

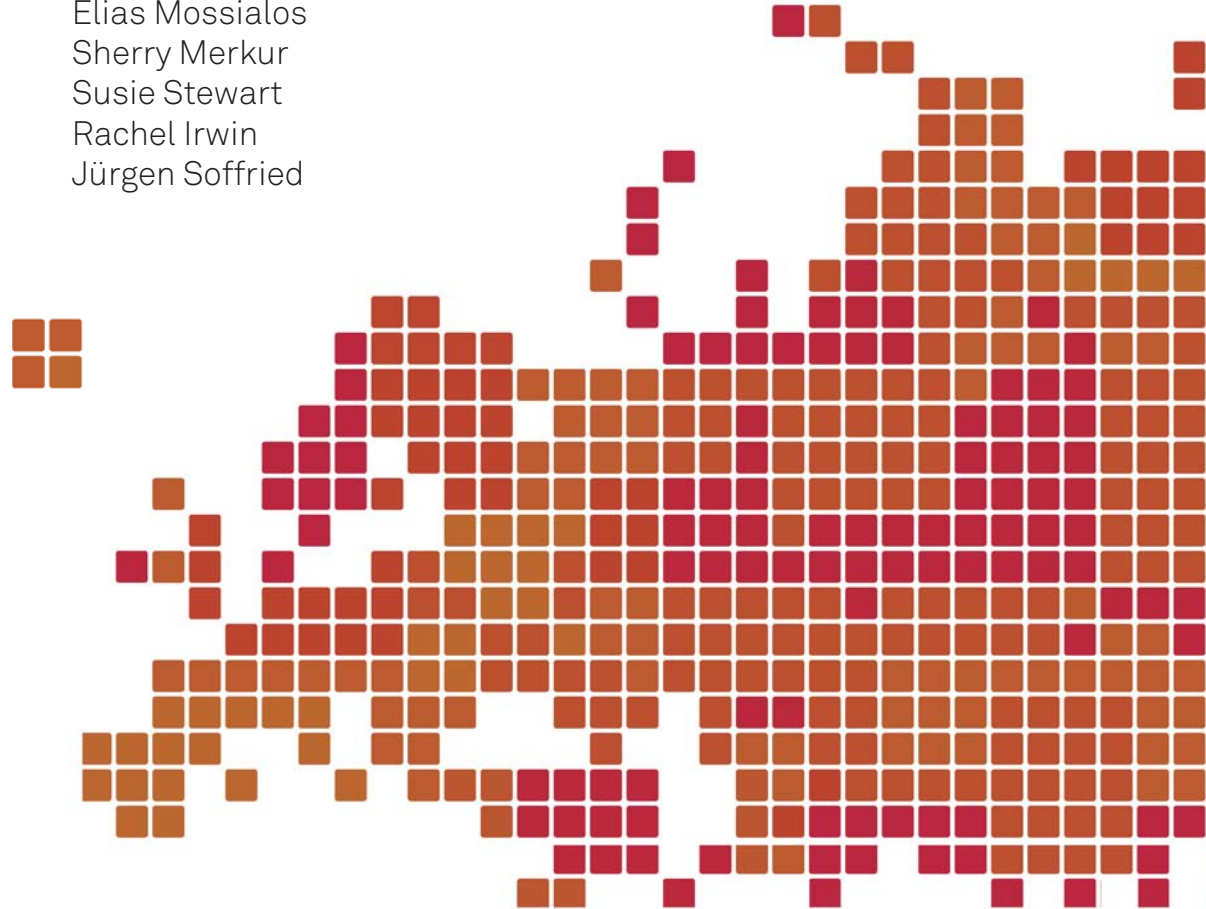
Public Health in Austria

24

Observatory
Studies Series

An analysis of the status
of public health

Edited by
Joy Ladurner
Marlene Gerger
Walter W. Holland
Elias Mossialos
Sherry Merkur
Susie Stewart
Rachel Irwin
Jürgen Soffried



Public health in Austria



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Public health in Austria

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**Joy Ladurner, Marlene Gerger, Walter W. Holland,
Elias Mossialos, Sherry Merkur, Susie Stewart, Rachel Irwin
and Jürgen Soffried**

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Foreword

Current demographic, medical and economic developments challenge our health care system in a hitherto unknown way, to be relevant not only today but also for decades to come. We are confronted with the difficult task of providing accessible, needs-orientated, high-quality and cost-effective health care services to everyone.

Great efforts need to be made to promote sustainable health for the entire population, especially in view of the fact that disadvantaged population groups currently tend to have less favourable health opportunities and outcomes and that health system processes can intensify this situation. Health service provision must strive to be independent of income, level of education or professional status.

Orientating health policy solely towards the health care sector is too limited. Modern health policy, which is characterized by a public health orientation, combines scientific, organizational and political efforts in order to promote the health of populations or defined population groups and creates health care systems which show a stronger focus on people's needs and efficiency.

Quality, effectiveness, efficiency, free access, equitable and needs-oriented health services are the basis for an optimal level of health care services for the population in the long term.

The Main Association of Austrian Social Security Institutions commissioned the London School of Economics and Political Science to undertake an analysis of the current status quo of public health in Austria, as well as to compile recommendations for further improvement.

This report is intended to highlight areas of public health in which Austria still has some way to go in order to cope with the challenges ahead. It is our hope that the report will lead to a fruitful discussion of public health in Austria.

The report – as well as other studies commissioned by the Main Association of Austrian Social Security Institutions – is available for download at www.hauptverband.at/fokoop.

*Dr Josef Probst
Main Association of Austrian Social Security Institutions*

Acknowledgements

Many organizations and individual experts have made valuable contributions to this report.

We are grateful to the Austrian social insurance institutions for commissioning the research project *Public Health in Austria*, as well as for their interest in and commitment to health policy research.

We would like to thank the members of the steering committee, the interviewed experts, the organizations visited and their representatives, as well as the reviewers for their time and their valuable input. Their involvement in the research project has been greatly appreciated. Every effort has been made to accommodate their comments, although it was not always possible to consider every point highlighted.

The views expressed in the report are those of the authors alone.

The Austrian public health experts represented on the steering committee were as follows: Werner Bencic (Regional Sickness Fund of Upper Austria, Linz), Gottfried Endel (Main Association of Austrian Social Security Institutions, Vienna), Bernhard Güntert (Private University for Health Sciences, Medical Informatics and Technology in Hall in Tyrol, Austrian Public Health Association), Jürgen Pelikan (Emeritus Professor in the Institute of Sociology at the University of Vienna, Key Researcher at the Ludwig Boltzmann Institute Health Promotion Research), Anita Rieder (Deputy Director of the Institute of Social Medicine at the Medical University of Vienna), Martin Sprenger (Associate Head of the postgraduate Master of Public Health Programme at the Medical University of Graz), Stefan Spitzbart (Main Association of the Austrian Social Security Institutions) and Nikolaus Patera (External consultant).

Experts interviewed personally (between February and April 2009) and/or in the context of a hearing (in June 2009)¹ included representatives with the following professional backgrounds (interview partners were assured that their names would not be quoted in the report): social insurance, research and teaching (university and other research institutions), professional representations (for example, physicians and pharmacists), public (health) authorities, patient and

¹ Most of the experts were interviewed twice, both by Joy Ladurner between January and April 2009 and in the context of a hearing which took place at the Main Association of Austrian Social Security Institutions in June 2009.

self-help organizations, media (print and television) and non-profit-making organizations.

Study visits were made to three organizations – the Ministry of Health, the FGÖ and the Chamber of Pharmacists – on 22 and 23 June 2009. The study visit to the Fund for a Healthy Austria took place on 6 July 2009.

Reviewers of individual chapters of the report were: (for Chapter 2) Bernhard Güntert (steering committee), Horst R. Noack (Professor Emeritus in the Institute of Social Medicine and Epidemiology at the Medical University of Graz, Head of the Master of Public Health programme at the Medical University of Graz) and Anita Rieder (steering committee); (for Chapter 3) Eleonore Bachinger (Department of Health Planning, City of Vienna) and Gerhard Fülöp (Austrian Health Institute, Gesundheit Österreich GmbH); (for Chapters 3 and 4) Gerlinde Grasser (Public Health Information Research Unit at the University of Applied Sciences FH Joanneum); (for Chapter 5) Werner Bencic (steering committee) and Claudia Habl (Austrian Health Institute, Gesundheit Österreich GmbH); (for Chapter 6) Martin Sprenger (steering committee). In addition, Stefan Spitzbart (steering committee) reviewed the entire report. Content is correct as of April 2010.

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List of abbreviations

AGES	Austrian Agency for Health and Food Safety
AHS	Grammar school
AIDS	Acquired Immune Deficiency Syndrome
AIDSG	AIDS Act
AKS	Working Group for Preventive and Social Medicine
AMS	Public Employment Service Austria
ÄrzteG	Physician Act
ASPHER	Association of Schools of Public Health in the European Region
ASVG	General Social Insurance Act
AURES	Austrian report on antibiotics resistance
AUVA	Austrian Social Insurance for Occupational Risks
AVOMED	Working Group for Preventive Medicine Tyrol
AVOS	Working Group for Preventive Medicine Salzburg
BGBI	<i>Federal Law Gazette (Bundesgesetzblatt)</i>
BGF	Network for Workplace Health Promotion
BIG	Business Intelligence in the Health Care System
BIQG	Federal Institute for Quality in the Health Care System
BMASK	Federal Ministry of Labour, Social Affairs and Consumer Protection
BMG	Federal Ministry of Health
formerly BMGFJ	Federal Ministry of Health, Family and Youth
formerly BMGF	Federal Ministry of Health and Women
B-VG	Federal Constitutional Act
CAP	Common Agricultural Policy
CDC	Centre for Disease Control and Prevention
CME	Continuing Medical Education
CML	Chronic Myleoid Leukemia
COPD	Chronic obstructive pulmonary disease
CT	Computer tomography
DALY	Disability-adjusted life years
DFLE	Disability-free life expectancy
DG	Directorate-General
DLD	Documentation of diagnosis and services
DokuG	Federal Act on Documentation in the Health Sector
DRG	Diagnosis-related group
DSN	Diseases Surveillance Networks
EAPN	European Anti-Poverty Network

EBM	Evidence-based medicine
ECHIS	European Community Health Interview Survey
ECHIM	European Community Health Indicator Monitoring
ECHP	European Community Household Panel
ECTS	European Credit Transfer System
ELGA	Electronic health record
EpG	Epidemics Act
EU	European Union
EUGLOREH	European Global Report on Health
EUPHA	European Public Health Association
EUPHIX	European Public Health Information System
Eurostat	European Union Statistics Office
EU-SILC	European Union – Community Statistics on Income and Living Conditions
EWRS	Early-Warning and Response System
FAG	Finance Equalization Act
FGÖ	Fund for a Healthy Austria
FH	University of Applied Sciences (<i>Fachhochschule</i>)
FLAF	Family Equalizations Fund
FOKO	Calculation of follow-up costs
GDP	Gross domestic product
GfG	Health Promotion Act
GKK	Regional health insurance fund
GÖG	Gesundheit Österreich GmbH
GP	General practitioner
GmbH/Ltd.	Limited company (<i>Gesellschaft mit beschränkter Haftung</i>)
GRG	Health Reform Act
HALE	Healthy life expectancy
HBSC	Health Behaviour in School-aged Children
HFA	Health for All
HiAP	Health in All Policies
HIV	Human immunodeficiency virus
HPA	Health Protection Agency
HPV	Human papilloma virus
HTA	Health Technology Assessment
HVB	Main Association of Austrian Social Security Institutions
ICD	International Classification of Diseases
IfGP	Institute of Health Promotion and Prevention
IGP	Institute for Health Planning
IHR	International Health Regulations
IHS	Institute of Advanced Studies
ILO	International Labour Organization
IPF	Institute for Pharmaeconomics Research
IVF	In vitro fertilization
KAKuG	Federal Hospital Act

KAL	Catalogue ambulatory services
KrebsstatistikG	Cancer Statistics Act, Federal Act on the Statistical Recording of Tumours
LBI	Ludwig Boltzmann Institute
LBI-HPR	Ludwig Boltzmann Institute for Health Promotion Research
LBI-HTA	Ludwig Boltzmann Institute for Health Technology Assessment
LEICON	Service/benefits controlling
LGKK	Software for the benefits/services of the regional health insurance funds
META-HONO	Meta reimbursement catalogue
MPH	Master of Public Health
MRI	Magnetic resonance imaging
MRSA	Methicillin-resistant <i>Staphylococcus aureus</i>
MSc	Master of Science
NGO	Nongovernmental organization
NHS	National Health Service
NÖGUS	Health and Social Fund of Lower Austria
ÖÄK	Austrian Medical Association
OAR	Senior civil servant (<i>Oberamtsrat</i>)
ÖBIG	Austrian Health Institute
OECD	Organisation for Economic Co-operation and Development
ÖGD	Austrian Public Health Service
ÖGIS	Austrian Health Information System
ÖGPH	Austrian Public Health Association
ÖGPP	Austrian Society for Policy Consultation and Development
ÖVP-PD	Austrian People's Party – Media Service
PAHO	Pan American Health Organization
PAP-test/smear	Papanicolaou-test/smear
PCN	Permanent Committee of Nurses
PCT	Primary Care Trust
PGA	Association for Prophylactic Health Activities
PHAC	Public Health Action Cycle
PHA-C	Public Health Agency of Canada
PSA-test	Prostate-specific antigen test
PrävG	Federal Act on Health Promotion and Prevention (draft)
REACH-Registry	Reduction of Atherothrombosis for Continued Health
REGIS	Regional health information system
RVU	Directives on the execution and evaluation of the periodic health examination
SARS	Severe acute respiratory syndrome
SchOG	Act on the Organization of Schools
SchUG	Austrian Schools Education Act
SHA	System of Health Accounts (OECD)
SHARE	Survey on Healthy Ageing and Retirement in Europe
SILC	Community Statistics on Income and Living Conditions
SMART	Specific (<i>spezifisch</i>), Measurable (<i>messbar</i>), Achievable (<i>realistisch</i>), Relevant (<i>bedeutsam</i>), Time-phased (<i>terminiert</i>)

STIs	Sexually transmitted infections
TB	Tuberculosis
TBE	Tick-borne encephalitis
TubG	Tuberculosis Act
UMIT	Private University for Health Sciences, Medical Informatics and Technology
VAEB	Insurance Institution for the Austrian Railway and Mining Industries
WHO	World Health Organization
(W)HR	Austrian civil servant title: (<i>wirklicher</i>) <i>Hofrat</i>
WIG	Vienna Institute for Health Promotion
WONCA	World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (short World Organization of Family Doctors)

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Methodology

Background

This publication is the result of a two-year research project commissioned by the Main Association of Austrian Social Security Institutions (*Hauptverband der österreichischen Sozialversicherungsträger*, HVB), featuring part of a research cooperation initiative between the London School of Economics and Political Science (LSE) and Austrian social insurance funds which has existed since 2004 and has so far involved the completion of five research projects, including this one.² Further information on the research cooperation and the resulting publications³ can be found at: www.hauptverband.at/fokoop.⁴

Terms of reference

The initial terms of reference were developed by the LSE. These were revised and finalized by the steering committee appointed by the HVB. The terms of reference are provided in Annex 1.

Report structure – national and international findings

The main report focuses on public health in Austria. International examples of public health structures and functions are given in the introductory chapter of this report.

Timeline

The project *Public Health in Austria* was agreed upon in October 2007 by the partners of the research cooperation initiative and the first meeting with the steering group took place in January 2008. Final agreement on the terms of reference was reached by September of that year, when the project officially began. The project report was finalized early in 2010 and the final version

² Previous research projects (2004–2008) dealt with the following topics: pharmaeconomics, performance assessment, reimbursement of physicians and incentive mechanisms, and quality in health care systems.

³ The first three reports were published in both German and English; the last two reports were published in English, with only the executive summary and the recommendations being translated.

⁴ Accessed 10 February 2011.

produced by April 2010. From June to October 2010 the document underwent additional editing by Susie Stewart, formerly an Honorary Research Fellow of the University of Glasgow and Fellow of the Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom.

Organizational structure

Internal project group

The internal project group was composed of Josef Probst and Gerald Plankenauer from the HVB, Elias Mossialos, Sherry Merkur, Walter W. Holland and Joy Ladurner from the LSE, and Marlene Gerger from the Institute for Health Promotion and Prevention (*Institut für Gesundheitsförderung und Prävention, IfGP*) in Graz, Austria.

Contributing authors

The following external research associates were consulted in the course of the compilation of selected chapters of the report: Rachel Irwin from the London School of Hygiene & Tropical Medicine (Introduction) and Jürgen Soffried from the IfGP in Graz, Austria. Marlene Gerger and Jürgen Soffried compiled Chapter 4 on health targets, and further information on the methodology they used is detailed in section 4.2 of that chapter.

Steering committee

Members of the steering committee were nominated by the HVB. They attended project meetings, defined the terms of reference for the research project, provided guidance and useful feedback, and acted as reviewers of individual chapters of the final report.

In the course of the two-year project, the steering group met four times (January and April 2008, February and December 2009). Members of the steering group were informed about project progress by a representative of the internal working group at the HVB.

Experts

A considerable number of Austrian experts were consulted during the course of the project. All interview partners were informed in advance that their input would be anonymous but that their professional backgrounds would be stated. Experts were consulted in three main ways, as explained here.

First, personal interviews were conducted in German by Joy Ladurner between February and April 2009. A total of 22 interviews were undertaken, 18 in person and 4 by telephone. The choice of experts was coordinated with the steering committee. Questionnaires for these expert interviews comprised a set of common questions, supplemented by several questions based on the field of expertise of the interview partner.

Second, a hearing took place between 22 and 24 June 2009 in Vienna at the HVB. At the beginning of April, 24 experts were invited to attend 20-minute interview sessions. A total of 21 experts responded, of which 18 who were asked were able to come and 3 who could not attend the hearing were available for a telephone interview. The selection of experts aimed to include all major stakeholders and experts in the field of public health in Austria. At the hearing, interviews were conducted by Walter W. Holland and Elias Mossialos, in both English and German. Interview questions focused on the area(s) of expertise of the interview partner.

Third, study visits were carried out at selected institutions – namely, the Ministry of Health (*Bundesministerium für Gesundheit*, BMG), the Austrian Medical Association (*Österreichische Ärztekammer*, ÖÄK), the Austrian Chamber of Pharmacists (*Österreichische Apothekerkammer*) and the Fund for a Healthy Austria (*Fonds Gesundes Österreich*, FGÖ). The first visits took place on 23 and 24 June 2009. The final study visit was postponed until 6 July because of conflicting appointments. In the course of the first three visits, interviews were conducted by Walter W. Holland and Elias Mossialos in both German and English. The interview with the representative of the FGÖ was conducted by Joy Ladurner and Gerald Plankenauer in German.

Literature search and review

International literature search

A variety of national and international sources was used, including publications of the World Health Organization (WHO) and the European Observatory on Health Systems and Policies, in addition to official national publications and published standard publications.

National literature search

The national literature search was undertaken by Joy Ladurner, mainly in 2008 but updated in 2009 and 2010 for selected topics. A range of key words from the terms of reference were translated and used as search items in Medline, the Internet search engine Google, the legal database RIS (*Rechtsinformationssystem*)

and on a variety of web sites of Austrian organizations as well as within their reports, research papers and other publications. In addition, various books and grey literature (unpublished material, such as internal reports of organizations that are not intended for wider dissemination) were consulted. Up-to-date and relevant search results for public health in Austria (in both German and English) were limited, which is why a considerable amount of information used for the compilation of the final report is based on expert opinion.

Meetings

Several project meetings took place in Vienna (in January and April 2008, and in February, June and December 2009). At the meetings in June and December 2009, interim and final research findings were presented and discussed. Members of the internal project team and representatives of the steering committee were invited to all meetings apart from the one in June 2009.

Further reporting and communication

In the course of the project, two progress reports were prepared by the LSE for the HVB. These were intended for internal documentation only and were compiled in November 2008 and January 2009. Ongoing communication and coordination efforts took place within the internal project team.

Chapter 1

Introduction

1.1 History

Public health was easy to define before the Second World War. Major threats to life were the result of unsanitary conditions, such as a contaminated water supply and defective or absent sewage or waste disposal, inadequate or overcrowded housing, poor and adulterated food and thus poor nutrition, hazardous work places and little effective clinical care. Public health at that time was concerned with attempting to rectify these conditions, either through legislation or population policies. In order to do this, the malpractices of landlords, employers, the state and others had to be identified and persuaded that improvements were essential and could lead to improvements in health status and better life expectancy.

At the beginning of the 20th century, many of these ills had been tackled and we no longer had open sewers or child labour, for example. A new focus for public health began to be identified – namely, the improvement of health, as well as the prevention of disease and death. Thus, public health began to be involved far more actively in health surveillance and in identifying particular groups who needed additional help, such as pregnant mothers, infants and small children.

In the last century, public health has thus become concerned with the organization of services in order to prevent illness and improve the environment and has become more interested in the efforts of medical science to prevent as well as cure disease. We are now involved not only with the control of infectious disease, but also with the control of other conditions, which entails not only population-level or legislative measures, but also changes in individual behaviour. Public health must, therefore, be involved with the local community on two levels. First, public health professionals need to work with representatives of their community to find the best structure for the measures that are required through a reciprocal process of communication and partnership. Second, they must also work with and guide those responsible for the planning and provision of those structures and activities which affect the health of a population – for

example, housing, water, sewerage, education, employment, transport and clinical services. Only through effective collaboration across many boundaries can health be maintained and improved.

The best working definition of public health is the one put forward by Acheson in 1988 that “public health is the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society”.⁵

The origins of modern public health lie in the 19th and 20th centuries, and the state of public health today – its philosophy, function and structures – cannot be fully understood without knowledge of its historical context. The orientation of modern public health has developed in response to changing health and social issues, as well as in response to the political context and shifting roles of the state.

1.2 The German experience

For the most part, the development of public health in German-speaking countries, including Austria, is similar to that in most developed countries, as outlined in section 1.3. However, there are two points that warrant mention.

First, one of the most important early figures in the development of modern public health was Johann Peter Frank, a German physician. His nine-volume treatise – *System einer vollständigen medicinischen Polizey* – was a comprehensive examination of various aspects of public health, covering subjects such as sanitation and water supply, sexual health and prostitution, maternal and child health, a school health service, accident prevention and food safety. The first volume was published in 1779, with subsequent volumes following until the final one in 1827.

The title is best translated into English as *A system of complete medical policy*, although as the word “Polizey” also means police, the title has often been mistranslated as *A system of medical police*, with authoritarian overtones.⁶ Although this was not Frank’s intention, in Germany at the time authority tended to come from the ruler or adviser to the people, and people were likely to conform. Frank’s work presented a comprehensive health policy that had great impact in Germany and in other countries with close cultural contact, particularly in eastern Europe.

⁵ Acheson D. *Public health in England. The report of the Committee of Inquiry into the future of the public health function (the Acheson report)*. London, Her Majesty’s Stationery Office, 1988.

⁶ Holland W, Stewart S. *Public health: the vision and the challenge*. London, The Nuffield Trust, 1997.

Second, in the late 19th century, industrial accident and health insurance schemes were introduced following Bismarck's social policy programme in Germany that saw the founding of the modern social welfare model.

Currently, in Austria, the Federal Ministry of Health (*Bundesministerium für Gesundheit*, BMG) assumes many of the responsibilities for public health but responsibilities are also assumed by other federal ministries, the regions and municipalities and the social insurance institutions, which are self-governing public corporations.

1.3 The history of public health in developed countries

Before the Second World War, the main threats to health were unsanitary conditions such as an unsafe water supply, poor food, hazardous workplaces and overcrowded housing. Public health worked to rectify these conditions through legislative and population policies.⁷ Then, throughout the 20th century, as health concerns evolved, public health expanded to include the promotion of health and not just the prevention of ill health. Public health also looked at individual behaviours affecting health, not only population-wide issues. An examination of the last two centuries of public health can help to explain how the scope, functions and structure of public health have evolved into the 21st century.

Late 19th century

During this time the main health problems were caused by poor environmental conditions, including faecal contamination of the water supplies, widespread malnutrition, contamination of food, overcrowded and inadequate housing, and the poor working conditions associated with early industrialization. This led to a high prevalence of diseases such as tuberculosis (TB), enteric infections, infant mortality and acute respiratory diseases.

Occupational health problems were also significant. Dangerous working conditions are described in works such as Upton Sinclair's novel *The jungle*, and his other non-fiction works, which chronicle the exploitation of women and children and include accounts of industrial accidents, such as workers falling into rendering tanks.

Early public health action – such as the anti-poverty (reform) movement and public health structures – arose in response to this, largely through legislative and population policies. These policies addressed the malpractices of landlords,

⁷ Holland W, Stewart S. *Public health: the vision and the challenge*. London, The Nuffield Trust, 1997.

employers and the state, although such reforms were vigorously opposed by those concerned with lost profits. This era also saw significant achievements in sanitation and the development of sewerage systems, although this was more notable in the United Kingdom than in continental Europe.⁸

Before the First World War

By the end of the 19th century, many of these issues – particularly poor housing and child labour – had come to the attention of the government and the public, although there remained much to be done. The Boer War, however, marked another turning point for public health. The United Kingdom had difficulties in finding young men of adequate physical fitness to fight, with just over one third being turned away because of their poor physical condition.⁹ This highlighted the fact that the promotion of good health as well as the prevention of death and disease was essential, which led to an increased awareness of child and maternal health, the promotion of health in schools, the adoption of social health insurance and the enactment of public health laws. It also led to public health's more active involvement in health surveillance and in identifying groups with special needs, such as pregnant mothers, infants and small children. This surveillance function was developed further in the period between the two world wars.

Between the wars

Public health at the beginning of this period focused on surveillance, containment and prevention of infectious disease. Typhoid, TB, smallpox and other infectious diseases continued to plague most of Europe, although significant advances in treatments were beginning.

This period also saw the beginning of a decline in childhood illnesses, which was closely linked to increased numbers of children being vaccinated against disease. Deaths from measles and whooping cough in Glasgow, Scotland, for example, declined from 551 and 621 in 1905 to 4 and 7 in 1954, respectively.¹⁰

Despite the advances towards the end of the 19th century, issues such as poverty and unsafe housing and work environments persisted and continued to be the focus of public health.

8 Hamlin C. The history and development of public health in developed countries. In: Detels R et al., eds. *Oxford textbook of public health*. 4th edition. Oxford, Oxford University Press, 2002: 21–38.

9 Holland & Stewart, op. cit.

10 Chalmers AK, Macgregor A. The health of Glasgow 1818–1925. An outline. Glasgow, Glasgow Corporation, 1930. Cited in: Holland W, Stewart S. *Public health: the vision and the challenge*. London, The Nuffield Trust, 1997: 42.

After the wars

The post-war period saw a decline in many infectious diseases and an increasing realization of the burden of chronic disease and accidents. Diseases such as hepatitis and sexually transmitted infections (STIs) persisted, along with rabies – the latter a particular problem in Germany and Austria. It was also in this period that the use of antibiotics became widespread for the treatment of infectious diseases. In part because of the availability of antibiotics, health services began to realize that they could treat disease as well as try to prevent it. There was also a significant expansion in health service provision at this time.

Recent and current issues in public health

In the recent past (and currently), we have seen a continued rise in chronic disease prevalence, many of which are brought on by industrialization (smog and pollutants), smoking, and sedentary lifestyles that contribute to obesity, cardiovascular diseases, chronic obstructive pulmonary disease (COPD), asthma and cancers.¹¹ Changes in western diets – such as increased use of refined sugar, along with diets high in fats and low in fibre – have also been implicated in increased morbidity and mortality from such conditions as diabetes and colon cancer.

In the United States, for example, 40% of deaths are related to cardiovascular disease with its associated risk factors of smoking, poor nutrition, diabetes and obesity.¹² In the WHO European Region, noncommunicable diseases account for 86% of deaths and 77% of the disease burden, with cardiovascular diseases alone accounting for more than half of these deaths.¹³

This is not to say, however, that chronic disease is the only current concern of public health. Other current issues include methicillin-resistant *Staphylococcus aureus* (MRSA) infections in hospitals, the emergence of HIV, chemical and environmental hazards, food safety, bioterrorism, emerging infectious diseases, and various mental health issues, including violence and suicide. Sexual health issues are also prominent, including those related to abortion, access to contraception, and teenage pregnancies.

Changing age structures and fertility patterns also affect public health throughout developed countries. In Austria, specifically, since 1992 the average

11 Omran AR. The epidemiologic transition: A theory of the epidemiology of population change. *Milbank Mem Fund Q*, 1971, 49:509–538.

12 US Centers for Disease Control and Prevention Trends. Overweight and obesity trends among adults [web site]. Atlanta, GA, US Centers for Disease Control and Prevention, 2009 (<http://www.cdc.gov/nccdphp/dnpa/obesity/trend>, accessed 2 January 2009).

13 WHO Regional Office for Europe. *Tackling Europe's major diseases: the challenges and the solutions*. Fact sheet EURO/03/06 (11 September). Copenhagen, WHO Regional Office for Europe, 2006 (<http://test.cp.euro.who.int/document/mediacentre/fs0306e.pdf>, accessed 12 January 2009).

birth rate per woman has been less than 1.5; on a long-term scale, it would be necessary for each woman to bear 2.1 children to maintain the population at its current level. One of the biggest challenges to social and health policy in the coming years will be the greater-than-average increase in the number of elderly and very old people. People over the age of 60 years currently total about 1.8 million and will grow to 2.7 million by the year 2030. At the same time, the population group aged 15–59 years will shrink.¹⁴ The public health implications of this are likely to be an increase in diseases such as blindness and deafness, social isolation, Alzheimer's disease, cancers and cardiovascular diseases, along with an increasing dependency of the population on care services. The impact of an ageing population, however, is likely to be mitigated by increased incoming migration.

Finally, in the light of increasing globalization, public health has become an issue of foreign policy and security.¹⁵ Emerging diseases such as HIV/AIDS and severe acute respiratory syndrome (SARS) do not recognize national borders. Bioterrorism is also a present and growing threat – as witnessed by the Sarin attacks on the Tokyo subway in 1995 or the post-9/11 anthrax attack in the United States.

1.4 Scope, functions and responsibilities of public health

Addressing determinants of health

As discussed in the previous sections, in the 19th century, public health was preoccupied with the direct determinants of health, such as nutrition, environmental and occupational hazards, and lifestyle issues, as well as the wider determinants, such as poverty, education and housing. Whitehead and Dahlgren¹⁶ use the health determinants model to demonstrate this, as shown in Fig. 1.1.

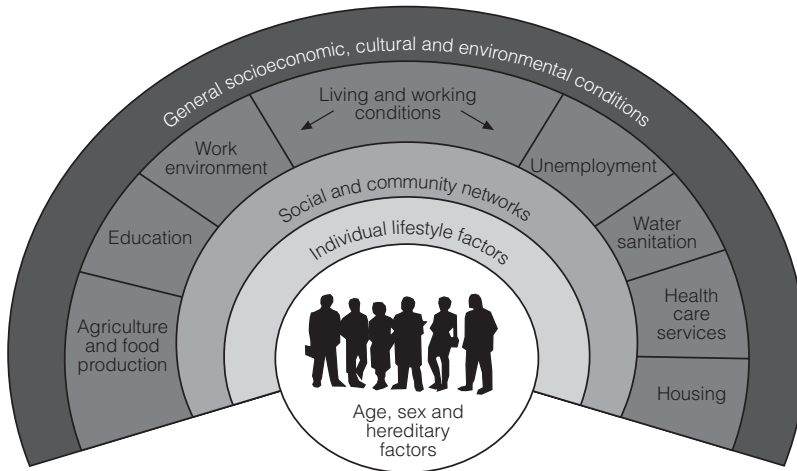
This model takes into account general socioeconomic, cultural and environmental conditions, such as the availability of food, shelter and housing, as well as access to general education, health care services and the economic situation in which those who are able to work can, and those unable to do so are supported.

It also takes into account individual behavioural factors, such as eating, exercising, smoking and alcohol consumption – although it recognizes that

¹⁴ Embassy of Austria. Social policy in Austria [web site]. Washington, DC, Embassy of Austria (<http://www.austria.org/content/view/90/104/>, accessed 12 January 2009).

¹⁵ Wyn Owen J, Roberts O. Globalisation, health and foreign policy: emerging linkages and interests. *Global Health*, 2005, 1:12.

¹⁶ Whitehead M, Dahlgren G. *Policies and strategies to promote social equity in health*. Copenhagen, WHO Regional Office for Europe, 1992.

Fig. 1.1 *The main determinants of health*

Source: Whitehead and Dahlgren (1992).¹⁷

Note: Copyright held by the Kings's Fund.

these are often a product of wider socioeconomic, cultural and environmental factors – and it looks at how community and social networks affect mental health through social connectedness and support systems.

The model also acknowledges the influence of demographic and genetic factors on health. To this end, public health must be concerned with the health risks of specific population groups, such as men, women, children, the elderly and ethnic minorities.

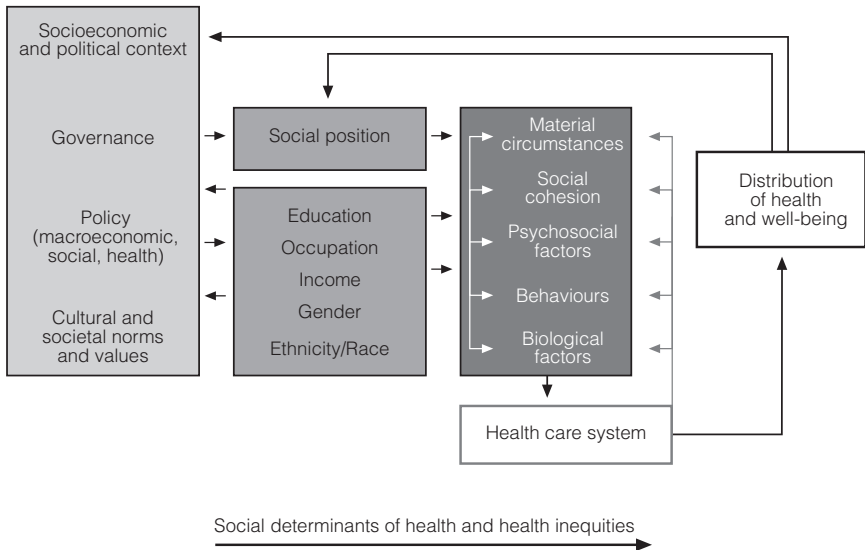
Much of modern public health is designed to blame the individual for choosing certain risk behaviours, such as smoking or poor diet, but it should in fact acknowledge the wider structural factors that influence decision-making. A diagram from the report of the Commission on Social Determinants of Health¹⁸ demonstrates a few of the pathways through which the wider socioeconomic environment, social position and opportunities affect health (see Fig. 1.2).

Inequalities in health outcomes are caused by the unequal distribution of power, income, goods, public services and education, as well as by living and working conditions.¹⁹ Assessing both the direct and wider societal and environmental conditions that affect health allows the field of public health to identify areas for intervention and to tackle the root causes of health inequities.

17 Whitehead M, Dahlgren G. *Policies and strategies to promote social equity in health*. Copenhagen, WHO Regional Office for Europe, 1992.

18 WHO Commission on Social Determinants of Health. *Closing the gap in a generation*. Geneva, WHO, 2008 (http://www.who.int/social_determinants/final_report/en/, accessed 12 January 2009).

19 WHO Commission on Social Determinants of Health. *Closing the gap in a generation*. Geneva, World Health Organization, 2008 (http://www.who.int/social_determinants/final_report/en/, accessed 12 January 2009).

Fig. 1.2 Commission on Social Determinants of Health conceptual framework

Source: WHO Commission on Social Determinants of Health (2008).²⁰

Scope and responsibilities

Major public health problems have tended to recur over the years, sometimes in slightly different guises or with modifications. There are four broad types of problems:

1. outbreaks of disease caused by infective or toxic agents – for example, smallpox, typhoid, food poisoning, influenza, radiation and so on;
2. problems arising from social and environmental issues, such as inadequate housing, unemployment, poverty, abortion, fluoridation of water supply;
3. behavioural concerns, such as smoking, excessive consumption of alcohol, drug taking and insufficient exercise;
4. health service issues, including the assessment of health care needs and outcomes and the effectiveness and efficiency of particular services.

Public health as a discipline must not become directly involved in the management of clinical services, whether in the community or within institutions. It lacks the necessary expertise for this task and its prime responsibility must be to promote health and to prevent and control disease. It must, therefore, be responsible for surveillance and for the planning and coordination of measures that promote and maintain health. It needs to be involved in the planning and distribution

²⁰ Whitehead M, Dahlgren G. *Policies and strategies to promote social equity in health*. Copenhagen, WHO Regional Office for Europe, 1992.

of clinical services in accordance with measures of need and demand and the assessment of effectiveness.

1.5 Structure of public health

Public health is exercised at all levels (central, regional and local) and some tasks are better accomplished by certain levels of government. In general, many of the tasks carried out by a locality or town may be coordinated by regional structures, which are then overseen at the national – and sometimes international – levels. There must also be processes in place to ensure accountability. If a public health physician at the local level identifies a public health issue, there should be a clear mechanism through which (s)he can report this to the regional or national level, with adequate feedback on action taken.

Public health must also be independent of politics and political influence in its design. Many public health recommendations go against other policies. In an historical example, factory owners were opposed to reforms to improve workers' safety for fear of lost revenue. Public health *must* be able to work in the interests of health and not be ignored for monetary or political reasons. This may mean appointing regional or national public officers who remain in post regardless of the current government and who can only be removed in cases of gross misconduct, not because of unwelcome recommendations.

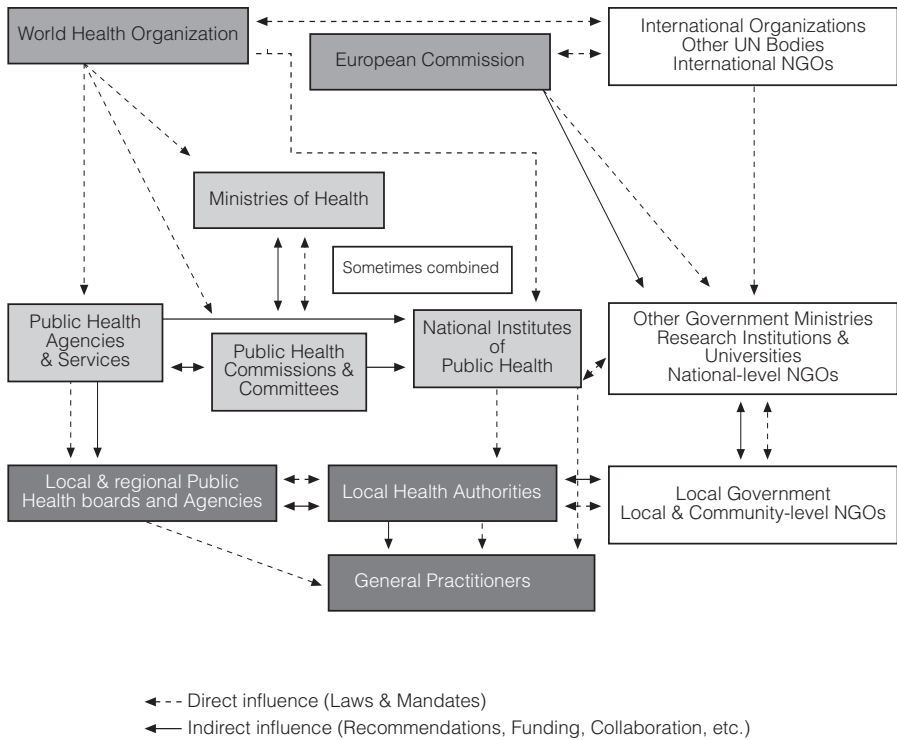
In addition, public health is best carried out by multidisciplinary teams, with specialized individuals assuming relevant responsibilities.

Various models of public health infrastructure may coexist within the same country or region. These may be at local, regional, national and international levels, as shown in Fig. 1.3. Public health work also occurs outside these “official” structures. Most public health research, for instance, takes place within universities and academic centres.

National and local structures

Public health efforts must be incorporated into all levels of the health system, from primary care to hospital care. This includes ensuring involvement at general practitioner (GP) level, by working with regional health bodies, as well as through liaison with physicians' associations. In a drive to tackle obesity in 2008, for example, National Health Service (NHS) Scotland staff – GPs, nurses, health visitors and pharmacists – were provided with guidance for patients on how to incorporate exercise into their daily routine.

Fig. 1.3 Bodies and institutions involved in public health



Public health must also be incorporated into other policy sectors, such as education, social welfare and transport. If GPs are to advise patients on how to incorporate exercise into daily life, for example, the government must provide facilities such as playgrounds and sports grounds or promote active transport policies, such as walking and cycling. In terms of creating a healthy environment, local authorities can control traffic patterns and affect road safety and should ensure that housing is structurally sound and free from contaminants. The incorporation of health into other sectors will be discussed further, later in this section.

In general, larger municipalities will have public health boards. In federal or provincial systems, such as the United States or Canada, the states and provinces will also have their own public health structures which have focused traditionally on communicable disease control, such as vaccination programmes and monitoring outbreaks of notifiable diseases, rather than on health promotion.

At national level, public health efforts can take various forms. Health Japan 21 for example, is a national prevention campaign aimed at strengthening primary prevention, creating an environment conducive to enhancing health, setting

appropriate goals and monitoring, and coordination among health bodies.²¹ This type of campaign may be organized by the Ministry of Health or public health bodies, such as a national public health agency or service or by a national institute of public health.

Examples of public health agencies in North America include the Center for Disease Control and Prevention (CDC) in the United States and the Public Health Agency of Canada (PHA-C). The PHA-C was established in 2004 to focus on emergency preparedness and response, infectious and chronic disease prevention and control, and injury prevention, as well as to facilitate coordination among federal, provincial and territorial governments. Public health agencies tend to be large bodies concerned with the health of the nation and coordinate with international bodies, such as WHO. They may also coordinate the work of national disease surveillance and public health laboratories. National authorities also set standards for vaccination schedules, food labelling and food safety, as well as for road and occupational safety. In federal or provincial systems, lower levels of government may also have their own laboratory and surveillance structures.

National institutes, such as those seen in Finland and Sweden, serve similar purposes to public health agencies but often have a narrower remit. A national institute of public health can be defined as a “science-based organisation that provides leadership and expertise for a country’s efforts to protect and improve health”.²² In most cases these institutes are attached to or affiliated with the country’s Ministry of Health and are linked to other governmental agencies with public health competences.

The main functions of public health institutes are to assess the country’s health status, to protect health through surveillance and response and to conduct research to inform policies and programmes.²³ These institutes typically serve to monitor public health, inform policy and coordinate work with other health and non-health bodies. Most institutes address communicable disease, as well as chronic disease and often focus on the wider determinants of health. They have a national scope of influence and national recognition. Within this broad definition, the actual range of functions and organizational structures of national institutes of public health is vast. There is no explicit definition or criteria for what constitutes a national institute of public health and budgets range from tens of thousands to billions of dollars.²⁴

21 Japanese Ministry of Health, Labour and Welfare. Health Service Bureau [web site]. Tokyo, Japanese Ministry of Health, Labour and Welfare, 2006 (<http://www.mhlw.go.jp/english/org/policy/p10-11.html>, accessed 14 January 2009).

22 IANPHI. International Association of National Public Health Institutes [web site]. Atlanta, GA & Helsinki, International Association of National Public Health Institutes, 2009 (http://www.ianphi.org/who_we_are/faqs/, accessed 14 January 2009).

23 Ibid.

24 Binder et al. National public health institutes: Contributing to the public good. *J Public Health Policy*. 2008, 29:3–21.

Although governments and supranational bodies may do much to promote health, policy decisions can have a negative effect on health. For instance, the European Union (EU) subsidizes the production of tobacco. It is within the remit of public health to address this type of contradiction.

Supranational and international structures

In addition to institutions, programmes and foundations at the national level, work on chronic disease can also be undertaken at the supranational and international levels. Certain tasks are within the remit of the EU, and WHO also has multiple functions.

Under the EU's principle of subsidiarity, the responsibility for health policy and the provision of health care is mainly the responsibility of individual Member States, but there are instances in which cooperative action is more effective. These are mainly in the realm of international or cross-border health threats, such as pandemics and bioterrorism, or those that relate to the free movement of goods, services and people. Other tasks for which the EU is responsible include workers' safety, food safety and consumer protection, action on accidents and injury, and addressing health concerns related to climate change.

The Directorate-General for Health and Consumers (DG Sanco) works in three main areas: public health, consumer affairs and food safety.²⁵ Other Directorate-Generals, the remits of which affect health, include DG Energy and Transport, which works in road safety and DG Agriculture and Rural Development, which is responsible for overseeing the Common Agricultural Policy (CAP), a policy which has had many negative effects on health, such as subsidizing foods with a high fat content. The Research Directorate-General commissions research, with a budget of €6.1 billion for health-related research from 2007–2013.²⁶

The EU's public health competence is limited and, other than fines, there is little incentive for Member States to accept health-related recommendations. However, many Member States do want assistance and usually, if work at the EU level fits in with national priorities, it will be accepted.

In other areas, such as agriculture, environmental policies, and food and drink labelling, the EU has a wider remit. It is partly for this reason that, during Finland's EU Presidency in 2006, one of the aims was *Health in All Policies* (HiAP). This served to establish "coordination mechanisms to ensure that the

25 European Commission. Directorate-General for Health and Consumer Affairs (DG-Sanco) [web site]. Brussels, European Commission, 2009 (http://ec.europa.eu/dgs/health_consumer/index_en.htm, accessed 14 January 2009).

26 EPHA. European Public Health Alliance [web site]. Brussels, European Public Health Alliance, 2009 (<http://www.epha.org/a/1791>, accessed 14 January 2009).

health dimension is integrated into activities of all Commission services.”²⁷ A large part of this initiative involved developing methodologies for health impact assessments to be conducted in an integrated way throughout all European Commission-level activities. These are based on environmental impact assessments and their objective is to evaluate how non-health policies and practices will affect health.²⁸ In practice, further developments are necessary, but the recognition of the impact of other sectors on health is a crucial first step.

WHO also plays an international role in dealing with chronic disease. The functions of WHO’s Regional Office for Europe in dealing with chronic disease prevention are threefold: surveillance, research and recommendations. It provides a coordinating function only to the extent to which it coordinates research and surveillance among countries and research institutions, and it provides a forum for stakeholders to discuss research and produce recommendations and guidelines for addressing health issues. In contrast to the EU, WHO has limited statutory powers. Generally, it can only provide recommendations and guidance to Member States, but two notable exceptions to this are the International Health Regulations and the Framework Convention on Tobacco Control, which are binding international treaties. The former addresses the control of infectious disease outbreaks and the latter addresses the public health threat of tobacco, including provisions on limiting the sale and marketing of tobacco products, health education and reducing tobacco dependence, among other matters.

Other actors and sectors

Other actors – from civil society to academia – play an important role in public health. The United Kingdom, for example, has a very active charity sector. Large organizations may run nationwide campaigns and raise money for both public health and biomedical research, while smaller community-based organizations may run local initiatives, such as healthy eating cookery classes or blood pressure screening. Rather than actually providing services, however, the United Kingdom charity sector has played a vital role in mobilizing public opinion and lobbying the Government to change its policy on health-related issues.

As mentioned earlier, other sectors affect health and are also affected by it; public health must be prepared to liaise with them. In tackling obesity, for instance, public health must work with the transport sector to promote active forms of transport such as walking and cycling. It must also work with food

27 Madelin R. Forward. In: Ståhl T et al., eds. *Health in all policies: Prospects and potentials*. Helsinki, Ministry of Social Affairs and Health, 2006 (<http://www.euro.who.int/document/E89260.pdf>, accessed 14 January 2009).

28 Salay R, Lincoln P. Health impact assessments in the European Union. *Lancet*, 2008, 372(9641):860–861.

standards agencies to ensure clear labelling on food. In terms of controlling outbreaks of disease and addressing bioterrorism threats, public health must coordinate with defence and security services. To this end, public health needs appropriate legislative means to achieve its goals in working effectively across different sectors.

Multidisciplinary public health

Public health is a multidisciplinary specialty which requires a wide range of skills and tools and includes specialists with training in a variety of disciplines: epidemiologists, statisticians, economists, physicians, demographers, policy specialists, geneticists, anthropologists, sociologists, ethicists, information systems and computer specialists, and many others. It draws upon the tools and methodological approaches of many disciplines.

In health protection, for example, statisticians and epidemiologists gather and analyse data on health threats and diseases, including the use of registries for notifiable diseases and cancer. These data can then inform work on protocols for addressing outbreaks and health emergencies and for designing appropriate treatment and prevention efforts. With regard to health improvement, social scientists work on analysing individual health behaviours and the social and community factors contributing to ill health. To ensure high quality in health services and social care, economists measure health interventions in terms of their cost–effectiveness. Not all specialties are required at all levels – it may, for instance, be significantly more cost-effective to have a regional laboratory to which local authorities can send specimens for analysis, rather than suggesting that each town should have its own laboratory.

Public health practitioners must be skilled in handling outbreaks of disease and these responsibilities must be accompanied by the necessary legal powers to act. Training in epidemiology is crucial to this activity. Public health practitioners need to develop the essential links with microbiology and toxicology laboratories but they must also have training in these disciplines to be able to assess the situation and use their expertise to the best possible effect. Defined responsibilities for this require explicit organizational links and adequate powers to investigate and control any outbreak that might occur.

Relevant methods of disease surveillance, including education, are essential. Public health has key needs in the collection, analysis and dissemination of accurate information. It has a major role to play in the design and implementation of appropriate supporting information systems. Expertise is required in interpreting the demographic, social and environmental data essential for the measurement of utilization and of outcome, and public health experts must

have an understanding of economic principles. They should not, however, be involved in financial or other purely administrative matters such as those related to manpower. For the effective monitoring of health needs and outcomes, the data collected regarding patients must be linked to individuals and not merely based on events. Methods of record linkage which respect confidentiality have been pioneered in Oxford and Scotland in the United Kingdom, as well as in several other European countries such as Sweden and Denmark.

1.6 Education, training and research

Effective public health work is underpinned by both a trained public health workforce and a well-researched evidence base for making sound public health decisions. Public health research is usually conducted by institutes and academic centres and many government bodies collaborate with these institutions to educate new generations of public health professionals and to conduct research on best practices in public health policies, interventions and programmes. Research must also be encouraged at local level and, to this end, regional and national governments must ensure that local authorities have the capacity to carry out local research and training.

As already discussed, public health is a multidisciplinary field, which includes not only clinicians, but also epidemiologists, statisticians and social scientists. In establishing centres for public health training, it is important to involve physicians and physicians' associations and bodies from other disciplines. Apart from a grounding in the basic disciplines, public health training should also include a practical element, such as a work placement in a public health agency.

The Faculty of Public Health in the United Kingdom, for example, sets out a five-year training plan for those wishing to become public health physicians. Another model is found in the United States, where the American Association of Public Health Schools accredits schools of public health, based on their course content and examination practices and develops standards for qualifications. What is paramount – regardless of the model – is that public health training is regulated and regularly inspected and includes both academic education and practical experience.

One of the major needs for public health practitioners is the ability to communicate with the media, pressure groups and the public, regarding the concepts of health risk. Risk perception and communication are seen as an important part of the role of public health practitioners and they must be properly educated to fulfil it. This also implies that one of the major tasks of the public health practitioner is diplomacy and the ability to persuade others to

do what is required. Thus, in order to fulfil the public health role effectively, it is necessary for public health practitioners:

- to be forthright in the advocacy of programmes that improve health and to state clearly and openly the dangers and consequences of some actions, whether they are clinical, environmental or political;
- to be able to influence the budget for public health activities and to ensure that long-term public health issues are considered separately from short-term clinical and practical issues;
- to assume a clearly identifiable role in helping to influence and guide the policies not only of health authorities, but also of schools, environmental agencies, welfare agencies, housing departments, microbiology departments and so on;
- to prepare an annual report which highlights the problems of public health in a particular locality. (This can direct the programme of work and is an important component in influencing both individuals and authorities.)

1.7 Examples of public health in practice

The fact that public health is multidisciplinary, affected by many sectors, and tackled in various ways based on its overlapping domains, is demonstrated in the following subsections, which discuss important considerations in dealing with three specific public health issues.

Coronary heart disease

Risk factors for coronary heart disease include high blood pressure, obesity, smoking, and lack of exercise. At a local level, GPs and community pharmacies may run blood pressure screening programmes so that individuals are aware of their blood pressure and consequent disease risk. Individuals with increased risk should then receive follow-up care to supervise and, if necessary, treat their blood pressure. Local authorities should also offer smoking cessation services. At the national level, governments should implement policies such as smoking bans and ensure that smoking prevention education occurs in schools.

Individual behaviours – such as diet and exercise – are very much influenced by practical issues, such as environment and access to healthy food. Regional and local planning commissions must ensure that sports facilities are available to all and that cost is not a barrier to sport. At national level, governments can set targets for supermarkets to reduce the amount of salt in prepared foods and can explore the option of subsidizing the cost of healthy foods, such as fruit and vegetables.

Abortion and fertility

Abortion and fertility are significant public health issues, particularly in areas with high abortion rates. Governments should ensure appropriate sex education in schools and easy access to contraception where cost is not a barrier. Sexual health clinics should be easily accessible, staff should be supportive, and it should not be difficult or stigmatizing for women to use such clinics.

Violence

Violence includes road accidents, family violence and industrial accidents, all of which may or may not be related to alcohol, drugs and education. With the aim of achieving the public health goal of reducing road accidents, appropriate alcohol and drugs policies at the national level should be adopted to prevent drink-driving, and should be followed up with appropriate education, both in schools and more widely.

Preventing family violence is also within the realm of education. Children living in a violent household, for instance, may not realize that what is happening to them is not right. Teachers and other educators should be trained to notice signs of abuse and to have an effective system in place through which they can report these cases to the local authorities in the confidence that they will be addressed.

Finally, industrial accidents can be prevented both through a system of worker education and training, which is the responsibility of employers, and through industrial regulation and effective workplace safety inspections carried out by government authorities.

Reference to country examples

Public Health efforts differ between countries and undergo considerable change over time. For a snapshot of important public health policies in different countries, please refer to the Health system profiles (HiTs) of the European Observatory on Health Systems and Policies, which are freely available for download at www.healthobservatory.eu. HiTs are country-based reports that provide a detailed description of each health care system and of reform and policy initiatives in progress or under development.

1.8 Conclusions

Public health focuses on health at the population rather than the individual level. It is concerned with a properly organized and equipped health service, rather than with individual patients.

The achievement of good health for a community or a nation is accomplished through the organized efforts of society at multiple levels and by multiple actors, from government ministries to grass-roots community organizations.

Knowledge of changes in health issues facing developed countries over the past two centuries permits an understanding of how public health has evolved to tackle these issues and what the situation is today. Throughout its history, public health has addressed the direct (and broader) material, social and ecological conditions affecting health, such as sanitation and standards of living. The concept of controlling infectious disease has been the basis for many public health structures. Today, public health continues to evolve and is adapting to current circumstances in an attempt to control chronic diseases and improve the health status of populations.

This chapter's short description of public health structures and functions in a number of countries shows the importance of an organization with responsibility for the delivery of public health services. Public health in the 21st century is concerned with more than the control of communicable diseases. To be effective in the improvement of health status in a country, public health attitudes and actions are required in all areas of government and at all levels, not only relating to health – for example, in education, environment, transport, industry and agriculture. To achieve this, adequately trained individuals are required. Research to investigate current and possible new hazards must also be supported and sound information services are essential.

Chapter 2

Analysis of the Austrian public health system

2.1 Introduction and definitions

Public health is often referred to as the third column of a health system, operating in parallel and in cooperation with the fields of outpatient and inpatient care. In the international literature, public health is defined as: “the collective action for sustained population-wide health improvement”²⁹ or “the process of mobilising and engaging local, state, national, and international resources to assure the conditions in which people can be healthy”.³⁰

Before considering the Austrian setting and discussing definitions, functions and understanding of public health in Austria, it must be said that definitions of public health in the international context also display considerable variation.

Core functions of public health – a brief overview

In the international literature, various frameworks have been developed to define the core public health functions. These include:

- the American model
- the WHO/Delphi Study on Essential Public Health Functions
- The Pan American Health Organization (PAHO) Framework
- The Australian Model
- The Essential Public Health Functions for the WHO Western Pacific Region.

A summary of the different frameworks can be found in a literature review undertaken by the Ontario Public Health Association – *Core competencies in public health* – the findings of which were presented in March 2004.³¹

29 Beaglehole R et al. Public health in the new era: Improving health through collective action. *Lancet*, 2004, 262:2084–2086.

30 Detels R et al., eds. *Oxford textbook of public health (4th edition)*. Oxford, Oxford University Press, 2002.

31 OPHA. *Core competencies in public health. Literature review*. Toronto, ON, Ontario Public Health Association, 2004 (<http://www.opha.on.ca/programs/archived/phcci/litreview/PHCCI-LitReview-4Mar04.pdf>, accessed 5 May 2009).

In Austria, the term public health has not long been established – in the mid-1990s it was hardly known. Only few individuals, who had usually been trained abroad, could describe the relevant concepts and principles. The terms social medicine (*Sozialmedizin*) and *Öffentlicher Gesundheitsdienst*, which is translated in this report as “public health service”, are still used interchangeably with “public health”, although these cannot be equated with public health, either in scope or in regard to the basic principles. Within certain communities today, however, the concept of public health is gradually being increasingly applied and understood.

Public health in Austria is thus at an early stage of development. The understanding of the term – for which in Austria for the most part no German translation is used – is very varied among health system stakeholders in Austria and even among national experts working in the field of public health. In Germany, the translation *Gesundheitswissenschaften* is used for public health, which literally translated means “health sciences”. The lack of a legal or national definition in Austria hampers the creation of common ground for discussion and the development of a uniform strategy. At present there are only about 200–250 experts who have undergone postgraduate training in public health (at home or abroad) in Austria.³² For those lacking specialized training, the concept of public health often still seems vague and difficult to define.

Because a clear definition of public health does not exist, the terms of reference of this report – which were defined by the steering committee of Austrian Public Health experts (appointed by the Main Association of Austrian Social Security Institutions – *Hauptverband der österreichischen Sozialversicherungsträger* (HVB)) – were used as a framework to describe the main functions of public health in Austria, which are characterized by the following key areas:

- public health services, including preventive health services such as health promotion and disease prevention, but also health care services;
- information management and health reporting;
- health targets;
- public health training and research;
- addressing disadvantaged and special needs groups.

In the course of this study, 22 selected Austrian public health experts were initially interviewed individually by Joy Ladurner. These interview partners were presented with the question – among others – *What are, in your opinion, the current core areas and functions of public health in Austria?*

³² Martin Sprenger (University of Graz). Personal communication in response to an inquiry by the author, 22 May 2009.

Another series of interviews was undertaken in June 2009, when 18 experts attended a hearing at the HVB in Vienna. Experts were questioned, mainly about matters relating to their individual fields of expertise. Further details on these interviews can be found in the *Methodology* at the beginning of the report.

The 22 experts initially interviewed listed a considerable number of public health functions. The ones quoted most often were:

- planning (in combination with funding, health reporting and steering);
- health reporting (which was stated to be gradually evolving but still underdeveloped);
- health care services (at the moment representing the main focus of the Austrian health system, which is evident when looking at the distribution of funding, especially at expenses for hospital care);
- the public health service (*Öffentlicher Gesundheitsdienst, ÖGD*) (which deals mainly with matters such as infection control, sanitary control and disease prevention);
- capacity-building (involving education and training);
- health promotion (which is developing steadily, showing a focus on the various settings: workplace, hospitals, schools);
- prevention (involving immunization and screening);
- health targets (are quoted as being under way but are very varied and no national priorities or plan exist).

Other functions listed by experts were usually quoted with caveats – for example, by commenting that they were still poorly developed or only just beginning to be carried out in Austria. These included research and evaluation (slow development, lack of funding) and health economics (comparison of costs and benefits, reimbursement, market structure, economic evaluation). Public health functions which were only referred to by a few experts included the consideration of health determinants, political consultation, access to care, social inequalities, monitoring (data surveillance, building of an information system), integrated care, long-term care, and the concept of risk/lifestyle factors.

Further functions quoted by experts – seen as currently underdeveloped in Austria but important for the future – were public relations work (communication and networking) and the design and shaping of the health system.

Core disciplines which should be involved in public health research and practice are: social sciences, social medicine, sociology, social psychology, health economics, political sciences, anthropology, history, environmental medicine,

hygiene, management sciences, health services, demography, nursing sciences, pharmacology, epidemiology, health statistics, biometry or informatics.³³ The multidisciplinary nature of public health, both in practice and research, is vital.

Several experts added that a large number of small-scale public health activities and initiatives existed, but that these were in many cases not coordinated and of variable or unknown quality. Analogies used to describe the public health situation in Austria were “pieces of a puzzle” or “rag rug”. Responsibilities, activities and outcomes were felt to lack transparency and an absence of interdisciplinary activity was also criticized. Selected public health functions are described in more detail in section 2.5.

Before describing public health in Austria in more depth, a few concepts and definitions are relevant and should be discussed. Definitions of public health that have been found in legislation, used by Austrian institutions, or cited in the literature are presented. The understanding of the term public health in Austria, as expressed by a range of experts who were interviewed for this study, is then described.

Notions of public health in Austria

The understanding of public health in Austria is variable, not only generally speaking but also within different levels of the health system or even within individual institutions or departments. This also seems to apply to social insurance, with social insurance funds taking different viewpoints. Some common elements exist, however, and are recognized among most public health professionals. More information on these can be found in section 1.3.

The initial terms of reference were developed by the London School of Economics and Political Science. These were revised and finalized by the steering committee appointed by Austria’s HVB. The compilation of final terms of reference took place between January 2007 and June/July 2008. This information is provided with the sole intention of demonstrating how difficult it was to reach a consensus on the topics covered and the scope of the study, even among a small number of Austrian public health experts.

The following subsections present definitions of public health found in Austrian legislation, institutional documents or Austrian literature.

Legislation

Legislation on public health issues in Austria is fragmented and in some cases outdated and patchy. No legal definition of public health exists in Austria and

³³ Mossialos E et al. *Framework performance assessment. Report for the Main Association of Austrian Social Security Institutions*. Vienna, Main Association of Austrian Social Security Institutions, 2006.

there is no Public Health Act. Several public health functions and activities are regulated in a range of legal documents detailed in section 2.2. This subsection refers only to legislation in which the term *public health* is defined or explained.

Public health is referred to or mentioned explicitly in Austrian health legislation for the first time in the agreement according to article 15a of the Federal Constitutional Act (*Vereinbarung gemäß Artikel 15a B-VG (15a Vereinbarung)*), which is signed by the Federal Government and the regions at regular intervals and is – in its current version – valid from 2008 to 2013. According to article 11, the contracting parties agree to accommodate principles of public health when implementing any measures stipulated in the agreement. The principles listed are:

1. acknowledgement of a comprehensive notion of health
2. health services research to ensure needs-orientated planning, development and evaluation
3. promotion of interdisciplinarity of care or research
4. development of health targets
5. systematic health reporting.

The list of principles provides a clear indication of what public health involves. It does not, however, represent a formal national definition of public health. Furthermore, the agreement based on article 15a does not appear to be known to all experts, as only two mentioned it during their interview when asked about definitions or understanding of public health in Austria.

Article 33 of the same agreement defines the funding of cross-national prevention programmes and treatment mechanisms. In article 34 the Federal Government and the regions agree on joint analysis and evaluation of the epidemiological impact of current and future preventive measures in the Federal Health Agency and the health funds of the regions.

Institutions

In a recent information release (in the form of a leaflet), the Austrian Public Health Association (*Österreichische Gesellschaft für Public Health, ÖGPH*) defines public health as “the science and the practice of the promotion of individual and population health, the improvement of the quality of life and the society-orientated system design in the health sector”. It further states that “public health must be a multidisciplinary and interdisciplinary science with a strong link to practice and policy”. The ÖGPH also states that while public health was previously dominated by topics such as a clean water supply and adequate sanitation, stronger emphasis is now placed on issues such as improved

access to health services (mainly through health insurance), prevention or the promotion, maintenance and improvement of health of the broad population and of disadvantaged groups.

The Institute of Public Health at the Paracelsus Private Medical University of Salzburg³⁴ defines public health as “a societal effort to protect, promote and restore human health”. It sees public health as “a problem-orientated and interdisciplinary field of health science, describing the health status of population groups in interaction with medical health care systems”.

The Medical University of Graz³⁵ describes public health as “a very dynamic and cross-disciplinary field”. Two targets of the multidisciplinary and interdisciplinary field of research and practice are listed:

1. maintaining and promoting the health of the population or of large population groups;
2. further development of the health system in terms of increasing quality of care and efficiency.

The Center for Public Health at the Medical University of Vienna defines public health as “a multidisciplinary field combining natural sciences as well social and cultural sciences”. It argues that public health aims to “improve the population’s health through health-related initiatives in research, development, education and public relations as well as through consultation of national and international committees. Public health research creates the scientific foundations necessary to achieve these targets.”³⁶

The University of Linz³⁷ states that public health:

takes a perspective beyond the health sector and considers especially education and environment. Public health is to be understood as a comprehensive approach, as interdisciplinary science with a strong link to practice and involvement of decision makers. It aims to improve the quality of life and promote the health of the society, especially also of disadvantaged groups. Measures therefore are preventive and health promotion measures as well as ensuring demand-orientated access to evidence-based medical, nursing and social care for all individuals.

Literature

In the course of the literature search undertaken for the purposes of this study,

³⁴ Paracelsus Medical University Salzburg (<http://www.pmu.ac.at/de/167.htm>, accessed 5 May 2009).

³⁵ Medical University Graz (<http://public-health.meduni-graz.at/>, accessed 5 May 2009).

³⁶ Medical University Vienna, Center for Public Health (<http://www.meduniwien.ac.at/zph/>, accessed 5 May 2009).

³⁷ Johannes Kepler Universität Linz (JKU). *Postgraduate study programme. Public health and health systems management*. Linz, Johannes Kepler Universität Linz, 2009 (http://www.ges-mgmt.jku.at/FolderMPH/folder_mph.pdf, accessed 1 February 2011).

several definitions of public health were found. The literature search was limited to Austrian literature as the aim was to find out how public health was described in the national environment.

In the preface to his *Handbook on public health*,³⁸ editor Gerhard Polak defines public health as “the joint effort of society towards health development and a healthy life of the population”. He adds that it stands for frontier crossing and pluralism and strives to ensure the best possible status of health for each individual. Referring to science, Polak defines public health as “the science which deals with finding solutions for the question of how, considering existing resources, environmental conditions and genetic circumstances, the best possible health status can be ensured for the largest possible number of individuals”. He believes public health to be “a platform for all players in the health sector: physicians, natural scientists, individuals working in fields related to philosophy, psychologists, sociologists, health economists, jurists, insurers, qualified nurses and employees of the basic health care institutions”. Polak emphasizes that public health cannot be equated to the Austrian Public Health Service (ÖGD).

In his article on modern public health, Noack³⁹ writes that the “multidiscipline” public health, under which he subsumes health science and health care, deals with “the scientific exploration of health-related developments and with the political and organizational design of the health system”.

New versus old public health is described as “public health with a wider perspective”, as against “just public health medicine”.⁴⁰

In an article on knowledge and qualifications for public health, Noack⁴¹ defines new public health as “a comprehensive, interdisciplinary and intersectoral public health system”. He continues by stating that the term “new public health” refers to a complex pattern of health-relevant functions available for all social ranks, as well as to the appropriate organizational infrastructure. He further distinguishes three main public health functions – political, scientific, and managerial.

According to Bencic and Popper,⁴² public health stands for “an increase in efficiency of health care, the systematic expansion of health promotion and

38 Polak G. *Das Handbuch Public Health. Theorie und Praxis. Die wichtigsten Public Health Ausbildungsstätten*. Vienna, Springer-Verlag, 1999. Interview with Dr. Gerhard Polak on “Public health, requirements and chances”, 2003 (http://www.stethosglobe.de/alternativen/publichealth/interview_a_09-2003_kp.php, accessed 5 May 2009).

39 Noack HR. Modern public health. In: EUPHA. *Promoting the public's health – Reorienting health policies, linking health promotion and health care*. Graz, European Public Health Association Conference, 10–12 November 2005 (http://www.goinginternational.org/pdf/Noack_e.pdf, accessed 2 May 2009).

40 Expert interviews, 22–24 June 2009.

41 Noack HR. *Wissen und Qualifikation für Public Health*. Vienna, Going International Information Services (http://www.goinginternational.org/deutsch/pdf/Autorenarchiv/Noack2_dt.pdf, accessed 2 May 2009).

42 Bencic W, Popper H. Public Health in Kernprozesse der Krankenversorgung einbringen. *Soziale Sicherheit*, 2009, 159–161.

prevention and the exercising of a positive influence on all health determinants across all policy areas". They argue that public health ideas in the Austrian health system could be promoted by integrating public health approaches into the core processes of health care provision.

Experts' opinions on the definition and understanding of public health

For the study, 22 national experts operating in various fields relevant to public health were presented with two questions in individual interviews:

1. How do you define public health?
2. What is, in your opinion, public health in Austria?

The aim of these two very similar questions was to find out whether the experts' perception of public health in Austria deviated from their formal definition. The first question was targeted at receiving general definitions of public health. It was assumed that the experts' view of public health would be strongly influenced by their academic and professional background. The second question was aimed at receiving information and specific details about the understanding of public health in Austria.

How do you define public health?

Definitions of health and public health depend on the scientific perspective taken – either applying a narrow disease paradigm or employing a wider comprehensive health paradigm (including disease).⁴³ The definitions of public health given by national experts showed considerable variation in scope, but are also characterized by the use of several common expressions, terms and concepts.

Only a few experts quoted definitions from the literature. Of these, the definition given by Beaglehole and colleagues in their 2004 article from the *Lancet*⁴⁴ was referred to most often. Other frequently mentioned elements of public health are listed here. These are ordered according to how often they were referred to by the experts and similar principles or characteristics are grouped together.

1. Maintaining, promoting, improving and restoring individual and population health (that of the entire population and that of certain disadvantaged population groups).

⁴³ Noack HR, Kahr-Gottlieb D. Introduction: The 2005 conference of the European Public Health Association. About the conference and the conference book. In: Noack H, Kahr-Gottlieb D, eds. *Promoting the public's health*. EUPHA 2005 Conference Book. Gamburg, Verlag fuer Gesundheitsfoerderung, 2005: pp. 10–16.

⁴⁴ Beaglehole R et al. Public health in the new era: Improving health through collective action. *Lancet*, 2004, 262:2084–2086.

2. Joint effort involving different levels and fields, including the individual, the organization, the health system, policy, the population and science: a participatory approach.
3. Cumulative efforts of different scientific disciplines to try to prevent premature death and early disease, such as health care in general, prevention, health promotion, societal aspects, health determinants.
4. Evidence; a scientific basis; appropriate, needs-based services and making best use of existing resources.
5. Cross-sectional matter, multidisciplinary and interdisciplinary approach (multisectoral approach: HiAP).
6. Systematic and standardized assessment, analyses and detection of interdependencies, as well as evaluation and reflection of results using the following tools and/or models: epidemiology, health reporting, health planning, Public Health Action Cycle (PHAC).
7. Linking theory (research/science) and practice (health system stakeholder activities, policy, action-orientated, policy-orientated discipline, formulation of targets, strategies, measures, and so on); a very broad range of art and skills.
8. Addressing inequality: ensuring equal access, affordable health services and fair funding.
9. Current focus on medicine and health care, equating public health and social medicine.

Items in the first combination of principles were quoted by far the most often. All experts used the terms population or society, most stipulated health improvement, several argued that the effect of health improvement ought to be long lasting and sustainable. This suggests that Beaglehole's definition is widely used among public health experts in Austria and that the population focus is recognized as a key feature of public health.

Different functions of public health were listed by about half of the experts, mostly quoting prevention and health promotion. Several experts pointed out that it was important not to limit public health purely to prevention and health promotion. Other disciplines and tools mentioned included epidemiology, health planning and/or health reporting.

Principles such as multidisciplinary and interdisciplinarity, as well as cross-sectional cooperation were mentioned by almost a third of the experts and were considered to be crucial.

It was believed to be essential to employ adequate methods (for example, epidemiology) in a systematic way, to collect, assess and analyse data and to evaluate as well as present evidence.

Public health should show a strong link to practice, demonstrating policy relevance and seeking interaction between experts in research and practice.

Selected experts also stated that public health should not display too strong a focus on medicine and should not be limited to the activities of the ÖGD (public health authorities in Austria).

This subsection concludes with some of the definitions of the experts interviewed.

Public health can be defined as:

- an endeavour of society and its institutions to ensure that health is promoted and improved in accordance with a demand-orientated standard and in line with the definition of WHO;
- a multidisciplinary and interdisciplinary science with a strong link to practice and politics;
- a systematic and epidemiological assessment, the detection of correlations and the reflection of these;
- the science and practice of the promotion of individual and societal health, the improvement of the quality of life and the society-orientated design of the health system;
- multidisciplinary and population orientated (that is, orientated towards population groups); orientated towards health promotion and prevention; responsibility of society for health; participatory action, together with those involved/affected;
- sustained improvement of society's health under consideration of social inequalities;
- a cumulative denomination for different scientific disciplines that try to prevent premature death and disease at an early stage, especially through prevention. Public health involves an organized networking structure, in which different sectors or areas should theoretically cooperate. It is characterized by a population orientation and does not focus on the individual.

What is, in your opinion, public health in Austria?

The intention behind this question was to find out whether the definition and

understanding of public health in Austria, according to the experts' opinion, deviated from their general definition of public health and, if so, in which way.

According to experts, the term public health is fairly new to Austria. Related alternative terms or disciplines which were and still are often used synonymously with public health are social medicine, the ÖGD and health care. Based on expert opinion, the field of public health in Austria still maintains a strong traditional focus on medicine (medical prevention) and on the services provided by the public health authorities – infection control, immunization, compilation of expert opinion. Several experts argued that equating public health with the activities of the ÖGD is too restrictive and that the ÖGD represents only one important segment of public health.

The field of public health is currently undergoing considerable change in Austria and is, according to experts, only beginning to develop gradually. The potential for further development was felt to be significant. Experts also argued, however, that many public health activities are already taking place in Austria but are not being recognized as such.

Public health in Austria is a small specialty with few experts and no clear-cut definition. Depending on the individual asked, the definition may vary considerably. In this context, different groups can be identified. First, there are those who endorse public health development and those who oppose it. Second are those who take a narrow perspective on public health (relating it mostly to the activities of the public health authorities), comparable to the concept of old public health, and those who adopt a broader perspective, comparable to the concept of new public health. Third are those who promote certain subdisciplines of public health, such as health promotion, prevention, or health economics, but who do not have a view of the whole system.

With regard to framework and structure, public health seems to occupy a weak position in the system when compared to other players and fields. Among decision-makers, knowledge and understanding of public health are often limited. The specialty lacks funding for the establishment of structures, research, training, and programmes, legislation – which is either non-existent or in some cases outdated – and the integration of concepts into institutions and organizations. Very few institutions deal exclusively with public health issues. Some departments or individuals within institutions work on practical public health issues or in public health training and research. Political willpower, targets and prioritization at all levels of the health system – but especially at a macro level – are missing, as are concerted actions or systematic programmes for implementation.

The experts interviewed stated that the Austrian landscape of public health activities is comparable to a variegated patchwork of initiatives and projects. Activities are not grouped and stakeholders do not cooperate or communicate well enough. Those directly involved or concerned are often not asked to participate when particular measures are being developed or implemented. Efforts related to public health are often driven by individuals who show great enthusiasm and dedication to the subject. Activities are mostly short-term projects, rather than long-term ones, and rarely have much impact.

As far as knowledge, research and training are concerned, several training programmes for public health have been established over recent years. This has been welcomed by experts as a positive development. Coordination between programmes is often lacking and discussions between the stakeholders involved have only recently started. Public health research in Austria is very limited, mainly because of an absence of funding. Expertise and knowledge are available – there are about 200–250 graduates with a MPH degree in the country – but are not always used appropriately or appreciated. Institutions are only slowly making use of new skills. New public health posts should be created and attractive career paths developed. Many people work in applied public health, but few of these have undergone formal training. The database necessary for public health activities is not always appropriate or sufficient.

Some quotes from the experts interviewed provide an indication of the current situation in public health in Austria.

Public health in Austria:

- is a patchwork of initiatives and projects;
- is pieces of a mosaic, lacking a systematic programme for implementation;
- is a heterogeneous mishmash of institutions and individuals;
- is driven by individuals;
- is often used synonymously with public health care services;
- involves expert knowledge which has not yet found its way into the structures of all players;
- involves many activities which are not denominated or recognized as being public health activities.

2.2 Legislation

The legislation considered most relevant to public health in Austria is listed in Table 2.1. No Public Health Act exists and the term public health is only

mentioned in one legal document – article 11 of the agreement according to article 15a of the Federal Constitutional Act.⁴⁵ The only legal documents addressing specific public health functions are the Health Promotion Act (*Gesundheitsförderungsgesetz, GfG*), the draft of the new Federal Act on Health Promotion and Prevention (*Bundesgesetz über Gesundheitsförderung und Prävention, PräVG*), the Imperial Sanitary Act and the acts related to infectious diseases and epidemics. Other legislation covers issues relevant to public health among many other topics.

According to experts, legislation related to public health in Austria is often regarded as being outdated or even non-existent. Gaps exist in several areas, such as organizational structures and responsibilities, funding, education, health promotion and prevention structures, and management of chronic diseases.

The range of legislation presented in Table 2.1 regulates issues or refers to topics related to public health functions in Austria. For more information on the understanding of public health in Austria please refer to section 2.1.

A very brief description follows of each of the legal documents.

The **Federal Ministries Act** (*Bundesministeriengesetz*) regulates the number of federal ministries and the distribution of responsibilities across and within all the ministries. It also details the responsibilities of the BMG and the distribution of its functions.

The **Imperial Sanitary Act of 1870** (*Reichssanitätsgesetz*) created the first legal foundation for the introduction of systematic data collection by the health authorities. It regulates the organization of the ÖGD as well as listing the responsibilities of medical health officers and the Supreme Sanitary Council.

The **Federal Constitutional Act** (*Bundesverfassungsgesetz, B-VG*) defines the responsibilities of the different health system stakeholders, such as the Federal Government, the regions or the self-administrative bodies in the health sector.

The **15a Vereinbarung**, which was signed by the regions and the Federal Government every four years and is, in its current version, valid from 2008 to 2013. It refers to public health in article 11 by stating that the contract partners will use principles of public health as guidance when implementing their measures. This involves the following aspects:

- acknowledgement of a comprehensive notion of health;
- health services research to ensure needs-orientated planning, development and evaluation;

⁴⁵ Excluding a few citations in legislation on public health training courses in which, however, public health is not referred to in detail and no definitions are provided.

Table 2.1 *Public health legislation*

English translation	German name/description	Abbreviation
Federal Ministries Act 1986	<i>Bundesministeriengesetz</i>	BMG
Imperial Sanitary Act 1870 and the regional Sanitary Acts	<i>Reichssanitätsgesetz</i>	RSG
Federal Constitutional Act especially article 10 para.12 and article 12, para.1	<i>Bundesverfassungsgesetz</i>	B-VG
Agreement between the Federal Government and the regions according to article 15a of the Federal Constitutional Act	<i>Vereinbarung gemäß Artikel 15a B-VG</i>	15a Vereinbarung
Health Reform Act 2005	<i>Gesundheitsreformgesetz</i>	GRG
Federal Act on Documentation in the Health Sector	<i>Bundesgesetz über die Dokumentation im Gesundheitswesen</i>	DokuG
Health Promotion Act 1998	<i>Gesundheitsförderungsgesetz/ Bundesgesetz über Maßnahmen und Initiativen zur Gesundheitsförderung, -aufklärung und -information</i>	GfG
Federal Health Promotion and Prevention Act (draft)	<i>Gesundheitsförderungs- und Präventionsgesetz</i>	GPG (Draft)
General Social Insurance Act as well as the Social Insurance legislation for other types of social insurance (farmers, self-employed, miners/railwaymen, civil servants, etc.)	<i>Allgemeines Sozialversicherungsgesetz und Sondergesetze</i>	ASVG B-KUVG GSVG BSVG
Professional legislation, e.g. Physician Act	<i>Ärztegesetz</i>	FSVG ÄrzteG
Federal Hospital Act and regional Hospital Acts	<i>Kranken- und Kuranstaltengesetz</i>	KAKuG
Epidemics Act	<i>Epidemiegesetz</i>	EpG
AIDS Act	<i>AIDS Gesetz</i>	AIDSG
Tuberculosis Act	<i>Tuberkulosegesetz</i>	TubG
Cancer Statistics Act Federal Act on the Statistical Recording of Tumours	<i>Bundesgesetz über die statistische Erfassung von Geschwulstkrankheiten, Krebsstatistikgesetz</i>	KrebstatistikG
Act on the Organization of Schools	<i>Schulorganisationsgesetz</i>	SchOG
Austrian School Education Act	<i>Schulunterrichtsgesetz</i>	SchUG
Austrian Government Programme 2009	<i>Regierungsprogramm</i>	
Community legislation (on the local level of communities, municipalities)	<i>Gemeinderecht</i>	

- promotion of interdisciplinarity of care or research;
- development of health targets;
- systematic health reporting.

Article 33 of the same agreement regulates the funding of cross-regional prevention programmes and treatment mechanisms. In article 34, the Federal Government and the regions agree on joint analysis and evaluation of the epidemiological impact of current and future preventive measures in the Federal Health Agency and the regional health funds.

With the enactment of the **Health Reform Act 2005** (*Gesundheitsreformgesetz, GRG*), regulations of the Federal Hospital Act (*Kranken- und Kuranstaltengesetz, KAKuG*), the General Social Insurance Act (*Allgemeines Sozialversicherungsgesetz und Sondergesetze, ASVG*) (and other social insurance legislation), the Federal Act on Documentation in the Health Sector (*Bundesgesetz über die Dokumentation im Gesundheitswesen, DokuG*) and the Physician Act (*Ärztegesetz, ÄrzteG*) were amended. In addition the GRG formed the basis for the implementation of the Health Care Quality Act and the Health Telematics Act. Central aspects of the Acts featured the installation of measures to promote integrated care, the coordination of planning, steering and funding within the health sector, the initiation of measures to ensure the sustainability of funding of the health sector, the support of prevention and the promotion of quality of care, as well as of telematics in the health care sector.

The **DokuG** regulates the documentation of diagnoses and services provided in connection with hospital and outpatient care, as well as the documentation of statistics and costing data in hospitals. Despite this Act, documentation of private outpatient care, especially of diagnoses, is still very scarce or sometimes missing altogether.

The **GfG** was enacted in 1998. It defines measures and initiatives to ensure the following aims: maintenance, promotion and improvement of the population's health in a holistic sense and for all phases of life; and education and information on preventable diseases as well as on emotional, mental and social factors influencing health. It draws on WHO's comprehensive definition of health and the Ottawa Charter on health promotion. This Act transferred responsibility for the implementation of strategies to achieve these aims to the Fund for a Healthy Austria (*Fonds Gesundes Österreich, FGÖ*). Financial resources are made available from income generated through value-added tax and are distributed based on the regulations of the Finance Equalization Act (*Finanzausgleichsgesetz, FAG*). In 1998 these funds amounted to 100 million Austrian shillings, the equivalent of about €7 million. With regard to the strategies, special focus is to be placed on the following topics and population

groups: children and adolescents; workplace health promotion; addressing the needs of specific groups, such as individuals suffering from chronic diseases, the elderly and pregnant women. Aspects such as psychosocial health or socioeconomic circumstances must also be taken into consideration.

The draft of the **GPG** seeks to create a common basis for the coordination of health promotion and disease prevention measures and initiatives. It regulates structural and financial support for measures and initiatives of the responsible bodies that include social insurance funds, the HVB, the Federal Government, the regions, the municipalities and communities, and Gesundheit Österreich (GÖG). These bodies can either undertake measures themselves or commission third parties. The Federal Health Agency is in charge of defining targets for health promotion and prevention, as well as developing strategies for reaching these targets. A board for health promotion and prevention is to be installed at the BMG. The draft also lists criteria for the distribution of subsidies and any relevant implications.

The **ASVG**⁴⁶ refers to public health functions and services provided by social insurance funds, such as those regulated in section 116 (ensuring health promotion), section 154b (health promotion: obligation to inform the insured about general health risks and the prevention of disease and accidents) or section 447h (installation of a fund for preventive health check-ups and health promotion at the HVB).

Professional legislation regulates the education and training of health professionals as well as their duties with regard to continuing education and professional development. It also contains regulations on certain types of professional activities; for example, those of a medical officer.

The **KAKuG** regulates the responsibilities for and within hospital care. It describes stakeholder obligations, funding mechanisms and duties related to documentation and qualification requirements. The KAKuG sees hospital planning in terms of beds and equipment as part of the national health care structure plan or regional health care structure plans and also lists principles to consider in order to promote integrated care. Hospital hygiene is also regulated by this Act.

The **Epidemics Act** (*Epidemiegesetz*, EpG), the **AIDS Act** (*AIDS Gesetz*, AIDSG) and the **Tuberculosis Act** (*Tuberkulosegesetz*, TubG) regulate responsibilities and procedures related to reporting or monitoring of infectious diseases and the course of action to be taken in the event of an infection or disease outbreak. Issues relating to infectious diseases are described in greater detail in section 3.8 of this report.

⁴⁶ Along with the other special legislation relevant for further groups of insured individuals, such as civil servants, self-employed people, farmers, individuals working in the railway and mining industries, notaries, and so on.

The **Cancer Statistics Act 1969** (*Bundesgesetz über die statistische Erfassung von Geschwulstkrankheiten, Krebsstatistikgesetz, KrebsstatistikG*) lists the type of data to be collected by the national cancer registry – namely, patient data and data on the type and site of the tumour(s), as well as on disease progression. It specifies the types of disease to be recorded, including all carcinomas, sarcomas, malignant illnesses of the haematopoietic system, the lymph system and the reticuloendothelial system. Reports must be made on incidence and deaths related to the respective illnesses. The responsible individuals are the executive or medical directors of hospitals, examination offices of the regional and local authorities, institutes for pathological anatomy, and institutes for forensic medicine.

The **Act on the Organization of Schools** (*Schulorganisationsgesetz, SchOG*) (section 2) stipulates the responsibility of schools to promote the health of their students. The **Austrian School Education Act** (*Schulunterrichtsgesetz, SchUG*) (section 66 (1)) lists the duties of school physicians.

In the **Austrian Government Programme 2009** various references are made to public health functions, such as occupational health; health in connection with transport policy; health protection with regard to environmental issues, food products, promotion of child and adolescent health, physical exercise, e-health and the reduction of administration costs. The coordination of environmental policy with energy, social, climate, health, economic and regional economic policies is also stated as a goal.

In the chapter on health, the government programme states that “the Federal Government affirms itself to a strong public health system and to ensure high-quality medical care for all people in Austria, regardless of their income, age, origin, religion or sex”. It aims to define national health targets with an emphasis on living environments and target groups. Other topics referred to are addiction, suicide, preventive health examinations, occupational health promotion, patient interests (waiting times, access to care, case management), patient rights, child and adolescent health, women’s health, rehabilitation, quality of care, health professionals, research and teaching, integrated care, planning and steering, palliative care and funding (of health insurance funds and hospitals).

European legislation and development at EU level can have a considerable impact on the situation in Austria. Relevant legislation is not listed here as this would go beyond the scope of the study at hand.

2.3 Funding

The lack of funding for public health is one of the central aspects hindering its further development in Austria. In very few cases do fixed or even legally defined budgets for public health services exist. Public health usually has to compete for funding with curative services and receives much less attention, financial support and staffing.

A comparison of the levels of health expenditure on curative services and on disease prevention and health promotion makes it clear that curative services – especially those based in hospitals – are dominant. On the positive side, it is also clear that the amount of money allocated to public health has been increasing over recent years, indicating a rising awareness of the importance of these services.

Expenditure on tertiary and secondary prevention dropped between 1996 and 2001, while expenditure on primary prevention and health promotion increased. This increase is mainly attributable to the foundation and work of the FGÖ.

In times of economic hardship, however, health promotion and preventive measures are usually the first to be cut. This is partly because the curative services have a stronger legislative base and are given a higher priority in terms of service provision. Public health services are at present often provided on a voluntary basis and depend on the economic viability of the funding body.

This section describes the current position with regard to funding for public health-related services and activities in Austria by detailing the resources allocated to certain institutions and reimbursement for selected services.

Legislation

In the absence of an explicit public health policy, the Austrian funding structure is highly fragmented.

The relevant legislation in this context is listed here:

- FAG
- Federal Finance Act (*Bundesfinanzgesetz* 2010)
- Agreement based on paragraph 15a of the B-VG
- GfG
- PrävG (draft)
- ASVG.

The **FAG** (section 8) regulates the allocation of an annual sum of €7.25 million for health promotion, education and information. This is the budget of the FGÖ, one of the three subdivisions of GÖG. Funding issues of the FGÖ are cross-referenced in the Federal Act on GÖG (section 6). In connection with the generation of funding for the FGÖ, the **GfG** refers to the Constitutional Finance Act and the FAG.

The **Federal Health Promotion and Prevention Act** (*Gesundheitsförderungs- und Präventionsgesetz*, GPG (Draft)) defines guidelines for the allocation of subsidies and regulates the conditions for their use.

The **ASVG** regulates which services social insurance must provide to its insured population and under which conditions these are to be provided.

Article 33 of the 15a Vereinbarung stipulates the funding of cross-regional prevention programmes and treatment measures. The Federal Government and the regions provide funding of €3.5 million for the promotion of programmes and measures described in the legislation, as well as for the funding of further projects and plans undertaken in connection with article 30 para.1 of the same Act (projects and plans of the Federal Health Agency). The Federal Health Agency subsequently developed guidelines and directives for cross-regional prevention programmes and applications for funding from this source are required to be filed accordingly. The sub-working group on public health agreed with both the guidelines and the directives but still encouraged the development of framework targets for health to make priorities explicit.

Article 34 of the same agreement states that the Federal Government and the regions agree jointly to evaluate and analyse the epidemiological outcomes of existing and future prevention measures in the health sector in the Federal Health Agency and the regional health funds.

The funding for this measure for 2010 was enshrined in the **Federal Finance Act**, detailing the income and expenses of the Federal Government on an annual basis. Other income and expenditure allocations of the BMG as well as contributions of the Federal Government to social insurance are also listed in this Act – for instance, for fighting substance abuse, for the mother–child pass examination programme⁴⁷ or for measures related to food safety, radiation protection or infectious diseases.

⁴⁷ A national screening programme that intends to monitor the health of mothers and their children during pregnancy and up to the 62nd month of the child's life. The programme is described in detail and compared to international approaches in the following report: Mossialos E et al. *Antenatal care in Austria and selected countries*. Report for the Main Association of Austrian Social Security Institutions. Vienna, Main Association of Austrian Social Security Institutions (HVB), 2010. The report can be downloaded from the HVB web site (www.hauptverband.at/fokoop, accessed 2 May 2011).

Research and literature

There is little research on the subject of public health funding in Austria, with only a handful of references available.

Reports on public expenditure on health care prevention and health promotion were published in 2004 and 2001 (based on data from 1996 and 2001, respectively) by the Austrian Health Institute (*Österreichisches Bundesinstitut für Gesundheitswesen*, GÖG/ÖBIG), commissioned by the then Federal Ministry of Health and Women (*Bundesministerium für Gesundheit und Frauen*, BMGF).

As part of the *Health care in transition* report for Austria, which was published in 2006 by WHO on behalf of the European Observatory on Health Systems and Policies, the Institute of Advanced Studies (*Institut für Höhere Studien*, IHS) calculated public health expenditure.

Experts interviewed in the course of this study argued that it is very difficult for them to obtain national funding for public health research and that they are therefore forced to apply for external funding. One national source of funding mentioned is the Anniversary Fund of the Austrian National Bank (*Österreichische Nationalbank*).⁴⁸

Funding of public health-related services – Overview

In 2007, total health expenditure in Austria amounted to 10.1% of gross domestic product (GDP) – since 2001 it had ranged from 10.1% to 10.4%. The calculation of health expenditure is based on the Organisation for Economic Co-operation and Development (OECD) System of Health Accounts (SHA) and 76.4% of total health expenditure was public, while 23.6% was private.

Based on the same data, health expenditure on prevention and public health services amounted to €455 million in 2007. The OECD manual *A system of health accounts* defines this expenditure category as “collective health services covering traditional tasks of public health such as health promotion and disease prevention including settling and enforcement of standards”. In comparison, €9.272 million was spent on inpatient care and €5.077 million on outpatient care.⁴⁹

When calculations of health expenditure were still based on the system of National Accounts (*Volkswirtschaftliche Gesamtrechnung*), which uses a different expenditure structure and lists expenditure by stakeholder, the current expenditure for prevention and public health services amounted to

⁴⁸ For further information, see the web site of the Österreichische Nationalbank (http://www.oenb.at/de/ueber_die_oenb/foerderung/jubilaeumfonds/jubilaeumfonds.jsp, accessed 8 April 2010 (in German)).

⁴⁹ Statistik Austria. Gesundheitsausgaben in Österreich [web site]. Vienna, Statistics Austria, 2009 (http://www.statistik.gv.at/web_de/statistiken/gesundheit/gesundheitsausgaben/index.html, accessed 26 August 2009).

about €503 million in 2006. Of this, the Federal Government, the regions and the communities contributed €217 million (43%) and social insurance funds contributed €211 million (41.9%) – the remainder was funded privately and to a lesser extent by NGOs and corporations (other than social health insurance).⁵⁰

In 2004 the then BMGF published a report entitled *Public expenditure on health care prevention and health promotion in Austria* that was based on 2001 data.⁵¹ The authors stated that public expenditure on health care prevention and health promotion amounted to about 6.3% of total health expenditure and about 9.3% of total public expenditure on health. This is the equivalent of an annual amount of about €127 per person living in Austria and €1.027 billion in total.

Comparing these figures with 1996 data, expenditure has increased by almost 31%, demonstrating the increase in significance of these services over the years.⁵² This rise may also be related to the higher concentration of related activities between 1996 and 2001, such as the enactment of the GfG and the establishment of the FGÖ.

The largest share of the €1.027 billion – equivalent to 86.7% – was contributed by social insurance; about 7% by the Federal Government; close to 5% per cent by the regions; 0.8% by the FGÖ; and 0.7% by the municipalities. More than half (61%) of the social insurance expenditure for health care prevention and health promotion was spent on medical rehabilitation services.⁵³ Expenditure on health care promotion and prevention totalled about €458.6 million (2.9% of total health expenditure). Compared with 1996, all funding bodies apart from the municipalities had increased the amount of money allocated to health care prevention and health promotion.

Most of the funds spent on health promotion and health care prevention services were spent on medical rehabilitation, preventive (periodic) health check-ups, measures improving the dental health status of the population, services related to the mother–child pass examination programme and vaccinations.

Another trend described in the 2001 publication of GÖG/ÖBIG was that administrative bodies tended to outsource the provision of health promotion and prevention services to external institutions such as NGOs or associations.

50 Statistik Austria. Gesundheitsausgaben in Österreich laut "System of Health Accounts" – Ergebnisse [web site]. Vienna, Statistics Austria, 2009. (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitsausgaben/index.html#index2, accessed 26 August 2009).

51 Habl C et al. *Public expenditure for prevention and health promotion in Austria 2001*. Report commissioned by the Federal Ministry of Health and Women. Vienna, Austrian Health Institute (ÖBIG), 2004.

52 Ibid.

53 Ibid.

The FGÖ and other players in the system appeared to be able to influence the priority attached to selected topics that, as a result, received more funding.

The IHS has calculated that a share of 18.3% of public health expenditure was allocated to the ÖGD – medical officer services, social services, environmental medicine – in 2005. This included the regions' expenditure on health promotion that was financed from tax revenues.⁵⁴

Funding of selected public health services and activities

The FGÖ, the national competence centre for health promotion, has an annual budget of about €7 million (see section 2.2 for details) that is intended to support projects relating to health promotion and primary prevention, as well as providing further education on these topics. This is one of the very few cases in which a fixed budget is allocated to a specific public health-related service. For further information on the responsibilities of the FGÖ, refer to section 2.4.

In 2008 social health insurance devoted €116 million (about 0.84% of its total health insurance expenditure) to measures geared towards early detection of diseases and health promotion, as well as €347 million (about 2.5% of total health insurance expenditure) to measures designed to strengthen the population's health, prevent disease and provide medical rehabilitation. This represents an increase of €24 million or 7.9% compared to 2007.⁵⁵

Social health insurance also covers one third of the costs of the examinations undertaken as part of the mother–child pass examination programme, a screening programme for pregnant women and their children. Social health insurance funds reimburse their health service providers (physicians) before receiving a two-thirds refund from the Family Equalizations Fund (*Familienlastenausgleichsfonds*, FLAF). The regions are responsible for distributing the mother–child pass booklets to the physicians, health centres and other recipients.

Social health insurance gives its insured population the opportunity to have an (annual) preventive health check-up. Individuals without health insurance coverage can also take advantage of this service, with the costs covered by the Federal Government.

Costs of the juvenile health examination, offered to the working population between the ages of 15 and 18 years, are shared by the social health insurance and the Federal Government (50% each).

⁵⁴ IHS HealthEcon 2005 (<http://www.ihs.ac.at>, accessed 2 May 2011), cited in: Hofmarcher M, Rack HM. Austria. Health system review. *Health Systems in Transition*, 2006, 8(3):1–247, p. 69.

⁵⁵ HVB. *Handbook of Austrian social insurance 2009*. Vienna, Main Association of Austrian Social Security Institutions, 2009.

Vaccinations⁵⁶ are not a statutory entitlement of social health insurance, with the sole exceptions of vaccination against tick-borne encephalitis (TBE)⁵⁷ and influenza. The latter, however, is only provided if WHO has declared a pandemic and the BMG has ordered the production of the appropriate vaccine.⁵⁸ Social health insurance also reimburses the costs for influenza vaccinations, rabies or tetanus following exposure.

Since January 1998, costs for vaccinations of children up to the age of 15 years⁵⁹ have been covered jointly by the Federal Government, the regions and social insurance funds.⁶⁰ The Federal Government pays for two thirds and the regions and social insurance for one sixth of the costs, respectively. The regions also pay the physicians' fees.⁶¹ The child vaccination concept currently includes the following vaccines: sixfold immunization (diphtheria, tetanus, pertussis, polio, haemophilus influenza B, hepatitis B), measles-mumps-rubella, hepatitis B, diphtheria-tetanus-polio, diphtheria-tetanus-pertussis, oral vaccination against rotavirus (since 2007). The conjugated pneumococcal vaccine *prevenar* is only designated for use without charge in high-risk groups (such as early birth). Costs of vaccinations for adults have to be paid for privately – the decision to be vaccinated is considered a matter of individual responsibility.

The coverage of costs of health examinations in schools depends on the type of school and can be the responsibility of the Federal Government, the regions or the municipalities.

Most of the regions have compiled health reports and some have already published more than one in recent years. Other stakeholders, such as social insurance and municipalities, have also become involved in health reporting. The compilation of such reports is frequently contracted to external consultants or university departments, although a few are produced in-house. Experts working in the field argue that financial resources dedicated to health reporting can be very limited and do not enable them to undertake elaborate data analyses. For further information on health reporting activities, refer to section 3.7.

Several regions have begun to develop health targets, although progress on this is varied and rarely supported by adequate scientific research or methodology. The funding and time required for the development and implementation of

56 HVB. *Vaccinations – A social insurance benefit?* Internal document, 8 July 2009. Vienna, Main Association of Austrian Social Security Institutions, 2009.

57 Social health insurance funds subsidize these; the height of the subsidy is defined on a yearly basis.

58 Regulated in section 132c of the ASVG "Other measures to maintain the health of the population".

59 Decisions on which vaccinations to include in the concept are taken jointly and are based on the recommendations of the Supreme Sanitary Council, expressed in the form of the yearly vaccination plan.

60 This is based on the so-called Vaccination Concept (*Impfkonzept*), which was initiated by the then Minister of Health in 1997.

61 Federal Ministry of Health (BMG), information provided by an expert in a telephone conversation on 20 October 2009.

health targets appears to be frequently underestimated by decision-makers. Health targets are discussed in detail in Chapter 4 of this report.

Over recent years, health system stakeholders have begun to invest in public health capacity-building, mostly by promoting workforce development measures and supporting their employees to obtain training in public health or a related subject. The FGÖ, for instance, provides regular scholarships and insurance funds train a certain number of employees every year. Without this support, some postgraduate programmes could not exist. Organizational structures are only very slowly being adapted, with appropriate and challenging positions being created for individuals with relevant training. Training structures for public health are described in Chapter 6 of this report.

Investment in public health research is still very low. Both financial and adequately qualified human resources are lacking, and commitment and leadership remain limited. Funding is predominantly provided for short-term projects and funding for long-term programmes or research studies is hard to find. Research issues are mainly covered in Chapter 6 of the report, but are also summarized in section 2.6.

2.4 Organization, structures and stakeholders

This section of the report outlines the organization of and structures surrounding public health in Austria. An overview of the key stakeholders operating in the field of public health is given, along with a description of their responsibilities and functions.

Responsibility for public health issues in Austria is not limited to one ministry, to a defined individual (such as a minister) or to specific health authorities or institutions operating in the health sector. It is a field in which responsibilities are fragmented and in which all levels of the health system and a large number of health system stakeholders and others (concerned, for instance, with social, environmental or educational issues) are involved in one way or another and to which departments, subdivisions or individual experts in institutions contribute, along with selected experts in a particular topic area.

Multidisciplinary cooperation within the health sectors and across different sectors, involving areas such as social services, environment, education or families, only happens in a few selected areas and regions and is rarely standardized. The building of collaborations and partnerships is not encouraged and is not standard practice.

Within the health sector new measures of coordination were introduced as part of the health reforms at national and regional levels in 2005 and their

effectiveness has yet to be assessed. Social insurance tried to encourage better communication and promote constructive discussion.

There is no clearly defined modern public health structure in Austria, nor is there an overall public health framework, strategy or plan. There is no national priority-setting process and no national health targets. The country does not have a public health ministry, a modern Public Health Act or a public health institute.⁶² The discipline lacks organizational and structural integration, clearly defined responsibilities, targets and strategies, as well as a formal modern legislative basis. Commitment to public health by decision-makers remains limited.

Some organizational structures are in place – the Science Association of Social Insurance (*SV Wissenschaft*) and the public health sub-working group of the Structural Changes working group of the Federal Health Commission (*Unterarbeitsgruppe Public health der Bundesgesundheitskommission*) – but are not active across all levels of the health system. The responsibilities and potential powers of existing stakeholders are not clearly spelled out.

Several topic-specific institutions (for health promotion, health technology assessment (HTA) and prevention) have been established since the mid-2000s but there is no overall strategy. Two different types of health institution can be distinguished in the public health field. The first is usually focused on a specific field of public health endeavour, such as health promotion (Ludwig Boltzmann Institute for Health Promotion Research (LBI-HPR), the Vienna Institute for Health Promotion (*Wiener Institut für Gesundheitsförderung*, WIG) or the Institute for Health Promotion and Prevention (*Institut für Gesundheitsförderung und Prävention*, IfGP) in Graz) or HTA (the Ludwig Boltzmann Institute for Health Technology Assessment (LBI-HTA)). The second type, which represents most of the Austrian institutions or health system stakeholders, is predominantly active in other areas, such as defining different core responsibilities and covering public health matters in conjunction with many other related topics (BMG, Social Insurance, GÖG/ÖBIG, and so on). In this way, it is often the case that no separate department or unit for public health exists, with related topics simply being assigned to selected individuals.

The key stakeholders involved in public health-related activities in Austria are detailed here.

At national level:

- the *Nationalrat* (National Council) and the *Bundesrat* (Federal Assembly);

⁶² An exception is the FGÖ with its responsibility for the field of health promotion and primary prevention.

- the BMG;
- self-governing bodies, such as social insurance institutions (HVB, various national social insurance funds – for example, for miners, railway workers, farmers, civil servants and the self-employed – or professional organizations (for example, the Austrian Medical Association (*Österreichische Ärztekammer*, ÖÄK));
- the Federal Health Agency with the Federal Health Commission and the Federal Health Conference;
- the Public Health sub-working group of the Structural Changes working group of the Federal Health Commission;
- advisory boards: the Supreme Health Board and its subcommittees;
- the Austrian Agency for Health and Food Safety (*Österreichische Agentur für Gesundheit und Ernährungssicherheit*, AGES): owned by the Federal Government (represented by the Minister of Health and the Minister of Agriculture, Forestry, Environment and Water Management);
- GÖG, which is owned by the Federal Government and consists of the subdivisions the FGÖ, the ÖBIG and the Federal Institute for Quality in the Health Care System (*Bundesinstitut für Qualität im Gesundheitswesen*, BIQG);
- research institutions: universities and universities of applied sciences, selected institutes of the Ludwig Boltzmann Society (LBI-HPR and LBI-HTA), Institute for Health Planning in Upper Austria (*Institut für Gesundheitsplanung*, IGP), IHS;
- others: ÖGPH, Anti-Poverty Network;
- planned: National Institute of Public Health.

At regional level:

- the regional government, regional health authorities, regional health directorate
- regional health insurance funds (*Gebietskrankenkasse*, GKK)
- regional offices of professional organizations
- regional health platforms
- advisory boards: regional health boards
- regional research institution: the WIG.

At municipal, district and community levels:

- district and community health authorities.

At various levels of the health system:

- medical universities
- patients and patient representatives
- self-help groups
- medical officers
- NGOs
- working groups
- health professionals
- health care institutions
- individual experts.

Representatives of different institutions state that cooperation between institutions does take place in the form of projects for selected target groups (such as the elderly), on specific topics (such as mental health) and through working groups or networks. However, few standardized coordinating mechanisms exist.⁶³

The responsibilities of the individual stakeholders are as follows:

The **Nationalrat** and the **Bundesrat** are responsible for debating and voting on legislation.

The duties of the **BMG** are laid out in the Federal Ministries Act. Responsibilities involve general health policy, protection of the general population's health status, engagement in cross-regional health crisis management, structural policy, planning and funding, as well as further development of the health care system, information management, health reporting, health informatics and telematics. It also encompasses prevention, overseeing the mother–child pass examination programme, occupational medicine, hygiene and vaccination services, monitoring and combating infectious diseases, issues related to radiation, supervision and combating of alcohol and drug addictions, training and further education of health professionals and food inspection. The BMG plays an important role in policy-making and acts as a supervisory authority; it also has a coordinating function in bringing together all health system stakeholders. Many of the duties listed above are delegated to the regions or self-governing bodies, such as social insurance institutions.⁶⁴

Other ministries, such as the Federal Ministry of Education, Arts and Culture, the BMASK, the Federal Ministry of Agriculture, Forestry, Environment and

⁶³ Expert interviews, 22–24 June 2009.

⁶⁴ Hofmarcher M, Rack HM. Austria. Health system review. *Health Systems in Transition*, 2006, 8(3):1–247.

Rural Development are also confronted with a range of health-related issues. Cooperation among ministries mainly takes the form of joint projects rather than standardized programmes.

Social health insurance funds have, by law, various obligations with regard to public health services. According to section 116 of the ASVG, social health insurance is responsible for ensuring health promotion (with the same legal entitlement for those that are insured as with preventive services). Social health insurance can also work with other institutions in the prevention or early detection of disease and the prevention of accidents (apart from work-related accidents) and can promote research into the causes of disease and accidents. A special paragraph on health promotion, section 154b, which was enacted in 1992, rules that health insurance funds have to inform their insureds regarding general health risks and the prevention of disease and accidents (apart from work-related accidents). Social health insurance funds can cooperate with other institutions and share costs. The intention behind introducing this paragraph was to promote the role of health insurance in the field of prevention.⁶⁵ Based on section 447h of the ASVG, a fund for preventive health check-ups (*Vorsorgeuntersuchungen*) and health promotion must be set up at the HVB. This is funded by money from the Federal Ministry of Finance (tobacco tax) and other forms of income and is intended to be used for the preventive health check-up and for coordinated health promotion measures. The HVB is required to report to the BMG on the development of the use of preventive health check-ups. Social insurance has also recently established a five-year programme for health promotion and prevention.

Social health insurance funds are obliged to provide preventive health check-ups for their insured population and examinations are carried out as part of the mother–child pass examination programme. They offer human genetic examinations and selected vaccination services, and are also involved in accident prevention, the promotion of dental and occupational health, disease management, promotion of physical activity and healthy nutrition, as well as informing insureds about risk factor reduction, for example, by encouraging participation in smoking cessation programmes. The main settings for these health promotion activities are schools (the Healthy Schools Project – a joint project of the Federal Ministry of Education, Arts and Culture, the BMG and the HVB) and workplaces.

Public health expertise is increasingly being promoted within social insurance by sponsoring the participation of a specified number of employees in postgraduate and other training courses. Awareness of the importance of public

⁶⁵ HEI docu – contributions from Günter Flemmich, Helmut Ivansits, Paula Lanske, Doris Lutz, Christa Marischka, Christian Rothmayer, Monika Weißensteiner and Brigitte Wolkersdorfer. Download of part 1 available at the web site of HEI Consulting (<http://members.aon.at/heiconsulting/docu1.pdf>, accessed 22 April 2011).

health is also being encouraged by organizing events, initiating working groups and defining targets.

The **Science Association of Social Insurance**⁶⁶ (*SV - Wissenschaft*), which has been established by all social insurance funds, promotes research cooperation in social insurance. Research fields have been defined, knowledge on networking acquired, scientific evidence on social insurance positions collected, research cooperation encouraged and events organized.

The **ÖÄK** is the professional body of physicians, representing both employed and freelance physicians. Regional professional organizations exist in each of the nine regions. The duties of the national and regional associations include the issuing of statements or suggestions related to any matters affecting physicians' interests in the health system in general or in connection with education and training or continuing medical education (CME) of physicians. They are also in charge of monitoring the quality of CME events, recording registrations and negotiating contracts with social health insurance funds.

In the course of Health Reform 2005, which aimed to promote integrated care by reducing the divide between outpatient and inpatient care, the **Federal Health Agency** (*Bundesgesundheitsagentur*) was established at national level with the Federal Health Commission (*Bundesgesundheitskommission*) as an executive body. Regional Health Funds (*Landesgesundheitsfonds*) were established at regional level with the Regional Health Platforms (*Gesundheitsplattformen*) as executive bodies. The Federal Health Conference (*Bundesgesundheitskonferenz*) was installed as an advisory body of the Federal Health Commission.

The Federal Health Agency is responsible for monitoring developments in the health sector, for promoting further development by defining principles for planning, budgeting and reimbursement, and by applying steering mechanisms. The Agency is also in charge of defining quality standards, of devising regulations for uniform documentation and for defining a framework for the management of interfaces between the different sectors of the health system. Its executive body, the Federal Health Commission, is composed of representatives of the Federal Government, the regions, social insurance and professional organizations and interest groups, including physicians, patients and hospitals.⁶⁷

The draft of the PräVg lists various additional responsibilities, such as the development of targets for health promotion and prevention and the definition of strategies for achieving these. The Federal Health Agency is also charged

66 *SV-Wissenschaft*: http://www.sv-wissenschaft.at/portal/index.html?ctrl:cmd=render&ctrl>window=forschungundlehreportal.start.startWindow&cp_menuid=65117&cp_tabid=1 (accessed 9 October 2009).

67 Federal Ministry of Health (BMG): www.bmgf.gv.at (accessed 5 May 2009). Article 15 of the agreement according to article 15a of the Federal Constitutional Act (*15a Vereinbarung*).

with ensuring the coordination of new measures with existing ones and the compilation of a report on the activities undertaken in the areas of health promotion and prevention.

The Public Health sub-working group (*Unterarbeitsgruppe Public Health*) of the Structural Changes working group of the Federal Health Commission (*Arbeitsgruppe Strukturveränderungen der Bundesgesundheitskommission*) is composed of representatives from the following organizations: BMG (six), regions/regional organizations (four), social insurance (three), Vienna Health Promotion Ltd (one), GÖG (two). Management of the working group is undertaken by an additional regional representative (from Styria). The working group advises the Federal Health Commission on public health matters.

The **Supreme Health Board** (*Oberster Sanitätsrat*) is a medico-scientific body composed of well-respected health experts – physicians from various specialties, pharmacists, psychologists, experts in health planning, financing, nursing – who are appointed by the Minister of Health for a period of three years. Representatives do not receive any remuneration for their work and are bound by strict confidentiality. The legal basis for the Supreme Health Board is the Imperial Sanitary Act of 1870 when the committee of the day advised on questions of population health. After the Second World War the work of the board focused on maternity and child care, reducing infant mortality and combating infectious diseases, including the development of vaccination programmes for children.⁶⁸ Today the Supreme Health Board retains the duty to provide the Minister with advice and expert opinions on selected topics. It was reorganized in 2005 and now has 39 members, rather than the 19 that used to belong to the Board.⁶⁹ Meetings are held three times a year. Recommendations of the Board are not binding for the Minister.⁷⁰

The Supreme Health Board has various subcommittees: the AIDS committee, the vaccination board, the dental committee and the mother–child pass committee.⁷¹ In 2004 a public health committee was established.

The **Subcommittee for Public Health of the Supreme Health Board** (*Unterarbeitsgruppe Public Health*) is composed of members of the Supreme Health Board who volunteer their services. The committee deals with issues related to occupational health and diseases of civilization, as well as with topics defined by the membership or with inquiries passed on by the Supreme Health Board from the Minister of Health. At present, Professor Michael Kunze, Professor of Social Medicine at the University of Vienna, is in charge of

68 Marina Hufnagl (BMG). Personal communication on 27 August 2008 (in response to an enquiry from the author).

69 Hofmarcher M, Rack HM. Austria. Health system review. *Health Systems in Transition*, 2006, 8(3):1–247.

70 BMGF. *Public health in Austria*. Vienna, Federal Ministry of Health and Women, 2005.

71 Marina Hufnagl (BMG). Personal communication on 27 August 2008 (in response to an enquiry from Joy Ladurner)

coordinating the Subcommittee, which comments on current issues, works on topics in the government programme and on self-defined fields of interest, such as health targets and demographic change.⁷²

In general, the activities of the Supreme Health Board and the subcommittees are subject to very strict confidentiality regulations. The choice of topics dealt with or decisions made are not publicized.

The **AGES** is owned by the Federal Government and fulfils a wide range of responsibilities related to health and food safety. These involve inspection to ensure safe and properly labelled food, the promotion of healthy nutrition, veterinary examinations to ensure protection against animal diseases or zoonoses, the approval of medicinal products and devices, as well as the prevention and control of infectious diseases. AGES oversees the entire food chain by performing assessments, issuing approvals, giving advice and undertaking research.

GÖG was founded on 1 August 2006, based on the Federal Act of the Establishment of *Gesundheit Österreich*.⁷³ It is a national research and planning institute for the health system, acting as the national competence centre for health promotion, and is owned entirely by the Federal Government. The organization comprises three divisions: the **ÖBIG**, the **BIQG** and the **FGÖ**.

The **ÖBIG**⁷⁴ provides expertise in various areas, such as planning and steering (including development of the Austrian Health Care Structure Plan, management of the Austrian Health Information System (*Österreichisches Gesundheitsinformationssystem*, **ÖGIS**) and of various registries), health reporting (compilation of regional health reports and reports on specific topics), training of health professionals (development of curricula), prevention (health promotion and secondary prevention), health economics and evaluation (funding, health systems analysis, HTA and pharmacoeconomics).

The **BIQG** was founded in the course of the health care reforms of 2005 and is based on the Federal Act on the Quality of Health Services (Health Care Quality Act) as well as the Federal Act on the Establishment of **GÖG**. It has four main operating fields including: patient safety and quality information, quality programmes, outcome quality and quality and effectiveness/HTA.⁷⁵

The **FGÖ** was founded in 1998 based on the **GfG** (see section 2.2). It is the central body for supporting projects on health promotion and primary

⁷² Expert interview, 13 March 2009.

⁷³ Federal Act of the Establishment of *Gesundheit Österreich* (**GÖG**), available at the **GÖG** web site (<http://www.goeg.at/cxdata/media/download/berichte/GOeGG.pdf>, accessed 2 March 2010).

⁷⁴ **ÖBIG**. *Gesundheit Österreich GmbH* [web site]. Vienna, Austrian Health Institute, 2009 (www.oebig.org, accessed 3 January 2009).

⁷⁵ **BIQG**. Federal Institute for Quality in the Health Care System [web site]. Vienna, Austrian Health Institute, 2010 (<http://www.goeg.at/de/BIQG-Arbeitsbereiche.html>, accessed 5 April 2010).

prevention, as well as providing further education on these areas. It defines health promotion in line with WHO's Ottawa Charter and has the following aims:⁷⁶

- to support practical and research projects in the fields of health promotion and primary prevention, bio-psychological/social well-being and participation in international promotion programmes/research projects;
- to facilitate structural development;
- to promote continuing training and national as well as international networking and cooperation with international associations;
- to engage in public relations work to raise awareness of the activities of the FGÖ and of health promotion.

The FGÖ's work spans six fields: physical activity, nutrition, mental health, children and adolescents, health promotion in the workplace, and the elderly. For 2008 the following priority areas were defined in terms of project support: cardiovascular health in the district setting of community/city, nursery and school, place of work and business. The working programme for 2009 builds on this work, taking it further. The basic principles of social status and gender mainstreaming are constantly taken into account by the Fund and published guidelines will be available for applicants seeking project support. In 2008/2009 the FGÖ's research focused on the following topics: the contribution of health promotion to a sustainable improvement in the population's health and the reduction of health inequalities; the contribution of health promotion programmes and strategies to establishing sustainable structures and comprehensive health policies; and the contribution of capacity-building to the population-wide introduction of sustainable health promotion programmes and activities.

The FGÖ supports up to one third of the total costs of a practical project. Appropriate evaluation and documentation are mandatory and projects have to meet defined quality criteria. The Fund sees itself as responsible for dissemination of research findings and the implementation of resulting health promotion and primary prevention measures. It has an annual budget of €7.25 million from income generated through sales tax. So far around 725 projects have been supported and documented in a project database. The FGÖ also offers further education courses, organizes events and publishes extensive information. It is one of the most important players in the field of health promotion and primary prevention in Austria.

⁷⁶ FGÖ. Fund for a Healthy Austria [web site]. Vienna, Fund for a Healthy Austria, 2009 (www.fgoe.org, accessed 2 January 2009). Expert interview, 6 July 2009 (FGÖ).

Universities play a crucial role in the growth of public health expertise by organizing programmes on public health and related disciplines and by participating in public health research. Further information on this can be found in Chapter 6 of this report.

The **LBI-HPR** began its work in March 2008 and focuses its research on the influence exercised by organizations such as schools, hospitals and nursing homes on the health of their employees and users, as well as the requirements for the successful implementation of health promotion measures. The impact and consequences of these measures are also assessed.⁷⁷

The **LBI-HTA** was founded in April 2006⁷⁸ and defines itself as an independent research institution providing scientific evidence to support decisions in favour of an efficient and appropriate use of resources. The Institute covers several areas: evaluation of medical interventions and questions related to evidence-based health services research (assessments); scientific supervision of decision-maker networks; HTA in hospitals; scientific decision support of the BMG; scientific public and public understanding; HTA implementation, including development and information on effective steering and policy instruments; and international collaboration. Systematic work and traceability of findings is considered crucial.

The **IHS**, in its department of health economics, is primarily occupied with research in the fields of applied health economics, health systems comparison and health policy. Scientific methods are used to analyse and assess questions relating to the structure of the health care system. This emphasis was chosen because of the traditional focus of the Institute on economic policy. The IHS receives public sponsorship for its educational activities, but in the field of applied research only the overhead costs are covered. Staffing must be funded through projects and public funding for research is hard to find.⁷⁹

The **ÖGPH** is an NGO that brings together both individuals and institutions interested in public health in the form of a scientific community. It promotes interdisciplinary and multidisciplinary collaboration in the field of public health. It was established in the 1990s by a group of enthusiasts who wanted to bring modern public health to Austria. The main objective of the organization initially was to introduce training programmes and to close the gap public health professionals perceived when returning after undergoing training abroad.⁸⁰ Participation in the association, which has more than 200 members, is based on

⁷⁷ LBI HPR. Ludwig Boltzmann Institute Health Promotion Research [web site]. Vienna, Ludwig Boltzmann Institute Health Promotion Research, 2009 (<http://lbi-hpr.lbg.ac.at/>, accessed 5 May 2009).

⁷⁸ LBI HTA. Leitbild des LBI-HTA [web site]. Vienna, Ludwig Boltzmann Institute for Health Technology Assessment, 2009 (<http://hta.lbg.ac.at/de/content.php?iMenuID=11>, accessed 5 May 2009).

⁷⁹ Expert interview, 22 June 2009 (IHS).

⁸⁰ Expert interview, 22 June 2009 (ÖGPH).

individual or corporate membership. Members come from various professional backgrounds and include academics, practitioners and students. They form working groups and organize meetings and the Association also publishes a regular newsletter. The Association is a member of the European Public Health Association (EUPHA) and was asked to host the 13th European Congress of the EUPHA in 2005, which was held in Graz and attracted more than 900 participants from all over the world.⁸¹ The Association is also a member of the Association of Schools of Public Health in the European Region (ASPHER) and supports the development of quality standards for postgraduate training programmes in public health.

Today the ÖGPH strives to encourage sustainable health-orientated structures in society and in policy-making, and facilitates networking among experts. It promotes dialogue between experts and policy-makers on specific and current questions, as well as making statements on any relevant developments in the Austrian health sector. In 2007 it formed four working groups on Public Relations, Screening (International Austrian Screening Committee), Sports and Training, and Standards in Public Health Education. Their aims are described on the Association's web site.⁸²

There is a plan to establish a **National Institute of Public Health**. No specific details are available yet but it will be attached to one of the medical faculties in a department of social medicine and its role will be to engage in research and training activities. Currently, departments in social medicine exist in the medical faculties of the Universities of Vienna, Graz and Innsbruck. The one in Vienna is the largest and includes the Centre for Public Health.⁸³

The **Austrian Anti-Poverty Network** (*Armutskonferenz*) is a network of institutions, the aim of which is to fight poverty and social exclusion and to improve the living conditions of those affected. It brings together about 35 members, including welfare organizations, umbrella organizations of social initiatives, churches and groups at risk of poverty⁸⁴ (such as those without work or single parents), and is active at both national and regional levels. The overall budget of the network is about €300 000. It is part of the European Anti-Poverty Network (EAPN) and is supported by a scientific advisory committee. The Network offers selected social services, engages in lobbying and undertakes research in establishing the status quo and to find out about

81 Noack H, Kahr-Gortlieb D, eds. *Promoting the public's health*. EUPHA 2005 Conference Book. Gamburg, Verlag für Gesundheitsförderung, 2005.

82 www.oeph.at (> working groups (*Arbeitsgruppen*); accessed 9 September 2009).

83 The Institute for Social Medicine lists seven researchers on its web site, while the Department of Epidemiology lists four researchers on its web site. In total the Centre for Public Health has eight departments (epidemiology, general- and family medicine, ecotoxicology, ethics in medical research, history of medicine, medical psychology, social medicine and environmental hygiene) with about 160 employees listed on its web site.

84 Armutskonferenz (2011). *Netzwerk gegen Armut und soziale Ausgrenzung* [web site]. Vienna, Armutskonferenz, 2009 (www.armutskonferenz.at, accessed 4 September 2009).

developments, future trends and challenges. It also undertakes media and public relations work to raise awareness and reduce stigma. At the ministry level, the main point of contact for the network is the BMASK. Individual member organizations operate health care institutions such as hospitals and outpatient clinics for individuals without social insurance, and undertake health prevention activities in schools and nurseries or provide services for the homeless and for illegal immigrants.⁸⁵

At national level, the BMG is the supreme health authority. On defined public health issues it is, as described earlier, advised by the Supreme Sanitary Health Board (*Oberster Sanitätsrat*).

At regional level the **regional government** is in charge and is supported by the **regional health boards** (*Landessanitätsrat*). Each regional government has a health department, usually headed by a physician – the regional health director. District health departments are headed by a district medical officer. Along with various other duties, community health authorities are responsible for undertaking health inspections (audits) at local level.

The **WIG**⁸⁶ is a non-profit-making association wholly owned by the city of Vienna. It was established in March 2009 and aims to strengthen and further develop existing health promotion activities in Vienna and to initiate new programmes and processes. The intention is to bring together and concentrate health promotion in Vienna within this Institute, which will have about 35 employees. The Institute primarily covers topics related to health promotion, but also deals with issues of primary prevention. It subscribes to a comprehensive and not purely medical definition of health. It follows the settings approach as defined by WHO's Ottawa Charter (creation of healthier living environments), with defined target groups (children, adolescents, the elderly, and women and socially disadvantaged individuals in general) and target topics (such as healthy lifestyles, including physical exercise, nutrition, mental health), as well as pursuing a health promotion approach orientated towards individual behaviours and environments. All large projects incorporate a level of evaluation defined at the outset, and a comprehensive evaluation of the entire institute is planned for the future.

Numerous other **NGOs and charities**, such as Caritas, Diakonie, Hilfswerk, and family organizations, support or facilitate access to curative and public health services for disadvantaged or special needs groups, including family carers, individuals at risk of poverty or undocumented migrants/asylum seekers. They also offer information and in some cases counselling services.

⁸⁵ Expert interview, 24 June 2009 (Anti-Poverty Network).

⁸⁶ Expert interview, 19 August 2009 (public research institution).

Medical officers play a central role in the provision of public health services in Austria. They work for regional, district or local health authorities and also for the Federal Government, sometimes within in a multidisciplinary team that might include health attendants, biologists, disinfection officers, nurses and hygienists. A medical officer, of which Austria has about 300, is usually in charge of a population of between 30 000 and 60 000 inhabitants.⁸⁷ Training consists of a two-year postgraduate training course on issues such as hygiene, sanitation, epidemiology, toxicology and veterinary inspection. The curriculum of medical officers is at present undergoing revision as part of the reform of the ÖGD. For further details on medical officers and the ÖGD, see Chapter 6.

School physicians usually work on a part-time basis, and are responsible for undertaking routine annual health examinations as well as providing essential care for students at all types of school. They remain the only health professionals represented in schools and further details on their responsibilities can be found in Chapter 6.

Several public health activities – such as training or development of curricula for health professionals – take place in the field of **nursing** and further information on this can also be found in Chapter 6.

There are various **counselling centres**, for example for those suffering from AIDS, for pregnant women, and addicts, which aim to support the medical health officers in their daily work and to provide services to people in need at local level.

Other public health stakeholders include health working groups such as the Working Group for Preventive and Social Medicine (*Arbeitskreis für Vorsorge- und Sozialmedizin*, AKS), the Working Group for Preventive Medicine and Health Promotion Tyrol (*Arbeitskreis für Vorsorgemedizin Tirol*, AVOMED), the Working Group for Preventive Medicine Salzburg (*Arbeitskreis Vorsorgemedizin Salzburg*, AVOS), Healthy Lower Austria (Lower Austria), the Association for Prophylactic Health Work (Upper Austria) (*Verein für prophylaktische Gesundheitsarbeit*, PGA) and Styria Vitalis (Styria), which come together in the Forum of Austrian Health Working Groups (AKSAustria).⁸⁸ The AKS forum is a national cooperation of regional organizations with experience in the field of public health, which focuses predominantly on health promotion and preventive medicine. It defines itself as a contact point for commissioning cross-regional health services. Members are working groups from six different Austrian regions.⁸⁹ The forum aims to enrich the work in the Austrian regions through cooperation and exchange of experience; to prioritize own interests

⁸⁷ Hofmarcher M, Rack HM. Austria. Health system review. *Health Systems in Transition*, 2006, 8(3):1–247.

⁸⁸ Aksaustria. Aksaustria [web site]. Vienna, Arbeitskreis für Vorsorge- und Sozialmedizin Vorarlberg, 2009 (www.aksaustria.at, accessed 2 January 2009).

⁸⁹ Members listed on the AKSAustria web site include the PGA in Upper Austria, AVOS, AVOMED, AKS, the Health Forum of Lower Austria (*Gesundheitsforum Niederösterreich*) and Styria Vitalis in Styria.

and activities through a combined national presence; to offer projects a greater platform for professional implementation; and to be an active partner for cross-regional commissioning agents in Austria and the EU.

2.5 Public health disciplines, training and research – key functions

A brief summary of public health functions was presented in section 2.1. This section discusses the application of selected public health disciplines in Austria and then examines the key functions of public health in Austria.

Several public health disciplines and functions are discussed in detail in other chapters of this report and will not therefore be covered extensively in this chapter. Health reporting and control of infectious diseases are dealt with in Chapter 3, health targets in Chapter 4, disadvantaged and special needs groups in Chapter 5 and issues related to health professionals in public health in Chapter 6.

Public health disciplines

Multidisciplinary working in public health practice and research is vital. Ideally, individuals working in the field should have a strong foundation in one of the following disciplines: medical statistics, epidemiology, psychology and/or the social sciences, including health economics and management. But individuals with backgrounds in other fields, such as anthropology or history, can also provide a beneficial perspective.

An awareness of the need for capacity-building in these areas is emerging only slowly in Austria. Training in certain disciplines, such as epidemiology and health economics, is not available, career paths are poorly defined and career opportunities limited. Public health in Austria is still strongly dominated by medicine. Individuals with different backgrounds, such as the social sciences, nursing or psychology, are gradually coming into the field, however, and acceptance of multidisciplinary working is increasing.

Epidemiology

Austria does not offer any undergraduate or postgraduate training in epidemiology. There are very few recognized epidemiologists who have been trained abroad and they usually work either in hospitals or universities. There is a Department of Evidence-based Medicine and Clinical Epidemiology at the Danube University in Krems (Lower Austria) that deals with the fields of evaluation, evidence-based information, methodological research and systematic reviews and HTA assessments. An institute of Public Health, Medical Decision-

Making and HTA exists at the Private University for Health Sciences, Medical Informatics and Technology (*Private Universität für Gesundheitswissenschaften, Medizinische Informatik und Technik*, UMIT) in Hall in Tyrol.

The urgency of creating additional structures and resources and training opportunities for epidemiology appears to be afforded only low priority, especially among policy-makers.

Health economics

There are no specific training opportunities for health economics in Austria, although several research institutions include the term “health economics” in their name or research portfolio. Several economics, management or health-related training programmes may include individual lectures on health economics. Although the expression health economics is used quite frequently, its application and corresponding research outputs are limited. Only a few institutions, such as the IHS or the ÖBIG actually perform economic analyses and employ qualified staff. The need for the training of experts in health economics is only slowly being acknowledged.

The Karl Landsteiner Institute for Health Economics organizes an annual course for health economics, in collaboration with a university in Sopron, in Hungary. The Institute is also involved in research and provides introductory lectures on health economics and health systems for medical and dental students.⁹⁰

Universities of social sciences with courses on management, business studies, economics and statistics have begun to offer some health-related courses and have also started programmes on health management and health sciences. Several universities provide some hours or days of training on health economics but no specialized training is available.

Medical statistics

Research in connection with medical statistics and informatics is more widespread and established.

The Medical University of Innsbruck has a department for Medical Statistics, Informatics and Health Economics.⁹¹ Its main focus appears to be on biostatistics and medical informatics. Research activities in health economics deal with cost–benefit analyses, diagnosis-related group (DRG) systems and funding of health care systems.⁹²

⁹⁰ Karl Landsteiner Society. Institut für Gesundheitsökonomie [web site]. Sankt Pölten, Karl Landsteiner Society, 2009 (<http://www.karl-landsteiner.at/institute/gesundheitsoekonomie.html>, accessed 3 October 2009).

⁹¹ Existing since 1968, originally as the Department for Biostatistics and Documentation, renamed in 2004 as the Department of Medical Statistics, Informatics and Health Economics.

⁹² Department of Medical Statistics, Informatics and Health Economics at the Medical University of Innsbruck (<http://www.i-med.ac.at/msig>, accessed 3 October 2009).

The Medical University of Vienna has an Institute for Medical Statistics and a core unit for Medical Statistics and Informatics, offering expert knowledge in medical informatics and statistics. The core unit offers courses on clinical biometrics, medical statistics, biomedical computer simulation and bioinformatics, medical computer vision, medical expert and knowledge-based systems and medical information and retrieval systems.⁹³

The Medical University of Graz has an Institute for Medical Informatics, Statistics and Documentation, which focuses on image processing in medicine, data protection, clinical bioinformatics, medical information systems, human–computer interaction and usability engineering, telemedicine and eHealth, and knowledge sourcing in medical databases.

*HTA*⁹⁴

In the field of HTA, Austria can be described as a latecomer. There are only a few recognized experts in the field and a small number of institutions or departments.⁹⁵ The country does not have a national Health Technology Institute and has not implemented a national priority-setting process. Experts interviewed in the course of the study do, however, report some progress and state that HTA is received with greater acceptance nowadays and that findings of assessments are usually considered for further implementation. There is also a gradual change from retrospective assessments to prospective planning.

One stakeholder in HTA is the BIQG subdivision of GÖG. This subdivision was founded in 2007 and is responsible for developing a national strategy and framework for HTA. In 2008, representatives of BIQG working with colleagues from the Federal Government, the regions and social insurance produced the strategy, some aspects of which are already being implemented. A working group was established to make recommendations for integrating HTA into the decision-making structures.

Another important stakeholder is the LBI-HTA which has a staff of 12 researchers and produces about 10–12 comprehensive assessments and around the same number of rapid assessments per year. Some of these relate to public health questions – for example, assessments of the human papilloma virus (HPV) vaccination, of new interventions for hospitals, of interventions for chronic back pain, of interoperative radiotherapy, and of medical devices and equipment or rehabilitation measures. Topics for assessment and research

⁹³ Core Unit for Medical Statistics and Informatics at the Medical University of Vienna (<http://www.meduniwien.ac.at/msi/home/>, accessed 3 October 2009).

⁹⁴ Based on expert interviews, 22 June 2009 (HTA, research).

⁹⁵ For an overview, see the Health Technology Assessment Guide on the GÖG web site (<http://hta-guide.biogg.at/HTA/Institutionen:%D6sterreich.html>, accessed 10 April 2010).

priorities are defined with partners from hospitals, social insurance, the BMG and universities, which provide 40% of the institute's funding.

Research at the Institute of Public Health, Medical Decision-Making and Health Technology Assessment, which lists 33 members of staff on its web site, focuses on cardiovascular disease, cancer screening and treatment, infectious diseases, diabetes, neurological disorders and other diseases.⁹⁶

The Department for Evidence-Based Medicine and Clinical Epidemiology at the Danube University in Krems in Lower Austria deals with the fields of evaluation, evidence-based information, methodological research and systematic reviews and HTA assessments.

The EBM (evidence-based medicine) Review Centre at the University Clinic of Internal Medicine in Graz was established in 2005 and became a Research Unit at the Institute for Medical Informatics, Statistics and Documentation in 2009. The research centre's aim is to compile overview papers and undertake meta-analysis on defined medical topics.⁹⁷

In 2004 the HVB created a Department for Evidence-Based Medicine (*Evidenzbasierte wirtschaftliche Gesundheitsversorgung*, EBM).⁹⁸

HTA experts in Austria generally work either at universities, research institutions or on a freelance basis. Experts interviewed in the course of the study stated that there is a need for an effective priority-setting process in which international examples and experience should be used – good models for this already exist.

Public health training and research structure

The topic of public health training and research is covered extensively in Chapter 6 of this report. This section includes a brief overview of the main aspects.

Public health training

Training in public health or a related field can be obtained by following different training and career paths.

One path is to study medicine and to then specialize in social medicine, occupational medicine or to engage in training at one of the universities offering postgraduate training courses in public health or a related field. Austria has three public medical universities which are located in Vienna, Graz and in

⁹⁶ For further information see the web site of the Department for Evidence-based Medicine and Clinical Epidemiology (<http://phgs.umit.at/page.cfm?pageid=438>, accessed 8 April 2010).

⁹⁷ Medical University of Graz. EBM Review Centre (Evidence Based Medicine) [web site]. Graz, Medizinische Universität Graz, 2010 (<http://www.meduni-graz.at/ebm>, accessed 8 April 2010).

⁹⁸ HVB. Evidence Based Medicine (EBM)/Health Technology Assessment (HTA) [web site]. Vienna, Main Association of Austrian Social Security Institutions, 2010 (http://www.hauptverband.at/portal27/portal/hvbportal/channel_content/cmsWindow?p_tabid=5&p_menuid=65858&action=2, accessed 8 April 2010).

Innsbruck and one private medical university in Salzburg. Physicians can also enrol in a postgraduate training course for physicians working in the ÖGD, which is offered at the three public medical universities already mentioned. Reform of the training course is currently under way. Other training options (school physician, environmental medicine) are available for physicians in the form of diploma courses.

Another path is to complete an undergraduate course at a university in any subject and then to enrol in a postgraduate public health programme. Individuals may also enrol in a postgraduate programme without having an undergraduate degree if they are able to demonstrate sufficient work experience in public health, sometimes in a leading position.

Several Universities of Applied Sciences offer undergraduate training in subjects such as health promotion and health services management.

It is also possible to enter the public health field without formal graduate or postgraduate training on the basis of extensive practical experience and attendance at conferences, seminars and workshops.

Public health programmes are not well established in Austria. The first Austrian MPH programme started at the University of Graz in the autumn of 2002. More recently, further programmes have been started at the Johannes Kepler University in Linz (Upper Austria), at the UMIT in Hall in Tyrol (a Health Management course), and at the University of Vienna. The curriculum followed in Graz is also offered in Schloss Hofen (Vorarlberg), in cooperation with the University of Applied Sciences in Dornbirn.

Various universities (for example, in Krems and Klagenfurt) and Universities of Applied Sciences (for example, in Pinkafeld, Steyr or Bad Gleichenberg) have followed the trend and started courses with public health elements, such as health care management, health promotion and hospital management.

One huge problem in public health training, both at university and college levels is a serious shortage of teachers trained in public health.

Public health research

Public health research is limited in Austria for a variety of reasons. Departments at universities offering public health or related courses are usually very small and employees are occupied mainly with course organization, teaching and administration. No fixed budgets for research and few ongoing research collaborations exist, indicating the topic's low priority. Research is often commissioned on demand or following trends. Planned research barely exists. Publications often only report on outcomes of short-term projects. Long-

term research activities are very rare. Involvement in EU research activities is sometimes hampered by a shortage of the time and effort needed to prepare an application. Research topics are influenced largely by the head of the research institution, by the funding partners and by external trends and events. Currently, research indicates a focus on describing the present status of the specialty.

Functions of public health in Austria

This section describes a range of functions and applications of public health in Austria, involving health services, social medicine, occupational medicine, the ÖGD, health promotion and prevention services. Several functions of and tools applied in public health are detailed in other chapters of this report and need not be repeated here. These include health reporting (Chapter 3), health targets (Chapter 4) the addressing of disadvantaged and special need groups (Chapter 5) and training and research (Chapter 6).

Health care services

Health care services in Europe are mostly funded and provided by public entities, such as national or social insurance bodies or national, regional or local authorities. In Austria, public expenditure on health amounted to 76.9% of total expenditure in 2008.⁹⁹ Health insurance coverage is widespread throughout Europe. The main funding mechanisms of health systems are social insurance, tax funding or mixed funding systems. Austrian health insurance covered 99% of the population in 2009.¹⁰⁰ Private health insurance is also an option but its importance varies considerably in different countries, depending on the coverage of public insurance and the extent of the benefits packages provided.

Health expenditure as a percentage of GDP in Austria is above the European average and amounted to 10.5% in 2008. The main sources of funding are social insurance, private payments (23.1%) and taxes.¹⁰¹ Private health insurance plays a minor role, mostly acting as supplementary or complementary insurance and only in very few cases as a substitute. The main reason for this is the comprehensive coverage of social health insurance and the extensive benefits package.

Government relies heavily on delegating regulatory functions and devolution to the regions and to social insurance. Responsibilities for the funding and

99 Statistik Austria. Gesundheitsausgaben in Österreich laut "System of Health Accounts" – Ergebnisse [web site]. Vienna, Statistics Austria, 2009 (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitsausgaben/index.html, accessed 15 April 2010).

100 HVB. *Social insurance in figures*. Vienna, Main Association of Austrian Social Security Institutions, 2010 (http://www.sozialversicherung.at/mediaDB/561595_Sozialversicherung_in_Zahlen_Ausgabe23_Maerz_2010.pdf, accessed 5 April 2010).

101 Statistik Austria. Gesundheitsausgaben in Österreich laut "System of Health Accounts" – Ergebnisse [web site]. Vienna, Statistics Austria, 2009 (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitsausgaben/index.html, accessed 15 April 2010).

provision of services are fragmented, which to a certain extent limits continuity and completeness of care, along with proper focus on patients.

Demographic changes – such as the ageing of the population and the decreasing birth rate – present the health care sector with considerable challenges, as most health services are consumed by the elderly and paid for by the working population in the form of taxes or social insurance contributions. Additional trends in the health care sector include a rise in patient and provider mobility; an increasing demand for accountability, with a focus on EBM and the application of HTA and economic evaluation to justify expenditures; the introduction of case and disease management programmes; the movement towards mixed funding systems; the more frequent use of quality mechanisms; and a gradual integration of health promotion and prevention services into health insurance packages of all types.

Health care data are either related to the infrastructure and resources provided or to the use of these by patients.

The number of practising physicians per 100 000 inhabitants shows strong variation across European countries. It is highest in Greece (close to 500 physicians), Belgium (405 physicians in 2007) and Austria (376 physicians). Methodological differences may apply.¹⁰² Of the roughly 36 000 registered physicians and dentists in Austria, close to 30% had signed a contract with social health insurance institutions.¹⁰³

The number of hospital beds in the EU27 (all EU Member States, including the 2007 accession countries) decreased by 15% between 1997 and 2005. This is due partly to a shifting from inpatient to outpatient care, but is also the result of a more efficient use of resources. In 2005 an average of 206.3 acute-care beds as well as 60.4 psychiatric beds was available per 100 000 inhabitants in the EU27.¹⁰⁴ In 2008 Austria had a total of 267 hospitals and 770 hospital beds per 100 000 inhabitants, representing a slight increase compared to 2006 (765) and a decrease compared to 2002 (780). The number of inpatient days amounted to 18 569 303. All data quoted in this paragraph are from 2008.¹⁰⁵

Austria had 1233 public pharmacies in 2008, along with 46 hospital pharmacies and 962 in-house physician pharmacies.¹⁰⁶

102 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

103 HVB. *Social insurance in figures*. Vienna, Main Association of Austrian Social Security Institutions, August 2009 (http://www.sozialversicherung.at/mediaDB/561595_Sozialversicherung_in_Zahlen_Ausgabe23_August_2009.pdf, accessed 15 April 2010).

104 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

105 HVB. *Social insurance in figures*. Vienna, Main Association of Austrian Social Security Institutions, August 2009 (http://www.sozialversicherung.at/mediaDB/561595_Sozialversicherung_in_Zahlen_Ausgabe23_August_2009.pdf, accessed 15 April 2010).

106 Ibid.

Table 2.2 Selected health care indicators (per 100 000 inhabitants)

	Practising physicians ^a		Hospital beds		Hospital discharges of inpatients (excluding healthy newborn babies)	
	1996	2006 ^b	1996 ^c	2006 ^d	2001	2006 ^e
EU27	–	–	694.8	590.4	–	–
Belgium	360.3	404.7	798.3	672.3	16 162	16 084
Bulgaria	354.8	366.1	1 049.6	621.4	–	20 217
Czech Republic	298.6	355.7	886.9	817.0	–	20 799
Denmark	252.3	308.4	459.8	–	16 326	–
Germany	310.8	345.5	957.8	829.1	20 060	21 481
Estonia	317.0	328.9	795.5	565.3	–	–
Ireland	208.5	282.4	673.7	524.7	14 025	13 656
Greece	386.3	499.4	517.3	473.8	–	–
Spain	290.2	368.3	389.1	334.1	10 904	10 780
France	324.4	338.2	853.8	707.5	17 937	16 445
Italy	409.9	366.6	655.0	395.2	–	–
Cyprus	246.9	250.4	498.7	373.7	7 031	6 536
Latvia	282.1	286.1	1 038.3	755.4	–	19 970
Lithuania	373.2	364.8	1 092.0	801.0	23 454	21 866
Luxembourg	212.6	327.7	1 079.9	–	18 172	17 242
Hungary	304.3	303.7	903.0	792.1	–	–
Malta	–	332.8	576.8	237.8	–	6 871
Netherlands	189.9	–	522.2	438.2	–	10 135
Austria	280.6	375.7	746.3	770.9	–	27 119
Poland	235.1	218.0	766.3	647.5	–	17 955
Portugal	262.3	267.8	399.3	365.1	–	9 127
Romania	–	215.8	757.0	658.6	–	–
Slovenia	–	235.8	566.6	477.5	–	16 045
Slovakia	257.1	315.9	832.7	671.4	20 534	19 124
Finland	213.7	244.5	803.0	695.6	–	19 620
Sweden	289.0	356.6	559.8	287.7	14 997	–
United Kingdom	–	235.6	433.4	388.7	–	–
Croatia	219.9	–	618.5	545.0	12 268	13 307
FYR Macedonia	226.4	245.2	523.0	470.2	–	–
Turkey	–	–	248.5	241.2	–	–
Iceland	310.9	364.0	–	–	16 789	16 084
Norway	283.1	377.7	400.6	402.7	15 999	17 424
Switzerland	180.0	–	665.9	555.6	–	15 656

Source: European Communities (2009).¹⁰⁷

Notes: ^aGreece, France, Italy and the former Yugoslav Republic of Macedonia – professionally active physicians; Ireland and Malta – licensed physicians; ^bBelgium, Spain, Latvia, Malta and Austria – 2007; Denmark, Greece, Finland, the United Kingdom and the former Yugoslav Republic of Macedonia – 2005; Luxembourg and Portugal – 2004; ^cEU27, Denmark and the United Kingdom – 1997; ^dFrance, Latvia and Malta – 2007; EU27, Greece, Austria, the United Kingdom, Croatia, the former Yugoslav Republic of Macedonia, and Switzerland – 2005; Portugal and Turkey – 2004; ^eBelgium, Bulgaria, Croatia, Iceland, Latvia, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain and Switzerland – 2005; Malta – 2004.

¹⁰⁷ European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

Social medicine

Historically, social medicine (*Sozialmedizin*) has been very important in laying the foundations for public health. In Austria today it is a theoretically and scientifically orientated medical discipline that physicians can specialize in once they have graduated from medical school.¹⁰⁸ It requires a training period of six years, of which four involve training in the main subject of social medicine and two years' training in complementary medical specialties. The training can only be undertaken at a university. Austria has three departments of social medicine in the medical faculties of the universities of Vienna, Graz and Innsbruck. Currently only one full-time training post for social medicine is listed by the ÖÄK.¹⁰⁹

Qualification in social medicine previously involved a short examination that students sat towards the end of their undergraduate medical studies. Public health and social medicine elements have been increased in the new medical curriculum introduced in 2001/2002 (see section 6.1).

Based on the training regulations for physicians (*Ärzteausbildungsordnung*), the specialty of social medicine involves “the execution of measures to maintain social, physical and mental health and to combat disease, focusing on prevention, diagnostics, treatment and rehabilitation of health impairments, illnesses and behaviour which could be of a societal origin”.¹¹⁰

According to these regulations, social medicine is:

... an independent medical specialty, which deals with interdependencies between health and illness and society. In addition to diseases which are caused or influenced by social aspects, also the impact of health disorders on the social and economic standing of an individual as well as the entire population is assessed. Social medicine furthermore studies societal measures of preventing disease, restoring health and caring for chronically ill and disabled. Methods applied in social medicine are mostly geared towards epidemiology, sociology, economics and psychology.¹¹¹

The detailed knowledge and skills to be acquired during the four years of special training for social medicine are detailed in the training regulations.¹¹² Other

¹⁰⁸ The specialization “Social Medicine” was introduced in Austria in 1994.

¹⁰⁹ ÖÄK. Ausbildungsstättenverzeichnis der ÖÄK (Auszug). Fach: Sozialmedizin [web site]. Vienna, Austrian Medical Association, 2009 (http://www.aerztekammer.at/?type=module&aid=convert&curl=%2Fsvr%2Fdav%2Ffoak%2Fhtml_includes%2Fausbildstart%2Fsozmed.htm, accessed 4 May 2009).

¹¹⁰ Annex 39 of the Physician Training Regulations (*Ärzte-Ausbildungsordnung*), 2006, BGBl II, Nr. 286/2006, which came into effect on 1 February 2007.

¹¹¹ ÖÄK. Examination Directive for the medical specialization of social medicine (*Fachspezifische Prüfungsrichtlinie für das Sonderfach Sozialmedizin*). Vienna, Austrian Medical Association, 2001. Decided by the Examination Commission in November 2001, status 11/2008 (<http://www.arztakademie.at/fileadmin/template/main/facharztprdf1/richtlinien/Sozialmedizin.pdf>, accessed 10 May 2009).

¹¹² Annex 37 of the Physician Training Regulations (*Ärzte-Ausbildungsordnung*), 1994, BGBl Nr. 152/1994, last amended through BGBl Nr. 169/1998.

health professionals, such as midwives and social workers, also receive some training in social medicine.

The Institute of Social Medicine and Centre of Public Health¹¹³ at the University of Vienna states that social medicine deals with “the interaction of social circumstances, health and disease, as well as being titled the science of and for health policy”.

Public health is defined on the institute’s homepage as “the application of social medicine that uses epidemiology as source of information and implements findings from epidemiology in public health programmes with the intention of contributing to the promotion of the population’s health”.

The same definition classifies social medicine as a health sector staff function to support and evaluate the key functions of prevention, early detection, treatment and follow-up care.

Asked to describe the difference between social medicine and public health, one of the experts interviewed in this study stated that the disciplines cannot be separated but that social medicine has a stronger medical focus.

According to Rásky, social medicine and public health deal with almost identical questions and problems but social medicine has a medical background and public health a multidisciplinary one.¹¹⁴ Rásky suggests making better use of highly qualified social medicine specialists who currently work mainly in education and research by creating positions for them in the ÖGD, in policy consultation and in private research institutions. Hospitals, private practices and municipalities could also benefit from their broad knowledge and expertise.

There are institutes for social medicine at Vienna, Graz and Innsbruck Universities. They are small and traditionally structured.

Occupational medicine

Another medical specialty that overlaps with public health is occupational medicine (for detailed information on training in this context, see section 6.1).

Occupational medicine deals with:

... the interdependencies between work, occupation and health with the aim of maintaining and promoting health and the productivity of employees, thereby especially focusing on the detection of health- and productivity-related factors in the work environment, the assessment of the impact of these factors on the

113 Medizinische Universität Wien. Institut für Sozialmedizin und Zentrum für Public Health [web site]. Vienna, Medizinische Universität Wien (<http://www.meduniwien.ac.at/sozialmedizin/>, accessed 5 May 2009).

114 Rásky É. Prophete rechts, Prophete links, das Weltkind in der Mitten. Sozialmedizinische Fachärztinnen und -ärzte im Aufbruch. In: Polak G, ed. *Das Handbuch Public Health. Theorie und Praxis. Die wichtigsten Public-Health-Ausbildungsstätten*. Vienna, Springer Verlag, 1999: 14–156.

human being and on working procedures, the development and execution of preventive measures, the clarification of health disturbances with regard to their potentially work-related causes as well as participating in the medical measures taken in the case of work accidents and occupational illnesses including the execution of work promoting rehabilitation.¹¹⁵

The ÖGD

The ÖGD is an important subset of public health in Austria.

At the moment the responsibilities of the ÖGD are based predominantly on the Imperial Sanitary Act of 1870 and concern the fulfilment of administrative duties as defined by law. These duties are carried out via indirect federal administration, largely overseen by the regional governor and authorities, the districts and the municipalities.

The division of responsibilities with regard to these services varies markedly across the regions. The basic principles and duties are comparable, but their execution and the extent of delegation and devolution vary considerably in every region, making comparisons very difficult.

The regional and local health authorities are responsible for the establishment, implementation and supervision of public health services. These services include health reporting (compilation of medical statistical reports), prevention (approval of funding for prevention projects, vaccinations) reporting and monitoring infectious diseases, environmental issues, sanitary inspections of health care institutions), maternity care, and the provision of physician services in schools.¹¹⁶ Medical officers at all levels also act as consultants and sources of expert opinion.

Reform of the ÖGD was started as part of Health Reform 2005. One of the main motivations was to redefine the core duties of the ÖGD and to create a modern understanding of it. In 1998 the BMG had commissioned the ÖBIG to carry out a study on the repositioning of the ÖGD, but the results of the study were never implemented. This led to the decision to manage the reform, again led by the ÖBIG, as a process instead of another research study. This was intended to promote and facilitate the actual implementation of measures.

One of the first steps of the process was to suggest a list of duties for the ÖGD, as well as providing a recommendation of how these could best be distributed across the different administrative levels. As an initial output, a handbook of public health services was produced by the ÖBIG in cooperation with a working group of representatives of the regional health authorities and other

¹¹⁵ Annex 3 of the *Ärztinnen-/Ärzte-Ausbildungsordnung*, 2006, BGBl II Nr. 286/2006.

¹¹⁶ Hofmarcher M, Rack HM. Austria. Health system review. *Health Systems in Transition*, 2006, 8(3):1–247.

experts. This handbook forms the basis for discussions with the regions to try to reach a consensus on a standard list of public health service duties. The plan is, then, first to define a framework for training and a new curriculum for public health medical officers and, second, to devise a workable strategy for reforming the ÖGD in the regions. The authors of the handbook,¹¹⁷ which describes the future vision rather than the present state of the ÖGD, suggest that it is responsible for all matters affecting the health of the population as a whole.

Health promotion

WHO defined health promotion in the Ottawa Charter for Health Promotion as follows:¹¹⁸

... the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social wellbeing, an individual or group must be able to identify and to realise aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasising social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to wellbeing.

This is the definition used by most Austrian experts in the field.

A total of 12 Austrian health promotion experts were interviewed for this section, which describes their responses and the reviewed literature.

Health promotion in Austria has changed markedly since the 1986 Ottawa Conference and has undergone considerable development since the early 1990s, especially since the enactment of the GfG in 1998 and the creation of the FGÖ. It is now well established in the country, although many challenges remain.

The following regulations are considered the most relevant in the health promotion context (for details on legislation, refer to section 2.2):

- GfG 1998
- GPG (draft)
- Social insurance legislation
- FAG.

¹¹⁷ BMGFJ. *Handbook ÖGD. Basis for discussion. Handbook for the public health service*. Vienna, Federal Ministry of Health, Family and Youth, 2007.

¹¹⁸ WHO. *Ottawa Charter for Health Promotion*. Charter adopted at an interational conference on health promotion "The move towards a new public health", 17–21 November. Geneva, World Health Organization, 1986 (http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf, accessed 10 May 2009).

The most important stakeholders in this field are the BMG, the FGÖ, social insurance funds, NGOs, associations and charities, and research institutions (universities; universities of applied sciences; independent research institutes, such as the LBI-HPR; and regional institutes for health promotion, such as the recently founded Vienna Health Promotion Ltd). Also important in this context are networks such as the Network for Workplace Health Promotion (*Netzwerk Betriebliche Gesundheitsförderung*, BGF), service providers, health authorities at all levels of the health system and special health and counselling centres. Details on their respective responsibilities and on funding are described in section 2.4. Financial resources for health promotion remain very limited. The FGÖ is one of the few public health institutions with a fixed budget but, in relation to the importance of the field, this budget is small.

Past development and current health promotion situation

The Ottawa Charter is often quoted as being the starting point for health promotion activities in Austria. A crucial event for the development of health promotion was the enactment of the GfG in 1998 and the establishment of the FGÖ in the same year. With the beginning of the first MPH programme in 2002 and the subsequent establishment of other undergraduate and postgraduate programmes there is an increasing focus on health promotion and the necessary expertise is slowly being achieved. At present a significant number of individuals and organizations are involved in health promotion activities, although some of these are struggling to remain engaged in this way because of limited financial resources.

The foundation of the FGÖ and its work has resulted in health promotion receiving more attention and greater understanding, especially among health system stakeholders. The FGÖ used the first decade of its existence to create awareness of the specialty and to initiate a wide range of projects at different levels of the health system. Numerous information campaigns, conferences and other events have taken place with the intention of acquiring and sharing knowledge and promoting discussion among those involved. As already mentioned, these years were also used to build human resources. The topic of health promotion gradually spread into various settings, the most visible being workplaces, communities, hospitals and schools.

Thus, health promotion is developing – slowly but surely. Discussions and promises are, however, not always followed by action. Initiatives in the field often involve short-term activities that lack sustainable outcomes or continuity because they are not extended or pursued once the project funding has expired. They tend to take place in isolated settings and ongoing cooperation with project partners (such as schools or companies) after the particular piece of work has

finished is not common practice. Implementation or involvement over a wider area tends to be hampered by lack of support and long-term funding.

In terms of the different settings for health promotion activities, the workplace is the most advanced area, with communities and hospitals doing well, and schools quite a long way behind. This may be partly because the first three settings already have management structures in place into which such activities can be integrated. The very diverse ownership structures of schools and the large number of individuals involved may also make it a difficult environment in which to introduce concepts of health promotion.

There are of course other considerations that need to be taken into account when contemplating the various settings. Small and medium-sized companies, for example, may sometimes lack the financial resources to provide health promotion activities and may require special attention and assistance. Hospitals often have the advantage of links to research and familiarity with concepts such as EBM and clinical pathways.¹¹⁹ All settings can experience difficulties because of the lack of a legal and structural framework, the commitment of those involved and financial resources.

The regional sickness fund of Upper Austria was (and is) a great promoter of workplace health promotion and also houses the Austrian headquarters of the BGF. The LBI-HPR focuses on the various settings for health promotion and its evaluation.

The Healthy Schools Project was started in 2007 by the Federal Ministry of Education, Arts and Culture, the then Federal Ministry of Health, Family and Youth (*Bundesministerium für Gesundheit, Familie und Jugend*, BMGFJ) (now the Federal Ministry of Health (BMG)) and the HVB. The final report was published in 2009.¹²⁰

Social insurance undertakes various health promotion activities. It is involved in workplace health promotion, but also promotes measures related to dental health, smoking cessation, nutrition, physical activity and accident prevention. Recently the topic of health promotion for the elderly has also been taken up.¹²¹

Austria is part of the networks on *Health Promoting Hospitals* and *Healthy Communities*, and about 30 cities participate in the WHO *Healthy Cities Network*.¹²²

119 Expert interview, 1 April 2009 (Research, health promotion).

120 Project web site: <http://www.gesundeschule.at/> (accessed 10 May 2009).

121 Conference entitled "Ageing – Creating opportunities for the potential" in December 2009 and conference entitled "Health promotion with elderly people" (http://www.hauptverband.at/portal27/portal/hvbportal/channel_content/cmsWindow?p_tabid=2&p_menuid=58276&action=2&p_pubid=78092#pd921462, accessed 8 April 2010).

122 WHO Health Cities Network: <http://www.wien.gv.at/who/netzwerk.htm> (accessed 2 November 2009).

Present and future challenges

Health promotion activities in Austria tend to be too short to ensure continuity and sustainable outcomes and they also lack coordination. Initiatives are often isolated because of the absence of a joint collaborative framework or structure. Another weakness is that they do not always follow defined standards or undergo evaluation, although the FGÖ is generally regarded as a positive example of good-quality assurance and evaluation of projects.

Enactment of the PräVg could address some of these issues, although it is not yet clear whether the current draft will be approved. If it is, the Federal Health Agency will be responsible for defining targets for health promotion and prevention and for developing an overall strategy, as well as specific strategies for meeting the targets. Definite guidelines are to be drawn up, listing the requirements to be met in order to qualify for funding. The Federal Health Agency will also be charged with compiling a three-yearly report on health promotion and prevention activities in Austria. The Agency will have to establish a project database and the BMG will be responsible for undertaking a health impact assessment for any federal legislation if this entails a potentially significant impact on health.

The GfG of 1998 was very innovative at the time. The formation of a legal basis for health promotion triggered the establishment of structures and the building of capacity. It will be important to continue this process in the future and to extend these structures and the financial resources allocated to health promotion.

Health promotion and prevention are still neglected in Austria in comparison with health care services. Individuals need to be educated and informed about their health choices and guided to choose the healthiest of various options available. Self-help and self-responsibility ought to be encouraged. Structural, legislative and organizational frameworks will need to be defined in greater detail, to clarify responsibilities. These should be aligned to the needs of the population and the creation of a common language is essential. Projects and measures should be universally applied and their sustainability ensured. Any activities must be accompanied by effective quality assurance and subsequent evaluation. According to the experts interviewed, funding must be increased to ensure adequate output and to reduce the current imbalance between health promotion and health care. Vulnerable groups should be identified and targeted in the most appropriate way. Further expertise should be sought and the different sectors and settings for health promotion encouraged to cooperate closely. Future topics and target groups mentioned by the experts as being in need of special attention included chronic diseases, obesity, alcohol, smoking, social inequalities children/adolescents and the elderly.

Prevention

Activities related to prevention in Austria still show a strong focus on medical prevention. Prevention – an emotionally charged topic – is strongly influenced by pressure groups and economic interests. In the recent past, the focus has shifted from behavioural to settings-orientated prevention.

Early detection and prevention of disease

Austrian activities for prevention and early detection of disease involve the following aspects:

- mother–child pass examination programme
- school health examination
- juvenile health examination
- military health examination
- preventive health check-up for the adult population
- health passes for different target groups
- measures to strengthen population health, prevent disease and provide medical rehabilitation
- human genetic examinations
- vaccinations.

The **mother–child pass examination programme** is a national screening programme that aims to monitor the health of mothers and their children during pregnancy and up to the 62nd month of the child's life. The programme was launched in 1974 and is planned, implemented and overseen by the BMG, and advised by the mother–child pass committee (a subcommittee of the Supreme Sanitary Council). The programme has the following aims: to ensure basic medical care and prevention for pregnant women and their children; to promote early detection and timely treatment of health risks; and to facilitate the monitoring of the development status of children. It involves five examinations of the pregnant woman and nine of the child; ultrasound examinations are not yet included. Women receive a mother–child pass, which is a booklet documenting all examinations and their results. They also receive an information booklet on pregnancy and child care, as well as a vaccination certificate for their child.

All examinations listed in the mother–child pass are free of charge for mothers and their children. All women living in Austria who do not have Austrian nationality or are who not covered by social health insurance are entitled to

take part in the programme. Examinations are undertaken by physicians, predominantly gynaecologists. Midwives are not involved in the programme.

Although the mother–child pass examination programme has existed for more than 30 years, no comprehensive evaluation of the programme has yet been undertaken (an evaluation was planned to start in 2010, commissioned by the BMG to the LBI-HTA). There have been a few isolated and non-standardized attempts at analysis but no complete electronic record of the data exists. There is no regular review of the programme and there is little research on outcomes.

Examinations of students in schools are required to be undertaken on an annual basis. Examinations are carried out by school physicians who have a legal obligation to collect health-related information for the purpose of advising teachers. The examinations are not followed up by any treatment measures and as yet there has been no evaluation of their benefits.

The content and structure of the examination is based on the health form of the BMG. Data collected include a general history comprising details such as size, weight, eyesight, hearing, teeth, posture and general physical condition. Information is also collected from the parents. The scope of the examination is limited legally to aspects associated with participation of students in class and any other forms of examination may be refused. Parents are questioned about: prevalence of diabetes and/or obesity in the family; the infectious diseases that their child has already had; other illnesses from which the child may have suffered; operations; regular intake of medication; vaccination for TBE; and the presence of certain conditions, such as allergies, asthma, diabetes, frequent headaches and others.

The physician must state whether other examinations or referrals are required and any irregularity in the results have to be reported to the student and the parents. Any further examinations can only be undertaken with the consent of the student.

Responsibility for the administration of vaccinations to students at schools belongs to the health authorities but in practice the school physician may be appointed by them to carry out the vaccinations.

Analysis of data collected through school examinations cannot be used for scientific or research purposes and forwarding of individual data forms would require the consent of both students and parents under data protection regulations.

The **juvenile health check-up** is based on section 132a of the ASVG. It is targeted at young working people between the ages of 15 and 18 years and consists of a physical examination, a urine test and health counselling. In 2007,

68.2% of the target population participated in the examination. Participation was highest in Tyrol (88.1%) and lowest in Lower Austria (49.7%).¹²³ The costs are covered by social health insurance funds, 50% of which is refunded by the Federal Government. A plan is in place to evaluate the results of these basic examinations, which may be supplemented by other specific tests.¹²⁴

All individuals liable for military service are invited to attend a **military health examination** in the year of their 18th birthday. Those with a gap of more than five years between this examination and their planned military deployment need to be re-examined.

The **preventive health check-up** is available to individuals aged 18 years and over and is based on section 132b of the ASVG. It has been in existence since about 1974 and is provided by contract partners of the social insurance funds. Insured individuals are entitled to an annual examination¹²⁵ and costs for individuals without insurance are covered by the Federal Government. In 2008, 987 698 examinations were performed, of which 871 691 were basic and 116 007 were gynaecological examinations.¹²⁶ The share of the population taking the examination amounts to about 12% of those entitled to it. People can attend once a year. Depending on the age of the individual, however, several of the examinations are recommended to be undertaken only every two or three years. The basic examination includes a history, a medical examination and a consultation on risk factors related to lifestyle or genetic disposition. The programme includes a basic examination for the entire target population and specific examinations for certain groups of individuals, according to sex and age. Since 1990 the number of examinations performed has more than doubled, indicating a greater awareness of the potential benefits among the target population.

The new preventive health check-up,¹²⁷ which was intended to follow evidence-based standards of care only,¹²⁸ was introduced in 2005. The new programme was developed between 2003 and 2004 by the HVB together with a working group composed of representatives of the social insurance system and the ÖÄK.

123 HVB. *Handbook of Austrian social insurance 2009*. Vienna, Main Association of Austrian Social Security Institutions, 2009 (http://www.sozialversicherung.at/mediaDB/544531_Handbuch_der_oesterreichischen_Sozialversicherung_2009.pdf, accessed 5 September 2009).

124 HVB. Jugendlichenuntersuchung [web site]. Vienna, Main Association of Austrian Social Security Institutions, 2009 (http://www.sozialversicherung.at/portal/index.html?ctrl:cmd=render&ctrl>window=esvportal.channel_content.cmsWindow&p_menuid=533&p_tabid=3, accessed 5 September 2009).

125 Whenever a patient visits a physician for a periodic health examination two enquiries are performed after the patient has passed his e-card to the physician; one is the confirmation of insurance coverage and the second establishes whether the insured person has already undertaken a periodic health examination during the past year. For any components of the periodic health examination which are only recommended once in a defined time period, the same check is performed in order to see whether they can/should be repeated.

126 HVB. *Handbook of Austrian social insurance 2009*. Vienna, Main Association of Austrian Social Security Institutions, 2009 (http://www.sozialversicherung.at/mediaDB/544531_Handbuch_der_oesterreichischen_Sozialversicherung_2009.pdf, accessed 5 September 2009).

127 Based on information provided by the HVB.

128 Internationally recognized criteria and guidelines were consulted (for example, from the United States and the United Kingdom) and adapted to the Austrian context.

It comprises a mixture of measures of primary¹²⁹ and secondary prevention¹³⁰ and covers four different target areas: cardiovascular diseases,¹³¹ carcinomas,¹³² a general area¹³³ and the elderly.¹³⁴ New medical components of the examination programme include a stronger focus on encouraging a change of lifestyle where appropriate,¹³⁵ compilation of a risk profile for each individual, strengthening of the advisory role of the physician, screening for colon cancer for people older than 50 years,¹³⁶ testing of hearing and vision in individuals aged over 65 years, and screening for periodontal diseases.¹³⁷

As part of the preventive health check-up, women can take advantage of a gynaecological examination. A PAP smear (Papanicola test) is available to women aged over 19 years every three years and to those aged over 40 years every two years. Mammography is offered to women over the age of 40 years and can be performed as part of the preventive health check-up every two years. This involves a family history, the examination itself and medical counselling.

Haemocult tests can be carried out annually for men and women over the age of 50 years and colonoscopy is offered to the same target group every 10 years. Screening for melanomas, periodontal disease and glaucoma and advice on physical activity are offered to individuals aged under 40 years every three years and to those aged over 40 years every two years. Screening for prostate cancer is not part of the preventive health check-up but can be performed by physicians under certain circumstances.¹³⁸ Screening for impaired hearing and vision is also included in the preventive health check-up every two years for individuals older than 65 years.

Organizational innovations included the introduction of a call-recall mailing system, aimed specifically at identifying disadvantaged groups and individuals with special needs, as well as introducing quality assurance and evaluation as standard. In May 2007 the first mailing took place. It was originally planned to

129 Screening for risk factors and support for reducing personal risk factors.

130 Early detection of diseases: therapeutic measures to limit or prevent the progression of disease or complications associated with it.

131 Cardiovascular risk history, BMI, smoking, alcohol, type 2 diabetes, arterial blood pressure, hyperlipidaemia, Gamma-GT, triglycerides: younger than 40 years, every 3 years; after that every 2 years.

132 Carcinoma risk history, PAP smear, melanoma screening: younger than 40 years, every 3 years; after that every 2 years. Mammography: for women older than 40 years, every 2 years.

133 Periodontal diseases, glaucoma: younger than 40 years, every 3 years; after that, every 2 years.

134 Impaired hearing, impaired vision: for individuals older than 65 years, every 2 years.

135 Assessing BMI, total cholesterol and HDL-cholesterol, advice on physical activity: younger than 40 years, every 3 years; after that every 2 years.

136 Yearly haemocult test; colonoscopy for patients older than 50 years, every 10 years.

137 HVB. *Versorgungsuntersuchung Neu. Informationsunterlage*. Vienna, Main Association of Austrian Social Security Institutions, 2005 (https://www.sozialversicherung.at/mediaDB/MMDB135573_Gesundheitsbericht%202005.pdf, accessed 21 April 2011). (http://www.sozialversicherung.at/mediaDB/MMDB89823_Informationsbrosch%C3%BCre.pdf, accessed 7 September 2009).

138 The patient voices justified personal concern and is older than 50 years or older than 45 years with a hereditary predisposition. Further requirements for reimbursement may be specified in the reimbursement catalogues of the different health insurance funds.

target risk groups four times a year with every insurance fund involved in the mailing. Because of a low response rate, however, the campaign was reassessed in 2008 and the decision was made to send out only two sets of invitations in 2009.

Evaluation of data from the health check-ups was delayed because of problems with data protection and confidentiality that were resolved by the introduction of a system of pseudonyms to replace patient codes¹³⁹ at the HVB in 2008. The Association and the ÖÄK then agreed that the data should be evaluated between October 2008 and October 2010¹⁴⁰ and this is currently being carried out by the Insurance Institution for the Austrian Railway and Mining Industries (*Versicherungsanstalt für Eisenbahnen und Bergbau*, VAEB).

Quality is clearly also an important issue. Physicians performing preventive health check-ups have to follow the directives on the execution and evaluation of the examination (*Durchführungsbestimmungen, Richtlinien für die Durchführung und Auswertung der Vorsorgeuntersuchung*) of the HVB to ensure that quality standards are upheld. These directives contain administrative details and list requirements for the provision of certain services.¹⁴¹

A quality certificate has been developed for colonoscopy by the HVB, together with the Austrian Society of Gastroenterology and Hepatology. Several initiatives have been undertaken to improve the quality of PAP smears (at the HVB, the Vienna Sickness Fund) and a working group has been created at the BMG. Supplies provided by social insurance to gynaecologists in practices (spatulas) have been modified, based on the study/project results and expert recommendations to ensure the improved quality of outcomes.

Austria is only just beginning to introduce screening programmes. Current screening activities are still largely opportunistic. Evidence-based screening remains rare, although considerable efforts have been made in this direction, particularly when introducing the revised health examination in 2005.

Those involved in screening do not always agree on *who* should be screened (population), *what* should be screened for (parameters), *when* screening should be carried out (at what age) and *how often* screening should take place (intervals).

139 The social insurance number or code of an individual is replaced by a pseudonym, which makes it possible to follow an insured person's patient history without violating data protection regulations.

140 Specifications for the evaluation are listed in the Directives on the execution and evaluation of the periodic health examination (section 12) (*Richtlinien für die Durchführung und Auswertung der Vorsorgeuntersuchung*, RVU).

141 A final consultation must be undertaken establishing the history and all examinations (15 minutes). For PAP smears a cytological test must be performed. The medical specialists entitled to perform the different parts of the health examination are listed. Periodic health examinations must take place outside regular practice hours. Documentation must be kept electronically; patients are entitled to receive a letter from a physician or a printout of the examination report. Physicians are obliged to inform the patient regarding all examination/test results. Regulations concerning the call-recall system include the following: individuals younger than 40 years are invited every 3 years and individuals older than 40 years are invited every 2 years. Reimbursement of services provided to individuals without insurance coverage (refund from the Federal Government). Evaluation and reporting duties.

Reaching agreement on these basic elements of screening programmes has proved difficult – for example, in the case of mammography screening. Several pilot projects for mammography screening have been started in recent years but the standards and concepts applied by the different regions where these are taking place are not the same, making a direct comparison of outcomes impossible. At present the database for screening at GÖG/ÖBIG does not allow an evaluation of outcomes and it is not, therefore, possible to assess the number of cases or deaths avoided.

Patient representatives argue that lack of objective information and transparent quality standards can lead to uncertainty and fear among patients and that insufficient information is available on the impact of screening and any potential adverse effects.

Between 2005 and 2007, **health passes for various population groups** were developed for six age categories – for the population aged 6 years and over, for young people and adolescents (from the 8th level of education), for the population aged 18 years and over, the population aged 40 years and over and the population aged 60 and 75 years and over. These passes were geared to the school health examination, the juvenile health examination and the new preventive health check-up and were intended to encourage continuity of care and monitoring of results, as well as increasing awareness of health in general. With the pass, individuals received a booklet providing information on diseases, lifestyle and risk factors and an international certificate of vaccination. At the national level health passes are no longer distributed because, according to the BMG, they were not being taken up by the population or being strongly promoted by physicians. There have been discussions on whether to distribute the pass and information documents separately.

Health passes had previously been introduced in various regions, for example, in Vienna in 2001 and Lower Austria in 2000. The intention was to gather existing health-related information on an individual – regarding blood group, vaccinations, allergies and emergency contacts – in one document. It is not clear whether or to what extent these are still used.

Social health insurance measures to strengthen population health and disease prevention

Measures by social health insurance funds to strengthen the health of the population can include subsidized convalescent stays in the countryside or in a sanatorium or health resort. Measures to prevent disease are voluntary and include health education, caring for young and neonates, prevention of common diseases and tooth decay, and the reimbursement of travel costs in certain circumstances. The intention here is to strengthen the role of health

insurance in the field of prevention by reducing risk factors for health in everyday life and at the workplace.

Measures to maintain the health of the population

Measures to maintain the health of the population reimbursed by social health insurance include preventive human genetic examinations (genetic family counselling, prenatal diagnosis, cytogenetic examinations),¹⁴² vaccinations and any other appropriate measures.

Every year the Vaccination Committee of the Supreme Sanitary Council defines the vaccination plan for Austria, which lists the vaccinations recommended for infants and toddlers, schoolchildren and adults.

Vaccinations¹⁴³ are not an automatic benefit of Austrian social health insurance, the sole exceptions being the vaccination against TBE¹⁴⁴ and the influenza vaccination. The latter is only authorized, however, if WHO has declared a pandemic and the BMG has ordered production of the vaccine.¹⁴⁵ Social health insurance also reimburses the costs for influenza, rabies or tetanus vaccinations in cases of administration following exposure.

Since January 1998 and based on the so-called child vaccination concept, costs for vaccinations of children up to the age of 15 years¹⁴⁶ have been covered jointly by the Federal Government, the regions and social insurance funds.¹⁴⁷ The Federal Government pays two thirds of the costs and the regions and social insurance cover one sixth each, with the regions also covering the physicians' fees.¹⁴⁸ The child vaccination concept at present includes the following vaccines: sixfold immunization (diphtheria, tetanus, pertussis, polio, haemophilus influenza B, hepatitis B), measles-mumps-rubella, hepatitis B, diphtheria-tetanus-polio, diphtheria-tetanus-pertussis, and oral vaccination against rotavirus since 2007. The conjugated pneumococcal vaccine *prevenar* is only intended for use without charge in high-risk groups (premature birth). The costs of vaccinations for adults have to be paid for privately – the decision to be vaccinated is considered a matter of individual responsibility.

Vaccination status and vaccination rates for the whole population are not systematically documented or analysed in Austria. The BMG documents rates

142 Individuals whom this may concern are defined in the directive BGBl 274/1981 (<http://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10008492>, accessed 4 October 2009).

143 Based on HVB. *Vaccinations – A social insurance benefit?* Internal document, 8 July 2009.

144 Social health insurance funds subsidize these; the amount of the subsidy is defined on a yearly basis.

145 Regulated in section 132c of the ASVG: "Other measures to maintain the health of the population".

146 Decisions on which vaccinations to include in the concept are made jointly and are based on the recommendations of the Supreme Sanitary Council, expressed in the form of the yearly vaccination plan.

147 This is based on the so-called Child Vaccination Concept (*Impfkonzept*) which was initiated by the then Minister of Health in 1997.

148 Federal Ministry of Health (BMG), information provided by an expert in a telephone conversation on 20 October 2009.

for those carried out as part of the child vaccination concept already mentioned. Time trends do not exist but, according to a Ministry representative, a plan is in place to document these in the future. Regional health authorities also collect some data on vaccination rates. Individual regions or institutions in Austria may publish data (for example, in Styria) and information on rates is available sporadically, but with no clear indication of how they were calculated.

According to Kreidl and colleagues, “the official estimate of the average measles vaccine coverage with at least one dose of the birth cohorts 1997 to 2007 was 84 per cent”.¹⁴⁹ “No data were available on the age group specific measles seroprevalence of the Austrian population”.¹⁵⁰

Vaccination of children for certain diseases is sometimes refused because of parental concerns and this has resulted in outbreaks – for example, an outbreak of measles in 2008 in Salzburg, spreading to Upper Austria and Bavaria and an outbreak of rubella early in 2009, mostly concentrated in Styria. Under the Austrian vaccination plan, physicians have a duty to inform patients and their parents about any issues relevant to the vaccination.

Every year up to 400 000 people contract influenza during an average influenza season and up to 6000 of these die from complications of the disease.

The uptake of influenza vaccinations appears to be low, despite significant advertising efforts. Influenza immunization campaigns are normally run every autumn, offering vaccinations at a lower rate to try to encourage people to protect themselves. In recent years, the vaccination rate in the general population was about 18% and among health professionals it was even lower, at 17%. In 2007 only about 12% of the general population were vaccinated, rising to 37% in the population aged over 65. According to an expert, this low uptake is related to a lack of awareness in the population at large.¹⁵¹

The vaccination plan 2009 recommends the administration of influenza vaccinations for defined groups of children and for adults aged over 50 years. Public funding for influenza vaccinations for individuals aged over 65 years is judged to be cost-effective.¹⁵²

Potential role of social insurance in health promotion and prevention

Social health insurance funds currently have a very limited legal obligation to fund services related to health promotion and prevention. Responsibilities

149 Kreidl P, Muscat M. *Mission report – Measles outbreak in Austria – Risk assessment in advance of the EURO 2008 football championship 14–17 April 2008*. Solna, European Centre for Disease Prevention and Control, 2008. (http://www.ecdc.europa.eu/en/publications/Publications/0804_MIR_Measles_Outbreak_in_Austria.pdf, accessed July 2009).

150 Hanratty B et al. UK measles outbreak in non-immune anthroposophic communities: the implications for the elimination of measles from Europe. *Epidemiology and Infection*, 2000, 125:377–383.

151 Kunze U. Austria – resistant against Influenza control. *Facharzt*, 2008, 4:26–29.

152 Stoppacher A. *Cost-effectiveness analysis of influenza vaccination in Austria* [Master's thesis]. Graz, University of Graz, August 2008.

for the provision of public health services including health promotion and prevention are not clear-cut. Several public health-related benefits provided by social health insurance funds are mandatory, but most are voluntary, which means that the insured do not have a legal right to obtain them. The extent to which such services are provided depends on the financial situation of the particular insurance fund and its own judgement and viewpoint. Health insurance funds do not share a uniform view on this issue – some are more active and others less so in the fields of prevention and health promotion.

Experts questioned about the potential role of social insurance in this context argued that the current ambiguity ought to be clarified and standardized. There should be a clear statement of who is responsible for the provision of which services and exactly what these services entail. Nationally recognized definitions of health promotion and prevention must be elaborated.

The definition of legislation, structures and funding is essential. The importance and necessity of health promotion and prevention must be acknowledged and priorities and targets defined. Social health insurance could take on the role of promoter and facilitator of health promotion and prevention. It could encourage the revision of databases and the creation of evidence, indicating what works and what does not. Certain services could be included in the benefits catalogue but these should be based on evidence and supported by quality standards, and their use linked to incentives. Social health insurance also has the opportunity, through the wide network of contract partners, to reach the population groups in greatest need of the services. It is also essential that insurance funds form effective networks to support their responsibilities in this important area.

Scientific evidence of the benefits of services provided to the insured population must be demonstrated. Social insurance could be in charge of quality control to ensure that providers meet defined standards in terms of training, equipment and benefit to the patient. It could also encourage the development of standards for education and training and the alignment of training programmes.

Experts believe that social insurance funds could take on a leadership role in promoting and prioritizing topics, developing strategies or guidelines and implementing measures. They could engage in research cooperation and/or build up their own research institute and promote the systematic introduction of evidence-based screening programmes, entering collaborations for this purpose. They could also encourage the establishment of cohort studies or long-term research activities and support the further development of databases and data analyses to generate evidence.

One of the key responsibilities of social health insurance is to inform and educate the insured population. This can lead to empowerment and encourage

increased self-help as well as appropriate support from, for example, family members.

Balance of curative and preventive health services

The Austrian health system currently shows a strong imbalance in favour of curative health services that is reflected in funding, resource allocation, service provision and training structures. Health care organizations and their interest groups dominate the health sector.

Public health service responsibilities are not clearly defined and are sometimes covered by outdated legislation. Public health has not been integrated into existing organizational structures and does not at present have the financial or human resources to grow. There are too few qualified individuals and public health topics are not promoted in the same way as health care topics. There is little good public health research, due, once again, to a lack of funding and qualified staff.

In the past, training of health professionals paid only minor attention to public health elements. The topic is now gradually being given space in the curriculum. The first postgraduate training programme for public health professionals was set up in 2002 and other postgraduate and undergraduate programmes for health promotion and health management have followed. The health system is gradually opening up to the concept of multidisciplinary working by providing posts for individuals from a variety of professional backgrounds.

In terms of funding, a major share of financial resources is allocated to health care services. A study, based on 2001 data, states that expenditure for prevention and health promotion in Austria amounted to about 6.3% of total health expenditure, equivalent to about €127 per person per year.¹⁵³ In many cases, decision-makers and stakeholders lack even a basic understanding of public health and continue to focus heavily on curative health services.

The Austrian health care system also shows considerable fragmentation with regard to funding and responsibilities. This inevitably compromises the quality of care for the patient by reducing continuity, transparency, coordination of treatment or medication, communication among providers, and so on.

The needs of patients after discharge from hospital are also a cause for concern, especially in terms of the management of chronic diseases. Patients suffering from more than one condition also require supervision and periodic revision of their various medications to ensure effective treatment and to guard against potential drug interactions. So far only one disease management

¹⁵³ Habl C et al. *Öffentliche Ausgaben für Prävention und Gesundheitsförderung in Österreich 2001*. Vienna, Austrian Health Institute (ÖBIG), commissioned by the Federal Ministry of Health and Women (BMGF), 2004.

programme has been implemented – for diabetes – and this does not yet operate on a nationwide basis. Results of the related randomized controlled study undertaken in Salzburg need to be evaluated very carefully before wider coverage is considered. Insights gained from this programme should be useful in the planning and implementation of future programmes. Often the quality of treatment or services provided is not obvious and cannot be judged by patients. Outcomes should be made more transparent and understandable. Results of major patient surveys assessing patient satisfaction should be discussed with everyone involved, including the providers of health services. Experts report a current lack of patient orientation and adequate and clearly explained information.

2.6 Challenges and priority areas for public health in Austria

This section of the report summarizes current and future challenges and priorities for public health in Austria, based on findings in the national and international literature and supplemented by inputs from expert interviews.

Before detailing these challenges and priorities, the main indicators for health and disease in Austria are presented along with risk factors.

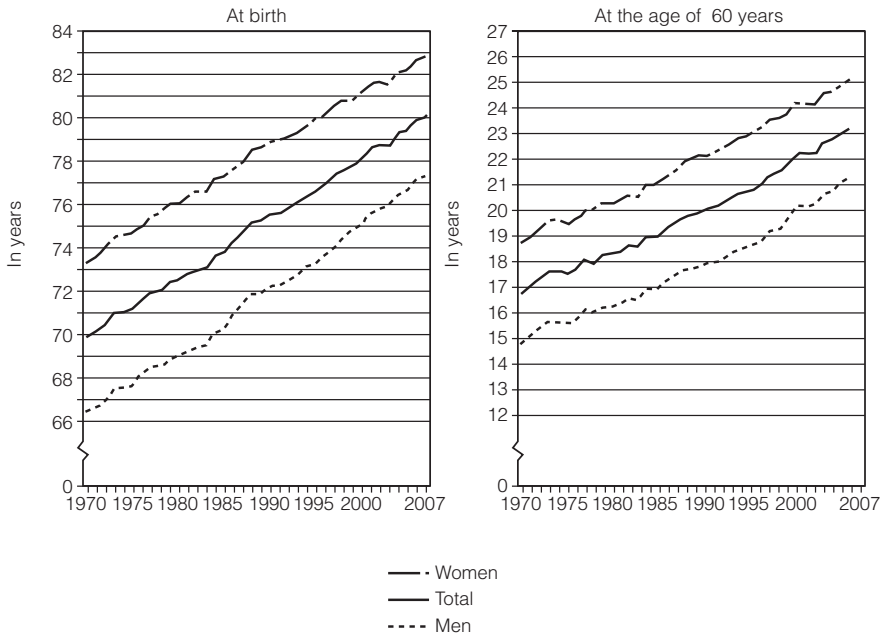
Health and disease in Austria

Life expectancy and healthy life expectancy

Life expectancy has increased considerably in the past century and is expected to continue to do so as a result of factors such as reductions in infant mortality, better standards of living, improved lifestyles and better education, as well as advances in health care and medicine.

Average life expectancy in Austria in 2008 was 77.6 years for men and 83.0 years for women. Since 1970 the difference between the life expectancy of men and women has decreased. The population in the west of Austria showed a higher average life expectancy than the population in the east of the country.

In 2006 life expectancy at birth was 77.1 years for males and 82.6 for females. Of those years, 80% (61.7 years) for men and 76% (63.2 years) for women are spent in good health. The life expectancy of a 65-year-old man was 17.2 years (51% spent in good health) and that of a 65-year-old woman was 20.5 years (44% spent in good health) (Fig. 2.1). Between 1978 and 2006 both life expectancy and life expectancy in good health experienced a significant increase. Results for life expectancy spent in good health are based on surveys

Fig. 2.1 Life expectancy at birth and at the age of 60 years

Source: Statistics Austria (2008).¹⁵⁴

and reflect subjective measures.¹⁵⁵ Life expectancy in subjective (that is, self-reported) good health was significantly higher for men and women with a higher level of education.¹⁵⁶

Life expectancy has been increasing throughout Europe over recent years and contributes to the ageing of the population. Considerable variations among the different countries persist. Male life expectancy at birth ranges from 65.3 years in Lithuania to 78.8 years in Sweden and Cyprus, and female life expectancy from 76.2 years in Romania to 84.4 years in both Spain and France.

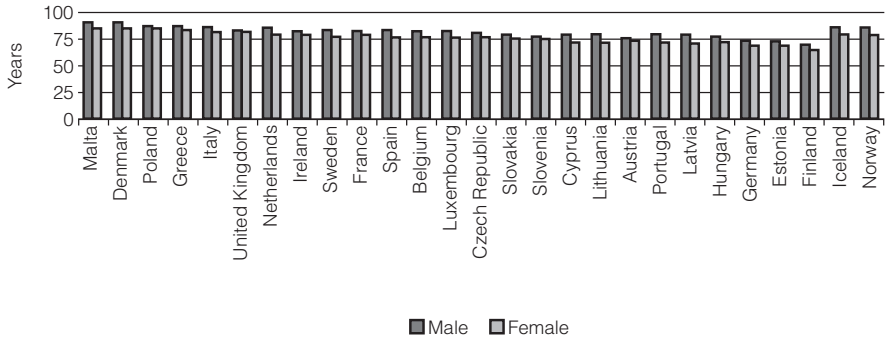
Healthy life expectancy (HALE) – also called disability-free life expectancy (DFLE) – is increasingly used as a health expectancy indicator in addition to life expectancy. HALE represents the average number of years that a person can expect to live in full health, free of disability, at a specific age (usually at birth or age 65 (Fig. 2.2 and Fig. 2.3)). It combines mortality statistics (objective data from life tables) with data on self-perceived disability (from health surveys) and thus introduces the concept of quality of life.

¹⁵⁴ Statistics Austria. Yearbook of health statistics 2007. Vienna, Statistics Austria, 2008 (http://www.statistik.at/wcmsprod/groups/public/documents/sitesstudio/pdf_icon.gif, accessed 5 October 2009).

¹⁵⁵ Statistik Austria. Healthy life expectancy [web site]. Vienna, Statistics Austria, 2009 (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitszustand/lebenserwartung_in_gesundheit/index.html, accessed 4 October 2009).

¹⁵⁶ Statistik Austria. Life expectancy 2006 depending on subjective health status, age and highest level of completed education [web site]. Vienna, Statistics Austria (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitszustand/lebenserwartung_in_gesundheit/041865.html, accessed 4 October 2009).

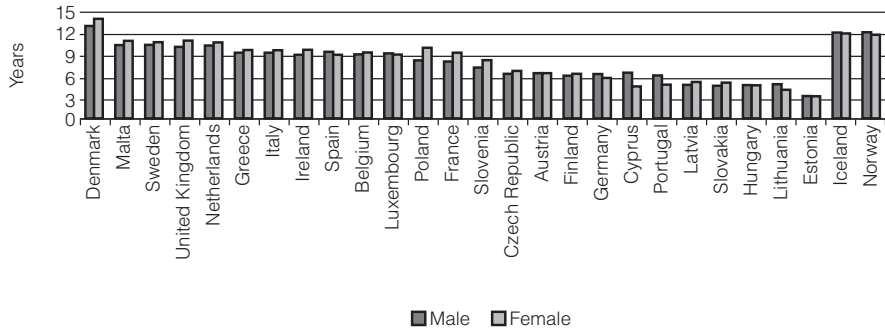
Fig. 2.2 Healthy life expectancy at birth (as a % of total life expectancy), 2005^a



Source: European Communities (2009).¹⁵⁷

Notes: ^aProvisional data; Italy, life expectancy data are for 2004; Bulgaria and Romania, not available; The figure is ranked on the average of male and female.

Fig. 2.3 Healthy life expectancy at age 65 years (in years), 2005^a



Source: European Communities (2009).¹⁵⁸

Notes: ^aProvisional data; Bulgaria and Romania, not available; The figure is ranked on the average of male and female.

Mortality

Mortality in Austria has shown a continuous decrease over the decades, both for men and for women and across all ages.¹⁵⁹

Main causes of death

In 2006 the main causes of death for men and women in Europe (in the EU27) were cancer, ischaemic heart diseases, accidents, diseases of the nervous system, pneumonia, chronic liver disease, diabetes mellitus and suicide (Fig. 2.4). Rates for cardiovascular disease and cancer have decreased since 1970, while rates

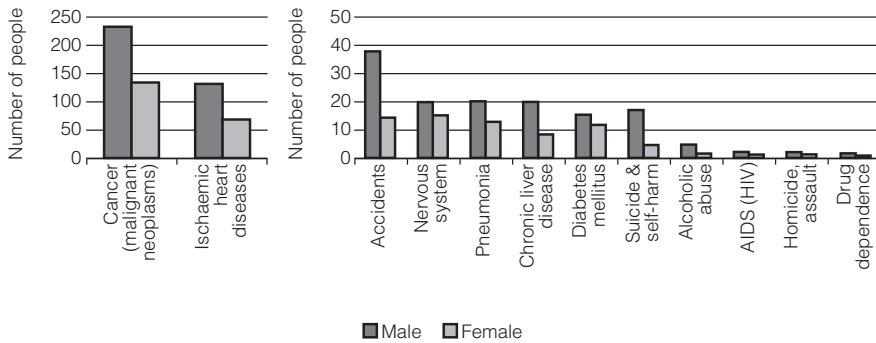
¹⁵⁷ European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

¹⁵⁸ Ibid.

¹⁵⁹ Statistik Austria. *Yearbook of health statistics 2007*. Vienna, Statistics Austria, 2008 (http://www.statistik.at/wcmsprod/groups/public/documents/sitestudio/pdf_icon.gif, accessed 5 October 2009).

for nervous diseases and diabetes have increased. Noncommunicable diseases, including cardiovascular disease, cancer, mental health problems, diabetes mellitus, chronic respiratory disease and musculoskeletal conditions account for more than 85% of deaths in Europe.¹⁶⁰ Significant gender disparities exist, as well as geographical differences in incidence of death.

Fig. 2.4 Main causes of death – standardized death rate, EU27, 2006^a



Source: European Communities (2009).¹⁶¹

Notes: ^aNote the differences in the scales employed between the two parts of the figure; the figure is ranked on the average of male and female; EU27 averages calculated on the basis of the latest year available for each Member State.

The main cause of death in Austria continues to be cardiovascular disease, although its incidence has decreased considerably over the decades.

Fig. 2.5 shows changes in causes of death over time. The percentage of deaths caused by malignancies has experienced a constant increase over the decades (36.34% in 2008). The percentage of deaths from cardiovascular disease also increased steadily until 2001, when it began to decline, contributing to an overall increase in life expectancy (43.01% in 2008). The percentage of deaths from diseases of the respiratory system dropped by almost 3% between 1970 and 2008, experiencing the biggest drop between 1970 and 1980 (5.50% in 2008). The percentage of the population dying from diseases of the digestive system decreased by about 2% between 1970 and 2008 (4.05% in 2008). The percentage of deaths from other diseases dropped by more than 3% between 1970 and 1980 and then remained more or less stable until about the year 2000, before gradually increasing again after 2001 (15.47% in 2008).¹⁶² The percentage of deaths caused by injuries and intoxication¹⁶³ has gradually

¹⁶⁰ European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

¹⁶¹ Ibid.

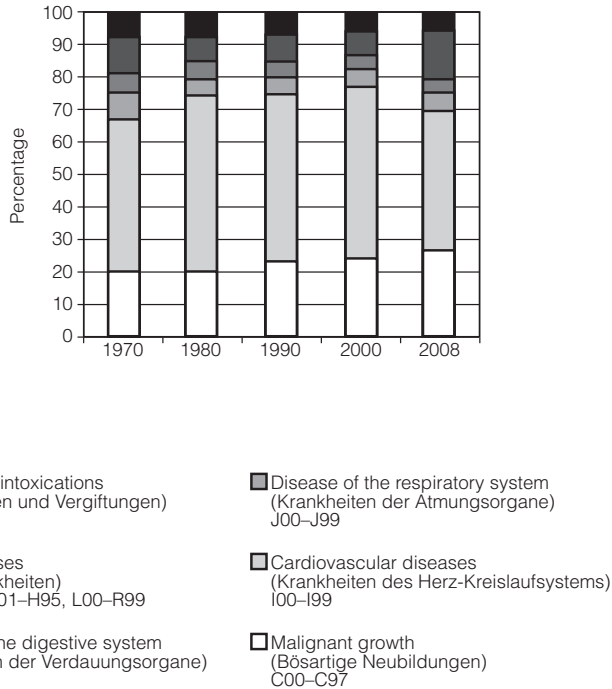
¹⁶² Other deaths include infectious and parasitic diseases: 0.8% of total deaths in 2007; diseases of the blood, dietary- and metabolism-related diseases (especially diabetes mellitus): 5.4% of total deaths (4.2% due to diabetes); mental illnesses: 0.9% of total deaths; alcohol abuse: 0.5% of total deaths; drug addiction: 0.3% of total deaths; diseases of the nervous system and the sense organs: 2.9% of total deaths. Further causes of death summarized in the category “other causes of death” are diseases of the urogenital tract, congenital malformations and perinatal affections.

¹⁶³ Including: traffic accidents, falls, intoxication, suicide and self-harm, homicides, manslaughter and deliberate harm of others.

decreased over recent decades, showing a reduction of about 2% in 2008 (5.62%) compared to 1970.

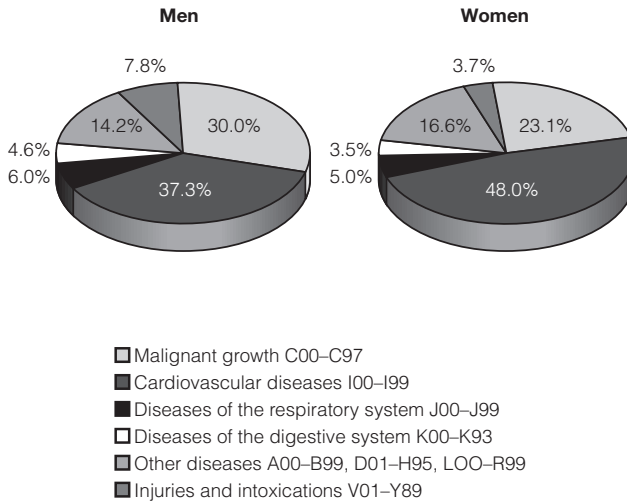
The most frequent cause of death among young people is injuries and intoxication, accounting for about 6 deaths in every 10. This is still the main cause of death in early adolescence, before being overtaken by malignancies and cardiovascular disease.

Fig. 2.5 Main causes of death in Austria – development over time



Source: Authors' own calculations based on Statistik Austria cause of death statistics.

Fig. 2.6 shows the percentage of deaths from the main disease groups for men (left pie chart) and women (right pie chart) for the year 2008. About 5 out of 10 women die of cardiovascular disease, compared to about 4 out of 10 men. Women are also more prone to die from other diseases, while men are far more likely to die from injuries and intoxication, and malignancies.

Fig. 2.6 Main causes of death in Austria – men and women (in %), 2008

Source: Statistik Austria (2008).¹⁶⁴

When looking at regional differences, the data for deaths from malignancies for 1998/2004 shows a considerably higher incidence in the north-east of Austria, in Vienna and especially Lower Austria, but also in parts of Styria. Mortality rates are lowest in parts of Salzburg, Upper Austria, Carinthia and Lower Austria.¹⁶⁵ The regional distribution of death rates from cardiovascular diseases shows a clear east–west divide, with mortality being much higher in the east, north-east and south-east of Austria (especially in Vienna and Lower Austria but also in parts of Styria and Upper Austria) than in the west and south-west, in Vorarlberg, Tyrol, Salzburg and Carinthia.

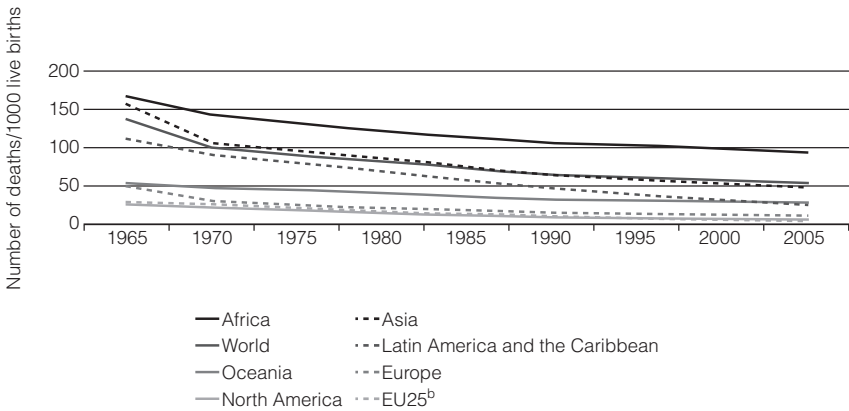
Infant mortality

Infant mortality in Europe has dropped from almost 28 deaths per 1000 live births in 1965 to 4.7 deaths per 1000 live births in 2006 (Fig. 2.7).¹⁶⁶ Progress in health care services (antenatal and postnatal care) along with better nutrition have contributed significantly to this development, although differences persist across different social groups or regions.

¹⁶⁴ Statistik Austria. Death statistics 2008 [web site]. Vienna, Statistics Austria, 2008. (http://www.statistik.at/web_de/statistiken/gesundheit/todesursachen/todesursachen_ausgewahlte/024439.html, accessed 16 June 2009).

¹⁶⁵ Statistik Austria. *Mortality: malignant growths 1998/2004 regional districts*. Vienna, Statistics Austria, 2008 (http://www.statistik.at/web_de/wcmsprod/groups/public/documents/sitestudio/pdf_icon.gif, accessed 5 September 2009).

¹⁶⁶ European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

Fig. 2.7 Infant mortality (per 1000 live births), 1965–2005^a

Source: European Communities (2009).¹⁶⁷

Notes: ^aAll data (excluding EU25) are averages of the 5-year period up to and including the reference period referred to in the figure. ^bEU27 for latest period; 2007 instead of 2005.

Since the mid-1980s infant mortality in Austria has dropped by more than two thirds. Since 1997 infant mortality has been below 5.0 deaths per 1000 live births (within the first year of life). In 2007 the highest infant mortality rate was documented for Vienna and Lower Austria (5.4 versus 4.4 deaths per 1000 live births), the lowest for Tyrol (2.3 deaths per 1000 live births).¹⁶⁸

Morbidity¹⁶⁹

The average length of stay in hospital has generally decreased in recent years and varies widely depending on the diagnosis. The longest average length of stay was recorded for patients suffering from cancer or circulatory system problems. Countries reporting a long length of stay are the Czech Republic, Finland, Germany and Lithuania. Cyprus, France, Malta and Poland have short average lengths of inpatient stay.¹⁷⁰

In 2006 the highest number of hospital inpatient discharges among the EU27 countries was recorded for Austria (more than 27 000 per 100 000 inhabitants)¹⁷¹, followed by Lithuania. The lowest number of discharges was recorded for Malta and Cyprus (below 7000 per 100 000 inhabitants). According to Eurostat (the EU's Statistics Office), the highest number of hospital discharges in 2006 was

¹⁶⁷ European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

¹⁶⁸ Statistik Austria. *Yearbook of health statistics 2007*. Vienna, Statistics Austria, 2008 (http://www.statistik.at/wcmsprod/groups/public/documents/sitstudio/pdf_icon.gif, accessed 5 October 2009).

¹⁶⁹ Ibid., based on hospital discharge data.

¹⁷⁰ European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

¹⁷¹ National statistics quote more than 30 000 cases.

related to diseases of the circulatory system.¹⁷² Based on the WHO Global Burden of Disease Report (2004 update), unipolar depressive disorders will rank highest with regard to burden of disease (disability-adjusted life years (DALYs))¹⁷³ in 2030, followed by ischaemic heart disease and road traffic accidents (Fig. 2.8).¹⁷⁴

Fig. 2.8 Ten leading causes of burden of disease worldwide, 2004 and 2030

2004 Disease or injury	As % of total DALYs	Rank		Rank	As % of total DALYs	2030 Disease or injury
Lower respiratory infections	6.2	1		1	6.2	Unipolar depressive disorders
Diarrhoeal diseases	4.8	2		2	5.5	Ischaemic heart disease
Unipolar depressive disorders	4.3	3		3	4.9	Road traffic accidents
Ischaemic heart disease	4.1	4		4	4.3	Cerebrovascular disease
HIV/AIDS	3.8	5		5	3.8	COPD
Cerebrovascular disease	3.1	6		6	3.2	Lower respiratory infections
Prematurity and low birth weight	2.9	7		7	2.9	Hearing loss, adult onset
Birth asphyxia and birth trauma	2.7	8		8	2.7	Refractive errors
Road traffic accidents	2.7	9		9	2.5	HIV/AIDS
Neonatal infections and other ^a	2.7	10		10	2.3	Diabetes mellitus
COPD	2.0	13		11	1.9	Neonatal infections and other ^a
Refractive errors	1.8	14		12	1.9	Prematurity and low birth weight
Hearing loss, adult onset	1.8	15		15	1.9	Birth asphyxia and birth trauma
Diabetes mellitus	1.3	19		18	1.6	Diarrhoeal diseases

Source: WHO (2008).

Notes: ^aAlso includes other non-infectious causes arising in the perinatal period, aside from prematurity, low birth weight, birth trauma and asphyxia.

Hospital discharge data in Austria are case-based data. Day clinic visits are also included in the statistics. The average length of stay in acute hospitals has decreased considerably over the past half century (from about 25 days in 1960 to about 11 days in 1989, to an average length of stay of roughly seven days).¹⁷⁵ The number of cases per 100 000 population, however, has more than doubled (about 15 000 in 1960, about 22 000 in 1989 and more than 30 000 cases per 100 000 in 2006; in total 2 538 544 inpatient stays). Average length of inpatient stays in acute hospitals was longest in Vienna (7.8 days) and shortest in Burgenland (5.8 days).

The number of inpatient stays is higher for women than men, especially for the

172 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

173 "One DALY represents the loss of the equivalent of one year of full health".

174 WHO. *Global burden of disease report. 2004 update*. Geneva, World Health Organization, 2008 (http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_part4.pdf, accessed 4 April 2010).

175 Depending on the diagnosis, average length of stay varies considerably. For example, it is very short for eye diseases, childbirth and pregnancy-related stays and is longest for stays in connection with mental and behavioural illnesses. In 1997 a new hospital funding system was introduced which has, according to the literature, also influenced the development of the length of stays and the number of admissions.

group aged 25–34 years (because of childbirth) and for those aged over 80 years (reflecting the age structure of the population). About half of all discharges from acute hospitals involve patients aged over 60 years.

The principal diagnoses on discharge after inpatient stays in 2006 were diseases related to cancer (14.4%), cardiovascular disease (12.0%), injuries and intoxication (10.2%), diseases of the musculoskeletal system and connective tissue (10.0%) and diseases of the digestive system (9.3%). For women the three main discharge diagnoses were cancer, diseases of the musculoskeletal system and connective tissue and cardiovascular disease, and for men they were cancer, cardiovascular disease, and injuries and intoxication.

Between 2001 and 2006, inpatient stays for the following diagnoses showed a significant increase: diseases of the nervous system (22.6%), diseases of the digestive system (21.2%), cancer (20.5%), diseases related to the musculoskeletal system and connective tissue (19.5%) and diseases of the eye and the adnexa (17.7%).

The most frequently performed operations in 2006 were those involving the uveal tract, the lens, cornea or visual nerve (7.9%), the distal femoral or knee joint (7.6%), pregnancy and childbirth (7.3%), the skin, dermal appendage or subcutitis (6.9%), and the uterus (5.8%). The most frequent non-invasive procedures were physiotherapy and computer tomography (CT)/magnetic resonance imaging (MRI) diagnostics.

In 2005, fewer new cases of cancer were reported than in 2004 but the incidence was 6.3% higher than in 1996. Men were affected slightly more frequently (52.8%) than women (47.2%) in 2005; between 1996 and 2005, new cases increased by 11.1% among men and decreased by 1.3% among women. Age-standardized rates have fallen for both men and women since 2001. The age-standardized risk of falling ill with cancer was 1.4 times as high for men as it was for women. Prostate cancer is the most common cancer for men; breast cancer is most common for women. The risk of contracting lung cancer has increased considerably for women and decreased for men since the early 2000s. Although rates of colorectal cancer have dropped over the same period, it remains the second most frequent location of cancer among women and the third most frequent among men. Cases of stomach cancer are decreasing for both men and women. Age-standardized incidence rates for cancer of the cervix dropped by 22% between 1996 and 2005. Regional age-standardized incidence for new cancer cases was highest in Carinthia and Tyrol and lowest in Upper Austria and Salzburg. In 2005 about a third of all tumours were diagnosed when the tumour was still limited to one organ, a fifth after the tumour had already metastasized and another 11% at an advanced stage.

In the 19th and early 20th centuries there was an epidemiological transition from communicable to noncommunicable diseases. Deaths from infectious diseases have dropped since 1960 but still remain an important issue in Europe because of high rates of HIV infection in various countries, the continuing threat from other epidemic-type communicable diseases and the emergence of new diseases. TB or hepatitis shows a higher incidence in eastern European countries than in central or western European countries.

In Austria, reporting of infectious diseases is the duty of the BMG and the regional health authorities. In 2007, cases reported most often were related to bacterial food poisoning¹⁷⁶ (10 227 cases), followed by scarlet fever (2053 cases), infectious hepatitis (1830 cases) and STIs (1092 cases). A total of 560 new cases of TB were reported, although numbers have been decreasing since 1994. For more information on the reporting of infectious diseases see section 3.8).

The number of people being infected with hepatitis has decreased since 1965. In 2007, 12.5 cases of hepatitis C were reported, 8.0 cases of hepatitis B and 1.4 cases of hepatitis A (per 100 000 people).

The same year, 64 individuals were infected with AIDS and, of these, 78.1% were men. Only 34.0% of the infections were related to homosexual contacts; 22% to heterosexual contacts, 16% to intravenous drug abuse, and for 26% the cause of infection was not known. Women are more likely to be infected with AIDS through heterosexual contacts and intravenous drug abuse.

In 2007, 42 096 road accidents involving physical injury occurred – 53 902 individuals were injured, of whom 691 died. This is an increase, after a decrease that had been observed since 2003. About two thirds of the casualties were the result of car accidents, 18% were caused by motorcycles and about 10% were cyclists. More than half of the casualties and three quarters of those killed were men.

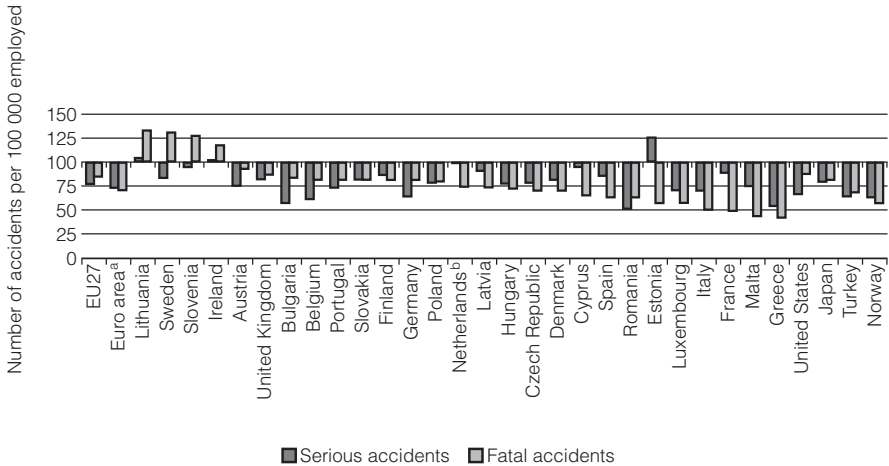
Sickness absence has been decreasing since 1985, but increased again slightly in 2007. The average duration of sickness absence of employed people in 2007 was 12 days, with 12.6 days for men and 11.4 days for women. The number of days increased with age for both sexes. The most sickness absences occurred in the construction sector, followed by public administration, national defence and social insurance, and the least occurred in the teaching sector. Reasons for sickness absences reported most often in 2007 were diseases of the respiratory system (31.9%), diseases of the musculoskeletal system and connective tissue (14.5%) and gastric diseases (10.2%).

According to the European Agency for Safety and Health at Work, there are over 150 000 work-related deaths each year (Fig. 2.9). The number of fatal accidents at work dropped by 24% in the EU27 countries between 1998 and 2005.

¹⁷⁶ In most cases related to *Campylobacter* or *Salmonellosis*.

Increases in fatal work accidents in this period were registered in Lithuania (33% increase), Sweden (31% increase), Slovenia (28% increase) and Ireland (17% increase). A marked decrease was observed in Greece, Malta and France. Fatal accidents occurred most often in the construction sector, in agriculture, and in the transportation sector. Occupational accidents affect many more men than women, since men are overrepresented in higher risk occupations.¹⁷⁷

Fig. 2.9 Incidence of accidents at work, based on the number of accidents per 100 000 individuals employed, 2005 (1998=100)



Source: European Communities (2009).¹⁷⁸

Notes: ^aEA12 instead of EA15; ^bBreak in series for serious accidents (re-based, 2005=100).

In Austria in 2007, 119 847 accidents occurred at work (198 of which were fatal), and there were 12 580 travel accidents (67 of which were fatal) and 1590 occupational illnesses (73 of which were fatal). Recognized work accidents excluding travel accidents have decreased by more than a third since 1990.

In the course of the military health examination (year of birth 1987), 73.7% of those examined were found to be suitable. A disease was diagnosed in more than two thirds of those examined: 21% showed anomalies of the skeleton, muscles and connective tissue; 11.1% displayed endocrinological, diet-related or metabolic diseases; about 10% were diagnosed with a mental illness; 9.7% with an injury or intoxication and 9.6% had a disease of the respiratory system. Those considered unsuitable for army service were mainly diagnosed with mental illness (25.1%), congenital disorders (11.3%) or defects related to ears, hearing or mastoid process (9.8%).

177 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

178 Ibid.

Diseases that led to the award of a disability pension most often in 2007 were musculoskeletal and connective tissue disorders (32.6%), mental illness (28.7%) and cardiovascular diseases (12.3%).¹⁷⁹

Health of Austrian school children¹⁸⁰

Based on the Health Behaviour in School-aged Children (HBSC) Survey 2005/2006, which was conducted in March 2006 among 11-, 13- and 15-year-old students, 43% of all students (50% of boys and 36.2% of girls) described their health status subjectively as excellent. About half of the girls and a third of the boys (37.5% of all students) stated that they regularly suffered from physical or mental discomfort. A total of 14.5% of the students had a medically diagnosed chronic illness or disability, and 40.5% had had an injury requiring medical treatment in the previous 12 months. Some 35% of the students believed that they were too fat. This was especially evident among the girls (42.8%) but almost a third of the boys also believed this. In fact, 12.2% of the students were overweight or obese.

Less than 20% of the students stated that they were physically active on seven days of the week. During school days, about 2.3 hours were spent sitting in front of the television, rising to 3.3 hours on non-school days. Computer games and game consoles were also used extensively – 1.4 hours per school day and 2.3 hours on days off. Only about 20.8% of the students stated that they ate fruit, and 35.2% that they ate vegetables once a week at the most. Only about a third ate fruit on a daily basis and even less – namely, about 16.2% – ate vegetables every day. Yet, about a fifth ate sweets or drank lemonade containing sugar every day.

A total of 35% of the students had smoked (11-year-olds: 8.4%, 15-year-olds: 64.6%) and half of these went beyond experimentation with the habit – 7.6% smoked every day (about 20% of 15-year-old boys and girls). Almost 15% of the students consumed alcohol on a regular basis (15-year-old boys: 41.2% and 15-year-old girls: 32.3%), and 12.1% stated that they had been drunk at least once in the past 30 days (31.8% of the boys and 26% of the girls aged 15 years). Nearly 60% of the students had been involved in bullying during recent months (19.2% as victims, 17.6% as culprits and 22.4% as both).

The socioeconomic situation of a family had an influence on both the health status and the health behaviour of a child. Children and adolescents from families that were better off appeared to be healthier than those from less

179 Statistik Austria. *Yearbook of health statistics 2007*. Vienna, Statistics Austria, 2008 (http://www.statistik.at/wcmsprod/groups/public/documents/sitestudio/pdf_icon.gif, accessed 5 October 2009).

180 Dür W, Griebler R. *The health of Austrian school students in their living conditions. Results of the WHO-HBSC Survey 2006*. Vienna, Federal Ministry of Health, Family and Youth (BMGFJ), 2007.

affluent families. Those in the first group, however, had a higher risk of being a victim in bullying or being drunk.

Another factor that proved to exert an influence on the health and health behaviour of the target group was family composition. Children and adolescents from single-parent families had a lower probability of being healthy compared to those from two-parent families. Adolescents from families with step-parents and siblings displayed a higher risk of getting drunk or smoking.

The school environment was also important for the health and health behaviour of the students. Children and adolescents who had a good relationship with their fellow students and teachers had a higher probability of being healthy. Equally, they showed a lower risk of being involved in bullying attacks, smoking or drinking.

Risk factors

Risk factors covered in this chapter include smoking, physical activity, nutrition, obesity and alcohol. Risk factors such as poverty, low level of income or education, or a migration background are covered in detail in Chapter 5 of the report.

The prevalence of chronic diseases is increasing in all European countries. Major risk factors for chronic disease are tobacco consumption, alcohol consumption, unhealthy diet, overweight and obesity, as well as physical inactivity.

Smoking

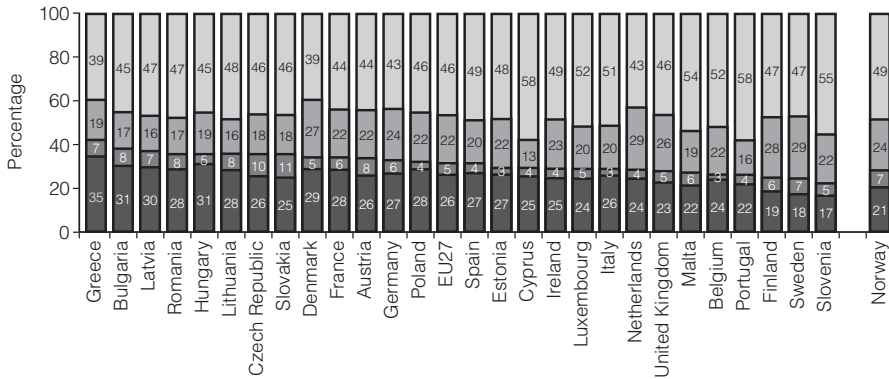
Tobacco is the single largest cause of preventable death and accounts for 650 000 deaths every year in the EU. It is estimated that the economic loss caused by smoking resulted in more than €100 billion in the year 2000. The percentage of daily smokers in the EU27 countries ranges between 16.4% and 36.3% of the total population, amounting to an average of 26.5% (Fig. 2.10).¹⁸¹

Countries with the highest proportion of daily smokers are Greece (35%), Bulgaria (31%) and Latvia (30%) and those with the lowest are Slovenia (17%), Sweden (18%) and Finland (19%).¹⁸² The proportion of young women smokers (aged 15–24 years) has increased considerably in recent years.

In Austria, smoking is also the single largest cause of avoidable death. Current legislation on smoking involves a compromise and is, when compared to measures taken in other European countries, very permissive. In the

¹⁸¹ European Commission. Public health/Tobacco/Policy [web site]. Brussels, The Public Health Portal of the European Commission, 2010 (http://ec.europa.eu/health/tobacco/policy/index_en.htm, accessed 4 April 2010).

¹⁸² European Commission. *Flash Eurobarometer survey on tobacco – Analytical report*. Requested by the Directorate-General for Health and Consumer Affairs, March 2009. Brussels, European Commission, 2009 (http://ec.europa.eu/public_opinion/flash/fl_253_en.pdf, accessed 5 November 2009).

Fig. 2.10 Smoking cigarettes, cigars or a pipe

Q1. Regarding smoking cigarettes, cigars or a pipe, which of the following applies to you?

- You smoke every day
- You smoke occasionally
- You used to smoke but you have stopped
- You have never smoked

Source: European Commission (2009).¹⁸³

Notes: Base: All respondents; % by country

Eurobarometer Survey on Tobacco, Austrians – along with the Czechs and the Dutch – were found to be among those least supportive of implementing smoking restrictions in public places. They also showed one of the lowest levels of being *totally in favour* of regulating smoking in restaurants (only 38%).

Smoking in restaurants appears to be far more widely accepted than smoking in offices and indoor workplaces.¹⁸⁴ In line with EU legislation, advertising of tobacco products is – with very few exceptions – not allowed in Austria.

Although many of the experts interviewed quoted smoking as one of the main current and future public health topics, measures taken to reduce smoking and passive smoking appear to be strongly influenced by emotions and interest groups.

According to the Eurobarometer Survey 2009, about 26.0% of the Austrian population aged over 15 years smoke. A survey commissioned by the BMG in 2004 estimated that 40–50% of the population were smokers – of these, 19% were seriously dependent on nicotine and 13% smoked up to a packet of cigarettes a day.¹⁸⁵

¹⁸³ European Commission. *Flash Eurobarometer survey on tobacco – Analytical report*. Requested by the Directorate-General for Health and Consumer Affairs, March 2009. Brussels, European Commission, 2009 (http://ec.europa.eu/public_opinion/flash/fl_253_en.pdf, accessed 5 November 2009).

¹⁸⁴ Ibid.

¹⁸⁵ Federal Ministry of Health (BMG): www.bmgf.gv.at, accessed 5 September 2009.

The percentage of men smoking has decreased over recent decades (from about 39% of the male population in the 1970s to about 27% in 2006/2007),¹⁸⁶ while the percentage of women smoking has increased over the same period (from about 10% to about 19%).¹⁸⁷ Young people start smoking at a very early age. A total of 60% of people aged 14–19 years had smoked in the past year and 13% of these are regular smokers.¹⁸⁸

Questioned about their views on smoking policies in Austria, many experts openly declared themselves to be mystified. They could not understand the reasons for the liberal smoking policies and felt that lobbying by restaurant owners and interest groups could play an important role and that politicians might be worried about losing votes if they took a clear stand against smoking. Smoking had been scheduled to be part of a television campaign but this had been postponed on the grounds that it “was not considered to be a good moment to discuss the topic”. Some experts believed that the decision to smoke or not was a matter of personal choice. Awareness of the health of others does not appear to be high. It also seems that, in a small country such as Austria, individuals can dominate the argument and have a strong influence on decision-makers.

Various services are offered to encourage people to stop smoking. Social health insurance funds offer inpatient and outpatient smoking cessation programmes. Working with the regions and the BMG, they have established “the smoker’s telephone”, a national initiative whereby people receive information and counselling on topics related to smoking by means of a hotline and online.¹⁸⁹ A range of advisory centres and contact points which are run by the regions, the local health centres, the health insurance funds, hospitals or other institutions can be found across the country, but a national strategy and standardized nationwide services for smoking cessation are still lacking.

Alcohol

Europe is the continent with the highest alcohol consumption, measured in litres of pure alcohol. Between 3% and 8% of all global deaths were related to alcohol in 2004. Alcohol is also one of the major preventable causes of disease, accounting for 4–6% of the global burden of disease and injury. Both deaths and diseases attributable to alcohol show wide regional variation. Gender and socioeconomic status are the most relevant factors in alcohol consumption. Alcohol has an especially pronounced detrimental effect on unintentional and

186 Based on the National Health Survey 2006/2007, which is based on the European Community Health Interview Survey (ECHIS) and executed by Statistics Austria. For further information, documentation is available on the web site of the BMG (http://www.bmg.gv.at/cms/home/attachments/1/1/8/CH1066/CMS1187768952223/oesterr_gesundheitsbefragung_2006_20071.pdf, accessed 22 April 2011).

187 Statistik Austria. Rauchen [web site]. Vienna, Statistics Austria, 2009 (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitsdeterminanten/rauchen/index.html, accessed 4 September 2009).

188 Federal Ministry of Health (BMG): www.bmgf.gv.at (accessed 5 September 2009).

189 Smoker’s telephone (*Rauchertelefon*), available at www.rauchertelefon.at (accessed 10 February 2011).

intentional injuries, cardiovascular disease, cancer, and cirrhosis. Worldwide, men consume more alcohol than women.¹⁹⁰

Alcohol consumption and abuse should be taken very seriously in Austria. The negative effects of excessive alcohol consumption on health can be considered as one of the main health risks in the country. Although both the total number of those misusing alcohol as well as the daily amount of alcohol consumed by the adult population have decreased since the early 1980s, certain population subgroups (women and teenagers) show an increase in consumption.¹⁹¹

About 10% of the Austrian population suffer from alcoholism at some point in their life. This applies to about 14% per cent of men and 6% per cent of women. In 2005, Austrians aged 15–99 years consumed an average of 12.6 litres of pure alcohol per year, an equivalent of about 27.2 grams per day. Alcoholics account for about a third of this amount.¹⁹² About 16% of the population can be classified as alcohol abusers, who are defined by either suffering from alcoholism or by consuming problematic amounts of alcohol (10.6% versus 5.0%). Those suffering from alcoholism (5% of the total population) represent about 7.5% of the male and about 2.5% of the female population. In absolute terms this amounts to about 340 000 individuals. In the recent past there has been an *alcoholic emancipation* of women characterized by more women drinking and abusing alcohol.¹⁹³

Teenagers experiment with alcohol at the age of 13 years (boys) and 15 (girls) or sometimes even earlier. About 8% of 13-year-olds and 37% of 15-year-olds drink alcohol regularly (at least once a week).¹⁹⁴

Alcohol can cause damage to health in various ways and result in certain diseases. Potentially, excessive consumption can lead to or trigger the development of fatty liver, diabetes mellitus type II, pancreatitis, certain types of carcinomas, kidney damage, cardiomyopathy, circulatory disturbances, hypertension and cirrhosis. Consumption of alcohol during pregnancy can also increase the risk of miscarriage or halt the development of unborn children.¹⁹⁵ Other illnesses

190 Rehm J et al. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet*, 2009, 373:2223–2233.

191 BMGF. *Public health in Austria*. Vienna, Federal Ministry of Health and Women, 2005.

192 Uhl A et al. *Nationwide representative survey on substance use*. Vienna, Federal Ministry of Health and Women (BMGF), 2005. See also Uhl et al. Handbook alcohol – Austria. In: VIVID – Fachstelle für Suchtprävention. Alkohol [web site]. Graz, VIVID – Fachstelle für Suchtprävention, 2008 (http://www.vivid.at/de/wissen/zahlen/zahlen_alkohol/, accessed 4 September 2008).

193 BMGF. *The not quite normal consumption of alcohol and its consequences for health. 2nd edition*. Vienna, Federal Ministry for Health and Women, 2007 (<http://www.api.or.at/lbi/pdf/07%20e%20645%20der%20ganz%20normale%20alkoholkonsum%20brosch%FCre.pdf>, accessed 2 September 2008). See also VIVID – Fachstelle für Suchtprävention. Alkohol [web site]. Graz, VIVID – Fachstelle für Suchtprävention, 2008 (http://www.vivid.at/de/wissen/zahlen/zahlen_alkohol/, accessed 4 September 2008).

194 Dür W, Griebler R. *The health of Austrian school students in their living conditions. Results of the WHO-HBSC Survey 2006*. Vienna, Federal Ministry of Health, Family and Youth (BMGFJ), 2007.

195 BMG. *Completely 'normal' consumption of alcohol and the health-related consequences*. Brochure, 2nd edition. Vienna, Federal Ministry of Health, 2007.

that may be linked to alcohol consumption are depression, sleeping problems and anxiety.

Life years lost due to alcohol consumption provide a more reliable estimate of the scope of the problem than mortality rates. It is estimated that the average reduction in life expectancy of those who abuse alcohol is 17 years for men and 20 years for women. The average reduction of life expectancy of all Austrians in connection with alcohol amounts to 1–3 years.¹⁹⁶

In 2006, 2578 alcohol-induced accidents occurred, in the course of which 3564 individuals were injured and 56 killed. On average about 100 fatalities per year are related to acute alcohol intoxication. In addition, about 8000 alcoholics die as a consequence of their illness.

The population is informed about the health risks and potential detrimental consequences of alcohol consumption and abuse through various media, including the internet, brochures, television and radio, as well as information events. Providers of health services, especially GPs, are encouraged to talk to their patients about the health risks related to alcohol consumption and to promote preventive actions. In the course of the preventive health check-up a form on alcohol consumption must be completed by the patient.

Outpatient and inpatient clinics deal with the treatment of alcohol-related illnesses and offer counselling services and there are also various self-help groups.

However, even in the presence of information campaigns and a range of other measures, the topic of alcohol abuse continues to be affected by stigma and shame (people do not talk about it) and also by ignorance (trivialization and denial of the problem).

Physical activity¹⁹⁷

The findings of the Austrian Health Survey 2006/2007 indicate that 60% of men and 49% of women aged over 15 years undertake physical exercise at least once a week. A third of all men and close to a quarter of all women exercise at least three times a week. Physical activity decreases with advancing age and is especially pronounced for men and women between the ages of 60 and 75 years. Women in nearly all age groups undertake less physical activity than men.

The results of the ÖSES.pal07 study indicate that the average physical activity level (PAL) of Austrian adults was 1.64 at that point in time. WHO

196 BMGFJ. *Alcohol. Handbook alcohol – Austria. Figures – data – facts – trends.* Vienna, Federal Ministry of Health, Family and Youth, 2008.

197 Statistik Austria. *Austrian health survey 2006/2007. Physical activity during leisure time.* Vienna, Statistics Austria (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitsdeterminanten/koerperliche_aktivitaet/index.html, accessed 5 September 2009).

recommends a level of at least 1.70. The PAL was influenced by the age, level of education, profession, time spent sitting, and smoking habits. Women showed much lower levels of physical activity than men, many more of whom had professions involving physical activity. Smokers and individuals who spent a lot of time sitting also displayed lower PALs.

Nutrition¹⁹⁸

All population groups – apart from children – consume too much fat, especially in the form of fatty acids. Individuals in all age groups consume sufficient protein, but too few carbohydrates and fibre. Cholesterol levels are lower than recommended for children but above the recommended levels for elderly people, adult men and pregnant women.

Austrians consume less folic acid, calcium and vitamin D than the recommended levels (all age groups) but levels of sodium consumed are too high.

Factors influencing dietary habits are smoking, body weight, satisfaction with weight, frequency of eating and attitude towards eating.

In the Austrian population as a whole, the consumption of breadstuffs, vegetables and fish has increased but is still lower than the recommended levels. Women between the ages of 18 and 65 years appear to consume the recommended amounts of fruit and vegetables and women of all ages consume more fruit and vegetables than men. Children in particular consume much too little fruit and vegetables. The average consumption of fat is too high and children and young people eat too many sweets. Individuals in all age groups drink more than the recommended daily levels of fluid intake in the form of tap water.

Overweight and obesity

Obesity is a serious public health problem and is a considerable risk factor with regard to death and disability. Since the early 2000s large increases in obesity rates have been seen in all EU Member States (Fig. 2.11). About 50% of the EU population is overweight or obese, with especially high proportions in England and Germany (61.0% and 59.7%, respectively) and the lowest levels in Italy and France (less than 40% of the population). The increase in obesity rates has been especially pronounced in central and eastern European countries.¹⁹⁹

More than half the Austrian population is overweight and, of these, 43% are overweight and 12% obese. Fewer women than men tend to be overweight (29%) but more are obese (13%). In all age groups the percentage of overweight

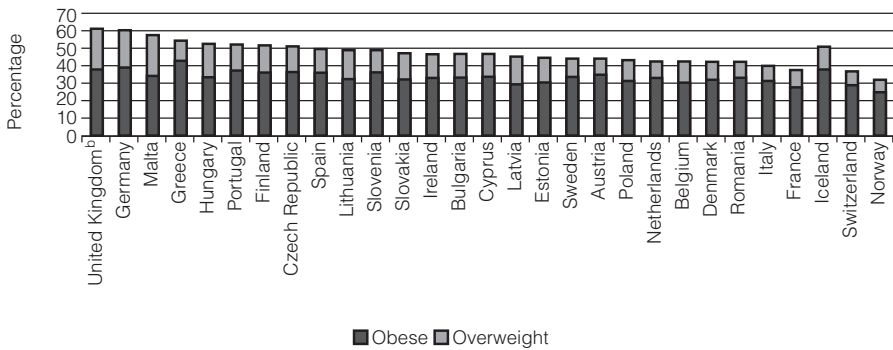
198 Elmadfa I. *Austrian nutrition report 2008*. Vienna, Institute of Nutrition Sciences of the University of Vienna and Austrian Federal Ministry of Health (BMG), 2009 (http://www.bmgfj.gv.at/cms/site/attachments/3/2/3/CH0518/CMS1237809435080/der_gesamte_ernaehrungsbericht_n.pdf, accessed 5 November 2009).

199 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

men is greater than the percentage of overweight women. The highest percentage of overweight men and women can be found in the group of the population aged 60–74 years (53% of the men and 41% of the women). About 20% of the same population group are obese.²⁰⁰

A total of 19% of children between the ages of 6 and 15 years are overweight and 8% of these are obese. The distribution of overweight and obese population shows an east–west divide.

Fig. 2.11 Overweight people (as a % of the total population)^a, 2003



Source: European Communities (2009).²⁰¹

Notes: ^aNational Health Interview Survey (HIS) data, 1996–2003, depending on the country; ^bOnly England; Note that data for Germany and for England relate to valid height and weight measurements.

Challenges and priority areas for public health based on expert opinion

In the second part of this section, current and future challenges and priorities for public health in Austria (as perceived by experts) are presented. The experts interviewed were asked two questions:

1. What are the main problems and future challenges for public health in Austria?²⁰²
2. If you were a decision-maker in the health sector, which issues would you consider being of the highest priority to change or promote?²⁰³

Challenges

The challenges were grouped into various categories, explored here in the following subsections:

200 Statistik Austria. Body mass index (BMI) [web site]. Vienna, Statistics Austria (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitsdeterminanten/bmi_body_mass_index/index.html, accessed 8 November 2009).

201 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

202 Responses from 19 experts were incorporated into this section.

203 Again, responses from 19 experts were incorporated into this section.

- Structures, framework and integration
- Capacity-building
- Research
- Specific topics that should be addressed in the future.

Structures, framework and integration

The understanding of public health is varied in Austria, although some common elements are recognized among most professionals. A clear definition of public health measures and activities would seem essential in order to achieve a common basic understanding of the elements and features of the specialty, as well as to improve communication on the subject in general. This would require existing legislation to be revised and new legislation to be drawn up.

Public health ought to be formalized by creating a new institution for public health in a coordinating role or by establishing a new senior post for a recognized public health professional. In order to make this possible, adequate funding must be available and a strategy defined, including planning, target definition, forecasting, and resource allocation.

According to the experts, the importance of public health should be more widely recognized and understood. This could be achieved through activities such as lobbying, political involvement, social marketing or other steps to increase awareness among stakeholders at all levels of the health system. Responsibilities of actors in the specialty should be defined very clearly and active participation of concerned stakeholders, individuals and the population should be encouraged. The integration of public health and health care services needs to be promoted, with the aim of achieving a better balance between the two areas.

It is important not only to promote the integration and coordination of various subdisciplines of public health, such as health planning and reporting, but also to integrate public health concepts into all health service issues from the micro to the macro levels. Public health should become an integral part of health system organizations – the HiAP concept.

Social matters and health care are traditionally separated in Austria and handled by two different ministries. This makes it very difficult to define strategies for public health measures in areas which affect both ministries – for example, poverty, long-term care, social exclusion. The lack of cooperation between health and social services is also evident in the area of after-care, especially when patients are discharged from hospital and in many cases do not receive adequate support to help them to cope. Standardized communication and coordination structures are lacking.

Capacity-building

After the Second World War there was considerable resistance to any public health ideas in Austria. A new start was made in the 1960s and 1970s but, in comparison to other European countries, Austria was a latecomer to the field of public health. The country should now aim to produce a critical mass of public health professionals operating at all levels of the health system in order to take matters forward.²⁰⁴

The concept of multidisciplinary working (teams consisting of doctors, nurses, dieticians, physiotherapists and others) should be applied more widely. Public health skills also need to be brought into other sectors such as environment, social services and education.

The basic principles of public health should be part of the training curricula of all health professionals, with varying degrees of intensity. These principles must also be explained to decision-makers at all levels of the health system, to increase an understanding of the specialty. Experts should be urged to promote capacity-building, which will require the commitment of adequate resources to create the right structures, appropriate training and suitably qualified staff.

Communication and exchange of knowledge often takes place in an unstructured way and is not standardized. Best practice examples are, on occasion, not shared or communicated and this can result in isolated and repetitive initiatives. The establishment of networks, the search for external expertise and the building of cooperation are all essential – it is neither possible nor sensible for every organization to do everything. A coordinated and concerted course of action is required. There must be evidence of a strong commitment to public health and a willingness of individuals to assume leadership for certain topics to promote their success.

Networking between different stakeholders at national level (for example, cooperation between stakeholders operating in any area related to health, education, social services and the environment) works well on a project basis. Implementation of follow-up measures can, however, be problematic and lengthy.

Research

There is no national research strategy for public health in Austria. Funding for research is very hard to obtain and this seriously limits research development. The strict data protection regulations and the restricted access to data also pose a considerable barrier to research.

²⁰⁴ Expert interviews, 22–24 June 2009 (University, research).

In several areas, no data exist. This is the case, for example, with data on homeless people or illegal immigrants. Research on needs and needs analysis is largely non-existent and this results in unsatisfactory allocation of resources.

Experts believe it to be important to establish several model projects and longitudinal studies that will have greater impact and provide a stronger evidence base than the short projects that currently dominate the public health environment in Austria.

There are too few adequately trained researchers, in particularly epidemiologists. Staff involved in postgraduate public health training are usually so preoccupied with organizational issues that there is little time for research.

Initiatives need to be evaluated and assessed in terms of their benefit. The development of methods should be encouraged and forecasting of future trends promoted.

Careers in public health research are not attractive for young people and university graduates. They are often poorly remunerated and perceived as boring in comparison with clinical work.

Specific topics that should be addressed in the future

Topics that should receive special attention in the future include: inequality; lifestyle (risk) factors, especially smoking; increasing the health awareness of people; health promotion for children and adolescents; management of co-morbidities or chronic diseases by promoting integrated care; e-health; mental health; demographic change and its influence on health; and long-term care.

Based on expert opinion, the following are considered to be the main public health problems in Austria: cardiovascular disease, chronic diseases, health problems related to the musculoskeletal system, mental health problems (suicide, depression), smoking, obesity, lack of physical exercise, alcohol, and inadequate nutrition.

The challenges of modern life, such as the current economic crisis and the issue of climate change also present important public health problems and may result in a rise in diseases related to poverty, unemployment and stress. Other issues, such as water or food shortages, flooding, storms and migration may become more prominent.

Priority areas

The priority areas listed by the range of experts are listed here. These are very similar to the challenges presented in the previous section, but here they are ranked according to how often they were mentioned.

Structural changes

- Funding for public health: definition of budgets, allocation of financial resources.
- Definition of a national public health infrastructure.
- Integration of health care/health services and public health (redistribution of resources, networking/dialogue/coordination across and between professions, encouraging participation of those involved, promotion of the HiAP concept).
- Creation of public and political awareness.
- Clearly articulated commitment to public health.
- Definition of health targets, priorities, strategies and measures.
- Reduction of double structures/overprovision of services.
- Move from interest-dominated and supply-orientated structure to needs-based structure.
- Needs-orientated and fair reimbursement, use of incentive mechanisms.
- Orientation towards health determinants.
- Reduction of inequality.

Legislation

- Revision of legislation for public health, creation of new legislation – for example, for public health training and chronic diseases.
- Revision of legislation on data protection.

Capacity-building

- Educating of decision-makers.
- Ensuring political commitment and will.
- Building of new public health capacity to achieve a critical mass.
- Integrating public health elements into the training of all health professionals.
- Paying more attention to quality of qualification in the public health sector.
- Encouraging multidisciplinary working.

Research

- Allocating financial resources to research.
- Promoting basic and interdisciplinary research.
- Financing of longitudinal studies.

- Shifting from project-dominated research to sustainable programmes and studies, covering larger areas.
- Proposing a research programme in public health – a research grant for at least 5–10 years is essential.
- Creating a sound evidence base for decision-makers.
- Promoting research on needs and identifying groups at risk.
- Creating evidence and evaluation measures – HTA, health impact assessment.

Data

- Creation of a conceptual framework for data collection, data processing and use of data.
- Improvement of the data situation: creation of a database adequate for scientific research and for health policy work.
- Revision of the legislation on data protection to make data available to research institutions. Public health focuses on the population, not the individual, and analysis on an aggregated level is therefore of fundamental importance.
- Initiation of periodic surveys – the current health survey could be undertaken more frequently than every 10 years.
- Revision of the effectiveness of existing registries.

Other

- Raising the health awareness of the population, which appears to be quite low
- Increasing the interest in prevention, prophylaxis and health promotion. The curative system in Austria is very well established and accepted, but insufficient resources are directed towards public health.

A critical mass of most of these priority areas is important and there is an urgent need for the monitoring of health services in the context of economic, social and political developments.

In general there is a considerable need to cooperate within the EU. Public health is a global field of action but emphasis naturally needs to be placed on efforts targeted at the regional and European levels.

2.7 Conclusions

The field of public health is currently undergoing considerable change in Austria and is, according to experts, just beginning to develop. The term itself is not well established and was hardly known in the mid-1990s. Today it is frequently used, but the underlying understanding and knowledge of the specialty varies considerably.

One of the core problems is based on language. There is no accepted German translation of the term public health. The English term is normally used, often without knowledge of what it actually involves. On the one hand, aspects or activities are described as being relevant to public health even if this is not the case and, on the other, aspects or activities, which are clearly relevant for public health, are not described as such. The lack of a nationally recognized definition and the absence of a consensus on the basic functions of public health result in confusion and contribute to the slow development of common ground for discussion and the formation of a coherent strategy. For those without specialized training, the concept of public health often appears vague and difficult to grasp.

Legislation on issues relevant to public health is fragmented and in some cases outdated and there are several gaps. There is no modern national Public Health Act and no national public health institution, although the establishment of the latter is currently the subject of discussion. Responsibilities for public health functions are fragmented and distributed across a variety of institutions, departments and individuals. Awareness of the need for trans-sectoral cooperation – for example, between the health care and social sectors – with regard to health matters is still limited, but is increasing.

The Austrian health system still has a strong focus on curative medicine that is reflected in the way funds are allocated and in the reimbursement schemes for health service providers. These schemes do not currently offer any incentives to providers to encourage them to offer health promotion or preventive services. Social health insurance funds in Austria have a limited legal responsibility to provide public health services and individual insurance funds handle this issue in different ways.

Concepts such as prevention and health promotion have gained considerable ground over recent years. There have been two important achievements in this context. The first of these was the enactment of the Austrian GfG in 1998 and the consequent foundation of the FGÖ, the major institution responsible for the higher awareness of the topic as well as the increase in health promotion activities. The second was the revision in 2003 and 2004 of the preventive

health check-up that is provided by physicians contracted by social health insurance, along with the introduction of the new health check-up in 2005.

Because of economic pressure and other national or international developments, disciplines such as EBM, HTA, health economics and quality management have received more attention in Austria in the recent past. Evaluation, however, is not yet standard practice and some initiatives are started without sufficient supporting evidence. Conversely, promising projects are discontinued and their findings not implemented either because of an absence of funding or lack of evidence of their effectiveness. For those involved this can be very frustrating.

This lack of evaluation is also related to the limited availability of data and to restrictions on the use of existing data. Access to data as well as the linking of databases and data analysis in general can be complicated because of strict data protection regulations. These problems hamper the creation of a basis for sound decision-making.

Financial resources for research are, as already indicated, scarce and difficult to obtain, and this reduces the chances of attracting highly qualified individuals to undertake research.

The public health community in Austria is very varied and career paths are not yet clearly defined. Many professionals working in public health have medical training but individuals with nonmedical backgrounds are gradually becoming involved in the specialty and various training paths are being followed. The development of a public health workforce has been promoted in the recent past by selected regions, the FGÖ and social insurance funds and received a particular impetus when national public health programmes were established at various Austrian universities. Several of the experts interviewed stated that the increasing number of public health professionals was already making a noticeable impact. Other aspects of capacity-building, such as organizational development and the formation of networks and partnerships, still require considerable work.

In terms of health outcomes, Austria has been experiencing a constant increase in life expectancy over recent decades. Infant mortality has dropped by more than two thirds since the mid-1980s. The main cause of death is still cardiovascular disease, although it has also seen a major decrease. In contrast, the percentage of deaths from cancer has increased. The main diagnoses on discharge from hospital in 2006 were diseases related to cancer (14.4%), cardiovascular disease (12%), injuries and intoxication (10.2%), musculoskeletal diseases (10.0%), and diseases of the digestive system (9.3%).

Smoking, alcohol abuse and weight problems present significant future challenges for Austria. Smoking is decreasing among the male population but

has increased among women, especially young women. Smoking policies are lenient compared with many other European countries. Alcohol abuse is also a matter that should be taken very seriously. Although the total number of individuals misusing alcohol and the daily amount of alcohol consumed by the adult population have decreased since the early 1980s, certain population subgroups (women and teenagers) show an increase in consumption.²⁰⁵ More than half of the Austrian population is overweight and, of these, 43% are overweight and 12% are obese.

²⁰⁵ BMGE. *Public health in Austria*. Vienna, Federal Ministry of Health and Women, 2005.

Chapter 3

Information management and health reporting

3.1 Introduction

Information, in the form of a comprehensive, up-to-date and reliable database, is a crucial component of any health system. The systematic collection of data – which should be revised and adapted regularly – forms the basis of research, analysis and reporting, which are essential foundations for health planning, further analysis and data assessment, health forecasting, monitoring of trends, definition of targets and subsequent evaluation.

Data-collection procedures and processing mechanisms have changed significantly over time, as has the focus of data collection. This has been extended from documentation of data on infectious diseases, mortality and services provided to include morbidity and health system-related information. Public health aspects, such as determinants of health (including demographic and environmental factors) are now being increasingly discussed when assessing health data and this allows the health risks of different population groups to be calculated and their needs addressed in a more appropriate way. However, implementation of public health concepts in practice is slow.

There are undoubtedly problems with health data in Austria. There is no national information strategy or framework to define data needs, reasons for collecting data, and intended use of data. A large variety of data is collected but it is not always clear whether these are relevant, sufficient or of good quality. Reports in many cases do not appear to be followed up in a standardized way and further analyses and detailed assessments of comprehensive health reports are rarely undertaken. There are promising signs, however, with respect to health reporting activities and also a growing awareness of the importance of public health in general.

Health reporting has a long history in the United Kingdom and the United States, going back to the 19th century. In Austria health reporting activities started in the 1970s and 1980s, initially in the form of activity reporting by public health authorities based on the Imperial Sanitary Act. Health reporting as it is now understood internationally is a fairly recent discipline in the country, with the first developments taking place in 1994, and it is not yet being used to its full potential. Few disease registries exist and extensive representative health surveys or large-scale research studies are rare. Decision-makers often lack an understanding of public health issues and are only gradually incorporating existing knowledge and evidence-based findings into their decision-making processes.

Financial resources and adequately qualified professionals for data collection, processing, analysis and interpretation are lacking. Austria does not have a long history of epidemiological research and has only recently started to show an interest in this area. Medical research is still strongly influenced by the pharmaceutical industry, which is reflected in the research areas covered.

Experts interviewed describe the situation with regard to epidemiological data as unsatisfactory and believe that this has a negative impact, both on research and on health policy.²⁰⁶ Inpatient data are influenced by aspects of the reimbursement system and there is no adequate documentation of diagnoses for outpatients.²⁰⁷

At national level, few data are collected on children or immigrants. The WHO HBSC Survey is conducted every four years by the LBI-HPR.²⁰⁸ The Austrian Health Survey 2006/2007 also contains information on immigrants (see specifically the special evaluation on socioeconomic determinants of health²⁰⁹). There are only a few registries (see section 3.8) and these are predominantly based on regional, local or individual initiatives. Systematic screening is uncommon and often unscientific, although since 2006 Austria has followed international guidelines in several projects for mammography screening. The preventive health check-up, which was introduced in 1974, was revised in 2005 with the intention of creating an evidence-based examination programme.

Legislation and regulations on the use of data, data protection and data confidentiality are strict in Austria and this makes the linking of datasets and data analysis in general very difficult and sometimes impossible.

206 Expert interviews, 22–24 June 2009 (Research, university).

207 Expert interviews, 22–24 June 2009 (Research).

208 Contact information for the HBSC Survey in Austria can be found at the HBSC web site (<http://www.hbsc.org/countries/austria.html>, accessed 10 February 2011).

209 Statistik Austria. *Sociodemographic and socioeconomic determinants of health*. Vienna, Federal Ministry of Health, Family and Youth, 2008.

Public health research is still underdeveloped in Austria, largely because it does not have a high priority politically, or a high national profile in terms of financial and human resources – at present, for example, it is not possible to do a PhD in public health at any Austrian university.

Few data on objective health status, outcomes and quality of health services are available. There are examples of the publication of quality data in the Austrian Hospital Compass (*Österreichischer Spitalskompass*)²¹⁰ and the Austrian Rehabilitation Compass (*Österreichischer Rehabilitationskompass*).²¹¹ The clarity and validity of data on health outcomes and of data in general have so far not been actively promoted. Evaluation of projects and other activities or measures does not appear to be part of Austrian culture and is not encouraged. This may change through the work of the BIQG, which was established in July 2007 and has quality of disease registries and outcomes as one of its core working areas.²¹²

A literature review for this report revealed that there is only a small body of publications on public health information in Austria, many of which date back to the 1990s or early 2000s. A comprehensive and concise description of the health data situation was given by Rásky in 2001,²¹³ who summarized an extensive range of existing health data sources at that time, assessed the relevance of the data and suggested measures for improvement.

According to Rásky's assessment, the Austrian health data landscape at the beginning of this century showed a strong disease focus and health aspects were barely considered. Data were fragmented and not comparable and socioeconomic, psychosocial and ecological factors were neglected, as were topics such as adolescents, gender and health promotion. Systematic data collection was uncommon, critical data analysis and discussion rarely encountered, and statistics (especially those of health authorities) still placed an emphasis on disease rather than health. Rásky also commented that no comprehensive representative surveys or longitudinal research studies to identify the health status of the population had been undertaken. The author argues that the tendency to neglect health and health promotion aspects in the past in favour of aspects related to disease and health care has led to resources being allocated mainly to health care services.

The situation Rásky describes remains largely unchanged today. Austria's health data situation is still strongly disease orientated, data analyses or health reporting are only undertaken by a small but growing group of experts, national

210 Austrian Hospital Compass 2010: <http://www.spitalskompass.at/> (accessed 10 February 2011).

211 Austrian Rehabilitation Compass: <http://rehakompass.oebig.at/> (accessed 10 February 2011).

212 Other fields of work include: quality reports and health information, quality of processes and structures and quality and efficacy/HTA.

213 Rásky È. Health data situation in Austria. In: Rásky È, Freidl W. *Health reporting in Austria. Appraisal and results of a regional survey*. Linz, Report series Health sciences, 2001.

reports are frequently not followed up in a standardized way or used to their full potential, qualified human resources are in short supply and many decision-makers and professionals in the health sector have only a vague idea of what public health is or does.

There have, however, been several very positive developments since the early 2000s. One of these is the first national health survey based on the European Community Health Interview Survey (ECHIS). Several questions from the 1991 Micro-census were included in the Austrian Health Survey 2006/2007 and are comparable across time. The Survey is intended to be carried out every 10 years by the national statistics institute Statistics Austria (*Statistik Austria*), although a shorter interval would be favoured by a number of the experts interviewed. There have also been positive developments with regard to health reporting in Vienna, Styria and Carinthia, as well as the installation of various health data tools and the expansion of the ÖGIS. Training programmes introduced in recent years have also resulted in a steady increase in the number of qualified individuals.

3.2 Legislation

Nearly all legislation relevant to the health sector contains regulations on data collection, documentation or reporting. The legislation listed here and described in more detail in the paragraphs that follow is considered the most relevant to information management and health reporting. The main stakeholders and providers of health data in Austria are referred to in the next section. European and international regulations are not included in the list but are relevant in the Austrian context.

- Imperial Sanitary Act (*Reichssanitätsgesetz 1870*)
- DokuG
- KAKuG
- Professional Legislation (for example, the *ÄrzteG*)
- *15a Vereinbarung*
- ASVG²¹⁴
- GRG 2005, including amendments of various laws (for example, the KAKuG, social insurance legislation or the DokuG and the new Federal Act for the Quality of Health Services, as well as the Health Telematics Act)
- KrebsstatistikG

²¹⁴ As well as the other social insurance laws.

- Resolution E 103/XVII. GP of 16. 12. 1988 of the National Council (national health report)
- Population Register (*Melderegister*)

The **Imperial Sanitary Act** dates back to 1870 and describes the ÖGD. It is closely linked to the Act on Political Authorities which outlines the organization and responsibilities of the public authorities at the different administrative levels. The Imperial Sanitary Act obliges regional health authorities to produce activity reports based on the health statistics they collect. The legislation has been amended in several regions (Styria, Vienna), resulting in a reduction of the duties of the regional health authorities. Although no legal basis for health reporting exists in Styria, the regional health authority does commission the compilation of a health report, while in Vienna health reporting has been made the responsibility of a specific department of the Magistrate of Vienna.²¹⁵

The health report for the National Council is based on a resolution of the National Council (dating back to 1988),²¹⁶ which requires the Minister of Health to present a health report every three years.

Public health is explicitly referred to in Austrian health legislation for the first time in the **15a Vereinbarung** that is agreed on by the Federal Government and the regions at regular intervals and is, in its current version, valid from 2008 to 2013. According to article 11, the contracting parties agree to incorporate the principles of public health when implementing any measures stipulated in the agreement. These principles include systematic health reporting, the acknowledgement of a comprehensive notion of health, the undertaking of health services research to ensure needs-orientated planning, development and evaluation, the promotion of multidisciplinary working in care or research, the development of health targets.

Article 6 of the same agreement regulates reporting on quality in the health care sector. Article 28 states that hospitals receiving regional authority funding must report diagnoses and services to both an anonymization unit and the regional health funds. The Federal Health Agency is in charge of all decisions related to the anonymization unit. Article 37 strives to ensure and promote further development of documentation and stipulates that the documentation and information system which can be accessed by social insurance and the regional health funds should be extended. The same article also forms the legal basis for the installation of an anonymization unit at the HVB, intended to promote data transparency across various areas of the health sector, ensure

215 Bachinger E, Grasser G. Capacity building for health reporting. In: Kuhn J, Böcke J, eds. *Administered health. Contributions to the political relevance of health reporting. Concepts of health reporting at the centre of discussion*. Frankfurt, Mabuse, 2009.

216 Resolution E 103/XVII. GP of 16 December 1988.

data protection and encourage use of the data for joint monitoring, steering, planning and financing in the health care sector.

Another document which deals with health reporting is the *Handbook for the New Austrian Public Health Service (Handbook ÖGD Neu)*,²¹⁷ which was developed during a project on the reorganization of the training of physicians working in the ÖGD at national, regional and community levels of the health system. Before redefining the curriculum, the authors outlined what the future field of work of these professionals might entail. The project is described in Chapter 2 of this report.

The authors recommend that epidemiology and health reporting should be one of nine fields of responsibility of the ÖGD. They propose the assignment of this duty to the ÖGD by arguing that it has the necessary independence from individual interests and takes a population perspective. They also stipulate that a modern public health service in the form suggested requires profound and comprehensive epidemiological information in order to detect trends, make connections, plan resources and make recommendations. Subsidiary responsibilities in the field of health reporting would include: monitoring the health status of the population, including factors with an impact on health; identifying further such factors; ensuring the collection and provision of the necessary data; ensuring the assessment and analysis of the collected data; providing data- and knowledge-orientated political consulting; and ensuring the publication of health data and recommendations. They incorporate current trends in health reporting, such as action-orientated and health-orientated reporting and acknowledge that new legislation would have to be enacted to make all this possible.

The recommendation on health reporting, developed by the Platform for Health Reporting in 2007 is another document which has an important role in the development of health reporting in Austria.

3.3 Stakeholders

A large number of institutions and organizations at various levels of the health system collect information relevant for health and an overview of those considered most important was developed by the authors of this report and complemented by inputs from the expert interviews. A good overview is also provided by Rásky and Freidl.²¹⁸

217 BMGFJ. *Handbook ÖGD. Handbook for the new Austrian public health service, ÖGD*. Vienna, Federal Ministry of Health, Family and Youth, 2007.

218 Rásky È. Health data situation in Austria. In: RáskyÈ, Freidl W. *Health reporting in Austria. Appraisal and results of a regional survey*. Linz, Report series Health sciences, 2001.

Data collection and reporting activities are frequently based on legal obligations and concern infectious diseases, health service utilization, mortality and morbidity (diagnosis-related data on inpatient care), data on health system structure (institutions, beds, health professionals/providers, equipment, etc.) and costing data. Assessment and documentation of health outcomes, health determinants and economic aspects of health and health targets is only slowly increasing.

The stakeholders considered most important with regard to data collection are:

- Statistics Austria (national statistics institute);
- social insurance institutions (HVB and the individual social insurance funds: health insurance, accident insurance/worker's compensation, pension insurance);
- BMG;
- BMASK;
- regional and local/district health authorities (health department/public health service);
- health service providers (hospitals: discharge data, physicians: billing and prescribing data, etc.)
- professional organizations (ÖÄK, Chamber of Pharmacists, etc.);
- AGES;²¹⁹
- research institutions, universities, private insurance companies, NGOs.

Statistics Austria has a legal obligation to collect and report certain data. It documents mortality by recording cause of death statistics and fertility by recording birth statistics. It is also responsible for publishing data on inpatient care, based on the medical and administrative hospital data it receives from the BMG, as well as on selected social insurance information. Statistics Austria oversees the national cancer registry and is contracted by the BMG to carry out the national health survey. Data from the latter are publicly available free of charge and results are presented in the form of reports. Statistics Austria also calculates Austrian expenditure on health based on the (OECD) SHA. Data on infectious diseases are reported to Statistics Austria by the BMG. Statistics Austria also reports data to the EU, Eurostat, WHO and the OECD. In general, Statistics Austria operates in a very open way. Data or any results of further analysis are published in reports, which are in most cases similar to any other information relevant for data collection, such as via questionnaires

²¹⁹ AGES. English introduction [web site]. Vienna, Austrian Agency for Health and Food Safety (<http://www.ages.at/ages/en/ages-austrian-agency-for-health-and-food-safety/>, accessed 3 May 2009).

available through their web site in the form of a downloadable file (or they can be ordered by post for a small charge).

The **BMG** collects structural data on health providers and health institutions, such as hospitals, as well as recording cases of infectious disease. The Ministry has delegated several documentation duties to other institutions, such as the AGES and GÖG.

The **BMASK** records and publishes data on topics such as long-term care, social assistance and issues relating to people with special needs.

Social insurance funds collect data on their insured population (basic indicators, contributions), on health care provision (contract providers) and utilization (billing data of providers: physician visits, services provided, prescriptions issued), on work accidents and occupational illnesses, on sickness absence and on pensions and disability.

Professional organizations – for example, Medical Associations – record a wide range of data on their members (registration, professional status, place and nature of work, training, competences, location, membership fees, etc.).

Hospitals report their administrative data (human resources, costing data, beds, machines) and their service data (discharge data: diagnoses, examinations performed) to the relevant regional health fund, which forwards it to the BMG for transmission to the national statistics office, Statistics Austria.

Responsibilities of **public health regional and district authorities** vary greatly throughout Austria. In general, they document the services they themselves provide, as well as recording infectious diseases. Regional statistics offices (*Landesstatistik*) collect demographical data on the population in their respective regions.

The **ÖBIG** is one of the three divisions²²⁰ of GÖG, which is wholly owned by the Federal Government. ÖBIG plays a major role when it comes to health information management and reporting. It oversees the ÖGIS, produces reports on numerous topics and keeps several registries – for example, the registry for objections against organ donation, the in vitro fertilization (IVF) registry, the registry for medicinal products, and the haemovigilance (blood safety) registry. Registries are usually overseen by GÖG/ÖBIG or sometimes by medical societies or other institutions. For further information on registries (see section 3.8 of this chapter.)

The **BIQG** is another division of GÖG and is responsible for the following areas related to information management: basic groundwork on health reporting, health information for the public, patient safety, national quality guidelines, outcome quality and HTA.

²²⁰ The other two divisions are the BIQG and the FGÖ.

Most institutions report data to international organizations such as WHO, the European Commission, Eurostat or the OECD, as well as supporting international surveys and studies such Eurobarometer, European Union – Community Statistics on Income and Living Conditions (EU-SILC), Health Promoting Hospitals, and HSBC.

Other data collected within the health system include data on school examinations, which are recorded but not analysed in a standardized way, those on traffic accidents (Board for Traffic Safety, *Kuratorium für Verkehrssicherheit*), and those on air pollutants (Federal Authority for Environment, *Umweltbundesamt*).

Data are sometimes collected but not published or analysed for reasons of confidentiality and lack of resources. This, for example, applies to the data collected in the course of school examinations. The range of different stakeholders involved in responsibility for data exacerbates the situation.

3.4 Health information systems

The GÖG/ÖBIG created the national health information system, **ÖGIS**, in the mid-1990s. Many of the stakeholders described in section 3.2 feed their data into the system and ÖBIG's intention is to create a database spanning the entire health system. Several selected indicators of the information system are publicly accessible via the interface REGIS (regional health information system, *Regionales Gesundheitsinformationssystem*), in which data are provided in predefined queries, in the form of cartographic images. Data and images cannot be downloaded or used for further analysis. REGIS has provided a positive starting point but further development is necessary.

The situation regarding health information systems at regional level is very variable. Several regions have already established health information systems and others are in the process of doing so (for example, Styria, Tyrol, Lower Austria and Carinthia). According to one Austrian health reporting expert, the composition and content of ÖGIS is similar to the European Public Health Information System, EUPHIX.²²¹

3.5 Data protection

Legislation and regulations on the use of data, data protection and data confidentiality are strict in Austria, partly for historical reasons, and this can make it difficult or even impossible to access data for research and analysis. Public health authorities, universities and other research institutions often encounter

²²¹ See the EUPHIX web site for more information (http://www.euphix.org/object_document/o4581n27010.html, accessed 10 February 2011).

considerable obstacles when trying to access or use data. Use of individual patient data generally requires obtaining the consent of the individual, which is not always easy. Data can sometimes be analysed anonymously but the disadvantage of this is that patient pathways cannot be followed over time.

Experts hope that the situation may improve with the introduction of the electronic health record (*Elektronische Gesundheitsakte*, ELGA) and may be facilitated by the pseudonymization of data.

A special unit was set up at the HVB in 2008, and here the pseudonymization of social insurance data can now be carried out. The social insurance number/code of an individual is replaced by a pseudonym that makes it possible to follow an insured person's patient history without violating data protection regulations. This system is currently used for the evaluation of data from the preventive health check-up.

Based on interviews with experts, the only professional group which appears to be completely in favour of the existing data protection regulations is the medical profession, through their representative organizations.

Before questioning or modifying data protection regulations, however, there is a need to be clear about data-collection needs – what data are to be collected and how are they to be analysed?

3.6 Data surveillance and data analysis

Surveillance describes the act of systematic observation or the monitoring of the health of the population and the factors responsible for it.

Few institutions in Austria undertake data analysis or perform assessments of health data. No real disease surveillance systems exist in Austria, apart from one for infectious diseases. Several registries exist (see section 3.8).

The national statistics institute (Statistics Austria) collects data in accordance with its legal responsibility to do so and publishes a variety of standardized reports. Data linkage is possible on occasions – for example, by linking data on the incidence of disease, the utilization of health services or other aspects of health services with age, sex, regions, income or education – but this is generally difficult because of the difference in datasets.

If commissioned to do so, experts from Statistics Austria perform further analyses on the collected data, but this is not a regular procedure and is not one of their statutory responsibilities. Reports or data published by Statistics Austria do not appear to be used or followed up in a standardized way. Although new reports are presented widely, for instance in a press conference, actual interest

in the data for further analysis or action tends to be fairly low among the main system stakeholders. Data collected by Statistics Austria are often requested by universities or other research institutions, which then carry out more detailed analyses.

In addition to the reports published by Statistics Austria, comprehensive reports have been compiled by university departments on various disease-related topics, such as diabetes or osteoporosis. The use of the findings of such reports and the implementation of measures suggested are far from clear. The impetus for disease surveillance and monitoring of disease spread tends to come from the universities and other research institutions, rather than from the public authorities.²²²

In summary, health data and health reports do not appear to be being used to their full potential or followed up in a standardized way.

Institutions with a reputation in terms of data analysis, health system analysis and/or HTA in the health sector and elsewhere in Austria involve the IHS, the Institute for Pharmacoeconomics Research (*Institut für Pharmäökonomische Forschung*, IPF), the LBI-HTA or GÖG division of ÖBIG, the Public Health Information Research Unit (PHIRU) at the University of Applied Sciences FH Joanneum, as well as some of the health insurance funds or selected university departments. Research at the IHS focuses on applied health system analysis and health economics, at the IPF on pharmacoeconomics, at the LBI-HTA on HTA and at GÖG/ÖBIG on health system and health services research.

Institutes and departments in the field of health promotion undertaking data analysis include the LBI-HPR, the IfGP, the Department for Evidence-based Medicine and Epidemiology at the Danube University Krems and Styria vitalis. Several private consultants also offer services in this area.

Research and data analysis also take place in university departments of social medicine, epidemiology, environmental medicine and medicinal statistics at the medical universities of Vienna, Graz and Innsbruck. Several universities of social sciences have also established departments of health, public health, and health care management – including, for example, the University of Klagenfurt, the UMIT in Hall in Tyrol, and the University of Vienna.

A considerable amount of patient data are collected by hospitals for use in clinical research and in scientific publications.

Health insurance funds have, in the past, focused data analyses on expenditure (billing/reimbursement of contract providers). Research on HTA and health care provision and utilization is gradually increasing. Since the early 2000s, the HVB

²²² Expert interview, 22 June 2009 (Research).

and several insurance funds have created powerful tools for data comparison and analysis (calculation of follow-up costs (*Folgekostenrechnung*, FOKO), software for the benefits/services of the regional health insurance funds (*Software für die Leistungen der Gebietskrankenkassen*, LGKK), Business Intelligence in the Health Care System (*Business Intelligence im Gesundheitswesen*, BIG), catalogue ambulatory services (*Katalog ambulante Leistungen*, KAL), service/benefits controlling (*Leistungscontrolling*, LEICON), meta reimbursement catalogue (*Metahonorarordnung*, META-HONO)). These are still mainly used for monitoring the behaviour of providers and the insured population, but are increasingly being applied in analysis or research.

Other institutes collecting and analysing data for health reporting are detailed later in this chapter.

3.7 Health reporting

Modern health reporting, as already mentioned, is not well established in Austria. The first health reporting activities took place as early as the 1970s, based on the Imperial Sanitary Act of 1870, and took the form of activity reports. In 1994 the first modern health report was produced in Vienna. Subsequently, based on a 1998 ÖBIG study, a few regions – namely, Vienna, Styria and Upper Austria – started publishing health reports.

Health reporting is usually based on data from existing pools because the collection of additional data would involve considerable time and financial resources.²²³ One of the first information systems developed in this area in Austria during the 1990s was the ÖGIS, which enables analyses of selected health-related questions.

Definitions and targets of health reporting

There are various targets of health reporting, as listed here, originating either from the international literature or from Austrian publications. Targets quoted by the interviewed experts are also listed and a brief summary concludes this subsection.

The aim of health reporting is to improve the health status and health care of the population.²²⁴ Based on this definition, the *Vienna health report 2004*²²⁵ lists various sub-goals, including:

223 Meggeneder O. Statistics as basis for health reporting. Data on the health status of employed people. In: Grossmann R, ed. *Health promotion and public health. Developing public health through organisations*. Vienna, Facultas-Universitätsverlag, 1996.

224 Quoted by E Bachinger in her presentation given at the 11th Austrian Health Promotion Conference “How healthy is Austria?” on 4 May 2009 in Innsbruck, Austria (organized by GÖG/FGÖ).

225 Bachinger E. *Vienna health reports 2004*. Vienna, Magistrate of the City of Vienna, Department of social- and health planning and Finance Management Health Reporting, 2004 (http://www.goeg.at/cxdata/media/download/berichte/WIEN_Gesundheitsbericht_2004.pdf, accessed 15 April 2009).

- making public health measures more targeted by providing decision-makers in the fields of policy, administration and health services with the relevant data to create, plan and steer policies;
- motivating decision-makers and citizens to place increasing emphasis on health;
- providing citizens with factual and relevant information on the state of health of the population and its main determinants.

Health reporting should not only form the basis of decision-making for health planning, health policy-making and health promotion measures, but should also reach a varied group of users from all kinds of backgrounds, disciplines and professional fields, as well as reaching the general public.²²⁶

GÖG/ÖBIG states on its web site that health reports “document and analyse the health status of the population of a defined regional entity, being a community, region, federal state or entire state, the type and scope of inpatient and outpatient care institutions as well as factors determining the health status of the population such as environmental and behavioural factors”. It argues that the aim of health reporting is to “spot deficits, to elaborate measures for improving the situation as well as to assess these measures with regard to their effectiveness and efficiency”. It concludes by defining health reporting as “a permanent process that ought to take place at the national, regional and community level[s]”.

The **PHIRU** at the University of Applied Sciences FH Joanneum states:

Health reporting consists of various products and measures aimed at both creating knowledge and awareness of public health problems and their determinants among different population groups, as well as recommending possible solutions. The target groups of such reports are decision-makers in a position to contribute to improvements in the public’s health, as well as the affected population in general. Health reporting is carried out at the national, regional and communal levels, and can have various thematic emphasis, such as fitness, women’s health, or tourism. Completion of health reports at regular intervals can serve a monitoring function and provide the requisite information for strategic health policy planning.

Compiling health reports involves collection, collation, analysis and epidemiological interpretation of routine data, and data from health surveys. Qualitative methods are also employed, such as document analysis, systematic literature research and expert interviews. Based on these data, interrelationships

²²⁶ Bachinger E. *Vienna health report 2004 and outlook on the health report 2008*. Presentation given at the 11th Austrian Health Promotion Conference “How healthy is Austria?” on 4 May 2009 in Innsbruck, Austria (organized by GÖG/FGÖ).

can be identified and recommendations can be made for health policy measures and programmes to improve the health of the population.²²⁷

Rásky, in her report of 2001, defines health reporting as “the periodic, comprehensive and understandable analysis of data relevant to the health of the population”. She argues that a complex approach is necessary that is intended to improve the infrastructure and instruments of data collection and analysis. Health reporting is action orientated and, therefore, offers a basis for the formulation of effective and efficient interventions. She also states the ideal scenario, in which the results of health reporting are communicated to those affected and links are made between different datasets.²²⁸

The **experts interviewed** stated the following aims of health reporting:

- information for the public and the expert community about the status quo and about future trends in the health sector and health care;
- provision of modern, comprehensive and up-to-date reports which are well presented and useful for international comparisons and benchmarking and understandable to a mixed target group;
- support for further development and monitoring of health targets;
- periodic assessment of achievements to form the basis for the definition of follow-up measures;
- explaining health system aspects and correlations, as well as promoting the detection of problems, deficiencies or deviations;
- constituting the basis for planning of public health and health promotion measures;
- facilitating the assessment of the potential and the limitations of available data, followed by the definition of measures to improve the database and the use of data, methodology and definitions.

In summary, health reports have a wide variety of aims. They should not simply provide information but – further – do so in an understandable and proactive way, facilitating and promoting implementation of follow-up measures. Reports ought to be the basis for planning and policy-making, both in the health care sector and across sectors. Describing the status quo with regard to selected indicators, assessing the current situation and developing targets and measures to meet these targets are also important aims of health reporting. Reports must meet certain scientific standards, but at the same time be readable and understandable for a very varied audience. They should inform decision-

²²⁷ Information folder of the PHIRU at the University of Applied Sciences FH Joanneum.

²²⁸ Rásky Ě. Health data situation in Austria. In: Rásky Ě, Freidl W. *Health reporting in Austria. Appraisal and results of a regional survey*. Linz, Report series Health sciences, 2001.

makers and provide them with the relevant knowledge on which to base sound decisions. They should also present recommendations and give guidance for future action.

Development of health reporting in Austria

Regional public health authorities today are responsible for producing annual reports documenting their activities. In most Austrian regions, the Imperial Sanitary Act of 1870 is still the only legal basis for health reporting and, because of the absence of a modern legal requirement, efforts related to reporting are frequently based on the initiative of regional politicians, senior civil servants or other individuals.

Health reporting activities corresponding to the WHO concept of health reporting began in Austria in the 1990s. The first health reports in the modern sense were produced in the mid-1990s by the regions of Vienna, Styria and Upper Austria and other regions followed. Initial reports tended to focus intently on disease, health care infrastructure, health care services and utilization. The intention of those involved in the production of the reports has always been that health reports are to be used as a strategic tool providing the basis for planning and decision-making. Reports have, however, rarely resulted in visible and sustained action. The commitment to initiate follow-up measures after publication still appears to be low, as reports rarely contain health targets or are evaluated after a defined time period. In general, the priority attributed to health reporting and the financial resources dedicated to the field are limited. Some stakeholders may appreciate reporting as a personal political marketing tool, rather than valuing it as basis for strategic health planning and decision-making.

With regard to the content of the reports, public health topics such as health versus disease, health determinants, prevention, health promotion and social inequality have received more interest in recent years.

In 2004 the first national health report was produced by ÖBIG and published by the BMG.²²⁹ Most experts interviewed in this study do not recognize this as a health report in the current understanding of the term. Today, nearly all regions have published at least one health report and some have recently updated their reports. In addition, a few local communities have started to produce their own health reports. A list of special reports – usually targeting a defined illness or population group and prepared at any level of the health system – has been compiled. Topics covered include mental health, men's/

229 ÖBIG. *Health and disease in Austria. Health report Austria 2004*. Vienna, Federal Ministry of Health and Women, Austrian Health Institute, 2004 (http://www.goeg.at/media/download/berichte/Gesundheit_und_Krankheit_in_Oesterreich_2004.pdf, accessed 28 March 2010)

women's health, adolescents and children, and chronic illnesses. The second national report was planned for publication in 2010. In addition to producing the national report and several regional reports, ÖBIG is also commissioned by the BMG to compile the highly standardized political health report for the National Council (*Nationalrat*), which must be presented to the National Council every three years.

Health reports in Austria can only be compared with each other to a very limited extent because of their diverging aims, decided by the commissioning agency, their variable availability and resources, the time frame covered, their data and methodologies applied (for example, weighting), structure and contents. To counteract this and to strive towards a certain degree of harmonization, the Platform for Health Reporting was established at national level by ÖBIG in 2003. This Platform brings together experts and representatives of institutions in the field of health reporting – representatives of the BMG, Statistics Austria, GÖG and the regional health authorities – and meets twice a year. In 2007 it developed a recommendation for health reporting which aims to promote the comparability, uniformity and targeted application of health reports in Austria, as well as encouraging health reporting to follow a defined cycle of steps, comparable to the PHAC.²³⁰ Methodology has begun to be defined more closely and has undergone a harmonization process.

Experts have welcomed the development of an Austrian framework for health reporting but remain reluctant to acknowledge its contribution to the current reporting landscape. The recommendation was only published in 2007 and it will take some time before all stakeholders are aware of it and accept its value.

Infrastructure

The resources for health reporting and health surveys in terms of funding, expertise and human capacity are very scarce in Austria. The existence of a fixed budget for health reporting is a rare exception. Austria has very few adequately trained and experienced experts. Posts specifically for health reporting or health statistics barely exist within the public health structure, with exceptions in Vienna and Upper Austria. This results in the contracting out of these important public health services. The number of appropriately qualified individuals is gradually increasing after the introduction of several public health-orientated training courses in recent years.

Prioritization of the topic and commitment to it are lacking at all levels of the health system and reports are not being used productively by decision-

²³⁰ For a definition, see, for example, Bundesamt für Gesundheit. The public health action cycle as starting point for evidence-based public health [web site]. Zurich, Bundesamt für Gesundheit, 2010 (http://www.henet.ch/ebph/04_konzepte/konz_042.php, accessed 28 March 2010).

makers. This may be partly because the reports are not sufficiently analytical and understandable for those without prior knowledge of public health and epidemiology, and they do not include precise and compact summaries, conclusions and recommendations. It is also the case that decisions in Austria have in the past not always been made on the basis of factual information, but rather on political grounds and through negotiations.

Producers of health reports

Health reports in Austria are promoted, commissioned and produced at various levels of the health system. Their significance and success depends strongly on the initiative of the commissioning agency, politicians or senior civil servants involved. To a certain extent they may use the health report as a marketing tool for their own interests and position, rather than to improve the health of the population.

Regional public health authorities are (in most Austrian regions) obliged by law to publish medical reports with statistics on the services provided. The national health reports (2004, 2009) and the political report to the National Council are compiled by GÖG/ÖBIG. Several regions have contracted GÖG/ÖBIG to produce their reports and the updates – Burgenland, Salzburg, Tyrol, Vorarlberg and Lower Austria are among those who have done so. Some experts argue that GÖG/ÖBIG is assuming a monopoly position in terms of health reporting.

The BMASK, Statistics Austria (results of health surveys) and certain NGOs (e.g. the Anti-Poverty Network) also produce national reports. The Austrian social insurance also presented a first pilot report in 2007, although for the future there are plans to contribute to existing reports and those published by other stakeholders, rather than undertaking its own. Health system reports or analytical reports are published by the IHS or GÖG.²³¹

Further regional health reports have been compiled in-house by experts in regional health authorities such as those in Vienna and Styria. Others have been based on a cooperation between experts in the regional health authorities and research institutions (for example, Styria or Carinthia: PHIRU at the University of Applied Sciences FH Joanneum) or have been produced by research institutions or university departments in the form of special reports, such as the Austrian Diabetes Report 2004, which was produced by the association *Altern mit Zukunft*.

In Upper Austria the IGP operates on a partnership basis funded jointly by the region of Upper Austria, the cities of Linz and Wels, the regional sickness fund

²³¹ See also Hofmarcher MM, Rack HM. Austria: Health system review. *Health Systems in Transition*, 2006, 8(3):1–247.

and the Medical Association of Upper Austria. The institute produces regional and community health reports, as well as detailed reports on special topics.

GÖG/ÖBIG lists health reports published in Austria since the year 2000 on its web site.²³²

Time spans between reporting

Several regions have published one health report thus far but most regions have published two or more. Vienna has a longer history and more experience with reporting than most regions and had previously published annual reports. Experts, however, recommend a period of about five years between reports, as this time span would capture the major events but also allow time for change to take place and for evaluation to be carried out. Monitoring ought to take place in between reports so that selected updates could be carried out if necessary.

Contents of reports

Health reports can either be general or special. General reports cover basic indicators and show a strong epidemiological focus; special reports address specific topics/issues (subject-related reports) or focus on population groups (target group-related reports).²³³ Additional features or components adding to health reports may be the results of health surveys or data analysis.

Initially, health reports mainly contained data on the utilization of health services. At a later stage epidemiological information was added and, more recently, health determinants, health behaviour and in a few cases health targets have also begun to feature. Experts, however, continue to feel that health reporting in Austria is not yet part of a cycle but remains an isolated procedure. Follow-up evaluation and reassessment are missing in most cases, although the national health survey undertaken by Statistics Austria is regarded as a valuable contribution to health reporting. Viennese health reports also have a very high standing and are frequently quoted by experts as benchmark models.

Few reports include health targets and even fewer recommendations for measures or evaluation of past targets or measures. This is partly because of a lack of basic epidemiological data, such as important registries and statistics. Other relevant factors are an absence of political willpower and commitment.

232 GÖG. Gesundheitsberichte [web site]. Vienna, Gesundheit Österreich GmbH (<http://www.goeg.at/de/Bereich/Gesundheitsberichte.html>, accessed 9 October 2009). See also the ÖBIG web site for more information (http://www.oebig.org/index.php?set_language=de&ccpage=arbeitsbereiche_detail1&set_z_arbeitsbereiche_ebene1=64&set_z_arbeitsbereiche_ebene2=9999&set_z_arbeitsbereiche_ebene3=9999, accessed 6 May 2009).

233 The distinction between subject-related and group-related reports was taken from Bachinger (2002). Bachinger E (2002). Health reporting on specific groups of Vienna's population. In: Robert Koch Institut (Hrsg.): Proceedings of the International Conference on the German Health Reporting System and Current Approaches in Europe. Berlin, RKI, November 2001: 75–76; 126–132.

It is also the case that planning and decision-making structures tend to follow legislative programmes and periods of government, with politicians being reluctant to allocate large amounts of money to measures which may show positive outcomes only after about 10–20 years.

Influence of international reporting activities

Examples of reports or guidelines influencing national health reporting activities at international level include WHO reports and at the European level they include EUGLOREH, the European Global Report on Health²³⁴ and the Dutch RIVM reports.²³⁵ Several countries are considered among the leaders in the field of health reporting. These include the United Kingdom, Germany (Bielefeld, Nordrhein-Westfalen), France, Italy (South Tyrol) and the Scandinavian countries. Indicators used are based on WHO's Health for All targets (HFA 21) or on the ECHIM project (European Community Health Indicator Monitoring).²³⁶

Follow-up measures, evaluation and sustainability

For various reasons, including a lack of strategy and commitment, few reports in Austria include an assessment or evaluation of achievements since the previous report. Several regions have defined health targets but do not publish them in their health reports. This may be because politicians or other stakeholders fear too great a commitment and potential criticism should the targets not be met. In addition, targets are not always quantifiable and achievement can thus be difficult to measure. Health reports in Austria usually provide a very good and comprehensive description of the status quo but are not part of an overall framework process, strategy or action cycle. Use of the health report depends largely on the interest of the contracting agencies and their understanding of the contents, and thus of the implications and potential reactions to the findings.

Experts interviewed were asked how sustainable impact of health reports could be ensured or promoted and their responses are summarized here.

- Health reporting should be given a higher priority: this ought to be visible in funding, capacity/resources, building of expertise, embedding it in the organizational structures, as well as using it for follow-up activities, such as planning and strategy development.

²³⁴ Vitozzi L. *EUGLOREH 2007. The global report on health in the European Union*. Report to WP HS meeting, Luxembourg, 21 June 2006. Brussels, European Commission (http://ec.europa.eu/health/ph_information/implemented/wp/systems/docs/ev_20060621_co3_en.pdf, accessed 10 February 2011).

²³⁵ See the RIVM web site for more information (<http://www.rivm.nl/>, accessed 10 May 2009).

²³⁶ See the ECHIM web site for more information (<http://www.echim.org/>, accessed 10 May 2009).

- Responsibilities and roles in connection with health reporting need to be clearly defined and transparent.
- Health reporting activities should be backed by legislation.
- A consensus on basic features of the report should be agreed with a degree of flexibility.
- A common understanding of the concept of health reporting should be reached.
- Expectations of all actors involved in health reporting should be made clear, resulting in health reports being more tailored to meet the needs of their users.
- Stakeholder and expert involvement during compilation should be promoted, to improve personal identification with the report and commitment to it in terms of implementation.
- Health reporting should be part of a cycle involving: clear and quantifiable targets, conclusions, recommendations, follow-up measures, identification of weaknesses/problem areas, analysis and evaluation.
- Intersectoral and integrated health reporting activities should be promoted.
- Health reports and activities connected to these should be communicated and marketed appropriately to increase public awareness and discussion.

Success factors for health reporting

Experts suggested various factors that could promote the successful compilation and use of health reports. Responses were grouped into the following categories: content, resources/capacity, commitment/backing, communication/user orientation, and effectiveness and evaluation.

Content

- Content of reports with a large number of contributing authors should be coordinated and aligned.
- Health and disease should be the subject of reporting, not disease only.
- Health determinants ought to be included.
- A distinction should be made between recurrent and special topics, the latter being carefully chosen in terms of deciding on the best moment to address them.
- The timing interval of reports should be between 5 and 10 years; one year is too short and sensible samples can be found more easily for five years.

Resources, capacity

- Availability of financial resources should be considered.
- Time frame for compilation should be adequate/realistic.
- Good knowledge of the expert scene is required, to know who to involve and how.
- Commissioning agent should have a certain degree of knowledge of public health to understand, interpret and take forward results.

Commitment, backing

- Prioritization of health reporting, dedication and commitment are required.
- Health reporting should be a continuous, long-term activity and independent from political decision-making schedules and agendas.
- All stakeholders – professionals and organizations – should be involved in developing and compiling the report to increase acceptance.
- The report and the results should be backed by the contracting agent.

Communication, user orientation

- Reports should reflect the needs of their audience: some may be political, others action orientated.
- Reports should be understandable but demanding. Layout and design, presentation and language are key features.
- Providing a long and a short version of a report is considered a good idea. The long version should not be too long (maximum of 200–300 pages).
- A brief update or monitoring report could be published between two reports.
- Good cooperation with contributing institutions (Statistics Austria, regional statistics authority, social insurance) is crucial.
- The general public should be involved beyond merely responding to surveys.
- Presentation on the Internet and the production of an executive summary in English could expand dissemination opportunities.

Effectiveness and evaluation

- A minimal consensus on the contents and the methods could promote comparability of reports.
- Reports should be commissioned on a regular basis.
- Success must be defined and measurable.

- Careful and adequate interpretation of data is required.
- Authors should draw conclusions and give recommendations. They are the experts, not the readers.
- Future trends, plans and targets should be included in the report.
- Health reports should include measures, targets and an evaluation of previous targets.
- There should be follow-up of the use made of reports and their impact.

Ideal health reporting versus current practice in Austria

Information provided in this section came from one expert working in the field of health reporting in Austria. It contrasts ideal conditions for health reporting with current practice. Due to the variation in health reporting activity in the different regions, the following elaborations may not be applicable to all regions in the same way.

Health reporting should ideally:

- provide appropriate information on the health status and condition of the population and the most relevant determinants;
- be an important, knowledge-based and indispensable foundation for health planning decisions, health policy targets and health promotion measures related to national and regional health politics;
- represent a valuable source of knowledge for a very varied target group, including health professionals, health policy-makers and health economists;
- promote topics relevant for improving the health of the population;
- contribute to raising the awareness of the population and ideally motivate them to engage in more sensible and responsible health behaviour;
- meet the numerous requirements concerning health reporting²³⁷ aimed at different target groups and topical areas by means of an interdisciplinary team equipped with adequate human resources, as well as sustainable and calculable economic resources.

Experts in health reporting should ideally:

- align the contents of health reporting with the current requirements of health policy by being in direct contact with the decision-makers;
- act as professional advisors to decision-makers.

²³⁷ With the primary fields: demography, epidemiology, health planning, health economics, health promotion, social affairs, development of health targets and indicators, elaboration of and execution or commissioning of periodic health surveys, execution of special assessments.

At present health reporting activities in Austria are characterized by:

- appropriate information being provided but very rarely used as a basis for decision-making by the responsible health department politicians;
- a significant discrepancy between the existence of elaborate and detailed reports and the lack of interest in and use of these reports by decision-makers;
- lack of training, technical knowledge and obvious information deficits of decision-makers with regard to basic public health principles;
- little appreciation of the work of health reporting experts by decision-makers (especially by those without a basic understanding of or training in public health);
- unrealistic demands of decision-makers and their advisors who are usually of a political rather than a technical orientation;
- frequent changes of decision-makers and top representatives, which in many cases also results in a change in their advisors;
- being accorded a low value within Austria;
- lack of awareness of the possibilities offered by and the significance of health reporting at policy level;
- health reporting experts and health policy-makers not being equal partners in terms of background knowledge and understanding;
- lack of priority afforded to them;
- lack of resources, with few employed positions dedicated entirely/mostly to health reporting, small budgets, and absence of appropriate organizational structures.

Trends

Various developments are currently taking place in Austria with regard to health reporting. This section summarizes the main future trends and is based on the responses of experts interviewed for this study and presentations given at a health promotion conference organized by the FGÖ on 4 May 2009 in Innsbruck, Austria.

Health reporting as a topic has received greater attention in the recent past than previously, but resources remain very limited, as discussed later in this section. Developments at the international and EU levels promote developments in Austria by requiring certain data and reports.

There is a visible trend towards harmonization and comparability of reports, a movement that is especially driven by the Platform for Health Reporting at GÖG/ÖBIG. This process involves the definition of core indicators, contents and structure as well as data classification and methodological issues. A certain degree of harmonization appears to be welcomed but several experts voiced the concern that extensive uniformity could undermine the individual creativity and variety of health reports, as well as neglect any special needs of decision-makers who may, for example, want to focus on a certain topic because it is related to a regional health target. According to one expert,²³⁸ representatives of the regions fear that future standards for health reporting will be too restrictive. It may thus be difficult to achieve agreement within the Platform that requires consent of all the involved stakeholders and representatives.

Another development is increased communication and networking among the health reporting community, which is visible in the establishment of ÖBIG's Platform for Health Reporting as well as in the increased number of presentations related to the topic at conferences in 2009.

Experts in the field suggest that health reports should aim for a stronger orientation towards action and provide a basis for health policy-making. This implies that health reports must be explicit with regard to the conclusions made and the recommendations given and must be easily understood by key decision-makers. Health reports also ought to incorporate targets and suggestions for measures to be taken following the assessment of the current situation. At present the slogan *Daten für Taten* – meaning *Data for action* – is used very frequently in Austria in this context. Sometimes, however, decision-makers choose to not promote this idea because they fear that it will have political consequences, such as increased pressure, the obligation to meet targets or to perform in line with measures defined in the reports.

Experts also believe that health reporting should be part of a process, similar to that outlined in the PHAC, involving steps such as an assessment, action and evaluation before re-initiating the process.

There has been recent discussion of putting more emphasis on health determinants in health reports and making them more health focused rather than disease orientated.

²³⁸ Telephone inquiry (expert for health reporting) on 18 December 2009.

A future trend is expected to focus on integrated and intersectoral health reporting. Austria has, with very few exceptions,²³⁹ limited or no experience in this field, which is why international developments (for example, in Germany) are being carefully considered.

Another trend is health reporting at community or district level. Only a small number of reports exist at this level of the health system – for example, for the cities of Linz and Wels in Upper Austria or for the community of Schwechat in Lower Austria.

Reports published in Austria in the future will be both general and specialized.

There has been much recent progress in health reporting in the Austrian context but there have also been some surprising and disappointing decisions, such as the cutting back of resources allocated to well-established health reporting entities. Such developments increase frustration and disillusionment among those affected. They also appear to reflect the current political priority given to health reporting in Austria.

Resources for health reporting were and still are very limited and the topic does not form an integral part of the health policy agenda. Currently, health reporting in Austria is concentrated on the activities of a small group of very motivated and dedicated experts who are, on occasion, backed up by decision-makers and politicians.

The restricted and varied understanding of public health and epidemiology complicates the implementation of health measures oriented towards the population, such as health reporting. This applies to all levels of the health system, although gradual changes can be observed in the form of capacity-building or awareness events in social insurance. The culture of decision-making based on data and evidence, rather than on the outcome of negotiations – which may be biased through political or interest-group involvement – is progressing very slowly in Austria.

A wide variety of data exist in Austria. Their adequacy for health reporting, however, is not always certain; some areas show large gaps in data and few large-scale population surveys are carried out.

²³⁹ See, for instance, the *National report on strategies for social protection and social inclusion (2008–2010)* by the then BMSK (now the BMASK), which was published in 2008 (BMASK. *National report on strategies for social protection and social inclusion*. Vienna, Federal Ministry of Labour, Social Affairs and Consumer Protection, 2008). (http://www.bmsk.gv.at/cms/site/attachments/8/5/4/CH0121/CMS1218101293137/strategy_report_%5B1%5D.pdf, accessed 25 October 2009)), or the final report of the “Healthy Schools” project undertaken jointly by the Ministry of Education, Arts and Culture, the BMG and social insurance (Dür W et al. *Healthy school project. Final report*. Vienna, Main Association of Austrian Social Security Institutions in cooperation with the Federal Ministry of Education, Art and Culture and the Federal Ministry of Health, 2009 (http://www.gesundeschule.at/fileadmin/user_upload/Downloads_Diverse/ENDBERICHT_Gesunde_Schule.pdf, accessed 22 April 2011)).

The role of social insurance in health reporting

One of the demands voiced repeatedly by experts in the Austrian health care system is that responsibilities should be made very clear and based on who can contribute best in which way. Several experts argued that not all stakeholders within the health system should compile their own reports but should instead encourage cooperation, such as the one established in the Upper Austria region. When experts were asked to state what role social insurance could play in health reporting, several suggestions were made. Social insurance could:

- make social insurance data (especially data on outpatient care) available for various health reports;
- make its own data more suitable for health reporting;
- improve the situation on health data and data quality in general;
- assist the anonymization and pseudonymization of health data;
- analyse and assess its own data, looking at other aspects in addition to reimbursement;
- grant access to its data for further analysis;
- promote the definition and implementation of health targets;
- assist the creation of a decision-making process for strategic planning in the health sector;
- be an opinion leader, build up public pressure and create awareness to promote certain topics;
- promote the use of health reporting in general;
- make a contribution to supporting a stronger public health perspective;
- promote awareness of and demand the use of evidence-based and knowledge-based decision-making, basing its own decisions on a strong health reporting foundation;
- present and communicate itself as a consumer-orientated institution by ensuring the provision of high-quality and evidence-based care and value for money;
- assess the needs of its insured population;
- facilitate access to certain population groups (such as immigrants) for health surveys to be carried out, through its contract partners;
- report to its insured population on a regular basis, based on their needs and wishes.

The interest in social insurance data is considerable among other health system stakeholders. Experts would like to see social insurance as an active partner in health reporting activities, granting access to its data and feeding into existing health reports. As one of the most powerful stakeholders in the health system, social insurance could take on the role of promoter and opinion leader.

3.8 Infectious diseases

As in other western European countries, infectious diseases in Austria have decreased in importance over recent decades. Changes include a reduction in both morbidity and mortality. In recent years, however, the number of deaths associated with certain infectious diseases has been rising again. Factors contributing to this development are assumed to be the increased mobility of the population, as well as the opening of borders.²⁴⁰

In 2007, 0.8% of all deaths in Austria (564 people) were caused by infectious diseases. In 2007, cases of infectious diseases reported most often were those related to bacterial food poisoning (10 227 cases), followed by scarlet fever (2053 cases) infectious hepatitis (1830 cases) and STIs (1092 cases). A total of 560 new cases of TB were reported in 2007; numbers have been decreasing since 1994.

Reports of bacterial food poisoning increased noticeably between 1990 and 2004, before decreasing again. Most reports are related to *Campylobacter* (73.7 per 100 000 population) or *Salmonellae* (43.2 per 100 000).

The highest number of reports of scarlet fever was made in 1965 (10 706 cases). Since then, reports continuously decreased and have ranged between about 1500 and 2200 cases per year since 1994.

TB has (also on an international level) received more attention lately. Reported cases of sterile TB decreased between 1960 and 1985, a short increase took place in 1990, before falling again in 1993. Since 1994 the number of cases has dropped. In 2007, 560 new cases were reported, of which 526 were related to pulmonary TB (6.3 per 100 000) and 34 to extrapulmonary TB (0.4 cases per 100 000). The highest numbers of cases were reported in Vienna, Lower Austria and Upper Austria.

The number of people being infected with hepatitis has decreased since 1965. In 2007, 12.5 cases of hepatitis C were reported (per 100 000 people), eight cases of hepatitis B and 1.4 cases of hepatitis A. (hepatitis C, 56.9% of cases; hepatitis B, 36.3%; and hepatitis A, 6.4%).

²⁴⁰ BMGFJ. *Report on infectious diseases 2006*. Vienna, Federal Ministry of Health, Family and Youth, 2007 (http://www.bmgfj.gv.at/cms/site/attachments/7/3/2/CH0742/CMS1161014971132/oesterreichischer_infectionskrankheitenbericht_cms1201869447628_kopie_von_gbik_06.pdf, accessed 18 July 2008) (Reporting term 1992–2003).

In 2007, 64 individuals were infected with AIDS. Of these, 78.1% were men. A total of 34% of these infections were related to homosexual contacts, 22% to heterosexual contacts, 16% to intravenous drug abuse and for 26% the cause of infection was not known. Women are more likely to be infected with AIDS through heterosexual contacts and intravenous drug abuse.²⁴¹

Reporting, monitoring and prevention of infectious diseases in Austria is regulated by law and is under the supervision and responsibility of the BMG, the ÖGD, including the district administration authorities (health authorities) and the regional health boards, along with the Supreme Sanitary Council as an advisory body at national level and the Food and Health Safety Agency, AGES.

The BMG publishes an annual report on infectious diseases that aims to provide information on the epidemiology of selected infectious diseases, as well as displaying trends of infections over time and reporting on their regional distribution. It also contains a description of the organization and quality of surveillance systems in Austria, gives an overview of national and international activities and presents a concept for the annual reporting of infectious diseases.

Measures to monitor infectious diseases involve surveillance and reporting. When performed effectively, these facilitate and enable rapid detection and the immediate introduction of appropriate actions to combat infectious diseases.

Legislation on infectious diseases

The handling of epidemics and infectious diseases in Austria is regulated in the EpG, as well as in the Directive of the then BMGF on notifiable transmittable diseases (*Verordnung der damaligen Bundesministerin für Gesundheit und Frauen betreffend anzeigepflichtige übertragbare Krankheiten*), published in 2004. Selected infectious diseases such as AIDS, TB, STIs, zoonosis or avian flu²⁴² are regulated more closely in individual laws. Other legislation relevant in this context is the Bacillus Excretor Act²⁴³ and the Rat Act.^{244, 245}

241 Statistik Austria. *Yearbook of health statistics 2007*. Vienna, Statistics Austria, 2008 (http://www.statistik.at/wcmsprod/groups/public/documents/sitestudio/pdf_icon.gif, accessed 5 October 2009).

242 Ordinance on Avian Flu (*Geflügelpestverordnung*, BGBl II Nr. 309/2007).

243 Bazillenausscheidergesetz (*BazillenausscheiderG*, BGBl 131/1964).

244 Rat Act (*RattenG*, BGBl 68/1925).

245 HELDocu – contributions from Günter Flemmich, Helmut Ivansits, Paula Lanske, Doris Lutz, Christa Marischka, Christian Rothmayer, Monika Weißensteiner and Brigitte Wolkersdorfer.

Mandatory reporting of notifiable infectious diseases

General legislation

EpG, 1950²⁴⁶

The EpG defines the diseases that have to be reported, who is responsible for reporting cases and to whom reports have to be made.

Fast-spreading and transmittable diseases that may potentially result in severe medical conditions are subject to statutory notification. According to the EpG (section 1), certain cases of infectious disease must be reported to the responsible District Commission (*Bezirksverwaltungsbehörde*) in the area of residence of the patient within a time period of 24 hours.

For some diseases, suspected as well as diagnosed cases have to be reported. In the case of subacute spongiform encephalopathy, only deaths have to be reported. The duty to report rests with the attending health professional – the physician, nurse or midwife. In hospitals the medical director or head of the department that is involved is in charge of making the report to the health authorities. Reporting responsibilities are regulated in section 3 of the EpG.

The District Commission or magistrate overseeing the area of residence of the patient or the deceased is the responsible authority to whom reports have to be submitted.

Notifiable diseases listed in the act are: leprosy, cholera, bacterial food poisoning, brucellosis, anthrax, infection with the influenza virus A/H5N1 or any other avian flu virus, SARS, measles, psittacosis, diphtheria, typhus, TBE, yellow fever, bacterial meningitis, transmittable spinal meningitis, meningococcal sepsis, streptococcus pneumoniae, haemophilus, hepatitis A–G, pertussis, transmittable poliomyelitis, trachoma, Legionnaires' disease, paratyphus, plague, pox, glanders, recurrent fever, malaria, dysentery, scarlet fever, deaths related to subacute spongiform encephalopathy (Creutzfeldt-Jacob-Disease, Gerstmann-Sträußel-Scheinker), *Echinococcus granulosus* and *E. multilocularis*, trichinosis, rabbit fever, childbed fever, rabies, and TB caused by mycobacteria bovis and viral haemorrhagic fever (Ebola, Lassa, Marburg, Krim-Kongo, etc.). The Minister of Health is entitled to modify the list of notifiable diseases.

Disease-related legislation²⁴⁷

The following subsections summarize legislation related to specific notifiable diseases.

²⁴⁶ Epidemics Act (*EpidemieG* 1950, BGBl Nr. 186/1950, Verordnung betreffend anzeigepflichtige übertragbare Krankheiten 2004, BGBl II 254/2004).

²⁴⁷ BMGFJ. *Notifiable infectious diseases in Austria*. Vienna, Ministry of Health, Family and Youth, 2008 (http://www.bmgfj.gv.at/cms/site/attachments/0/4/4/CH0742/CMS1038915287272/cms1201868963067_meldepflichtige_uebertragbare_krankheiten_neu.pdf, accessed 28 July 2008).

AIDSG²⁴⁸

Individuals diagnosed with AIDS (evidence of an HIV infection, or an indicator disease according to Directive VO BGBl No. 35/1994) have to be reported to the BMG within a week of diagnosis. This equally applies to any deaths whereby the deceased had AIDS at the time of death. Reports have to be made in writing and patient data are anonymized. The Supreme Sanitary Council has a topic-related subcommittee, the AIDS Commission.

Sexually Transmitted Diseases Act (*Geschlechtskrankheitengesetz*)

STIs that require reporting to the District Commission include gonorrhoea, syphilis, chancroid and lymphogranuloma iniguale. The prerequisite for these diseases to be reported is that a further spread of the disease is feared. Reporting also involves the naming of patients who are unwilling to undergo treatment or who refuse medical observation.

TubG²⁴⁹

Cases in which individuals have been diagnosed with TB or deaths caused by TB must be reported to the health authorities (*District Commission*) within three days. According to section 5(1) and section 11 of the Act, the District Commission reports individual anonymous cases and deaths directly to the BMG.

Zoonosis Act (*Zoonosengesetz*)²⁵⁰

The Zoonosis Act regulates the reporting of cases of Zoonosis as well as the procedures to be followed in the case of a food-related outbreak.

Surveillance of infectious diseases

If a notifiable disease is suspected or identified, certain measures must be taken. These are regulated in section 6 of the EpG and involve measures to prevent the infection of others as well as measures to combat the disease. They comprise adequate documentation of the case, public communication and, if necessary, the isolation of the patient, disinfection of any items or facilities that may be infectious, as well as refusal of access to public facilities such as schools.

Other actions include the monitoring of infected individuals, the closure of institutions such as schools or businesses and the cancellation of major events. The handling of infected dead bodies is regulated in section 13 of the EpG. Anybody failing to report a notifiable disease is subject to an administrative penalty.

²⁴⁸ AIDS-Gesetz 1993 (*AidsG*, BGBl 728 idgF).

²⁴⁹ Tuberkulosegesetz (*TuberkuloseG*, BGBl Nr. 127/1968 idgF).

²⁵⁰ Zoonosen-Gesetz (*ZoonosenG*, BGBl I 128/2005 idgF).

Surveillance of the epidemiological development of infectious diseases over time is facilitated through mandatory reporting and changes in reporting practices must be taken into account.

Surveillance systems for infectious diseases distinguish between illnesses for which an EU case definition exists (TB) and those for which this is not the case (hepatitis C). The reporting procedure for infected cases is regulated in the EpG and in specific legislation related to particular illnesses, as already described.

Reports on infectious diseases are usually made to the District Commission within a time period defined in the relevant legislation. The District Commission then reports the case to the regional public health authority (*Landessanitätsdirektion*), which notifies the BMG in an anonymous form and at regular intervals (monthly reports). This process usually results in a time lag before information is available at regional and national levels. Only individuals suffering from AIDS have to be reported directly to the Ministry. In addition to the cases that are reported through these channels, further reports may be made by laboratories. Inpatient cases are documented by hospitals (Documentation of diagnosis and services, *Diagnosen- und Leistungsdokumentation*, DLD). The latter involves significant delays in reporting of two–three years and may entail inaccuracies with respect to data quality. A special information system was created for influenza illnesses. National reference centres are also involved in reporting: they undertake defined tests for laboratories and report cases to the District Commission.

Detailed flowcharts outlining the reporting processes can be found in the *2006 Report on infectious diseases* of the BMG.²⁵¹ Central aspects influencing the quality of surveillance systems include the quality and validity of the data reported and the speed of reporting. The latter is a precondition for the early detection of outbreaks and epidemics as well as for the rapid introduction of counter measures. The application of clear, uniform and unambiguous definitions of disease cases is central to efficient and meaningful reporting. Continuous evaluation of the surveillance systems is necessary and this is currently undertaken by following the standard protocols defined by WHO and the CDC in Atlanta.

Disease outbreaks occurring at regional level can only be detected by the regional sanitary authority because it obtains information for the entire region. Data at district level is collected by the District Commissions. National outbreaks can be detected either by the BMG or by the reference centres that have access to national data.

251 BMGFJ. *Österreichischer Infektionskrankheitenbericht 2006*. Vienna, Federal Ministry of Health, Family and Youth, 2006. (http://www.bmg.gv.at/cms/home/attachments/7/3/7/CH1083/CMS1282307997918/oesterreichischer_infektionskrankheitenbericht_cms1201869447628_kopie_von_gbik_06.pdf, accessed 18 July 2008) (Reporting term 1992–2003), p. 8.

Central (national) reporting registry for infectious diseases²⁵²

The then BMGFJ commissioned a feasibility study to assess the installation of an electronic reporting system detailing individual cases of infectious diseases. Cases would be based on clear case definitions. The objectives of such a system were to create a data record for each individual, to avoid multiple reporting and to enable documentation of disease progression. It was also intended to act as an up-to-date early-warning system.²⁵³

In May 2008 the National Council made the unanimous decision to create a national registry for infectious diseases – measles, rubella, scarlet fever, diphtheria, malaria and yellow fever. The EpG serves as a legal basis for the registry and was amended accordingly. Such a registry aims to prevent the spread of these diseases in an efficient way. Another central objective is to facilitate a fast response to a potential disease outbreak. Coordination and communication among the federal states and involved players should be promoted. The database is accessible to authorities responsible for handling infectious diseases and is situated within the BMG. Reported data include patient data, data on disease development and progression, as well as any other potentially relevant information related to vaccination records, travelling and contacts, for example. Data protection issues are handled in accordance with the existing regulations.

Early-warning systems

EU

At EU level, the Early-Warning and Response System (EWRS) and the Diseases Surveillance Networks (DSN) were established in the late 1990s. The EWRS is a network of 24-hour, seven-days-a-week contact points nominated by the national ministries of health. Their duty is to inform each other about incidents related to infectious diseases potentially affecting other EU Member States. The head office for public medical services at the BMG in Austria serves as the EWRS contact point, overseeing and ensuring the relevance of the information fed into the system. In order to ensure comparable reports for the different countries, case definitions for the different diseases have been developed. These mostly require reporting on an individual basis. Following the terrorist attacks in 2001, the Health Security Committee and the Bioterrorism Task Force as well as the Rapid Alert System for Biological and Chemical Alerts and Threats were established in Luxembourg. The European Centre for Disease Prevention and Control (*Europäisches Zentrum für Krankheitsvorbeugung und –kontrolle*) was founded in 2005.

²⁵² The then Ministry of Health, Family and Youth (BMGFJ) (www.bmgfj.gv.at, accessed 1 August 2008). Der Standard. Infektionen: künftige Datenspeicherung. *Der Standard*, 14 May 2008 (www.derstandard.at, 1 August 2008).

²⁵³ BMGFJ. *Notifiable infectious diseases in Austria*. Vienna, Ministry of Health, Family and Youth (http://www.bmgfj.gv.at/cms/site/attachments/0/4/4/CH0742/CMS1038915287272/cms1201868963067_meldepflichtige_uebertragbare_krankheiten_neu.pdf, accessed 28 July 2008).

WHO

WHO's International Health Regulations (IHR) (*Internationale Gesundheitsvorschriften*) were adopted in 2005 to regulate the cooperation of WHO Member States in the event of a transnational epidemic.²⁵⁴ These are currently undergoing revision.

Early-warning Austria

In response to the introduction of the EWRS at EU level, a national warning system was created. It features a mailing list including all regional sanitary authorities, reference centres and other relevant organizations.

Outbreak control

Austrian alarm plan for smallpox

The eradication of smallpox was declared by WHO in 1979 but, because of the use of anthrax in the recent past in the course of terrorist attacks, the fear of an epidemic has resurfaced. Austria has therefore defined clear procedures that should enable the fast and competent introduction of necessary action, if required.

Austrian influenza pandemic plan

Work on the Austrian influenza pandemic plan began in 2003 and a report was published through the then BMGF in 2005. This was motivated by WHO's elaboration of a framework for an influenza pandemic plan in 1999 and its revision in 2005. WHO also encouraged its Member States to develop national plans and to ensure a sufficient stock of medicines and vaccines in the event of an outbreak. The potential for an influenza epidemic received special attention during the spread of the avian flu H5N1 strain in Southeast Asia and was again at the focus of interest due to the A (H1N1) 2009 influenza.

Reporting and control of infectious diseases in practice²⁵⁵

Existing legislation and regulations regarding outbreaks of disease and disease surveillance appear to create problems in practice. Responsibilities are not always made entirely clear in the various legislative acts and this can lead to delays in the investigation of and the reaction to outbreaks, thus resulting in inefficiencies.

²⁵⁴ For further information see the WHO Regional Office for Europe web site (<http://www.euro.who.int/en/what-we-do/health-topics/emergencies/international-health-regulations>, accessed 21 April 2011).

²⁵⁵ Based on consultations with experts, June 2009 (Public authorities).

As already mentioned, certain cases of infectious diseases have to be reported to the District Commission in the actual area of residence of the patient. This can cause confusion as to who should be informed if the patient is staying in a different area or district at the time of the infection. Decisions on this are particularly difficult if more than one district or region is involved.

One of the main problems of the EpG is that at present only those infectious diseases that are specifically listed in the Act have to be reported. This creates difficulties when unknown diseases occur. If, for example, a cluster of deaths from an unknown source of infection genesis occurs, the medical officer is not officially entitled to investigate because the infectious disease is not listed in the EpG.

Contradictory interpretations of the reporting obligation by the 99 district commissions give rise to uncertainties. Are *norovirus* infections, for example, subject to compulsory reporting in Austria? Some district commissions may confirm that this is the case, while others may argue that they must be notified only if they have definitely resulted in viral food poisoning. The term *norovirus* is not mentioned in the EpG, in which reference is made only to viral food poisoning. Irregularities such as this mean that data on infectious disease can be unreliable. A total of 535 cases of *norovirus* infections were reported in Upper Austria in 2008, for example, and only one in Vienna.

Another anomaly arises in the reporting of animal bites by animals with rabies or suspected rabies. In a country such as Austria, which is free of terrestrial rabies, no such reports should be made. The BMG, however, reported a total of 2320 cases in 2008. It thus appears that some physicians wrongly consider all animal bites to be subject to mandatory reporting, which results in inaccurate data. The essential information to be considered in this context is the number of verified cases.

The situation is equally problematic in terms of mandatory reporting of invasive bacterial diseases, such as meningitis and sepsis. In 2008, only two cases of *staphylococcus aureus sepsis* were reported by the BMG, while in the AURES report²⁵⁶ – which is also published by the Ministry – more than 1700 cases are documented.

Based on the 2008 annual report, seven cases of botulism occurred in Austria. In reality these were cases of *clostridium difficile* infections (which are subject to mandatory reporting in Germany but not in Austria) and physicians recorded the cases as infections that had the most similar name – *clostridium botulinum*.

It is not always clear for attending physicians whether they are obliged to report a case and such uncertainties have a negative impact on the reliability and quality of the reported data.

256 BMG. *Austrian report on antibiotics resistance*. Vienna, Federal Ministry of Health, 2010 (<http://www.bmg.gv.at/cms/site/standard.html?channel=CH0742&doc=CMS1203598507001>, accessed 10 February 2011).

Mandatory reporting obligations for STIs are also subject to unclear regulations that result in overreporting. The Sexually Transmitted Diseases Act requires the attending physician to report cases for which “a spreading of the disease is to be feared or for which the infected person rejects treatment with antibiotics”. Very few cases exist in Austria in which patients with an infection reject treatment with antibiotics and which would, therefore, have to be reported. The BMG, however, has documented 821 cases of gonorrhoea in its annual report of 2008. The fact that Vienna reported 707 cases of gonorrhoea – while Lower Austria (which is comparable in size) only reported 13 – indicates the poor quality of these data.

A clear line of responsibility for the notification of foodborne disease outbreaks that occur across district boundaries is defined only in the 2006 Zoonosis Act, designating the regional governor as the person responsible. The regions are not mentioned in any other legislation, with the result that duties that in other countries are administered by a national public health institute are either neglected or dealt with directly by the BMG.

A problem experienced in practice is that, in many cases, medical officers and other nonmedical professionals in the field do not have adequate training or qualifications for outbreak investigation and handling because no training options exist for these professionals in the Austrian system.

In the light of these uncertainties and problems, current legislation ought to be assessed and revised to ensure efficient procedures and well-defined responsibilities for the stakeholders involved.

3.9 Registries

For this study, Internet research²⁵⁷ was undertaken and a range of disease registries and other registries were identified, although the exact details are unclear. Many of the registries are overseen by GÖG, either by the BIQG or by the ÖBIG. Others are managed by medical societies, groups of hospitals, university departments, the national statistics office, or other institutions.

It was not possible to look in detail at all of the registries listed in the tables that follow and only basic information is provided here, in order to give an impression of the data collected.²⁵⁸

The only national registry in Austria is the National Cancer Registry. All other registries listed in the subsequent sections are based on regional,

²⁵⁷ Internet search using Google search engine, leading to consultation of the web sites of various health system stakeholders.

²⁵⁸ Further details can be found at www.goeg.at (accessed 26 March 2010).

local or individual initiatives. This means that they cannot be used to assess prevalence. Their quality is also very varied and has usually not been evaluated. Further investigation of registries is essential.

Registries at the BIQG

Registries at the BIQG are, to a large extent, focused on measuring quality indicators for a range of medical specialties (Table 3.1). Based on selected indicators, they aim to assess the current situation and to identify opportunities for quality improvement, especially in terms of process and outcome quality, but also relating to patient satisfaction. Current procedures should be optimized both for the provider and the patient. The BIQG cooperates with medical societies and health service providers (hospitals).

Data collected include information on treatment processes, transportation management, waiting times, infection rates and complications. Data are collected, analysed and interpreted in cooperation with the corresponding medical societies. Results are passed on to the services providers in the form of benchmarking reports. These providers are then expected to use the information to define potential areas of quality improvement and introduce processes to improve their performance, with evaluation at the next assessment.

Table 3.1 *Registries at GÖG/BIQG*

Registry	Content/Status quo
Adult heart surgery registry	Evaluation of treatment results of the nine heart surgery centres in Austria.
Pacemaker and ICD registry	Medicinal product vigilance, documentation of acute problems, product performance and durability of the different products.
Hip endoprosthesis registry	Analysis of outcomes and development in connection with choice of implants, operation methods, operation management. Assessment of treatment quality and outcomes, early-warning system for defective products.
Registry for quality assurance in surgery	Re-operation rates within the first 14 days after operation
Austrian stroke unit registry	Process indicators, transportation times
Registry for quality assurance in child cardiology	Outcomes of treatment in child cardiology

Source: GÖG.²⁵⁹

²⁵⁹ GÖG web site: www.goeg.at (accessed 28 March 2010).

Registries at ÖBIG

Registries at GÖG/ÖBIG were mainly installed based on legal provisions. They are used either for administrative purposes (medicinal products, organ donations), for haemovigilance (transfusions) or for the documentation of outcome quality in specific cases (for IVF). These registries are listed in Table 3.2.

Table 3.2 *Registries at GÖG/ÖBIG*

Registry	Content/Status quo
Objection registry against organ donation	Individuals who do not wish to donate their organs
Registry for medicinal products	Registration of all individuals and companies with an office in Austria who/which are responsible for marketing medicinal products for the first time in the European economic region or those having a testing and supervision office in Austria
IVF registry	Outcome of IVF attempts
Haemovigilance registry	Adverse events and reactions in the transfusion chain (testing, processing, transport, administration)

Source: GÖG.²⁶⁰

Disease registries

Only a small number of disease registries were found in the course of the Internet search carried out for this study.

The **National Cancer Registry** at Statistics Austria is an epidemiological cancer registry that includes data on the incidence of cancer cases. Estimates of prevalence and survival rates can be calculated by matching the incidence statistics with the cause of death statistics. There are regional cancer registries in Tyrol, Carinthia, Salzburg and Vorarlberg.²⁶¹

The **birth registry** is managed by the Institute of Clinical Epidemiology in Innsbruck and documents defined quality parameters in the fields of gynaecology and obstetrics. Hospitals in different regions report their data to the registry.

In the course of an amendment to the EpG, a **national registry for notifiable infectious diseases** – for measles, rubella, scarlet fever, diphtheria, malaria and yellow fever – was created at the BMG. Recorded data include name, environment relevant to the infection, disease history and disease progression. Bodies responsible for preventing the spread of infectious diseases have direct access to this register. See section 3.8 for further details.

²⁶⁰ GÖG web site: www.goeg.at (accessed 28 March 2010).

²⁶¹ For further information see Mossialos, E., Merkur, S., Ladurner, J., Gerger, M., Panea, R. (2009). *Cancer Registration in Austria. Report for the Main Association of Austrian Social Security Institutions*. Vienna: Main Association of Austrian Social Security Institutions. Download available from www.hauptverband.at/fokoop

The **Bronchus carcinoma registry** (for primary malign tumours of the lung and the pleura) is located at the BIQG and collects data relevant for the diagnosis and treatment of lung and pleura cancer patients. The registry is currently in its pilot phase. Its aim is to improve the quality of process and outcome, based on diagnosis and therapy.

The **Austrian osteoporosis registry** contains data relating to patients from six Austrian hospitals. Indicators documented are prevalence, length of stay and treatment provided.

The **registry for Chronic Myeloid Leukemia** (CML registry) is an application provided by the Austrian Society for Haematology and Oncology, which documents patient information as well as diagnosis and treatment data on CML.

The **Austrian Acromegaly registry** is a project of the Austrian Society for Endocrinology and Metabolism.

The **Austrian Haemophilia registry** is a registry that was created on the initiative of the Haemophilia Society and providers of services for haemophilia. It aims to document treatment success, adverse effects and data relevant for research.

The **registry for cardiac and vascular atherothrombotic diseases**, REACH-Registry (Reduction of Atherothrombosis for Continued Health) aims to identify risk factors for atherothrombosis and to prevent future strokes or heart attacks.²⁶² Data recorded include patient information, health status and treatment of patients with a risk of atherotrombosis.

The Institute of Clinical Epidemiology in Innsbruck (Tyrol), which operates a number of registries, also manages a **registry for diabetes** that collects data on the patient, migration background, diagnosis, family history, complications and medical check-ups.

Other registries

Further registries found in the course of the search included:

- other registries of the Institute of Clinical Epidemiology in Innsbruck – Prosthesis registry
- Austrian stem cell transplantation registry
- Austrian registry for bone marrow and stem cell donations

²⁶² See, for instance, Wascher TC et al. The reduction of atherothrombosis for continued health (REACH-) register: Basisdaten der österreichischen Population. *Austrian Journal of Cardiology*, 2007, 14(3–4):71–77 (<http://www.kup.at/kup/pdf/6392.pdf>, accessed 28 March 2010).

- Styria abnormalities registry
- endoprosthesis registry
- gene analysis registry, gene therapy registry, registry of inter-laboratory tests
- general registry of residents at the Federal Ministry of Internal Affairs
- percutaneous transluminal coronary angioplasty registry
- central registry of radiation sources.

3.10 Conclusions

A wide variety of data is collected by different stakeholders in Austria but an overall national strategy or framework for information management does not exist. It is not always clear whether the data collected are relevant, sufficient and of good quality. According to experts, there are gaps in the collection of data relating to children, immigrants and outpatient diagnoses. The assessment of data needs and the practical use of data, along with the identification of gaps in reporting are important and should be undertaken periodically. Data protection regulations in Austria are very strict, making the linking of selected datasets and the undertaking of certain data analyses difficult. This aspect must be taken into consideration when assessing data sources.

The focus of data collection is slowly changing in Austria, from collecting data mainly based on legal obligations, as is the case with mortality or activity-related data, to collecting data that also relates to processes, health determinants, outcomes and quality. Data analysis is still in short supply and evaluation of activities is not yet standard practice. Meanwhile, it is becoming increasingly more important to provide evidence on the effectiveness of measures, in order to ensure their funding and sustainability. Data on health status are collected in the course of the national health survey every 10 years. Experts argue that more frequent data collection would be beneficial.

Interest in health reporting and data analysis appears to be emerging only gradually. Experts stated that acceptance and practical use of published reports as tools for health planning, forecasting or decision-making by health system stakeholders was often limited, although university and other researchers do request and use data in their work.

Factors contributing to this situation include the lack of a legislative base for health reporting (the Imperial Sanitary Act does not always apply), the small number of professionals qualified to compile health reports or to perform health economic and other data analyses, as well as the limited awareness of the need for these activities among decision-makers.

Another factor limiting the use of health reports might be their readability, as they are often quite technical and lengthy. A finer appreciation of the needs of the readership, the use of new media (such as the Internet or e-mail) to promote awareness of the publication of new or updated reports, as well as the inclusion of summaries and illustrations to make reading and understanding more accessible might help to increase the use made of the reports.

Most regions in Austria have published at least one health report and many are either planning or already in the process of publishing a second one. Producers of reports include ÖBIG, other research institutions and university departments, freelance researchers and in-house reporting units.

The interpretation and further application of findings can also be hampered by decision-makers who may not have an understanding of public health. Direct comparison of health reports is difficult because of a lack of standardized regulations for reporting. Recommendations and guidelines have been developed by ÖBIG's Platform for Health Reporting and are gradually spreading across Austria. Health reporting should form an integral part of political advisory work, but is currently rather the exception. Health targets and priority areas may be included, but the announcement of explicit measures to achieve these is rare and this obviously reduces actual commitment to a report and its implementation.

A favourable development is the higher profile of health reporting, which is reflected in most reports being published on the Internet and thus being more widely accessible, although the methodology and definition of health targets are not always clear. Another promising initiative is the cooperation of different stakeholders in the actual process of compiling a report. This is illustrated, for example, in Upper Austria where the regional sickness fund, the region of Upper Austria, the regional physicians' association and the two cities of Linz and Wels cooperate.

Concepts such as EBM and HTA are gaining ground in Austria, leading to greater importance being attributed to sound databases and solid data analysis. This change of emphasis is apparent, for example, when looking at the decisions made in connection with the reimbursement of services by social health insurance or other funding agents.

Social insurance could take on a range of functions in connection with health reporting – contributing its data, anonymization and pseudonymization of data, promoting an improvement in data quality, or generally encouraging the compilation and use of health reports.

Future trends in health reporting include the production of integrated health reports and of intersectoral health reports as well as community health reporting.

Legislation and regulations on outbreaks of disease and disease surveillance appear to present problems in practice. Responsibilities are not always entirely clear (reporting in the context of the EpG, the Venereal Diseases Act and the TubG, for example) and can result in delays in the investigation of or the reaction to outbreaks and thus to inefficiencies. With regard to the EpG in particular, one central problem is that at present only those infectious diseases specifically listed in the Act are required to be reported and uncertainties therefore arise if a new or unknown disease occurs. Unclear reporting regulations or standards also result in data reports and statistics not being suitable for comparison across countries or even regions.

Another difficulty that arises in this context is that medical officers and other professionals who report potential cases frequently do not have adequate training or qualifications for outbreak investigation and handling.

Chapter 4

Health targets²⁶³

4.1 Starting point and research question

In 1984 the Member States of the WHO European Region had already agreed to the framework concept *Health for All* (HFA), which at that time defined 38 health targets at national, regional and local levels.²⁶⁴ Currently, seven of the nine regions (*Länder*) in Austria are either in the process of developing health targets or of implementing strategies and measures in order to achieve those targets. At national level, both the *15a Vereinbarung* and the Government Programme for 2008–2013 stipulate that national framework targets for health for Austria must be defined by 2013 at the latest.²⁶⁵

This chapter of the project report describes the current situation on health targets in Austria and makes recommendations and suggestions for their further development and implementation. It examines the following central research question:

What aspects should be considered for the successful development and implementation of health targets?

Section 4.2 looks at the methodology used. Section 4.3 contains a brief introduction to health targets and section 4.4 details the status quo of health targets in Austria. Qualitative interviews and a literature research were performed to answer the research question and the outcome of these is presented in section 4.5 and summarized in section 4.6. Section 4.7 makes recommendations and suggestions for initial steps for the use and implementation of health targets in Austria in general and within the social insurance system in particular.

263 The authors of this section were Marlene Gerger and Jürgen Soffried.

264 WHO Regional Office for Europe. *The Health for All policy framework for the WHO European Region: 2005 update*. Copenhagen, WHO Regional Office for Europe, 2005, pp. 10–11.

265 BGBl No. 105/2008, p. 11. Bundesgesetzblatt für die Republik Österreich Nr. 105/2008: 105. Vereinbarung gemäß Art. 15a B-VG über die Organisation und Finanzierung des Gesundheitswesens. Jahrgang 2008. Ausgegeben am 14. Juli 2008 (http://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2008_I_105/BGBLA_2008_I_105.pdf, accessed 06 May 2009).

4.2 Methodology

Literature review

The review considered German standard works such as *The Public Health Book* by Schwartz and colleagues²⁶⁶ and *Health Policy* by Rosenbrock and Gerlinger,²⁶⁷ university research papers and the WHO publication on the *Health for All Framework*.²⁶⁸ For an overview of the current situation on the use of health targets, reports, statements and project documents were collected by means of an Internet search or through personal enquiries directed to health system actors and interview partners.

Interviews²⁶⁹ and qualitative content analysis

To address the central research question, the literature search was supplemented by 15 expert interviews undertaken with a field manual and conducted in German. A qualitative content analysis was carried out after the interviews. In addition to questions relating to the research question, the expert interviews also involved questions on performed or planned processes in development, along with implementation of health targets. The field manual, which was sent to interview partners in advance of the interviews, can be found in Annex 2. This was supplemented with keywords so that information retrieved by asking certain questions would not be forgotten and so that there was a uniform procedure for the interviews.

Interviews took place between 27 January and 23 February 2009. They were mainly undertaken by telephone and were simultaneously recorded. Three face-to-face interviews with a total of five interview partners took place and, apart from one group interview with three people, all were on an individual basis.

The aim in choosing interview partners was to find at least one national representative and one representative from each region who were either currently responsible for health targets or would be involved in the process in the future. Experts from all Austrian regions were contacted through the health departments. At national level the HVB, the BMG, the ÖBIG and the IHS were approached. The BMG nominated a representative of the public health sub-working group of the Federal Health Commission (*Bundesgesundheitskommission*), Ms Peinhaupt, who had already agreed to be an interview partner for Styria. An IHS representative, who had been involved

266 Schwartz FW et al., eds. *Das Public Health Buch. Gesundheit und Gesundheitswesen. 2. Auflage.* Munich, Urban & Fischer Verlag, 2003.

267 Rosenbrock R, Gerlinger T. *Gesundheitspolitik. Eine systematische Einführung. 2. Auflage.* Bern, Verlag Hans Huber, Hogrefe AG, 2006.

268 WHO Regional Office for Europe. *The Health for All policy framework for the WHO European Region: 2005 update.* Copenhagen, WHO Regional Office for Europe, 2005.

269 Employing a field manual.

in producing the report *Health targets and indicators as steering instrument of social insurance* in 2004, declined to be interviewed. Table 4.1 shows the 15 experts who were interviewed and agreed to their names being published in the report. A total of 10 experts stated that they were directly involved in the development or implementation of health targets, one person described his role as a consultant and four defined themselves as observers. In Styria a regional network of the ÖGPH made it possible to interview five experts.

Table 4.1 Interview partners

National level	
BMG	–
Hauptverband	Mag. Stefan Spitzbart Health Promotion and Prevention unit Member of the public health sub-working group of the Structural Changes working group of the Federal Health Commission (<i>Bundesgesundheitskommission</i>) Interview on 17 February 2009
IHS	–
GÖG/ÖBIG	DI Petra Winkler Interview on 17 February 2009
Regional level	
Burgenland	WHR DR. ⁱⁿ med. Claudia Krischka Region of Burgenland Head of division for Health and Sports Interview on 5 February 2009
Carinthia	Ass.-Prof. Dipl.-Kfm. Dr. Guido Offermanns University of Klagenfurt Department of Public Business Administration Interview on 10 February 2009
Lower Austria	Hon. Prof. (FH) Dr. Bernhard Rupp, MBA Chamber of Labour of Lower Austria Health care and Employee Protection unit Interview on 17 February 2009
Upper Austria	Mag. Markus Peböck IGP Managing director Interview on 13 February 2009
Salzburg	HR Dr. med. Christoph König Region of Salzburg Regional health director Interview on 6 February 2009
Styria	Dr. Thomas Amegah, MAS (ÖGD) Regional authority of the government of Styria Department 8B – Health care (Regional health directorate) Group interview on 27 January 2009 Mag. ^a Gerlinde Grasser, MScPH University of Applied Sciences FH JOANNEUM Competence Centre for Health Reporting Group interview on 27 January 2009

Table 4.1 *contd*

Regional level	
Styria (contd)	Mag. ^a Ines Krenn, MPH Styria vitalis Coordination of public health agendas in Styria Group interview on 27 January 2009
	Mag. ^a Karin Reis-Klingspiegl Styria vitalis Managing director Interview on 12 February 2009
	Mag. ^a Christa Peinhaupt Health Fund Styria and member of the public health sub-working group of the Structural Changes working group of the Federal Health Commission (<i>Bundesgesundheitskommission</i>) Interview on 3 February 2009
Tyrol	OAR Dr Franz Katzgraber Regional authority of the government of Tyrol Regional health directorate Interview on 10 February 2009
Vorarlberg	Dr Günter Diem MD aks Working Group for Prevention and Social Medicine Ltd Prevention Managing Director Interview on 11 February 2009
Vienna	Dennis Beck City of Vienna WiG Institute Interview on 23 February 2009
Total	15 Individuals

On completion of the interviews, responses were summarized, classified and assigned headings, corresponding to the questions in the field manual. The processed material was then forwarded to all interview partners who made any necessary changes and approved the content of the documents. This ensured that the material reflected the facts as presented by the interview partner. Information retrieved from the interviews was used to describe the status quo of health targets in the regions. Content analysis of the information assisted the answering of the research question. The corresponding procedure is described in more detail in subsequent sections.²⁷⁰

(a) Description of processes related to and the status quo of health targets in the regions (Länder)

Responses to the following questions are categorized according to regions in section 4.2, which contains a description of the status quo of health targets at regional level.

²⁷⁰ Questions in both black and grey font correspond to those asked in the expert interviews and listed in the field manual. Only responses to questions in the black font are presented here; questions in the grey font are discussed section 4.5.

- What is the current situation with regard to the topic of health targets in the area that you oversee or in which you operate (region, Federal Government)? Is the use of health targets in the planning stage, the development stage, the implementation stage or already in the evaluation stage?
- What were the motivating factors triggering the development of health targets? (What are, from your point of view, motivating factors or triggers for developing health targets in Austria?)
- How did or do you proceed when developing health targets? (What requires special attention?)

Where data from the interviews were incorporated into the report, an identifying reference was provided.

(b) Answering the research question

To answer the central research question interview partners were asked the questions listed here.

- (How did or do you proceed when developing health targets?) What requires special attention? (Catchphrases: success factors and barriers)
- What needs to be done in order to make sure that health targets do not remain an isolated event but are seen as an entrance point into the PHAC and to ensure that the cycle continues?

Results of the interviews are presented in section 4.5. The structuring of the content of the summarized responses was undertaken using a method devised by Mayring.²⁷¹ After several cycles of content analysis, the categories of success factors listed here were defined and their attributes specified. (For definitions of each category, see section 4.5.)

- Resources
 - o financial, time, human (quantitative)
 - o structural
 - o public health expertise
- Stakeholder involvement
 - o networking and partnerships
 - o participation
 - o transparency
- Consideration of the PHAC
- Leadership and political commitment

²⁷¹ Mayring P. *Qualitative Inhaltsanalyse. Grundlagen und Techniken*. 8. Auflage. Weinheim, Beltz, 2003.

Within these dimensions, the responses of the interview partners were categorized as follows, according to the four phases of the PHAC (see section 4.3): problem definition, formulation of strategy, implementation and evaluation. The outcome was summarized and supplemented by representative quotations based on the summaries. A verbatim transcript was also created for the record.

(c) Recommendations for social insurance

Responses to the following question are included in section 4.5.

- What preparatory work does social insurance have to do in order to enter the target development process well prepared?

Results of the interviews and verbatim text passages were cited in the form of a code. To facilitate this, letters and numbers were randomly assigned to interviews corresponding to the page number of the summarized response in the transcript. As the transcriptions of interviews contain an exact time specification, decoding of the material is possible. In addition, the number of statements assigned to each category – as well as the number of interviews in which each of the statements was made – were recorded (and the group interview with the three interview partners was interpreted as one interview). The subjectivity involved in matching the text passages to the dimensions – as well as the interpretation of the results – must be acknowledged.

The names of experts rather than codes were used in the process descriptions of the regions (section 4.2). Because only one person was usually being interviewed per region and the names of interview partners are listed in Table 4.1, decoding would have been possible in the process description section, resulting in a loss of anonymity in the entire document. All experts agreed to the content of the process description for their respective region, as well as to the citation of their name and thus anonymity could be protected in other sections.

4.3 Health targets – a brief theoretical introduction

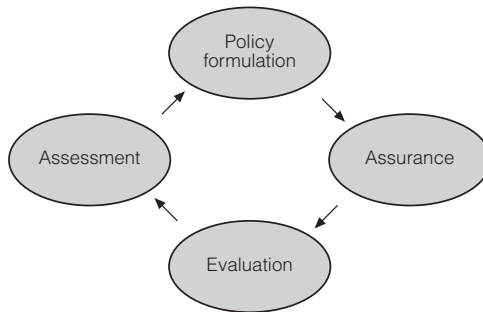
Health policy should strive to maximize the health status of the entire population of a state.²⁷² This principle was affirmed by all WHO Member States in 1998: “We, the Member States of the World Health Organization (WHO), reaffirm our commitment to the principle enunciated in its Constitution that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being; in doing so, we affirm the dignity and worth of every person, and the equal rights, equal duties and shared responsibilities of all

²⁷² Rosenbrock R, Gerlinger T. *Gesundheitspolitik. Eine systematische Einführung*. 2. Auflage. Bern, Verlag Hans Huber, Hogrefe AG, 2006, p. 12.

for health”.²⁷³ However, this is not always consistent with reality because “only too often health policy is foiled by political targets which are based on fiscal, industrial, regional economic or labour issues”²⁷⁴ as well as being dominated by the highly diverse interests of the actors and their tendency to strive for power in the political system.²⁷⁵

For these reasons health policy should be understood in analytical terms²⁷⁶ as “the sum of organized efforts having an influence on the health of individuals or social groups – whether they promote, maintain or reconstitute health or solely ease individual and social consequences of illness”.²⁷⁷ The PHAC (Fig. 4.1) – which also formed the basis of the qualitative content analysis (results in section 4.5) – represents a model for such a concerted strategy in health policy.

Fig. 4.1 PHAC (*Learning spiral*)



Source: National Academy of Sciences/Institute of Medicine (1988) cited in Rosenbrock & Gerlinger (2006), p. 25.

The phases of the PHAC, which can be understood as a recurrent learning spiral, are as follows:

1. Assessment phase

In this phase, the problem is defined and needs/demand are/is made clear through the compilation of a health report.

2. Policy formulation phase

Based on the problem definition, TARGETS are formulated and a strategy developed to reach these targets.

273 WHO Regional Office for Europe. HEALTH21 – health for all in the 21st century. An introduction. *European Health for All Series*, 1998, 5:4.

274 Geene R. Ziele für die Gesundheitspolitik. In: Geene R, Lubert E, eds. *Gesundheitsziele. Planung in der Gesundheitspolitik*. Frankfurt am Main, Mabuse-Verlag, 2000:49–57, p. 49.

275 Rosenbrock R, Gerlinger T. *Gesundheitspolitik. Eine systematische Einführung. 2. Auflage*. Bern, Verlag Hans Huber, Hogrefe AG, 2006, p. 18.

276 In the original in italic font.

277 Rosenbrock R, Gerlinger T. *Gesundheitspolitik. Eine systematische Einführung. 2. Auflage*. Bern, Verlag Hans Huber, Hogrefe AG, 2006, p. 12.

3. Assurance phase

This phase involves the implementation and the safeguarding of the planned interventions.

4. Evaluation phase

To make effects and impacts clear, the assurance phase must be followed by an evaluation, in the form of another health report and by evaluation of target achievement.²⁷⁸

According to this model, health targets should be defined in the second phase, after performing a precise baseline analysis, and should be viewed as part of an overall process, in which the definition of targets is followed by implementation and evaluation. Health targets should be understood in this context as “a binding definition of priorities in health policy”.²⁷⁹

Health targets in line with the broad public health approach of social determinants are formulated by WHO in line with the HFA concept. The history of this concept dates back to the conference in Alma-Ata in 1978. At that point the concept was aimed at ensuring the best possible level of health for the population by the year 2000. Member States have been asked to consider this strategy at both national and regional levels for over three decades. In 1984 the HFA framework concept was supplemented by the WHO European Region with a set of 38 targets as well as an action plan promoting its regional implementation and 65 indicators for assessment. WHO evaluates the regional progress of the HFA concept at three-yearly intervals. This resulted in a revision of the concept, the outcome of which was presented as HEALTH21 in 1998. The 21 targets of the concept take account of the diverse developments taking place in the European Region. HEALTH21 strives to achieve improvements in the level of health and the protection of health, as well as a reduction of health risks.²⁸⁰ A detailed list of the targets can be found in Annex 3. The publication of the HEALTH21 concept concludes with the following words: “Whether one is a government minister, city mayor, company director, community leader, parent or individual, HEALTH21 can help develop action strategies that will result in more democratic, socially responsible and sustainable development. Health is a powerful political platform”.²⁸¹

278 Rosenbrock R, Gerlinger T. *Gesundheitspolitik. Eine systematische Einführung. 2. Auflage.* Bern, Verlag Hans Huber, Hogrefe AG, 2006, p. 25.

279 Schwartz FW, Kickbusch I, Wismar M. Ziele und Strategien der Gesundheitspolitik. In: Schwartz F et al., eds. *Das Public Health Buch. Gesundheit und Gesundheitswesen. 2. Auflage.* Munich, Urban & Fischer Verlag, 2003: 229.

280 WHO Regional Office for Europe. *The Health for All policy framework for the WHO European Region: 2005 update.* Copenhagen, WHO Regional Office for Europe, 2005, pp. 9–11.

281 WHO Regional Office for Europe. HEALTH21 – health for all in the 21st century. An introduction. *European Health for All Series*, 1998, book cover.

In reference to the use of health targets for the implementation of this framework concept, the WHO evaluation report of 2005 draws the following disillusioning, but also motivating conclusions:

Target-setting has been a traditional approach in the European Region's Health for All policy formulation. Recently, however, there has been a consensus that establishing common targets for all countries in the Region can often be artificial, unfair or simply uninspiring. It does not take into account significant differences in Member States' public health and economic development. Nonetheless, setting targets can be an important exercise at national and sometimes subnational levels. National targets can be an excellent implementation and guidance tool, as well as a means for a country to articulate its degree of ambition. And when all stakeholders are involved, the formulation of national health targets can help ensure their joint ownership of health policy.²⁸²

4.4 Status quo of health targets in Austria

Target 21 of the WHO HEALTH21 framework concept (see Annex 3) states:

“By the year 2010, all Member States should have and be implementing policies for health for all at country, regional and local levels, supported by appropriate institutional infrastructures, managerial processes and innovative leadership”.²⁸³

Progress towards the achievement of this target in Austria is presented in the following subsections, with a special focus on national and regional levels.

National level

On 10 November 2003, at the Austrian Health Conference, the then Federal Minister of Health and Women, Maria Rauch-Kallat, presented *Health Targets 2010*, which were to be followed by an elaboration of reform measures in the areas of finance, health promotion, quality assurance, innovations and structures. Delegates at the conference were invited to participate in dialogues on health promotion, quality assurance, public health, food safety and other topics.²⁸⁴ In a report by Hofmarcher, Kraus and Riedel (2004) the targets presented were not judged to be “geared to the health status”.²⁸⁵ In the course of

282 WHO Regional Office for Europe. *The Health for All policy framework for the WHO European Region: 2005 update*. Copenhagen, WHO Regional Office for Europe, 2005, pp. 4–5.

283 WHO Regional Office for Europe. HEALTH21. The health for all policy framework for the WHO European Region. *European Health for All Series*, 1999, 6:163.

284 FGÖ. *Gesundes Österreich. Magazin für Gesundheitsförderung und Prävention* (5. Jahrgang, Nr. 4). Vienna, B&K Verlag, 2003, p. 7.

285 Hofmarcher MM, Kraus M, Riedel M. *Gesundheitsziele und -indikatoren als Steuerungsinstrument der sozialen Krankenversicherung*. Vienna, Institute of Advanced Studies (IHS), 2004, p. 1.

the conference, Rauch-Kallat drew the following conclusions: “In terms of the intended change in paradigm ‘Novel health thinking’ means a clear preference for health promotion, health insurance instead of sickness insurance, health centre instead of hospital”.^{286, 287}

Despite this commitment, a report was published in 2005 by the Central Auditing Authority (the *Österreichischer Rechnungshof*) which was critical of the performance of the then BMGF and stated: “Health Promotion was a priority target of the government programme of 2003 and part of the Health Targets 2010 of the BMGF. The Rechnungshof criticized the lack of an overall strategy. It advised the BMGF to coordinate measures for health promotion in a better way. A concerted medium-term concept for health promotion ought to be devised together with other funding agents. Regular evaluations should be undertaken”.²⁸⁸

On 26 July 2006 – only a few weeks before the election of the National Council in October – the Federal Minister of Health, Rauch-Kallat presented 10 health targets on the theme “World Health Champion by 2010” (for an excerpt from the archive of the *Journal Österreich*, refer to Annex 4).²⁸⁹ In the HVB press review, the following is mentioned in this context: “As sensible as these targets may be, they are as vague when looking more closely”.²⁹⁰

The way these targets were arrived at is not clear. There is no indication that target definition was preceded by needs assessment or multisectoral stakeholder involvement. It appears that, as a result of pressures of time, political interests took precedence over a systematic and well-grounded course of action. The summer 2006 targets were published on a web site at a cost of about €120 000. The campaign – which was planned to last until 2010 – was cancelled (without undergoing evaluation) as early as autumn 2006, following the formation of a new government.²⁹¹

A statement of the then BMGFJ in September 2008 – in which the current situation regarding health targets in Austria was addressed (see Annex 5) – refers primarily to the *Austrian report on strategies for social protection and social inclusion 2008–2010*,²⁹² which also looks into the topic of health. The current

286 Comment from the translator: in German the word hospital – literally translated – means “house for the sick”.

287 FGÖ. *Gesundes Österreich. Magazin für Gesundheitsförderung und Prävention* (5. Jahrgang, Nr. 4). Vienna, B&K Verlag, 2003, p. 7.

288 Der Rechnungshof. *Bericht des Rechnungshofes. Reihe Bund 2005/9*. Vienna, Central Auditing Authority, 2005, p. 4.

289 HVB. Presspiegel vom 27. Juli 2006, Nr. 172. Gesundheitswesen Inland. Punkt 8. WB 27. Vienna, Main Association of Austrian Social Security Institutions, 2006 (http://www.hauptverband.at/portal/index.html;sessionid=474B21C698CF150C911CCB29477D3953?ctrl:cmd=render&ctrl>window=hvbportal.print.printWindow&p_menuid=64762&p_tabid=2&p_pubid=123194, accessed 6 May 2009).

290 Ibid.

291 See Der Rechnungshof. *Teilgebiete der Gebarung einschließlich Gesundheitsförderung durch das BMGFJ; Follow-up Überprüfung*. Reihe Bund 2009/1. Vienna, Central Auditing Authority, 2009, p. 63.

292 BMSK. *Austrian report on strategies for social protection and social inclusion 2008–2010*. Vienna, Federal Ministry of Social Affairs and Consumer Protection, 2008 (http://www.bmsk.gv.at/cms/site/attachments/4/4/0/CH0121/CMS1222677019004/strategiebericht2008_engl_neu.pdf, accessed 22 April 2011).

agreement according to the *15a Vereinbarung* (valid from 2008 to 2013) is also quoted, in which the development of framework targets for health is explicitly stipulated in article 11, item 5 and which reflects the overall strategy.²⁹³ The report also refers to the GfG and to existing claims on mental health at EU level.

Based on this information, no explicit national health targets exist for Austria at present, nor is a national HEALTH21 strategy being pursued. An indication of a plan to develop such targets is the reference in the already mentioned agreement according to the *15a Vereinbarung* of the B-VG²⁹⁴ and the Government Programme of the XXIV legislation period.²⁹⁵ Specific external impetus for the use of health targets was given to the Federal Government, for instance by the HVB in the form of various reports, such as *Health targets and indicators as a social health insurance steering instrument*²⁹⁶ published in 2004, as well as in the *2005 Social health insurance health report*²⁹⁷ and in the report *10 To-dos – Potential course of action for the development of national respectively regional health targets in Austria*,²⁹⁸ which was published in 2007. The first of these reports provides an overview of international experience in using health targets. In *2005 Social health insurance health report*, the HVB aimed to show the contribution social insurance could make to Austrian health reporting using existing data as a basis for the development of health targets. The reports suggest a useful list of health targets for Austria. GÖG/ÖBIG recommended that health reporting in Austria should be linked with health targets.²⁹⁹ The necessity of health targets is also stressed in a publication entitled *Assessment approach of the realization of the health reform 2005*³⁰⁰ and calls have also been made by other social insurance groups for the development of target, including groups such as SHI-Research³⁰¹ and the public health expert group.³⁰²

293 BGBl Nr. 105/2008.

294 BGBl Nr. 205/2008, p. 11.

295 Republik Österreich. *Regierungsprogramm 2008–2013. Gemeinsam für Österreich. Regierungsprogramm für die XXIV. Gesetzgebungsperiode*. Vienna, Republic of Austria, 2008, p. 189.

296 Hofmarcher MM, Kraus M, Riedel M. *Gesundheitsziele und -indikatoren als Steuerungsinstrument der sozialen Krankenversicherung*. Vienna, Institute of Advanced Studies (IHS), 2004.

297 HVB. *Gesundheitsbericht der sozialen Krankenversicherung 2005*. Vienna, Main Association of Austrian Social Security Institutions, 2005 (https://www.sozialversicherung.at/mediaDB/MMDB135573_Gesundheitsbericht%202005.pdf, accessed 21 April 2011).

298 Mair A, Peböck M, Soffried J. *10 „To-Do’s“. Mögliche Vorgehensweise zur Entwicklung von nationalen bzw. länderspezifischen Gesundheitszielen in Österreich. Behandlungsökonomie OÖGKK*. Linz, Institut für Gesundheitsplanung, 2007.

299 GÖG. *Empfehlungen zur Gesundheitsberichterstattung. Empfehlungen zu Gestaltung und Funktion von Gesundheitsberichten in Österreich*. Vienna, Gesundheit Österreich GmbH, 2010 (http://www.bmg.gv.at/cms/home/attachments/5/1/1/9/CH1066/CMS1295609039169/empfehlungen_gbe.pdf, accessed 22 April 2011).

300 Herber C. *Beurteilungsansatz der Umsetzung der Gesundheitsreform 2005. Einrichtung der „Bundesgesundheitsagentur“ bzw. der neun „Landesgesundheitsfonds“. Gesundheitswissenschaften. Dokumente 14*. Linz, Institut für Gesellschafts- und Sozialpolitik, Johannes Kepler Universität Linz in Zusammenarbeit mit der Oberösterreichischen Gebietskrankenkasse, 2007, p. 144.

301 SV-Wissenschaft. *Resümee ExpertInnengespräch SV Wissenschaft, 20. Juni 2008 Gesundheitsförderung (in der SV): Projekte und was nun?* Sankt Pölten, SV-Wissenschaft, 2008 (http://www.sv-wissenschaft.at/mediaDB/MMDB134610_ResümeeExpertInnengesprächSVWissenschaft.pdf, accessed 19 March 2009), p. 5.

302 Spitzbart S, Plankenauer G. *Ansatzpunkte zum Auf- und Ausbau von Public Health in der österreichischen Sozialversicherung*. Vienna, Main Association of Austrian Social Security Institutions (HVB), 2009.

In summary, Austrian health policy is currently characterized by different players pursuing varied aims across a range of topic areas. A uniform and binding overall strategy in terms of the WHO strategy HEALTH21 is not yet being pursued. In order to respond to the calls at different levels as well as those listed in the agreement according to the 15a Vereinbarung and the Government Programme for 2008–2013, the development of Austrian health targets should be initiated. An Austrian public health strategy in line with the HEALTH21 strategy should also be defined. Section 4.7 contains recommendations on the initial steps towards the development of health targets at national level. The *Austrian report on strategies for social protection and social integration 2008–2010*,³⁰³ published by the then BMSK (now the BMASK) – which also contains data on health-related issues – could be interpreted as a first step towards cooperation spanning different ministries and sectors.

Regional level

At regional level, since only one person per region was usually interviewed, anonymity could not be guaranteed by use of a code and interview partners agreed to open citation of their names. Other sources were treated in the usual way. For a detailed listing of the information given in Table 4.2 and Table 4.3 and for a description of the process, readers can refer to Annex 6 (a–e).

Health targets are already used as part of the PHAC by most regions. Table 4.2 shows whether health targets have been developed and, if this is the case, when this took place. The current status in the cycle assessment of demand–development–implementation–evaluation is also given. As shown, the process of health target formulation has already taken place in five of the nine regions. Upper Austria took on the preliminary role in 2000 when it started defining the first health targets; in 2002 the regions of Lower Austria and Tyrol followed suit. Salzburg defined health targets in 2004 and Styria in 2007. Tyrol has already passed through the entire PHAC once and is at present undertaking the implementation phase for the second time. The regions of Lower Austria, Salzburg, Upper Austria and Styria are in the implementation phase for the first time and Upper Austria and Lower Austria have in parallel initiated the second target development process. Burgenland and Carinthia are in the target formulation phase and drafts already exist in both of these regions. Political decisions were planned to be made before the end of 2009. In each of these regions, the publication of a regional health report was the impetus for beginning the process.

303 BMSK. *Austrian report on strategies for social protection and social inclusion 2008–2010*. Vienna, Federal Ministry of Social Affairs and Consumer Protection, 2008 (http://www.bmsk.gv.at/cms/site/attachments/4/4/0/CH0121/CMS1222677019004/strategiebericht2008_engl_neu.pdf, accessed 22 April 2011).

Table 4.2 Status quo of health targets in the regions

Region	Health targets defined		Status quo (phase of PHAC)
	Yes/No	Since (year)	
Burgenland	Yes (draft)	Planned for 2009	First target process: target development
Carinthia	Yes (draft)	Planned for 2009	First target process: target development
Lower Austria	Yes	2002 (targets defined) 2004 (resolution of the regional government ^a) Planned for 2009	First target process: implementation Second target process: target development
Upper Austria	Yes	2000 (targets defined) 2006 (targets amended) Planned for 2010	First target process: implementation and evaluation Second target process: target development
Salzburg	Yes	2004 (targets defined)	First target process: implementation
Styria	Yes	2007 (targets defined)	First target process: implementation
Tyrol	Yes ^b	2002 (targets defined) 2007 (targets defined)	First target process: completed Second target process: implementation
Vorarlberg	No	–	–
Vienna	No	–	–

Sources: Authors' own compilation, based on expert interviews; Office of the regional government of Salzburg (2008, p. 81);³⁰⁴ Office of the regional government of Tyrol (2008, pp. 91–95).³⁰⁵

Notes: ^a 2004: Resolution of the regional government on the regional development concept, containing goals and objectives; 2006: Resolution of the regional government on the targets of objective 3 (see Annex 6e); ^b Tyrol has no explicitly formulated health targets but measures have been integrated into the health reports which implicitly are seen as health targets.

As Table 4.3 shows, the region of Lower Austria has – corresponding to the types of targets (for definitions, see Annex 6) – the highest number of defined targets, which also reflect 15 WHO targets. Three regions each have defined goals, objectives and targets. Lower Austria has in principle (as is the case in Upper Austria and Salzburg) defined 10 goals, but has also defined 12 additional goals, specifically for objective 3. Upper Austria has defined a SMART³⁰⁶ target for each of the defined goals. In Salzburg, targets were defined for each of the 10 goals, of which only 2 were formulated SMARTly. Styria and Tyrol settled on three goals. Neither of these regions used a SMART target formulation in public documents; with the exception of one target in Tyrol that indirectly meets the SMART criteria. In general the target areas of the HEALTH21 concept are incorporated in the target formulation of the regions and the number of WHO topics that have been incorporated into the regional targets ranges from 5 to 15.

³⁰⁴ Amt der Salzburger Landesregierung. *Salzburger Gesundheitsbericht 2007. Berichtszeitraum 1997–2006*. Salzburg, OEBIG Forschungs- und Planungsgesellschaft mbH, im Auftrag des Amtes der Salzburger Landesregierung, Abteilung 9 – Gesundheitswesen und Landesanstalten, 2008.

³⁰⁵ Amt der Tiroler Landesregierung. *Tiroler Gesundheitsbericht 2007*. Innsbruck, OEBIG Forschungs- und Planungsgesellschaft mbH, im Auftrag der Tiroler Landesregierung, 2008.

³⁰⁶ The acronym SMART stands for Specific, Measurable, Achievable, Relevant and Time-phased.

Table 4.3 Overview of the regional health targets according to target type and HEALTH21 orientation, May 2009

Region	Types of targets			HEALTH21 targets
	Goals	Objectives	SMART targets	
Lower Austria	22	13	22	15
Upper Austria	10	–	10	5
Salzburg	10	8	2	6
Styria	3	12	–	8
Tyrol	3	14	1	9

If explicit time dimensions are included in the target definition, these can include reference periods of up to 20 years, as described in Table 4.5. The published concepts of the Lower Austria, Upper Austria and Styria regions include specific and suggested measures for each target. The health report of the Tyrol region contains certain measures in parts. Financial and/or human resources required for implementation are not mentioned in any of the official target concepts. Four of the five mentioned regions list indicators; only Styria does not, although it plans to do so in future. Upper Austria has supplemented the largest proportion of health targets (as a share of total targets) with specific indicators (for example, proportion of non-smokers) and target values (for example, increase by 15%).

Table 4.5 Criteria incorporated into the target formulation of the regions' target definition(s), May 2009

Region	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No
Lower Austria	2000–2020	Yes	No	22 x Yes 11 x No 2 x Partially
Upper Austria	2000–2010	Yes	No	7 x Yes 1 x No 2 x Partially
Salzburg	2 x 2010 8 x No	No	No	2x Yes 4x No 4x Partially
Styria	No	Yes	No	No
Tyrol	No	6 x Yes 6 x No	No	2x Yes 8x No 2x Partially

Table 4.6 lists the priority topics that have been integrated into the existing health target programmes and shows how many targets were defined for a specific topic in each region. It is important to be aware of the fact that the illustration is not exhaustive as only *primary* listed topics were considered. Also, topic areas covered in the measures were not taken into account (for further details, refer to Annex 6).

Table 4.6 Number of health targets per topic in each region, May 2009

Topics	Lower Austria	Upper Austria	Salzburg	Styria	Tyrol	TOTAL
Adiposity					1	1
Musculoskeletal system	2					2
Education	1				1	2
- Capacity-building						
- Further development of the supply of education						
Diabetes mellitus	1	1	1			3
Long-term care	1					1
Health promotion (HP)	5	3	2	5		15
- Occupational HP						
- HP in Schools						
- Healthy cities, communities						
- Health-promoting lifestyle						
Health system	10			1	2	13
- Structure						
- Cooperations						
- Health care						
- Data collection						
Prevention	3	1	1	1	2	8
- Preventive health check-up						
- Mother-child examinations						
- Vaccinations						
Cardiovascular system	2	1	1			4
Cancer	2		1			3
Psychosocial health	1	1	1	1		4
Socially disadvantaged					1	1
Addiction	7	2	1	2	3	15
- Alcohol						
- Tobacco						
- Drugs						
Healthy environment					1	1
Accident prevention			1	1		2
Dental health	1	1	1	1	1	5

Addiction and Health promotion are the topics represented most often in the targets defined by the regions, with 15 mentions each. The topic Health system was also referred to many times; of the 13 mentions, however, 10 appear in the Lower Austria programme. The topics for which targets have been defined in all five regions are Addiction, Prevention and Dental health. Aspects of Health promotion have been agreed in Tyrol, but not in the form of a primary target formulation. The increased consideration of socially disadvantaged groups is, in principle, an integral part of all programmes, although only Tyrol has defined

a target for this topic. In Lower Austria the focus is clearly on the topic Health system, while in Styria the main focus is on Health promotion.

The impetus for the process of formulating health targets in the regions always came from the health department of the regional government; procedures used, however, were varied. The following descriptions show the status as at February 2009.

The first draft of health targets in **Burgenland** was developed by the regional health directorate (*Landessanitätsdirektion*) in cooperation with the regional sickness fund, based on the two health reports produced by GÖG/ÖBIG in 2002 and 2007. This draft was intended to be sent to different health system stakeholders in February 2009, with an invitation to a meeting to discuss and, if necessary, amend the draft. A formal decision from the Platform for Health Reporting was the aim, as well as increased publicity via a press conference and on the home page of the web sites of the region and other stakeholders. Evaluation of targets on an annual basis is planned, with results being reported to the Platform for Health Reporting.³⁰⁷

The health authority in **Carinthia** commissioned the University of Klagenfurt to develop targets. The duration of the project was initially limited to one and a half years but, because of political circumstances, the time frame was extended. A project group comprising representatives of the health and other sectors was set up and a steering group was formed to provide feedback. At the beginning of the target development process an attempt was made to reach a common understanding of public health, HFA policies and health impact assessment. A comprehensive study describing the situation in Austria and Germany as well as covering programmes going beyond the disease-orientated approach were undertaken and a publication is planned. Based on the results of the study, health targets were developed jointly with the university, which provided scientific advice and supervision. The resulting draft was put up for discussion in spring 2009, with the aim of obtaining clearance from the regional parliament.³⁰⁸ Carinthia, therefore, has provided the most detailed description of the methods applied in the process of developing regional health targets. Information on this methodology can be found in Annex 7.

Health targets for **Lower Austria** were developed in 2002 by the health authority and were cleared by the regional government in 2006. The Health and Social Fund of Lower Austria (*Niederösterreichischer Gesundheits und Sozialfonds*, NÖGUS) was then entrusted with further coordination responsibilities. Working groups were then set up to prepare detailed information on each of the 10 targets selected and results were presented to the regional government.

307 Krischka, expert interview on 5 February 2009.

308 Offermanns, expert interview on 10 February 2009.

The working groups were then disbanded, with the exception of the working group for occupational health promotion that was converted into a permanent platform for this topic. The periodic evaluation of the health targets was being discussed at the time of the interviews.³⁰⁹

Based on the first health report of **Upper Austria** in 2000, the regional sickness fund established a working group that defined 10 health targets for the region. At the end of 2002 the IGP was established for the further coordination required in the context of health reporting activities and health targets. The Health Conference of Upper Austria was founded as an advisory board in 2003. It is composed of about 50 participants. Working groups for nearly all health targets were set up and made responsible for defining measures. After about a year, results were presented and implementation began. The first evaluation in 2005 showed that targets were only being partially achieved. This was partly due to an unrealistic time frame according to which changes were made. For the 2010 health targets, defined by representatives of the Health Conference, a timescale of two years (December 2008 to December 2010) was envisaged. The IGP compiled working papers on 21 targets (mostly adopting WHO's HEALTH21 targets) complemented by epidemiological data. Potential and existing strategies in Upper Austria were also included in these documents. Results were presented to the Health Conference in December 2008, with feedback requested by February 2009. Targets as well as criteria for evaluation and a rough strategy should be presented at the Health Conference in December 2010. A further plan of action was being developed at the time at which the interviews took place.³¹⁰

In **Salzburg** the regional health directorate (*Landessanitätsdirektion*) was made responsible for developing targets. The organizational project management for the implementation of these targets was assigned to the AVOS, which delivers progress reports to the regional governments twice a year. The medical responsibility remained with the medical project managers, and project teams and a steering group were set up.³¹¹

In **Styria**, the health fund (*Gesundheitsfonds*) commissioned the University of Applied Sciences, FH Joanneum to develop targets within a period of six months. The university applied the following methodology:

- description of the demand, based on health reports and the epidemiological literature (mostly literature referring to the population of Styria);
- collection and documentation of existing health promotion measures;

³⁰⁹ Rupp, expert interview on 17 February 2009.

³¹⁰ Peböck, expert interview on 13 February 2009.

³¹¹ König, expert interview on 6 February 2009.

- assessment of the target areas using these criteria: public health relevance of the topic, efficacy of the interventions, target-group orientation, cost–benefit ratio, acceptance and use of resources;
- development of recommendations for measures based on a literature review (structured according to the levels: region, setting and individual);
- definition of actors and policy areas;
- definition of quality indicators for the implementation of the measures;
- development of a method for evaluating and monitoring the implementation, based on the Swiss model of outcome classification and on a review of international sets of indicators for public health surveillance/health reporting.

An expert board composed of health system stakeholders contributed to the development work, along with a steering group. As a result of the process, a final report on the scientific foundations of the health targets was compiled. Targets were presented to the public at regional conferences and the Health Conference 2007 of Styria. A resolution of the Platform for Health Reporting exists, in which the health fund commissions the implementation of the health targets, emphasizing physical exercise and nutrition. For this purpose a guideline will be prepared and published and will include specific measures related to behaviour and condition-orientated prevention, as well as indicators. Styria vitalis has been entrusted with implementation.³¹²

Tyrol has not defined independent health targets but regards the integrated suggestions for measures presented in the two health reports produced by GÖG/ÖBIG in 2002 and 2007 as its health targets. Measures were defined by the regional health directorate, finalized by an internal working group and agreed with the policy-makers. Implementation takes place according to the priorities defined by health politics. Evaluation will be undertaken by means of the health reports that are published every five years.³¹³

Local and institutional level

Because a detailed description of existing health targets at local level would go beyond the scope of this study, it is not included in the report.

312 Amegah, Grasser, Krenn, expert interview on 27 January 2009; Reis-Klingspiegl, expert interview on 12 February 2009; Peinhaupt, expert interview on 3 February 2009; Grasser, personal communication on 14 August 2009; Peinhaupt, Personal communication on 2 September 2009.

313 Katzgraber, expert interview on 10 February 2009.

4.5 Critical success factors when using health targets – the Austrian experience

This section describes the critical success factors for the use of health targets, based on the statements made by experts during interviews, as well as on their experience.

The factors described in the subsections that follow are a result of the qualitative content analysis of the interviews undertaken with a field manual. The ranking of factors reflects the number of statements made by interview partners with reference to each category (in descending order). Definitions for an understanding of the terms used precede each of the subsections. The content of the interviews is summarized using the categories presented in section 4.2 and is substantiated by representative text passages from the interviews.

Resources

“A resource is a means to act or to initiate a procedure. A resource can be a material or an immaterial good.”³¹⁴

The factor *resources* was referred to in each of the 13 interviews. In total, 86 statements of experts could be assigned to this factor, making it the indicator with the largest number of citations. Financial, time and human resources were bundled together in a cluster, including a total of 38 statements from 12 interviews. Human resources are, in this context, only to be interpreted in a quantitative way. The qualitative dimension of human resources is taken into account within the subcategory *public health expertise*, which was assigned the same number of statements (24 in 11 interviews) as the third subcategory *structural resources* (24 in 8 interviews).

(a) Financial, time and human resources

Experts reported problems related to resource availability arising as early as within the target development phase.³¹⁵ The main reasons for problems are restricted budgets,³¹⁶ understaffing and time lags.³¹⁷ With regard to time resources, internal bottlenecks were listed, as well as periods for target formulation being too short. Political time schedules, which depend on legislative terms or sessions, are perceived as obstacles, especially if the success of health target implementation is expected to become apparent within the same period. However, even if target implementation were to be independent

314 Von Troschke B, Haas B. *Vertriebscoaching. Von der Führungskraft zum Coach*. Wiesbaden, Gabler Verlag, 2009, p. 165.

315 H 2–3, F 4, C 3, E 3–4.

316 H 2–3, E 3–4.

317 H 2–3.

of legislative terms, experts felt that time lags would occur as a result of political changes in staff and long-term political coordination processes.

The process of target definition, in the political context, should thus be based on the following understanding: “(...) the time which is needed in case it takes a little longer, has still to be seen as an intervention, it is not wasted (...) and if this is not understood, (...), we will not achieve that which we need to”.³¹⁸ Adequate amounts of financial, time and human resources are essential for the process of target formulation in general, as well as for follow-up processes related to implementation and evaluation. One expert³¹⁹ suggests the idea of creating an adequate financing mechanism, analogous to that of the FGÖ, to guarantee a stable funding base for national health targets.³²⁰

In the implementation phase the issue of resources and of funding is considered as “the central question”.³²¹ “On the one hand good planning is definitely necessary and on the other hand the required resources need to be made available for implementation at the different levels.”³²² Interview partners state that, in practice, restricted budgets can result in an implicit prioritization of targets or even in targets not being pursued at all. It was also felt that a smaller number of targets had a higher chance of being implemented. It was recommended to use financial resources to create incentive mechanisms for stakeholders, with the aim of promoting implementation. The financial basis should receive political support, experts do not, however, always judge that political support is always forthcoming in practice. The experts point out that, while funding remains scarce for the fields of prevention and health promotion, money still flows into medical fields that are not supported by a strong body of scientific evidence or that lack proven sustainability. Additional funds must therefore be obtained from other sources, such as the FGÖ and the EU. Experts emphasize the level of funding needed to establish new structures, such as a public health institute, as a barrier to progress.

Patience appears to be an indispensable attribute in any implementation process, particularly at national level. As long as a process is under way this should be interpreted as progress, even if only a “policy of small steps”³²³ is feasible. A course of action orientated towards legislative terms should be avoided where possible.³²⁴

318 E 4.

319 K 3.

320 H 2–3, M 2–3, F 4, A 2, C 3, E 3–4, G 3, K 3.

321 J 2.

322 L 2.

323 E 4.

324 C 3, B 2–3, E 3–4, J 2, D 2, K 2–3, L 2, A 2.

(b) Structural

In connection with the second phase of the PHAC – policy formulation – the complexity and fragmentation of the Austrian health system are seen as a challenge. With regard to the development of targets, it was seen as a success factor if a clear definition of responsibilities and structures were already in place. The sub-working group for public health (*Unter-Arbeitsgruppe Public Health*) of the Federal Health Commission (*Bundesgesundheitskommission*) is believed to be an important structural resource for the proposed development of national health targets (see the agreement according to the *15a Vereinbarung* and Government Programme for 2008–2013). Experts reported that, in the course of target development, restructuring was taking place within various institutions. This may have been related to the health target process itself, with reallocation of human resources. The process was also influenced by restructuring mechanisms being undertaken for other reasons, and having an impact in the form of both a strengthening of structures (increase in human resources) as well as a weakening of structures (reduction of responsibilities).³²⁵

Conflicts of interest were also seen as a potential problem if structural resources depended directly on one stakeholder. The following example is related to the social insurance stakeholder and its potential conflicts of interest:

What we would need in addition, supplementary to social insurance – which has to play a very important role as the health insurer of our population – is to have an independent institute, to assist social insurance with EBM and other techniques, which, in the best case, is not subject to directives or external influences. Well, I would really hope for an independent institute which acts as an advisory agent for the Federal Government, the regions and social insurance. Social insurance will, by no stretch of the imagination, manage to get rid of the image that it also pursues its own economic interests besides acting in the best interests of the people. Well, social insurance will not be able to free itself of this problem of credibility by itself.³²⁶

Experts referred to the use of existing local and regional structures, initiatives or projects as being a crucial success factor for implementation because “it does not work, if one tries to somehow steer it centrally; Austria is too heterogeneous – it can only work on the regional level”.³²⁷ It was seen as an advantage if responsibilities were already clearly defined and both human and financial resources were guaranteed.

³²⁵ M 2–3, F 4, A 2, L 2.

³²⁶ A 3.

³²⁷ K 3.

Intersectoral implementation requires acceptance of the integration of a broad group of stakeholders. It was judged as beneficial if the individual strategies and plans of these stakeholders were directed towards the health targets. It was also believed to be important to “not try something on a small-scale basis (...) and that was it, but to immediately assess where I can start at this point, with which existing structures, so that I can immediately reach a greater breadth”.³²⁸ The use of regional and decentralized resources is mainly referred to in relation to this point. Interventions at this level can achieve a more focused orientation towards target groups and be more widely accepted. The need for new structures must be convincingly argued because “at the moment at which new structures are created, they [the decision-makers] are concerned that a lot of money will be needed”.^{329, 330}

(c) Public health expertise

Two interview partners reported on the benefits resulting from the integration of public health expertise into the needs assessment phase of the PHAC, explicitly mentioning the benefits of involvement of public health experts in health reporting.³³¹

Interview partners believe that the lack of public health knowledge among decision-makers and health system actors currently presents a barrier to efforts to define health targets that may not be perceived as necessary. Statements were also made to the effect that understanding of public health and its importance is increasing in the health system, independently of the health target process. Several regions have involved public health experts in this process and these experts should take on the task of “creating a common basis”.³³² This means that “all stakeholders who are involved have a certain professional know-how; that they understand what public health is; what it means if something like that should be implemented and then really carried out. But this is of course already a sizeable postulation”³³³ but appears to be relevant for further progress. The integration of expert knowledge into the health target process is also deemed necessary for agreeing target content.³³⁴

The importance of capacity-building in public health, as well as a concentration of public health knowledge – possibly in the form of a public health institute as a coordinating and contact point – should not be forgotten during target

328 J 2.

329 K 2.

330 C 3, B 2–3, J 2, K 2–3, L 2.

331 H 2, F 3.

332 F 4.

333 E 4.

334 H 2, M 2, F 3–4, A 2, I 2, E 3–4, G 2, L 2.

implementation. Statements made in this context included: It is important “(...) that knowledge is brought to the communities. ‘What is health?’, etc., has to be brought into the policy areas (...) Knowledge development and parallel to it implementation”.³³⁵ One should “(...) certainly also invest into capacity-building. We need more people who understand what it is about, from all levels”.³³⁶ One aim, therefore, is to broaden the public health knowledge of political players at all levels from Federal Government to communities; another is to achieve a degree of empowerment in the population, relating to health topics.³³⁷

With regard to public health expertise and capacity-building, experts voiced specific expectations relating to social insurance. They referred to the collaboration of social insurance in the development of health targets and the implementation of a public health strategy. Statements also reflect a certain amount of scepticism in relation to the present activities of social insurance.

“I don’t see enough know-how [within the social insurance] to really take on [more] responsibility, and I would therefore not like social insurance being given too much responsibility in the health care sector.”³³⁸

“Based on my judgement, social insurance to a certain extent has a large number of non-experts, who get involved with a topic based on a crash course or personal enthusiasm, but then cannot reason some things through in a good way.”³³⁹

“Those who wish to seriously be involved in the discussion should be equipped with public health expertise. This means additional training; ensuring that as many people as possible, who should deal with the topic, have the knowledge. This is very important in order to participate properly in the discussion.”³⁴⁰

Stakeholder involvement

A stakeholder is defined as a person, group of people or organization:

- “who/which is actively involved in the project or influenced by the project’s progression or outcome”;
- “who/which can, should the need arise, influence the project’s progression or outcome”.³⁴¹

335 F 4.

336 K 3.

337 F 4, B 2–3, C 3, E 3, K 2–3.

338 F 4.

339 A 3.

340 E 4.

341 Angermeier G. *Projektmanagement-Lexikon. 1. Ausgabe.* München, Projekt Magazin, 2005, p. 422.

In relation to health targets, these stakeholders include policy-makers, practitioners and researchers. The following list of stakeholders does not claim to be exhaustive:

- representatives of all policy areas which can exert an influence on the social determinants of health;
- representatives operating on different levels of administration relating to reimbursement in the form of public means (Federal Government, regions, cities, communities, and social insurance);
- service providers;
- service recipients;
- research experts;
- the interested public.

The term project, in this context, is not limited to the process of target development but refers to the entire PHAC.

The critical success factor category *stakeholder involvement* in the health target process has the subcategories *networking and partnerships* and *participation*. These terms are defined and distinguished from each other as described here.

- Networking is defined as “a linking of different professions (units) with all their specific abilities to a, for all participants, beneficial network”.³⁴² The term partnership is defined as: “(...) a target-orientated relationship between two independent enterprises pursuing joint targets and bilateral benefits, who are aware of their high mutual dependence”.³⁴³ In both aspects, cooperation is based on a long-term strategic activity.
- Nutbeam defines participation, in the context health promotion, as follows: “People have to be at the centre of health promotion action and decision-making processes for them to be effective”.³⁴⁴ For the purposes of this section though, participation is understood as being the selective and short-term involvement of stakeholders.

Another category that was defined is *transparency*. It is based on the following understanding: “transparency does thereby naturally not mean that everybody must know everything and may know everything. Transparency does, however, mean clarity about confidentiality, protection of trust and information obligations and information flows. This also applies to the documentation of the entire process”.³⁴⁵ In the context of the current analysis, it is understood as the transparency of the entire health target process – planning, definition,

342 Niemeier P. *Internet, Vernetzung und die Sozialarbeit!* Munich, GRIN Verlag, 2009, p. 7.

343 Heinrich A. *Globale Einflussfaktoren auf das Unternehmensverhalten. Die Corporate Governance des russischen Erdöl- und Erdgassektors.* Berlin-Hamburg-Münster, LIT Verlag, 2004, p. 81.

344 Nutbeam D. Health promotion glossary. *Health Promotion International*, 1998, 13(4):349–364, p. 351.

345 Freigang W. Hilfeplanung. In: Michel-Schwartz B, ed. *Methodenbuch soziale Arbeit: Basiswissen für die Praxis.* Wiesbaden, VS-Verlag, 2007:101–118, p. 110.

implementation and evaluation – and its outcome, as well as the motivation of all stakeholders to enter the PHAC. The motivation, which is defined as a “willingness to act”³⁴⁶ describes, in the current context, a willingness to use health targets.

Stakeholder involvement is the category with the second largest number of expert statements (70 in total). As with the *resources* factor, it was referred to in all interviews. For the experts, long-term collaboration appears to be the most important aspect, receiving a total of 40 statements across 12 interviews. In contrast, the selective involvement of stakeholders was assigned only 9 statements across 6 interviews. The subcategory *transparency* received 21 statements made in 8 interviews.

(a) Networking and partnerships

Because experts made the highest number of statements (mentioned in 11 out of 13 interviews) with reference to stakeholder involvement, in terms of a long-term collaboration in the policy formulation phase, this is seen as the most essential factor when defining health targets.

Based on expert opinion, health targets must be developed in close cooperation with politicians, in order to be achievable. On this level a broadly defined involvement of stakeholders in the development of health targets is recommended, relating to the WHO HiAP strategy. The following statement was also made in this context: “Of course close cooperation with politics is important; however, it is not always easy”.³⁴⁷ However difficult it may be, collaboration between all stakeholders is vital to succeed.

By involving all relevant policy areas, state institutions and decentralized institutions – namely, representatives of all those holding an interest in improved health – experts expect chances for the implementation of and the identification with health targets to be good. “If one has established trust, if it is clear what all of it actually means, what one is doing, then it works.”³⁴⁸ The establishment of trust is an essential requirement for the development of health targets and is primarily achieved through the entering and cultivating of productive partnerships. Experts have certain expectations of social insurance: “If social insurance can participate actively in the process then the same applies to social insurance as to all others. One needs to grant oneself some time for the development of health targets and to engage in the process in as positive a way as possible.”³⁴⁹

³⁴⁶ Brockhaus Encyclopedia. *Der Brockhaus. In einem Band. 9. Auflage.* Leipzig, Biobigraphisches Institut & F.A. Brockhaus AG, 2002, p. 617.

³⁴⁷ F 3.

³⁴⁸ F 3.

³⁴⁹ E 4.

It is best to try to exclude political competitiveness and fears of any kind from the process. For experts, the building of trust in collaborations means creating a culture in which it is accepted that each participant is an expert in his or her field. Those responsible for the process should have very good negotiating skills as well as expert public health knowledge and understanding of the structures, motivations and working techniques of all those involved.

Because many regions have already developed health targets, experts felt it essential to involve regional representatives in developing national targets and to consider existing health targets. The term *framework targets for health*, which is used in the agreement according to the *15a Vereinbarung*, appears to suggest such a course of action.³⁵⁰

“There is this decision on implementation which was taken by the regional government and this would actually also mean that intersectoral activities take place. Based on my personal perception, this has not gone much further than the health department. (...) Experience made in practice is: even if departments have the same political orientation, it is naive to believe that collaboration is automatically easy.³⁵¹ It is evident that intersectoral implementation presents many obstacles but it is still believed to be an essential requirement.” In answer to the question of what should be done to bring all stakeholders on board, experts stressed the importance of the “creation of awareness, good cooperation and networking, as well as good, coordinated project management and the political will [for cross-sectoral cooperation]”.³⁵² In addition, it was argued that stakeholders should be able to relate to topics and interventions and that there should be a perceivable benefit for them.³⁵³

(b) Participation

With reference to the development of health targets, the involvement of stakeholders in the form of selective participation was quoted as a factor less often by experts than long-term collaboration networks or partnerships. It was felt that anybody interested in a particular topic should, however, at least have the opportunity to put forward their own perspective.³⁵⁴

(c) Transparency

Transparency is created in the phase of formulating health targets by “(...) as broad as possible involvement of individuals – meaning organizations, stakeholders in the process – so that it becomes transparent for all those

350 H 3, M 2, F 3, I 2, C 3, E 3–4, J 2, D 2, L 2, K 3, G 3.

351 G 3.

352 L 2.

353 G 2–3, K 2, J 2, L 2, B 2–3.

354 H 3, F 3, E 3–4, G 3, M 2, A 2.

participating what happens in which time period, where they can participate, who takes decisions, where can one get information and that individuals reach the same level of knowledge”.³⁵⁵ Thus, transparency is created by the actual involvement of stakeholders and through clear definition of processes and outcomes to ensure a good basis for collaboration. If work packages delegated to stakeholders are not clearly defined at the outset, unachievable targets can ensue and quality may be compromised.

Interviewed experts recommend that the motivation to develop health targets must be transparent for all those involved in the process: “I believe that it begins with the question ‘What was the motivation?’ (...) My personal conviction is that politicians do not know what they should do. Politicians would like to achieve certain things, such as being liked, spending money well and winning the elections again. At certain times they believe that selected topics are well suited for this (...)”.³⁵⁶ This statement shows the conflict between the party-political and the topic-political motivation and the motivation of public health experts to develop health targets. As already mentioned in section 4.5, politically motivated planning within legislative periods is not beneficial for long-term activities. Politicians should be expected to declare their motivation for the development of health targets right at the beginning of the process, as well as stating what should happen within the final report and what should be achieved by when. Experts referred to different types of motivators and gave several examples, as detailed here.

- Health targets instead of disease targets:

“Naturally it would be ideal if (...) health targets and not disease targets were developed.”³⁵⁷

Statements like this one suggest that the main motivation behind health targets should be the striving for an optimum level of health. Experts recommended orientation towards the HEALTH21 targets (see Annex 3), even if evaluation of these is seen as being problematic.

- Evidence-based, research-based and innovative power of health targets:

“I do believe that research findings should be viewed, so that one tries to incorporate these accordingly; that one does not limit oneself by the status quo and that one tries to be innovative and include things that are evidence based, to (...) give a new impetus to the system.”³⁵⁸

- Reorienting health services:

355 E 4.

356 E 3.

357 M 2.

358 F 4.

“I believe that there is currently really too little money to offer the services we are offering at present in the long run. Some experts say that we will crash by the end of 2010 and that this will result in services being cut. Faced with this scenario, the players simply have the opinion that we cannot afford new structures like health promotion and prevention but that we will have to change existing structures.”³⁵⁹

Statements such as this make clear the impact of the restricted availability of resources on the development of health targets and especially on their implementation – a fact which again should be made transparent in the process.³⁶⁰

With regard to the creation of transparency through media involvement during the implementation phase, the following experience was reported: “If (...) marketing is via radio and television we experience this as a very immediate method, meaning that the attention of the people is very effectively attracted and, as a consequence, participation also increases immediately”.³⁶¹ The same expert also reported on competition existing in the media environment and described it as being a hindrance.³⁶² A uniform transfer of information and broad marketing for health targets could not be reported everywhere: “There are platform decisions (...), but I always have the feeling that they are hardly communicated. Based on my perception it is still a circle of insiders. I would (...) say everywhere, ‘Folks, health targets exist (...)’ But I do not get the impression (...) that many people are really aware of this.”³⁶³ Experts consider it important that the particular population that will ultimately be affected by the health targets should be able to understand the proposed targets and the plans for their implementation.

Consideration of the PHAC

The PHAC is described in section 4.3. Statements of the experts were assigned to the consideration of the PHAC success factor category first if they referred to a **SMART** target definition.³⁶⁴ Second, statements were assigned to this category if they referred to the problem definition, which forms the starting point of target formulation, or if they alluded to the implementation or evaluation of health targets. This therefore represents a consideration of all aspects of the PHAC (assessment, policy formulation, assurance and evaluation). Given that the PHAC is understood as a learning spiral, this category also includes

³⁵⁹ G 1.

³⁶⁰ M 2, I 2, E 3–4, F 3–4, C 3, J 2, G 3.

³⁶¹ B 2.

³⁶² Ibid.

³⁶³ G 3

³⁶⁴ Voland S. *Projektmanagement als Hilfsmittel des Zielkostenmanagements (Target costing)*. Munich, GRIN Verlag, 2008, p. 5.

statements on the use of experience or lessons learned, which are defined as “the sum of findings and insights”.³⁶⁵

The success factor *Consideration of the PHAC* occupies third place among all categories, with a total of 43 statements across 11 interviews.

“We have to equip these targets with measures, with responsibility for measures, with adequate resources, which means financial as well as human resources and then also achieving and evaluating the targets regularly.”³⁶⁶ Experts recommend taking the PHAC into account in the target formulation phase by defining measures, responsibilities and resources for the implementation and the evaluation phase. In order to define needs-orientated and measurable targets, experts believe health reports to be a primary step in the problem definition phase. They therefore recommend that the structure and content of health reports should be coordinated with the direction and the motivation of health targets. One expert³⁶⁷ argues that it is feasible to define targets separately for the normative, strategic and operational levels.³⁶⁸

Experts also consider it sensible to incorporate the experience of other regions and countries, as well as the experience acquired in connection with previous processes when planning the course of action required for a continuous improvement process.³⁶⁹

The foundation of a coordinating office with corresponding project management skills as well as clearly defined responsibilities should already be considered in the target formulation phase.³⁷⁰

Experts saw evaluation as an important aspect, but also perceived obstacles in this context, such as the reluctance of politicians to present outcomes of evaluation or to define indicators. The following core statements reflect reported experience and opinions.

This is where acceptance of prevention fails again and again. Results are actually known at a very late stage because it is not possible to provide the evidence of success for a very, very long time. Even though everybody theoretically knows that it yields something, it is impossible to convey this to the extent that it is reflected, for instance, in the government programme (...) Therefore, little

³⁶⁵ Der Brockhaus. *Der Brockhaus. In einem Band. 9. Auflage.* Leipzig, Biobiographisches Institut & F.A. Brockhaus AG, 2002, p. 617, p. 249.

³⁶⁶ M 3.

³⁶⁷ F 4.

³⁶⁸ H 2–3, M 2–3, F 3–4, I 2, C 3, B 2, G 2, K 2, L 2, D 2.

³⁶⁹ M 2, L 2, H 2, C 3.

³⁷⁰ A 2, D 2, B 2–3.

money is currently spent on health promotion and prevention because nobody can quantify their success.³⁷¹

I believe that in times of crisis the health of each individual will naturally still be the thing most important to him or her, but we will have difficulties finding means in the economy and in the policy area, because it is necessary – especially with regard to prevention and health promotion – to think of the long term ... For example, if we think about chronic diseases, such as diabetes or cardiovascular diseases, we really have to intervene in these instances during infancy and have to aim to create an awareness of health at that point in time, in order to not have even more people suffering from diabetes 30 years from now. Politics, as well as the economy, are only on rare occasion capable of following trends and thinking ahead in such long and sustainable intervals; barely anybody manages to do this. These are our great challenges; namely funding, and the fact that the degree of suffering one is confronted with is rarely so high that financing happens automatically. One always has to put an incredible amount of effort into convincing.³⁷²

What we would need is the understanding that no results of evaluations should be demanded from health promotion and prevention that ‘normal medicine’ does not provide either. We also do not, for instance, know the outcome of an orthopaedic specialist working in a private practice. Suddenly, a return of investment of 1:3 is demanded, and that everything amortizes and becomes more cost-efficient. This means finally distancing oneself from this nonsense in public discussion.³⁷³

In order to define and evaluate targets and to make achievements in health promotion and prevention clear, experts suggested building “a cohort for health reporting,³⁷⁴ by means of which achievements could be made transparent.³⁷⁵

Leadership and political commitment

Commitment expresses “an obligation to act”.³⁷⁶ In the current context, political commitment is defined as the compulsory political integration of targets. The following are characteristics of leadership: “Firstly leaders do not simply lead by instruction but by conviction, motivation and delegation of responsibility. They identify challenges and achieve approval of their vision. Secondly leaders

371 B 2.

372 K 2.

373 A 2.

374 G 3.

375 A 2, B 2–3, K 2, G 3, H 2, I 2, D 2.

376 Ammon S. *Commitment, Leistungsmotivation, Kontrollüberzeugung und erlebter Tätigkeitspielraum von Beschäftigten in Unternehmen und Behörden im Vergleich*. Berlin-Hamburg-Münster, LIT Verlag, 2006, p. 4.

do not solely develop individual accomplishment, but create a comprehensive involvement of their entire team”.³⁷⁷ Both criteria were clustered in one category.

A total of 39 statements that could be assigned to this category of success factors were found across 12 interviews.

With regard to the target development process, experts were convinced that with the assumption of the leadership role it is important to understand that a top-down process alone has little chance of implementation. “Exactly because of this, different players have to be involved; to be sure that as broad a basis as possible is created for it. If it contains something which people believe, understand and also want ... And this also means that it is not possible to say afterwards that it will not be included because it does not look good.”³⁷⁸ Leadership should strive to achieve consensus and support, accepting the expert opinion of stakeholders, and to work towards gaining the broadest possible approval of all those involved.

As far as political commitment is concerned, experts believe it essential that a clear strategy with precise allocation of resources is agreed, both across political parties and legislative terms, ideally by law: “Politics has to be supportive and define the strategies, provide certain resources, so that the implementation of targets can work”.³⁷⁹ Experience in this context was reported in the following way: “In addition the member of the regional government responsible for health (...) has achieved withdrawing it from party politics and regional health targets were approved of in a meeting of the regional government. Thereby the targets became official targets”.³⁸⁰ To achieve such a commitment, political will³⁸¹ was stated as a requirement. Experts report that they already sense the positive impact of the integration of the intention to develop framework targets in the agreement according to the *15a Vereinbarung*.³⁸²

In connection with political will and commitment, which are reflected in the allocation of resources, experts address the whole issue of social insurance: “The social insurance funds do not have any money and are badly in deficit. Well, one actually cannot burden them with prevention, if one does not grant them certain means to do this or does not change the legislation base”.³⁸³ This means: “Also for social insurance a clear legal appointment is needed and a clear authorization capacity, that money can be spent and incentives created

377 Zellweger H. *Leadership by Soft Skills. Checklisten für den Führungsalltag*. Wiesbaden, Gabler Verlag, 2004, p. 9.

378 E 4.

379 H 3.

380 A 2.

381 L 2.

382 E 3–4, H 3, I 2, M 3, F 4, A 2, B 3, G 2–3, D 2, K 3, L 2.

383 B 1.

(...). What we would need is a clear commitment, clear legislation and a clear allocation of budgets as well as instructions on what these should be used for.”³⁸⁴

Experts voiced clear expectations of social insurance. On the one hand, it is expected that social insurance speaks with one voice and assumes a clear position: social insurance funds should “not develop individual concepts! Because at the moment a slight trend can be observed that every social insurance fund believes that it has to contribute something individually to a development. And this is, at least from my point of view, cumbersome.”³⁸⁵ One should have a very clear idea of what one would like to achieve in this field, as well as in the field of health promotion. I consider it important that social insurance does this as a whole”.³⁸⁶ On the other hand, there is hope that social insurance can – as a key stakeholder – counter the current tendency to plan in legislative periods: “Social insurance should put its back into the process! Social insurance of all stakeholders is a body that is not bound to legislation periods and could therefore also, when it comes to health targets, promote the idea of not thinking, i.e. planning in legislation periods”.³⁸⁷

The installation of a professional structure by means of project management is felt to be a success factor in the implementation of health targets. A concerted course of action should be taken. Political leadership could, according to expert recommendation, be supported by a neutral coordination and networking unit. Throughout the entire process, including the implementation phase, politicians should understand their role as *achiever*³⁸⁸ and not only as *facilitator*.³⁸⁹ Implementation is perceived to be largely dependent on the support of and the decisions made by politicians and the extent of this support is dependent on the nature of the topic.

Several interview partners expressed support for the generation of resources being based on the existence of integrated health targets. They often perceive politicians as being too weak to achieve noticeable accomplishments in the process of implementation. One expert made the following statement: “In theory I believe that targets can be found, but in practice we can see in Bavaria and Austria that we do not get very far, even with regard to the easy topic of ‘smoking’ because politicians are simply too weak and because we are lacking an expert discussion, which is taken seriously by the public. It is difficult. Many health targets are related to lifestyle, and who enjoys taking it on with the population? Here I locate certain political weaknesses.”^{390,391}

384 A 3.

385 E 4.

386 C 4.

387 E 4.

388 G 2.

389 Ibid.

390 A 2.

391 K 2, B 2, C 3, A 2, G 2–3, D 2, L 2, E 4.

4.6 Summary and discussion

Summary of results

This chapter aimed to identify and present critical success factors for the practical use of health targets. First a short theoretical introduction on health targets was given. After an overview of the status quo of the use of health targets in Austria, which was based on 15 expert interviews, critical success factors for the implementation of a health target development process were generated. These were subsequently listed and then summarized. They define the most relevant fields of action. Section 4.7 contains recommendations for fields of action and initial steps towards formulating health targets.

Critical success factors

- Allocate resources:
 - o ensure sufficient financial, human and time resources;
 - o make use of existing structural resources and, if necessary, establish new structures;
 - o integrate and build public health expertise.
- Ensure broad involvement of stakeholders:
 - o establish long-term relationships for collaboration in terms of networking and partnerships;
 - o facilitate selective involvement of a broad range of interested parties in terms of participation;
 - o create transparency with regard to processes, outcomes and motivation for all stakeholders.
- Consider all phases of the PHAC right from the beginning.
- Assume leadership for the entire process and obtain broad political commitment.

Description of the success factors

• **Resource allocation**

Without the necessary financial, human and time resources, successful implementation of a health target process seems highly unlikely. Experts mentioned the success factor *resources* most often in their statements, emphasizing its significance. Adequate resources must be assured in every phase of the PHAC. Ideally, resources for the development of the strategy and measures, and the implementation and evaluation, should already be planned for in the target development phase. Building on existing regional structures is another critical factor facilitating the implementation of sustainable interventions. Health targets can also be used to establish new, innovative institutions, such

as public health institutes, although this obviously has important funding implications. All phases of the PHAC require a profound knowledge of public health. The development and implementation of health targets should also be used to extend public health expertise in terms of capacity-building.

- **Broad involvement of stakeholders**

In addition to the question of resources, experts attribute a very high level of importance to the broad involvement of stakeholders. To ensure multidisciplinary working and cooperation between sectors, both when developing and implementing the health targets, wide participation and involvement are essential, as is long-term collaboration in policy, research and practice through networking and the establishment of partnerships. Transparency for the stakeholders is also essential and is to a certain extent created by involving them in the process itself. There will inevitably be challenges and difficulties resulting from unavoidable conflicts of interest, but these must be overcome. Experts stated that this process can be supported by the creation of a sound knowledge base in public health, as well as by the clarification of joint aims and motivation in developing health targets. A general orientation towards the HEALTH21 targets should be the goal.

- **PHAC**

Health targets should be understood as part of a perpetual cycle in which the phases of the PHAC are constantly repeated. Because the PHAC is understood as a learning spiral, experience from other countries should also be considered. When the PHAC has been completed once, the process and outcomes should be evaluated. These should be considered when going through the stages of the PHAC again.

- **Leadership and commitment**

Leadership is usually taken on by a political representative. Party-political and personal interests – such as prospects for re-election and thinking in legislative periods – should be avoided and a focus on the actual public health aim of a healthier population encouraged. The motivation for developing health targets should be made transparent beforehand. Decisions made and the general political will are decisive factors for the success or failure of the process and, therefore, obtaining broad political commitment in the form of a resolution of the entire Federal Government should be the aim.

These findings are in line with those described in the Austrian literature.³⁹²

Discussion

The strengths and weaknesses of the approach applied in this chapter are discussed in more detail in the following subsections.

No systematic literature review was performed. Literature was identified using the so-called “snowball” or “berry-picking” method. The literature search focused entirely on information relating to theoretical concepts on health targets, as well as on information describing the current situation regarding health targets in Austria. There are very few sources documenting the development of existing health targets. Because no systematic literature review on the factors relevant for the successful development of health targets was undertaken, results and recommendations are based exclusively on expert interviews.

As far as these are concerned, it was helpful that at least one individual could be identified as interview partner for each region. On the other hand, interview partners for both the BMG and the IHS were not available, so their perspectives could not be considered. It is not possible to judge the impact this had on the findings. Five individuals from Styria were interviewed in contrast to only one person from each of the remaining regions. The actual interview process also varied. One interview with three participants was undertaken as a group interview, while the others were conducted individually. Interviews were largely conducted by telephone, with the exception of three personal interviews. Each of these aspects can be assessed critically in terms of their potential impact on the findings, although, as the outcomes were very similar, it is assumed that the approach used was acceptable. With regard to the success factors identified by the experts, the statements made were consistent and complemented each other. It was also helpful that in the five regions which had health targets in place or were in the process of developing them, interview partners were individuals who were directly involved in the process.

Discussion during the interviews was free and open. A transcript of the specific interview was sent to the respective expert to ensure that what he or she said

392 Soffried J. *Die Entwicklung nationaler Gesundheitsziele in Kanada und Schweden. Empirische Untersuchung der Motivationen nationale Gesundheitsziele zu entwickeln sowie der Erfolgsfaktoren der Zielfindungsprozesse in Kanada und Schweden.* [Master's-Arbeit, Master of Public Health]. Graz, Medizinische Universität Graz, Universitätslehrgang Public Health, 2006;

Mair A, Peböck M, Soffried J. *10 “To-Do’s”. Mögliche Vorgehensweise zur Entwicklung von nationalen bzw. länderspezifischen Gesundheitszielen in Österreich. Behandlungsökonomie OÖGKK.* Linz, Institut für Gesundheitsplanung, 2007;

Mair A. *Institutionale und prozessuale Handlungsfelder zur Erreichung der definierten Gesundheitsziele in Oberösterreich. Theoretische Konzepte und Ergebnisse von Interviews mit zentralen AkteurInnen* [Master's-Arbeit, Master of Public Health]. Graz, Medizinische Universität Graz, Universitätslehrgang Public Health, 2007;

Spitzbart CM. *Kriterien zur Entwicklung von Gesundheitszielen auf regionaler Ebene am Beispiel des Bundeslandes Oberösterreich.* [Diplomarbeit, Magistra (FH) für wirtschaftswissenschaftliche Berufe]. Graz, FH Joanneum, Fachhochschul-Studiengang Gesundheitsmanagement im Tourismus, 2007.

had been adequately documented. The organization of the interviews as well as cooperation with the interview partners were carried out smoothly.

The collection of information by conducting interviews using a field manual was judged appropriate and functional. As already mentioned, interview partners had the opportunity to amend the exact wording of the description of the process followed in their own regions, to ensure accuracy. The possibility of presenting a biased or incomplete description of the processes should be acknowledged, but the same problem would have arisen if published reports alone had been used.

Against the background of diverse political systems and structures and the limited resources available to the authors of this chapter, the conduct of interviews with exclusively Austrian experts was judged to be appropriate for developing recommendations for the development of health targets for Austria. The findings complement the existing literature and there is no known comparable survey. The results are similar to those in other Austrian publications,³⁹³ which also take account of international perspectives.

4.7 Recommendations for developing health targets in Austria

The development of health targets is an important step in the political and societal process of giving good health a higher priority. Research on determinants of health has shown that the main factors influencing health lie beyond the health care system or the individual.

The concept of HiAP, which was presented in the course of the Finnish EU presidency in 2006, takes this matter into account and describes the necessity for cooperation between different policy areas, with the joint aim of promoting the health of the population. The *whole of government* approach offers a tool with which to implement the HiAP concept. The existence of a clear vision for health – along with a sound health policy including health targets – represent the main prerequisites for the success of this approach.

393 Soffried J. *Die Entwicklung nationaler Gesundheitsziele in Kanada und Schweden. Empirische Untersuchung der Motivationen nationale Gesundheitsziele zu entwickeln sowie der Erfolgsfaktoren der Zielfindungsprozesse in Kanada und Schweden*. [Master's-Arbeit, Master of Public Health]. Graz, Medizinische Universität Graz, Universitätslehrgang Public Health, 2006;

Mair A, Peböck M, Soffried J. *10 „To-Do's“. Mögliche Vorgehensweise zur Entwicklung von nationalen bzw. länderspezifischen Gesundheitszielen in Österreich. Behandlungsökonomie OÖGKK*. Linz, Institut für Gesundheitsplanung, 2007;

Mair A. *Institutionale und prozessuale Handlungsfelder zur Erreichung der definierten Gesundheitsziele in Oberösterreich. Theoretische Konzepte und Ergebnisse von Interviews mit zentralen AkteurInnen* [Master's-Arbeit, Master of Public Health]. Graz, Medizinische Universität Graz, Universitätslehrgang Public Health, 2007;

Spitzbart CM. *Kriterien zur Entwicklung von Gesundheitszielen auf regionaler Ebene am Beispiel des Bundeslandes Oberösterreich*. [Diplomarbeit, Magistra (FH) für wirtschaftswissenschaftliche Berufe]. Graz, FH Joanneum, Fachhochschul-Studiengang Gesundheitsmanagement im Tourismus, 2007.

Based on the fields of action defined in section 4.6, the two subsections that follow present recommendations on aspects that are particularly relevant for the process of developing national health targets in Austria. The recommendations focus on the target development process and not on the implementation of measures or the evaluation of health targets.

General recommendations

(a) Ensuring sufficient resources

As far as a timescale is concerned, a time period of about two to three years (for example, 2010 to 2012) is recommended for the definition of national health targets. The target formulation process should be started as soon as possible; first, to ensure a comprehensive and concerted process and second, to allow consideration of the targets in the next agreement according to the *15a Vereinbarung* that is likely to come into force in 2014. The intention should therefore be to finalize national framework targets before the negotiations for the new formulation of this agreement begin.

For the complex process of defining national health targets, a project office should be established, equipped with experience in the management of complex projects and with public health skills. The individuals in charge of the management of the process should be focused on this task alone. To avoid conflicts of interest, they should not be members of the working groups set up to develop health targets. The existing structure of the Federal Health Agency could act as a commissioning agent and a project steering committee could be nominated from among the members of the Federal Health Commission.

The development of national health targets necessitates the allocation of an appropriate budget. This must definitely include funding for human resources and also for the structural and operational requirements of the office. Funding must be available for the organization of regular work meetings, for communication between the involved partners – including reimbursement for members of the working groups – and for the acquisition of expertise. Resources must be provided for creating a functional database and for the competent interpretation of data, as well as for the participation of stakeholders in consultations and public discussions. There will also be a need for publicity in the form of web sites, a media campaign and press conferences, to ensure that the process is as transparent as possible.

(b) Integration of public health expertise

Public health expertise must be integrated into the process of formulating health targets. The office must have public health expertise and public health experts must

be represented among the range of experts nominated for the working groups. Another option would be to set up a committee to access external scientific support for the process, with international experience and expertise where necessary. Public health expertise is required at all stages of the PHAC and should, therefore, be in place right from the beginning of the target setting process.

(c) Broad involvement of stakeholders

While the office would oversee the management of the target development process, including the consultation process and identification of measures to ensure transparency, the working groups would develop the contents of the Austrian framework targets for health. The working groups reflect the long-standing partnership of policy representatives, representatives of public institutions and experts from research and practice. On a political level, the involvement of all parties represented in the national parliament should be encouraged, with the intention of achieving a cross-party consensus and thus promoting the sustainability of targets.

Both the regions and the Federal Government must be represented in the working groups. The relevant ministries, social insurance, the professional associations (Chambers), the trade unions, GÖG, Statistics Austria and many other institutions should also be represented. Experts from various areas of activity – public and private education and research institutions, NGOs, local representatives and patient representatives – as well as public health experts would complete the working groups.

To achieve the best possible stakeholder involvement, parties who are not represented in the long-term working group should have the option of contributing by means of selective consultations. It should be ensured that the public in general – that is, the entire population of Austria – has the opportunity to comment and discuss. Participation could be promoted and facilitated through web sites, public events, a concomitant media campaign and publications. Such initiatives could improve transparency for all those involved and interested.

(d) Assigning the leadership role and broad political commitment

The individual who takes on the role of internal motivator and external representative must be chosen very carefully. This chairperson would head the office and make sure that the process specifications are met. At the same time he or she should make sure that the process has a positive external image, as well as promoting active participation within the opportunities available. To fulfil this function, the person in question requires both a high level of acceptance among stakeholders, profound knowledge of the subject, sufficient time and strong motivation.

Inclusion of health targets in the agreement according to the *15a Vereinbarung* would be helpful to ensure a high level of political commitment. The content of the targets as well as their funding and the responsibilities they involve should be clearly defined.

Recommendations for social insurance

(a) Involvement as a long-term partner

Social insurance is a significant stakeholder in the Austrian health care system and needs, therefore, to be fully involved in the development of national framework targets for health on a long-term partnership basis. This means that social insurance should, as public body, be part of the working group entrusted with the development of the contents of the health targets (see subsection c *Broad involvement of stakeholders*, in the previous subsection).

(b) Human resource development and organizational development in the area of public health

To take a constructive role in the development of health targets, social insurance requires public health expertise. As part of the traditional curative health care structure, its experience in areas such as health promotion and prevention are at present underdeveloped, with public health expertise being found in only a few social insurance funds. The recent decision to follow a new path for the professional qualification of employees in the field of public health should be pursued as a human resource strategy for the whole of social insurance. Special attention should be placed not only on training experts for particular operational tasks but also on conveying public health knowledge to the decision-makers. Internal public health experts within social insurance could cooperate with decision-makers on specific projects and in working groups.

(c) Generation of financial resources

Adequate resources need to be available to build public health expertise by means of human resource and organizational development. Social insurance should have significantly more resources at its disposal for general public health agendas, such as data-based problem definition, assessment of demand, quality management, planning of services, health economic assessment of interventions and better information on insured individuals, as well as for the specific action areas of health promotion and prevention, to provide the services needed in the adequate quality. Such resources should ideally be ring fenced to limit any competition from the field of health care.

(d) Assuming leadership

In the process of developing national framework targets for health, social insurance must take a clear stance, supported by all insurance funds. A joint strategy must be defined and described in a social insurance position paper. If social insurance can assume the role of a recognized stakeholder in target setting, this could help to counteract the current practice of thinking and planning in legislative periods. Social insurance could – if it succeeds in assuming leadership in this process – establish itself as an active and beneficial force in health policy.

(e) Creating commitment

With strong political will, agreement could be reached on a real national commitment to health promotion and prevention within social insurance. Favourable general conditions for health promotion, prevention and public health (in the form of clearly formulated legal responsibilities and the creation of earmarked funding) can be achieved if these topics are placed at the top of the political agenda and social insurance could play a leading role in this process.

(f) Taking on a role in the entire PHAC

Social insurance should assume an active role, not only in the target development process, but also in the implementation of targets. Social insurance is also an important player in the phases of problem definition and evaluation, as well as in health reporting. It already holds a considerable amount of data and could in the future assume an even more important role as a provider of data for health reporting. This potential has been recognized in the past and is described in the *2005 Social health insurance health report*.³⁹⁴

³⁹⁴ HVB. *Gesundheitsbericht der sozialen Krankenversicherung 2005*. Vienna, Main Association of Austrian Social Security Institutions, 2005 (https://www.sozialversicherung.at/mediaDB/MMDB135573_Gesundheitsbericht%202005.pdf, accessed 21 April 2011).

Chapter 5

Addressing disadvantaged and special needs groups

5.1 Introduction

A society is judged by how it deals with its disadvantaged and special needs groups, to whom it has a moral and ethical responsibility. Apart from ethical matters, addressing inequalities can lead to economic growth and thus potentially to better health, as well as reduced costs of illness. The opposite can also occur, however, with economic growth resulting in greater inequalities and inequity. Developments in this area need to be monitored closely.

Health inequalities and health-related inequity are relevant in a variety of policy areas, including health (keyword *HiAP*). There are many determinants of health and their impact on the access to and utilization of services and, ultimately, on the health status of individuals and their health outcomes is complex. Education, living and working conditions, economic and social status, as well as family composition influence health to a considerable extent. These interrelationships make a broader approach to dealing with health inequalities and health inequity necessary, so that measures also involve stakeholders in any other relevant policy areas and do not take place in isolation, focused solely on the health care system.

This chapter identifies various disadvantaged groups, discusses their health status (subjective health status, morbidity, mortality) and health-related behaviour, looking into the underlying causes of ill health, as well as dealing with equity of access to services. Ideas relating to how to promote the health of disadvantaged groups are presented and special health services for these groups in need in Austria are listed. The chapter concludes by outlining the potential role of social insurance with respect to disadvantaged groups.

It is essential to view the understanding of *disadvantage* in relative rather than absolute terms. Even indicators such as income – which may seem measurable and obvious – have to be assessed and interpreted in relative terms. Definitions also need to be adaptable to changing surroundings and circumstances, but should at the same time remain comparable over time. The identification of disadvantaged groups can be extremely complicated as data may not exist and those involved may not come forward of their own volition. Further, they may not be organized in groups representing their interests. Some do not have a voice of their own and need others to speak for them. These include, for example, children, certain people with a mental illness, illegal immigrants and (in some cases) elderly people.

There are also barriers to care that may make it more difficult for individuals to obtain the services they need or prevent them from accessing services altogether. These may be financial, geographical, language-related, cultural or intellectual barriers, or they may spring from the health system itself, including lack of coverage, limited availability of services, restricted opening hours, waiting times, administrative problems, and lack of disabled access/support measures for people with special needs.

Members of vulnerable groups are often burdened in terms of their ability to cope with everyday activities and in some cases with actually surviving daily life, and this can limit them in their commitment to other areas of their life, such as their health. Individuals also have varying perceptions of health, suffering and pain. They may attribute a higher or lower value to it, or simply take it for granted. Differing perceptions of health and disease can also be based on cultural background, beliefs or value systems.

The development and implementation of measures for disadvantaged groups are further complicated by responsibility for these groups being unclear, especially at the decision-making level. There is often no specific contact person and the institutions or bodies concerned may not cooperate in a systematic or standardized way.

Research linking data on health status with sociodemographic and socioeconomic aspects is limited in Austria. There are one or two comprehensive reports, as well as a number of research papers. Data availability also strongly depends on the disadvantaged group in question. It is, for instance, better for marginal groups such as the homeless. Experts in the field are rare. More research is required on the health status and health-related behaviour of disadvantaged groups to promote early intervention, facilitate access to the services needed and target those most vulnerable and in greatest need.

Addressing disadvantaged and special needs groups crosses many sectors, involving aspects such as health, social welfare, integration, housing/living conditions, education, gender, environmental and labour market issues. Various stakeholders therefore need be involved and standardized mechanisms for coordination and communication are required.

In Austria it is difficult to link epidemiological data (mortality, incidence of disease) or data on the utilization of health services with socioeconomic data. Information on ethnicity in connection with the demand for or use of health and social services hardly exists or is not collected at all.

Little research is available on how the socioeconomic situation of Austrian citizens and other aspects of their lives influence their health status, life expectancy, morbidity and mortality, and vice versa. Proxies – such as affiliation to a certain social class, income, education, and profession – are sometimes used to describe socioeconomic status. More information on life expectancy, mortality, morbidity and health behaviour can be found in section 2.7 of this report.

5.2 Identification of disadvantaged groups

In their first report on social inequality and health, published in 2002, Pochobradsky and colleagues concluded that income has a significant impact on the health status of individuals, potentially influencing their morbidity and mortality. Aspects such as disability, gender, lifestyle, the provision of health services, employment, living conditions and other circumstances are also very important in this context.³⁹⁵

Various disadvantaged individuals and population groups were identified. Some overlap among these may exist. Individuals or population groups are those:

- at risk of or threatened by poverty;
- with a low level of income;
- with a low level of education;
- seeking work – being (long-term) unemployed;
- in atypical working arrangements;
- with no insurance coverage;
- with a migration background – especially undocumented/illegal immigrants and asylum seekers;

³⁹⁵ Pochobradsky E et al.. *Social inequality and health care*. Study commissioned by the then BMGF. Vienna, Federal Ministry of Health and Women, 2002.

- in need of special assistance or protection, such as certain groups of particularly vulnerable children or old people.

Other disadvantaged groups include the homeless, the disabled and sometimes certain other individuals, such as single parents or family carers.³⁹⁶ Differences in health status and health behaviour can also be related to gender or age.

Other members of the population at risk of poverty – and, consequently, also at higher risk of experiencing poor health – are larger families. Some of these individuals or groups may have a different cultural understanding and appreciation of health and illness.

Information on the dimensions and scope of each of the population groups listed above is provided in the next subsection; their health status and health behaviour are discussed in the subsections that follow thereafter.

Dimensions and scope of the disadvantaged population

This first subsection tries to capture the dimensions and scope of the population confronted with disadvantage and is structured according to the disadvantages listed at the beginning of section 5.2.

Poverty and low level of income

About 13% of the Austrian population (more than 1 million people) are at risk of poverty.³⁹⁷ The proportion of the population affected by poverty has increased in the past. Low income, poverty and social exclusion are multidimensional problems and are highly complex. At European level, social cohesion indicators have been developed to monitor these matters more effectively.³⁹⁸

Groups at the highest risk of poverty include pensioners in single households, unemployed people, individuals with a low level of formal education, households with many children, single parents and migrants.³⁹⁹

In all European countries the average income of migrant workers is lower than that of nationals. This is related to the fact that migrants tend to be overrepresented in sectors characterized by low wages, as well as in unskilled jobs.

396 A total of 80% of all people in need of long-term care are cared for by family members at home.

397 Statistik Austria. *Income, poverty and living conditions. Results of EU-SILC 2007*. Vienna, Statistics Austria, 2009.

398 For further information, see, for example: Council of Europe. Social Cohesion Development Strategy [web site]. Strasbourg, Council of Europe, 2004 (http://www.coe.int/t/dg3/socialpolicies/socialcohesiondev/default_en.asp, accessed 2 November 2009); or European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

399 ÖGPP. *2nd report on poverty and wealth for Austria*. Vienna, Austrian Society for Policy Consultation and Development, 2008.

Analysis of the EU-SILC data⁴⁰⁰ shows that households comprising migrants, individuals relying on social benefits as a main source of income, long-term unemployed people, or individuals with special needs of working age are at the highest risk of poverty.⁴⁰¹

Based on data presented in the Eurostat yearbook for 2009 (figures for 2006, age 18 and over), the unemployed showed the highest at-risk-of-poverty rate (41% in the EU25)⁴⁰² after social transfers, when classifying the population according to their activity status.⁴⁰³ A total of 16% of the retired population were stated to be at risk of poverty, compared to 8% of the employed population. Of the total population, 15% were stated as being at risk of poverty.⁴⁰⁴

At European level (EU25, 2006 figures), the household types at highest risk of poverty after social transfers, were single parents with dependants, adults older than 65 years living alone, single females, two adults with three or more dependants, children and adults younger than 64 years living alone.⁴⁰⁵

Low level of education

Between 1971 and 2008 the proportion of the population (aged 25–64 years) with only compulsory education in Austria decreased from 57.8% to 19.5%. The share of individuals with a university education has risen fivefold since 1971, from 2.1% to 10.2% of the population. The population group with an apprenticeship has remained more or less stable since 1991, comprising about one third of the population.⁴⁰⁶

The level of education of the Austrian population has increased considerably since the early 1980s – 84.1% of the population aged between 20 and 24 years went beyond compulsory education.⁴⁰⁷

400 European Union Statistics on Income and Living Conditions – a survey through which information on the living conditions of private households in the EU is collected (http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/eu_silc, accessed 2 May 2011). For more information, see the Statistics Austria web site (http://www.statistik.at/web_de/frageboegen/private_haushalte/eu_silc/index.html#index1, accessed 5 October 2009) and the European Union's Statistics Office (Eurostat) web site (http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/eu_silc, accessed 22 April 2011).

401 ÖGPP. *2nd report on poverty and wealth for Austria*. Vienna, Austrian Society for Policy Consultation and Development, 2008.

402 Risk-of-poverty rate is defined as the share of individuals with an equivalized disposable income that is below the at-risk-of-poverty threshold, set at 60% of the national median equivalized disposable income. This rate may be expressed before or after social transfers, with the difference measuring the hypothetical impact of national social transfers in reducing poverty risk. Retirement and survivor's pensions are counted as income before transfers and not as social transfers.

403 Self-assessed most frequent activity status.

404 For definitions and further information please refer to: European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010), Data for 2006 (1).

405 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010)

406 Statistik Austria. Bildungsstand der 25- bis 64-jährigen Wohnbevölkerung 1971 bis 2008 [web site]. Vienna, Statistics Austria, 2009 (http://www.statistik.at/web_de/statistiken/bildung_und_kultur/bildungsstand_der_bevoelkerung/020912.html, accessed 4 October 2009). Based on data from the population census and the Micro-census.

407 Statistik Austria. *Education in figures 2007/08. Key indicators and analyses*. Vienna, Statistics Austria, 2009.

The findings of the population census in 2001 show that individuals with a university (tertiary-level) education tend to cluster in urban areas, especially in the Austrian regional capitals.⁴⁰⁸ The proportion of the population with compulsory education only is highest in the south-eastern part of Styria, the south of Burgenland, the north-west of Lower Austria and the north of Upper Austria.⁴⁰⁹ Young individuals (aged 25–34 years) with compulsory education only are concentrated in urban areas, while their older counterparts tend to live in rural areas.⁴¹⁰

Migrants living in Austria are in many cases at risk of poverty. This is partly due to their low level of formal education, which is especially applicable to migrants from Turkey (74% with only compulsory education) or from countries of the former Yugoslavia (39% with only compulsory education). In contrast, migrants from EU25 countries have a high level of education⁴¹¹ and those from western European countries have a significantly higher level of education than Austrian nationals.⁴¹²

The report *Employment and working conditions of migrant workers*, published in 2007 by the European Foundation for the Improvement of Living and Working Conditions⁴¹³ suggested that factors hindering labour market opportunities for migrant workers in Austria include the existence of fewer opportunities for training, work-related mobility and self-development, as well as language barriers. The skills and qualifications of the migrant worker's home country are not always recognized in Austria.

Unemployment

Data on unemployment are subject to frequent change and depend to a considerable extent on the economic situation of a country. In January 2010, Austria registered 402 000 unemployed people (including 79 000 on training courses), amounting to an unemployment rate of 8.9%.⁴¹⁴ The proportion of long-term unemployed (one year or longer without employment) comprised 2.6% of the officially registered 323 000 unemployed.⁴¹⁵

408 Statistik Austria. *Data of the population census 2001*. Vienna, Statistics Austria, 2009 (http://www.statistik.at/web_de/static/hoechste_abgeschlossene_ausbildung_2001_pflichtschule_nach_5km_rasterzelle_027403.pdf, accessed 4 October 2009).

409 Ibid.

410 Statistik Austria. *Education in figures 2007/08. Key indicators and analyses*. Vienna, Statistics Austria, 2009.

411 ÖGPP. *2nd report on poverty and wealth for Austria*. Vienna, Austrian Society for Policy Consultation and Development, 2008.

412 Statistik Austria. *Education in figures 2007/08. Key indicators and analyses*. Vienna, Statistics Austria, 2009.

413 European Foundation for the Improvement of Living and Working Conditions. *Employment and working conditions of migrant workers*. Dublin, European Foundation for the Improvement of Living and Working Conditions, 2007 (<http://www.eurofound.europa.eu/docs/ewco/tn0701038s/tn0701038s.pdf>, accessed 10 February 2011).

414 According to the Austrian definition. Using the Eurostat calculations, the unemployment rate as of January 2010 is at 5.4%.

415 Public Employment Service Austria (*Arbeitsmarktservice*, AMS): www.ams.at, accessed 3 March 2010.

According to data from Eurostat 2006 (first quarter), migrant workers comprise about 10.3% of the total Austrian labour force. The rate of economic activity of non-nationals from EU25 (76.5%) was higher than the economic activity rate of nationals (72.7%), while the rate of non-EU25 citizens (64.8%) was lower.

The unemployment rate for nationals in 2009 was 4.6%, for non-nationals from EU25 it was 8.5% and for non-EU25 citizens it was 15.8%.

Atypical working arrangements

Atypical working arrangements are increasing, for example part-time work, holding more than one job, freelance work, personnel leasing or contract for services work. Public policy has reacted to this development partly by including different types of employment in the statutory social insurance scheme.^{416, 417}

The increase in atypical working arrangements is seen across many economic sectors but shows a higher concentration in sectors such as agriculture, trade, tourism and health services. Atypical working arrangements usually affect women more than men and are also more prevalent among individuals with lower qualifications. Another factor contributing to the deterioration of employment conditions can be economically unfavourable circumstances that lead some companies to either reduce their staff or to modify employment conditions in order to contain ancillary labour costs – for example, by changing employment contracts to contracts for services or freelance working arrangements, or by reducing the number of employees or the number of hours worked.

Compared to other European countries (EU27), the proportion of women in part-time employment is relatively high in Austria and is only exceeded by the Netherlands, Switzerland, Germany, Norway and the United Kingdom. The proportion of men working part time is still comparatively low, being highest in the Netherlands, Norway and Switzerland.⁴¹⁸ These circumstances are obviously very closely linked to family policy issues (maternity leave, child benefits, child care facilities and so on).

In Austria, migrant workers are more often employed in temporary contracts than nationals. This is related to the large number of migrant seasonal workers. Part-time work is generally more prevalent among women, especially among

416 Fink M, Riesenfelder A, Tálos E. *Final report. Atypical working conditions*. Vienna, Co-operation of L&R Sozialforschung/social research and the Institute of State- and Political Sciences of the University of Vienna, 2001.

417 ÖGPP. *2nd report on poverty and wealth for Austria*. Vienna, Austrian Society for Policy Consultation and Development, 2008.

418 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

migrant women.⁴¹⁹ Migrant workers also appear to have irregular hours or work overtime more often than nationals.

Lack of insurance coverage

About 98.8% of the Austrian population are covered by statutory social health insurance.⁴²⁰ Some of those who are not covered have chosen to take up voluntary social health insurance, while others have decided to opt out of the system (this is only possible for a small group of individuals). Further details on insurance coverage are provided in the subsection *Impact of disadvantage on health status*.

At the end of June 2003, up to 3.1% of the Austrian resident population over the age of 15 years was not covered by social health insurance.⁴²¹ Of these, 0.7% had taken out alternative private insurance (opting-out cases) and 2.4% were without any registered entitlement to services in the case of illness.⁴²² Data for children are not known.⁴²³ According to statistics from the HVB, this proportion has dropped since 2003 (to 1.2% or 100 000 individuals in 2008).⁴²⁴

Austria has a statutory social health insurance system that bases insurance coverage and insurance status on employment and other criteria. The employed population, as well as the self-employed – whose income exceeds a defined limit – are subject to compulsory social insurance. Pensioners, the unemployed (entitled to unemployment benefits), individuals receiving child benefit and war veterans are also included in the system. Dependants (children) and certain other individuals living in the same household are also included. The vast majority of individuals cannot choose their health insurance fund.

Based on the findings of the study by Fuchs and colleagues, which was commissioned in the course of the National Action Plan to Combat Poverty and Social Exclusion 2001–2003, measures to extend social insurance coverage were defined in 2004 and included ensuring basic coverage for foreigners in need of assistance (asylum seekers). Social health insurance coverage is extended to recipients of social welfare benefits as a consequence of the introduction of a

419 OECD data, cited in: European Foundation for the Improvement of Living and Working Conditions. *Employment and working conditions of migrant workers*. Dublin, European Foundation for the Improvement of Living and Working Conditions, 2007 (<http://www.eurofound.europa.eu/docs/ewco/tn0701038s/tn0701038s.pdf>, accessed 10 February 2011).

420 HVB. *Social insurance in figures*. Vienna, Main Association of Austrian Social Security Institutions, August 2009 (http://www.sozialversicherung.at/mediaDB/561595_Sozialversicherung_in_Zahlen_Ausgabe23_August_2009.pdf, accessed 3 June 2010).

421 Fuchs M et al. *Quantitative and qualitative assessment and analysis of individuals not covered by health insurance in Austria, Final report*. Vienna, Report commissioned by the Federal Ministry of Health and Women (BMGF), 2003.

422 Maximum values.

423 Fuchs M et al. *Quantitative and qualitative assessment and analysis of individuals not covered by health insurance in Austria, Final report*. Vienna, Report commissioned by the Federal Ministry of Health and Women (BMGF), 2003.

424 Fuchs M. Not insured persons in Austria: empiric findings and methods of resolution. *Soziale Sicherheit*, 2009:327–334.

general minimum collateral in September 2010.⁴²⁵ The legislative basis for this is the agreement according to the *15a Vereinbarung*.

A lack of insurance cover should in principle be met by the social welfare systems of the regions. Health services can be accessed if recipients meet defined criteria, such as three years of residence.⁴²⁶

Individuals without insurance are mainly the unemployed population (without entitlement to unemployed benefits),⁴²⁷ illegal/undocumented immigrants or refugees/asylum seekers. Lack of insurance also affects individuals working part time with a monthly income below a defined threshold (liable to insurance registration) who do not take out voluntary insurance, as well as women losing their insurance cover after divorce (previously dependants), children who lose their insurance cover as a dependant due to their age (usually over 27 years)⁴²⁸ or individuals who feel ashamed to claim social welfare benefits and thus forego their entitlement to social insurance coverage. Another visible trend changing the insurance landscape is the increase in atypical working arrangements (referred to in the previous subsection). Some of the individuals affected by this do not reach the income limit for statutory insurance but do not take out voluntary insurance because they cannot afford to pay the contributions.

Several individuals are not insured because of a lack of information – for example, not taking waiting periods into consideration, not being aware that they will lose their insurance coverage after divorce or at a certain age (students). Some people are without insurance because they experience severe difficulties when it comes to organizing their lives because of a personal crisis, drug abuse or mental illness.⁴²⁹

According to the Austrian Network against Poverty and Social Exclusion,⁴³⁰ all those lacking social health insurance cover have a low income. Two thirds of these are without insurance coverage for the first time, while one third have experienced this situation before.

Individuals without insurance cover tend to be men more often than women.⁴³¹

425 Ibid. See also: BMASK. Frequently asked questions [web site]. Vienna, Federal Ministry of Labour, Social Affairs and Consumer Protection, 2010 (<http://bmask2.cms.apa.at/cms/site/dokument.html?channel=CH0052&doc=CMS1218620091441>, accessed 15 February 2010).

426 Ibid.

427 According to Fuchs (2009; see footnote 401), this affected 212 000 registered unemployed individuals in 2008 and on average about 9.6% of the unemployed population. Some of these individuals may be entitled to insurance as a dependant.

428 This mostly affects students. Based on Fuchs (2009; see footnote 401), 0.4% of the respondents of a survey on students and social issues undertaken in 2006 stated that they were not covered by social health insurance.

429 Fuchs M. Not insured persons in Austria: empiric findings and methods of resolution. *Soziale Sicherheit*, 2009;327–334.

430 Armutskonferenz (2011). Netzwerk gegen Armut und soziale Ausgrenzung [web site]. Vienna, Armutskonferenz (<http://armutskonferenz.at/>, accessed 2 May 2011). See also: European Centre for Social Welfare Policy and Research (2011). European Centre for Social Welfare Policy and Research [web site]. Vienna, European Centre for Social Welfare Policy and Research (<http://www.euro.centre.org/>, accessed 2 May 2011).

431 Showing a strong representation of the men aged 15–29 years.

Non-nationals are overrepresented among the population without insurance cover, as already mentioned.⁴³²

Based on national reports, 109 000 migrant workers were employed full time in undeclared jobs in 2002, compared with 74 000 nationals in the same situation.⁴³³ Areas of work in which this is common include agriculture, tourism, catering, construction work, household services, health care, child care and cleaning.⁴³⁴

*Migration background*⁴³⁵

Migration is influenced by economic, political and social factors. Austria has one of the biggest non-national populations in the EU25. In the past there has been a considerable increase in the number of foreign citizens living in the country, largely due to more people from outside the EU25 countries coming to Austria. According to data from Eurostat 2006 (first quarter), the share of non-nationals from EU25 countries⁴³⁶ of the total population in Austria amounts to 2.8% and the share of non-EU25 citizens amounts to 7% (9.8% in total).

The largest group of individuals without Austrian citizenship living in Austria is from the countries of the former Yugoslavia (about 37%); Turkish citizens represent the second largest group (about 14%).⁴³⁷

Migrants are a population group particularly at risk of poverty. In total, 27% of all people at risk of poverty live in a household with a migrant background.⁴³⁸

About 3.1% of the Austrian population are individuals born in Austria who have parents with a migrant background.⁴³⁹

Asylum seekers, undocumented immigrants

An estimate made in an Austrian study suggested that in 2002 there were between about 80 000 and 100 000 people living in the country illegally.⁴⁴⁰

432 Fuchs M et al. *Quantitative and qualitative assessment and analysis of individuals not covered by health insurance in Austria, Final report*. Vienna, Report commissioned by the Federal Ministry of Health and Women (BMGF), 2003.

433 European Foundation for the Improvement of Living and Working Conditions. *Employment and working conditions of migrant workers*. Dublin, European Foundation for the Improvement of Living and Working Conditions, 2007 (<http://www.eurofound.europa.eu/docs/ewco/tn0701038s/tn0701038s.pdf>, accessed 10 February 2011).

434 ÖGPP. *2nd report on poverty and wealth for Austria*. Vienna, Austrian Society for Policy Consultation and Development, 2008.

435 For international definitions of terms (for example, migration, immigrant, asylum seeker, refugee), see: European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010), Chapter 3, pp. 163ff.

436 All Member States belonging to the EU before 1 January 2007 (all except Bulgaria and Romania).

437 Forschungs- und Beratungsstelle Arbeitswelt. *Undocumented worker transitions. Austria. Country report*. Work Package, 2 July 2007, p.3 (http://www.undocumentedmigrants.eu/londonmet/library/x81059_3.pdf, accessed 2 October 2009).

438 ÖGPP. *2nd report on poverty and wealth for Austria*. Vienna, Austrian Society for Policy Consultation and Development, 2008.

439 Statistik Austria. *Education in figures 2007/08. Key indicators and analyses*. Vienna, Statistics Austria, 2009.

440 Fuchs M et al. *Quantitative and qualitative assessment and analysis of individuals not covered by health insurance in Austria, Final report*. Vienna, Report commissioned by the Federal Ministry of Health and Women (BMGF), 2003.

Illegal immigration is difficult to measure but is an important issue. In 2006 the Austrian Alien Police reported 63 971 cases of undocumented migrant presence, as well as recording 17 100 cases of organized human smuggling.⁴⁴¹

In comparison with other European countries (EU27), Austria has one of the highest numbers of asylum applications and is only exceeded by Sweden, France, the United Kingdom, Greece and Germany. According to Eurostat data, the number of individual applications has dropped from a high of 39 355 in 2002 to 22 460 in 2005 and to 11 920 in 2007.⁴⁴²

The positive outcome of asylum applications varies considerably with respect to the country of origin of the asylum seeker. Applications from Russian nationals (for example, Chechens) are accepted far more often than those from individuals from India or Nigeria. No official data exist.⁴⁴³ According to Eurostat, 41.4% of asylum decisions (of the total number of decisions) constituted rejections in 2007 (37.9% in 2006).⁴⁴⁴

A considerable number of citizens from Turkey and the successor states of the former Yugoslavia have come to live in Austria. Many people of other nationalities (for example, nationals of Bangladesh, Bulgaria, China, India, Romania or various African countries) come to Austria in transit to other countries in western Europe.^{445,446}

Children and young people

In 2009 the proportion of children in Austria (aged 0–14 years) was 15.1%.⁴⁴⁷ About 250 000 children and young people in Austria are either at risk of or threatened by poverty.⁴⁴⁸

441 ÖGPP - Austrian Society for Policy Consultation and Development (*Österreichische Gesellschaft für Politikberatung und Politikentwicklung*) (2008). 2nd Report on Poverty and Wealth for Austria (2. *Armuts- und Reichumsbericht für Österreich*). Vienna, December 2008.

442 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

443 Forschungs- und Beratungsstelle Arbeitswelt. *Undocumented worker transitions. Austria. Country report*. Work Package, 2 July 2007, p.3 (http://www.undocumentedmigrants.eu/londonmet/library/x81059_3.pdf, accessed 2 October 2009).

444 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

445 European Foundation for the Improvement of Living and Working Conditions. *Employment and working conditions of migrant workers*. Dublin, European Foundation for the Improvement of Living and Working Conditions, 2007 (<http://www.eurofound.europa.eu/docs/ewco/tn0701038s/tn0701038s.pdf>, accessed 10 February 2011).

446 IOM, EMN Austria. *Illegal immigration in Austria. A survey of recent Austrian migration research*. Vienna, International Organization for Migration & European Migration Network, 2005 (http://www.emn.at/modules/typetool/pnincludes/uploads/FINAL_VERSION_ENG.pdf, accessed 2 September 2009).

447 Statistik Austria. *Yearbook of health statistics 2008*. Vienna, Statistics Austria, 2009 (http://www.statistik.at/dynamic/wcmsprod/idcplg?IdcService=GET_NATIVE_FILE&dID=59973&dDocName=042339, accessed 23 March 2010).

448 Statistik Austria. *Sociodemographic and socioeconomic determinants of health*. Vienna, Federal Ministry of Health, Family and Youth, 2008.

Risk factors for child poverty include having a migrant background, living in a family with one working parent only or in a household with more than two children and living in a city. Having two working parents appears to be a protective factor and single-parent families are more likely to be at risk of poverty. Other risk factors include parents who are unemployed or have a low level of education (inheriting level of education). Children in poor families also tend to live in small flats or poor-quality housing, which represents an additional burden.⁴⁴⁹

Children in families in which one or both parents are mentally or physically ill and which are subject to poor housing conditions or domestic violence are also in need of special attention or protection.

Elderly

As in all other European countries, the largest proportion of the Austrian population is aged 25–49 years (37.6% in 2007). The proportion of the population aged between 50 and 64 years was 17.6%, between 65 and 79 years was 12.4%, and 80 years and older was 4.5%.⁴⁵⁰

Based on national statistics for 2008, about one fifth of the Austrian population is 60 years or older and the proportion of the population aged over 75 years is increasing rapidly.⁴⁵¹ According to Statistics Austria's population prognosis in 2009, the proportion of individuals aged over 65 years will increase from 17.4% to around 28% by 2050.⁴⁵² The proportion of old people is highest in the regions of Burgenland, Carinthia, Styria and Lower Austria, and is lowest in the western regions of Austria.

Findings from the EU-SILC 2006 survey show that 28% of pensioners living in single households are at risk of poverty.

Gender aspects

Gender medicine shows that men and women may be affected differently by certain conditions, may be more or less prone to develop certain diseases and may display different patterns of behaviour when accessing and utilizing health services.

449 Network Children's Rights Austria (<http://www.kinderhabenrechte.at/index.php?id=84>, accessed 9 October 2009), based on: Till-Tentschert U, Vana I, eds. Growing up in poverty. Empirical findings on poverty of children and young people in Austria. Vienna, University of Vienna Institute of Sociology, 2009 (http://www.kinderrechte.gv.at/home/upload/50%20thema/in_armut_-soziologischesem._2008.pdf, accessed 14 September 2009).

450 European Communities. *Europe in figures. Eurostat yearbook 2009*. Luxembourg, Office for Official Publications of the European Communities, 2009 (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-09-001/EN/KS-CD-09-001-EN.PDF, accessed 3 April 2010).

451 Statistik Austria. *Demographic yearbook 2008*. Vienna, Statistics Austria, 2009 (http://www.statistik.at/dynamic/wcmsprod/idcplg?IdcService=GET_NATIVE_FILE&dID=58397&dDocName=042258, accessed 23 March 2010).

452 Statistik Austria. *Yearbook of health statistics 2008*. Vienna, Statistics Austria, 2009 (http://www.statistik.at/dynamic/wcmsprod/idcplg?IdcService=GET_NATIVE_FILE&dID=59973&dDocName=042339, accessed 23 March 2010).

About 51.4% of the Austrian population were women in 2008. Men are overrepresented in younger and middle age groups, while the proportion of women increases above the age of 50 years and becomes noticeably dominant in the age group over 90 years. The larger share of elderly women results partly from differences in life expectancy and is also a consequence of the Second World War.⁴⁵³

Impact of disadvantage on health status

The potential consequences of the disadvantages listed earlier on the health status and health behaviour of certain individuals or population groups are described in this subsection. There is an inevitable degree of overlap among the different groups because of the multidimensional nature of the risk factors of poor health.

There is a reverse causality with regard to employment. On the one hand, certain employment conditions, lack of employment or poverty can lead to the development of health problems, but, on the other hand, poor health can result in reduced professional development opportunities, loss of employment and ultimately poverty.

Equally, there is a strong relationship between level of education and income, with a higher level of education usually resulting in a higher level of income. As both factors have a significant effect on health, the impact of a low level of education combined with a low level of income can result in an even higher probability of and wider scope for health problems.

Poverty also influences living conditions. Those on a low income may have worse living conditions – less space, more noise, dampness, darkness, an unpopular location – which can have a significant impact on their health status.

Poverty, low level of income

Poverty and deprivation can affect individuals in a variety of different ways, including impacting on their living conditions, their social contacts or their consumption habits. Poverty can also result in a higher prevalence of certain health problems.

Mortality

Austrian research findings show a correlation between the socioeconomic status of a person and mortality from cancer. This is more marked for some types of cancer (lung cancer), while no significant relationship could be determined for others (for example, prostate cancer).

453 Statistik Austria. *Demographic yearbook 2008*. Vienna, Statistics Austria, 2009 (http://www.statistik.at/dynamic/wcmsprod/idcplg?IdcService=GET_NATIVE_FILE&dID=58397&dDocName=042258, accessed 23 March 2010).

Morbidity

Individuals threatened by poverty report a lower subjective health status and show signs of chronic illness more frequently than the general population (23% as compared to 17%). They also show a stronger tendency to experience certain health problems, such as obesity, depression or headaches. Smoking behaviour and the amount of physical exercise taken by individuals did not show a strong correlation with the level of income of the individuals questioned in the course of the Austrian health survey. Women at risk of poverty, however, displayed a higher risk of having diabetes or high blood pressure.⁴⁵⁴

Health status, health behaviour

According to the Income, Poverty and Living Conditions report by Statistics Austria, which analyses data from the EU-SILC 2007, about 10% of the population living below the poverty line do not feel well and 12% feel restricted by disability.

Statistics Austria's 2008 report on *Sociodemographic and socioeconomic determinants of health*, which is based on the national health survey, confirms this and reports that people with a lower level of income quote their health status as being "very good" or "good" less often than people with a higher level of income.

Low level of education

A low level of education influences the perceived health status of individuals and their morbidity, as well as their utilization of health care services.

Morbidity⁴⁵⁵

Findings from the Austrian health survey show that individuals with a lower level of education (compulsory education) report more cases of chronic disease and pain than those with a higher level of education.

Men with a lower level of education report suffering from arthrosis, arthritis and rheumatism, as well as back problems, more often than men with a higher level of education.

In women with cancer of the cervix, the proportion of those with compulsory education is considerably higher than the proportion of those with a university degree. With regard to breast cancer, however, the inverse is true.⁴⁵⁶ Diabetes is more prevalent among women with a lower level of education (three times higher risk), as is the probability of suffering from severe pain.

⁴⁵⁴ Statistik Austria. *Sociodemographic and socioeconomic determinants of health*. Vienna, Federal Ministry of Health, Family and Youth, 2008.

⁴⁵⁵ Ibid.

⁴⁵⁶ BMGF (2003), cited in Habl C. Social inequality and health. In: Dimmel N, Heitzmann K, Schenk M, eds. *Handbook poverty*. Innsbruck, Studienverlag, 2009:172 ff.

Individuals with a lower level of education experience allergies less often than those with a higher level of education.

Health status, health behaviour

According to Statistics Austria's health survey, individuals with a higher level of education judge their health status as being better than those with a lower level.⁴⁵⁷

The findings of EU-SILC 2007 confirm that individuals with a higher level of education tended to rate their subjective health status better than individuals with a lower level of education. More education increases DFLE.

Individuals with a higher level of education engage in risky behaviour (smoking, unhealthy diet, physical inactivity) less often. In general, smoking prevalence is increasing among women, especially among young women with a low level of education.⁴⁵⁸

Unemployment

Mortality and morbidity

For regions with a high proportion of unemployed women, a high incidence of cancer of the urinary and sexual organs was found, as well as an above-average level of mortality from cerebrovascular disease.⁴⁵⁹

A study conducted by the Medical University of Vienna has proven that long-term unemployment has psychological implications for health, with increased prevalence of depression, as well as influencing physical health. Stress levels and weight appear to increase during unemployment.⁴⁶⁰

Health status, health behaviour

The results of EU-SILC surveys confirm these findings. About three quarters of people looking for work for less than six months report their health status to be "very good" as compared to only 49% of the long-term unemployed. Results of Statistics Austria's health survey⁴⁶¹ also confirm these findings, showing that unemployment has a strong impact on subjective health status. Unemployed individuals report their subjective health status as being "very good" or "good" far less often than working individuals.

457 Statistik Austria. *Sociodemographic and socioeconomic determinants of health*. Vienna, Federal Ministry of Health, Family and Youth, 2008.

458 Ibid.

459 Habl C. Social inequality and health. In: Dimmel N, Heitzmann K, Schenk M, eds. *Handbook poverty*. Innsbruck, Studienverlag, 2009:172 ff.

460 Egger et al. (2006), cited in Habl C. Social inequality and health. In: Dimmel N, Heitzmann K, Schenk M, eds. *Handbook poverty*. Innsbruck, Studienverlag, 2009:172 ff.

461 Statistik Austria. *Sociodemographic and socioeconomic determinants of health*. Vienna, Federal Ministry of Health, Family and Youth, 2008.

The results of the 1999 Micro-census show that unemployed women do less to maintain their health than working women and place less importance on healthy nutrition, physical exercise and so on. Working and unemployed men did not show such a large difference.

The unemployed are more likely to experience chronic diseases and this applies particularly to anxiety and depression. Unemployed women are more likely to be obese and are also more likely to smoke.

Atypical working arrangements

Atypical working arrangements have a strong impact on the amount of pension insurance an insured person receives and may also be problematic with regard to health insurance, whereby individuals are either not registered for social insurance by their employers, work on an informal basis or have no insurance entitlement for whatever reason.

In the past, social insurance has aimed to extend insurance coverage to as many members of the Austrian population as possible. In the course of doing so, individuals with atypical working arrangements – freelance or part-time workers or the self-employed without a business licence – have to a large extent been included in the statutory social insurance scheme.

Changes in working arrangements, which may be accompanied by greater instability for the individual, have also led to households with one or even two earners suddenly finding themselves at risk of poverty. The phenomenon of the working poor⁴⁶² is increasing in Austria.

Lack of insurance coverage

Very little data exists on the health status and health behaviour of individuals without social insurance cover in Austria. According to a study by Fuchs and colleagues in 2003, differences in subjective health status reported by insured and non-insured individuals were not significant.⁴⁶³

A more recent publication, also by Fuchs, reports that in particular those individuals who do not have any entitlement to health services (based either on social health insurance or social welfare systems) are exposed to experiencing severe underconsumption of health services. These individuals may ignore health problems and only seek assistance when symptoms are severe. Based on expert opinion, uninsured individuals are more likely to suffer from a poorer

⁴⁶² Based on Statistics Austria, defined as individuals who – despite being gainfully employed – do not have sufficient household income.

⁴⁶³ Fuchs M et al. *Quantitative and qualitative assessment and analysis of individuals not covered by health insurance in Austria, Final report*. Vienna, Report commissioned by the Federal Ministry of Health and Women (BMGF), 2003.

health status, characterized by mental health problems, alcohol abuse or social deprivation.⁴⁶⁴

Migration background

Morbidity

Based on the work of Pochobradsky and colleagues,⁴⁶⁵ lack of language skills and lack of awareness of the Austrian health care system result in migrants accessing health services belatedly, which can lead to a higher prevalence of chronic conditions among this population group.

Significantly more women with a migrant background suffer from chronic diseases (diabetes, high blood pressure) and pain than women without such a background.

The proportion of individuals who feel affected by poor health conditions at their workplace is documented to be higher among migrants (37%) than among nationals (16%). The percentage of Austrian workers who felt especially affected by accidents and injury risks was 13% among Austrian workers but considerably higher (30%) among migrant workers.⁴⁶⁶

Health status, health behaviour

Findings from the Austrian health survey show a strong correlation between a lower subjective health status and a migrant background. Migrant women in particular report their health status to be “very good” or “good” less often than individuals with no such background.

Individuals from Turkey or countries of the former Yugoslavia were also shown to engage in a more risky lifestyle than Austrian citizens, resulting in them being obese more often, smoking more and showing less interest in physical activity.⁴⁶⁷

Asylum seekers, undocumented immigrants

Illegal immigrants cannot fight for or represent themselves. Several organizations support this population group and raise awareness of their problems and needs among decision-makers and the general public. Little accurate data are available, despite the efforts of NGOs and welfare institutions.⁴⁶⁸

464 Fuchs M. Not insured persons in Austria: empiric findings and methods of resolution. *Soziale Sicherheit*, 2009:327–334.

465 Pochobradsky E et al. *Social inequality and health care*. Study commissioned by the then BMGF. Vienna, Federal Ministry of Health and Women, 2002.

466 European Foundation for the Improvement of Living and Working Conditions. *Employment and working conditions of migrant workers*. Dublin, European Foundation for the Improvement of Living and Working Conditions, 2007 (<http://www.eurofound.europa.eu/docs/ewco/tn0701038s/tn0701038s.pdf>, accessed 10 February 2011).

467 Statistik Austria. *Sociodemographic and socioeconomic determinants of health*. Vienna, Federal Ministry of Health, Family and Youth, 2008.

468 IOM, EMN Austria. *Illegal immigration in Austria. A survey of recent Austrian migration research*. Vienna, International Organization for Migration & European Migration Network, 2005 (http://www.emn.at/modules/typetool/pnincludes/uploads/FINAL_VERSION_ENG.pdf, accessed 2 September 2009).

Generally speaking, there is no public social or health care support for undocumented migrants. They are not allowed to register with social insurance (health, accident or pension insurance), nor are they entitled to receive social welfare benefits.⁴⁶⁹

Social services as well as some subsidies are linked to legal residence status and length of residence. Illegal immigrants do have access to emergency health care because hospitals are legally obliged to admit and treat individuals in serious danger. Hospitals can reclaim resulting costs after discharge, although this is not always successful.

In general, illegal immigrants are required to pay privately for any health care services they need and many do not have the financial means to do so. Because they are afraid of being detected and deported they postpone care or only seek treatment in an emergency. Hospitals will usually treat undocumented migrants, even if the individual in question does not strictly require emergency care.⁴⁷⁰

Research findings suggest that socially disadvantaged people, especially asylum seekers, show a high level of stress.⁴⁷¹ Undocumented immigrants live in constant fear of being reported, detected and deported. Health problems can arise because of psychological strain, isolation, difficult living conditions, lack of stability, and separation from family members.

Children and young people

Mortality, morbidity

Among children aged 1–9 years, congenital malformations account for 25.6% of all deaths, followed by illnesses of the nervous system and cancer (both 16.3%) and accidents (about 14%).⁴⁷²

The most frequent cause of death among individuals between 10 and 19 years of age is injuries, accounting for 30.6% of all deaths. Other common causes are cancer (14.1%), suicide (9.4%), drug abuse and illnesses of the nervous system (both 8.2%).⁴⁷³

Among those dying as a result of traffic accidents, young people between the ages of 15 and 24 years are overrepresented (31.3%). This drops to 16.8% between the ages of 25 and 34 years.

469 IOM, EMN Austria. *Illegal immigration in Austria. A survey of recent Austrian migration research*. Vienna, International Organization for Migration & European Migration Network, 2005 (http://www.emn.at/modules/typetool/pnincludes/uploads/FINAL_VERSION_ENG.pdf, accessed 2 September 2009).

470 PICUM. *Access to health care for undocumented migrants in Europe*. Brussels, Platform for International Cooperation on Undocumented Migrants, 2007.

471 Dimmerl N, Heitzmann K, Schenk M, eds. *Handbook poverty in Austria*. Innsbruck, Studien Verlag, 2009.

472 Statistik Austria. *Yearbook of health statistics 2008*. Vienna, Statistics Austria, 2009 (http://www.statistik.at/dynamic/wcmsprod/idcplg?ldcService=GET_NATIVE_FILE&dID=59973&dDocName=042339, accessed 23 March 2010).

473 Ibid.

Health status, health behaviour

Children from low-income families have a lower health status than those from high-income families. Since access to health services is comparable for both groups, however, differences are largely related to the less healthy living conditions and habits of those from lower income families.⁴⁷⁴

In a study of preschool children,⁴⁷⁵ Staedler found that children from a socially disadvantaged background required three times as much dental treatment than children without such a background.

Among 12-year-olds, children in grammar schools (*Allgemein Höhere Bildende Schule*, AHS) had about half as many dental lesions as a similar group of children in *Hauptschulen* (schools providing only compulsory education). A large proportion of treatment costs were spent on a relatively small group of individuals, who usually had a lower level of education and did not visit the dentist on a regular basis.

A study investigating the dental status of six-year-old children showed that the dental health status of children with a migrant background was poorer than that of children without a migrant background. Poorer dental health is related to socioeconomic status, with prevalence of poor dental health being significantly higher among children of parents with a lower level of education.⁴⁷⁶

Results of the HBSC Survey 2005/2006⁴⁷⁷ confirm that the socioeconomic situation of a family influences both the health status and the health behaviour of a child. Children and adolescents from families that were more affluent appeared to be healthier than children and adolescents from lower income families. Those in the first group, however, showed a higher risk of being a victim of bullying or of drinking alcohol (getting drunk).

Another factor with an influence on the health and health behaviour of the target group is family composition. Children and adolescents from single-parent families had a lower probability of being healthy when compared to two-parent families. Adolescents from families with step-parents or siblings displayed a higher risk of getting drunk or smoking.

The school environment is also important for the health and health behaviour of the students. Children and adolescents who had a good relationship with

474 BMASK. *National report on strategies for social protection and social inclusion*. Vienna, Federal Ministry of Labour, Social Affairs and Consumer Protection, 2008. (http://www.bmask.gv.at/cms/site/attachments/8/5/4/CH0121/CMS1218101293137/strategy_report_2006%5B1%5D.pdf, accessed 25 October 2009).

475 Städler P. Die Situation der Mundgesundheit in Österreich. *Dental Tribune Austrian Edition*, 2007, 10:3.

476 GÖG. *Dental status 2006: 6-year-old children with and without a migrant background*. Commissioned by the then Federal Ministry of Health, Family and Youth. Vienna, Gesundheit Österreich, 2007.

477 Dür W, Griebler R. *The health of Austrian school students in their living conditions. Results of the WHO-HBSC Survey 2006*. Vienna, Federal Ministry of Health, Family and Youth (BMGF), 2007. For further information see the HBSC web site (<http://www.hbsc.org/>, accessed 10 February 2011). The HBSC Survey is undertaken among 11-, 13- and 15-year-old children in 41 countries of the WHO European Region and North America.

their fellow students and teachers had a higher probability of being healthy and showed a lower risk of being involved in bullying attacks, smoking or drinking.

Elderly

The elderly population and their problems do not always receive sufficient attention. It is difficult to identify the stakeholders and experts responsible for health issues related specifically to the elderly because they are often also responsible for a range of other matters.

Gerontology and geriatrics – which deal with the social, psychological and biological aspects of ageing – have recently received more attention because of the increasing focus on the ageing population. Problems of the elderly can include medical issues, the appropriate provision of health care services, social, economic and other factors.

Medical problems include, for example, restricted mobility, instability (risk of falls), lack of control over bodily functions, dependence on others for help, depression, pain, impaired intellect or memory, and impaired vision or hearing.

Central topic areas in connection with health care provision for the elderly include the availability of resources for long-term care (beds, health professionals, etc.), the management of co-morbidities and chronic illnesses, integration of care, coordination and collaboration between providers of inpatient and outpatient care and the use of multiple medications (potentially resulting in interactions), as well as general overmedicating. The over-, under- and misuse of medical services is also a crucial aspect which needs close attention.

Social problems of elderly people can include isolation, and lack of social integration, contacts and networks. These can lead to loneliness, social withdrawal and also to medical problems such as depression. Economic problems can involve difficulties with social security, housing, income and financial stability. Other possible problems in this area include insufficient information, lack of knowledge of technology, as well as health illiteracy. The older generation is often accustomed to accepting without question the instructions of authorities, such as doctors.

Because of the increase in life expectancy and demographic changes, the proportion of the population composed of older people will increase significantly in the future. Even now, innovative models, structures, financial resources and skilled labour for long-term care are lacking. If these issues are not tackled, severe shortages and problems are to be expected in the future.

Gender aspects

Life expectancy

In 2008 the life expectancy of men at birth was 77.6 years and of women it was 83.0 years. The gap in life expectancy between men and women has been decreasing over recent decades.⁴⁷⁸

Mortality

The male death rate from a heart attack is still double the female rate.⁴⁷⁹ The risk of dying from lung cancer has dropped for men since 1998 but has increased for women, although men still have a higher risk (2.5 times greater).

The risk of dying from cancer was 58.9% higher for males than for females in 2007. The main causes of death from cancer for men are from lung, prostate, colon, pancreas, stomach and liver cancers. The most common causes of death from cancer among women are from breast, lung, colon, lymphatic and hematopoietic tissue, pancreas, ovarian and stomach cancers.

Deaths from injuries or intoxication accounted for 5.5% of total deaths, with about two thirds of these affecting men.

Morbidity

Hospital discharges for women are more than a fifth higher than those for men. For the population group aged over 80 years, women account for between double and triple the number of discharges than men. These differences are predominantly based on the age structure of the population. In the group of women aged 25–34 years, women also display double the number of hospital discharges because of pregnancy and childbirth.⁴⁸⁰

Based on age-standardized rates, the risk of developing cancer in 2005 was 1.4 times higher for men than it was for women. Between 1996 and 2005 the incidence of new cancers increased by 11.1% in men while in women it dropped by 1.3% in the same period.

In 2007 the majority of AIDS patients were male (78.1%). More than half the casualties and three quarters of the fatalities from road traffic accidents were men. Especially high proportions were reported for drivers of lorries and motorbikes, possibly because more men than women use these types of transport. More than four fifths of occupational diseases affected men.

In the awarding of disability pensions, diseases of the musculoskeletal system ranked first among males, while mental illnesses were most common among females.

⁴⁷⁸ Statistik Austria. *Yearbook of health statistics 2008*. Vienna, Statistics Austria, 2009 (http://www.statistik.at/dynamic/wcmsprod/idcplg?IdcService=GET_NATIVE_FILE&dID=59973&dDocName=042339, accessed 23 March 2010).

⁴⁷⁹ Ibid.

⁴⁸⁰ Statistik Austria. *Yearbook of health statistics 2007*. Vienna, Statistics Austria, 2008 (http://www.statistik.at/web_de/Redirect/index.htm?dDocName=034317, accessed 5 October 2009).

Health behaviour

The Vienna Health and Social Survey of 2001 showed that attitude and approach to health was influenced by gender (women tending to be more active) and that health promotion activities increased with age and level of education. Women demonstrated a more critical perception of their health status than men, the difference being especially prominent between women and men in lower income groups.

Smoking prevalence is increasing, especially among young women with a low level of education.⁴⁸¹

Regional issues

The concentration of individuals with tertiary-level education increases with the size of the community/city. Cities with a university show an especially high proportion of graduates. The concentration varies considerably across the districts within the cities.⁴⁸²

Mortality

Life expectancy at birth was highest in Tyrol and Vorarlberg for both men and women. Infant mortality was highest in Vienna and Lower Austria in 2007 (5.4 and 4.4 per 1000 live births, respectively) and lowest in Tyrol (2.2 per 1000 live births).

When looking at regional differences, the data for deaths from malignant growths for 1998–2004 show a considerable incidence in the north-east of Austria, in Vienna and especially Lower Austria, but also in parts of Styria. Mortality rates are lowest in parts of Salzburg, Upper Austria, Carinthia and Lower Austria.⁴⁸³

The regional distribution of death rates from cardiovascular diseases shows a clear east–west divide. Mortality is much higher in the east, north-east and south-east of Austria – especially in Vienna, Lower Austria and also in parts of Styria and Upper Austria – than in the west and south-west, in Vorarlberg, Tyrol, Salzburg and Carinthia.

Morbidity

In 2005 Carinthia reported the highest age-standardized incidence of new cancer cases, followed by Burgenland and Tyrol. The lowest rates were reported for Upper Austria and Salzburg. The regions with the highest age-standardized incidence rate for prostate cancer were Vorarlberg, Burgenland and Carinthia

481 Schleicher B, Hlava I. (2003), cited in Habl C. Social inequality and health. In: Dimmel N, Heitzmann K, Schenk M, eds. *Handbook poverty*. Innsbruck, Studienverlag, 2009: 172 ff.

482 Statistik Austria. *Education in figures 2007/08. Key indicators and analyses*. Vienna, Statistics Austria, 2009.

483 Statistik Austria. *Mortality: malignant growths 1998/2004 regional districts*. Vienna, Statistics Austria, 2008 (http://www.statistik.at/web_de/wcmsprod/groups/public/documents/sitestudio/pdf_icon.gif, accessed 5 September 2009).

and those with the lowest rates were Vienna and Styria. Age-standardized incidence rates for breast cancer were highest in Carinthia, Vienna and Styria and lowest in Vorarlberg and Upper Austria. Lung cancer incidence rates were highest in Vienna, Burgenland and Carinthia and lowest in Upper Austria and Salzburg.

In 2007 Vienna had the highest incidence of AIDS cases, followed by Upper Austria, which reported the highest number of deaths from AIDS, followed by Tyrol and Vienna.

5.3 Equity of access to curative and public health services

In Austria, social insurance covers risks of sickness, unemployment, work-related accidents and occupational illness, as well as old age. Access to health services is guaranteed for most Austrians by means of coverage by social health insurance (98.8% of the population in 2008). About 46% of the insured population are gainfully employed and voluntarily insured, 26% are dependants, 25% are pensioners and 3% come under other categories.⁴⁸⁴

Austria has a statutory social insurance system in which coverage is linked to employment and sickness fund affiliation depends on professional and regional factors. Insurance contributions are based on income and are not related to risk of illness. Dependants can be insured free of charge under certain circumstances. The unemployed who are entitled to cash benefits are insured, as well as asylum seekers under federal supervision. Recipients of social welfare benefits are covered by social health insurance from September 2010.

Private health expenditure in Austria amounted to about 23.1% of total health expenditure in 2008.⁴⁸⁵

Because of the high social health insurance coverage, private health insurance plays a minor role and is usually offered only in the form of supplementary or complementary rather than alternative health insurance. In 2006, 33.49% of the population signed up for private health insurance.⁴⁸⁶

484 HVB. *Social insurance in figures*. Vienna, Main Association of Austrian Social Security Institutions, August 2009 (http://www.sozialversicherung.at/mediaDB/561595_Sozialversicherung_in_Zahlen_Ausgabe23_August_2009.pdf, accessed 3 June 2010).

485 Statistik Austria. *Gesundheitsausgaben in Österreich laut "System of Health Accounts" – Ergebnisse* [web site]. Vienna, Statistics Austria, 2009 (http://www.statistik.at/web_de/statistiken/gesundheit/gesundheitsausgaben/index.html, accessed 23 March 2010).

486 Ladurner J (2008). *Private health insurance in Austria*. Country questionnaire prepared for the following report for the European Commission Directorate-General for Employment, Social Affairs and Equal Opportunities: Thomson S et al. *Private health insurance in the European Union*. Final report. London, LSE Health and Social Care, London School of Economics and Political Science, 2009.

The Austrian health care system is characterized by low-threshold access to outpatient and inpatient health services for most of the population, independent of their risk of illness, social status, income, gender or beliefs. The insured have more or less free access to care when making use of the social insurance contract partners. Benefits are financed primarily through the income-dependent contributions paid in equal shares by employers and employees. The benefits package is fairly generous and includes visits to GPs, direct access to nearly all specialists (a referral from a GP is needed for some specialists, such as radiologists), hospital care, rehabilitation, physiotherapy and so on. Claiming of benefits is virtually independent of the social insurance contributions made by the insured person.

Many services involve user charges, but a variety of exemption mechanisms are in place to reduce the burden on defined population groups and individuals. The amount of user charges can depend on the health insurance fund affiliation (for example, civil servants and the self-employed pay a certain amount per physician visit), or can be the same for all insured groups (for example, prescription charges).

About 20% of the insured population are exempt from paying prescription charges. Exemptions are based on the existence of an infectious, severe or chronic disease, are granted for some types of insured event or benefit (maternity, opportunistic health check-up) or depend on the income of the insured person.⁴⁸⁷ In addition to existing exemptions, an annual cap for prescription charges of 2% of the insured person's annual income was introduced in January 2008.

Barriers to accessing both curative and public health services can be based on financial or employment-related factors (low income or socioeconomic status, atypical employment arrangements, unemployment, lack of insurance coverage). They include geographical barriers (not being able to reach a provider within a certain time or, in some cases, having restricted choice because of living in a rural area); cultural barriers (for instance, as applies to individuals with a migrant background); lack of knowledge and health illiteracy (low level of education, lack of information); or other barriers, such as health system barriers (waiting times, administrative barriers), language problems, age, gender or disability. The way in which information or services are provided may not be user-friendly or easily accessible and it is important to match these with the level of knowledge and understanding of the targeted population.

In September 2010 a needs-orientated minimum collateral was introduced in Austria. This comprises 12 payments of €744 per person per year in 2010

⁴⁸⁷ Mossialos E et al. *Incentives and payment systems for physicians in selected countries with a special focus on Austria*. Vienna, Report for the Main Association of Austrian Social Security Institutions (HVB), 2006.

(for couples, €116 per month, plus an additional €134 per child)⁴⁸⁸ and aims to reduce poverty and define a national minimum standard. In addition to the collateral, every region in Austria can increase the payment by granting further subsidies. The introduction of the minimum collateral also means that social welfare benefits recipients, who were not previously covered by social health insurance, receive an e-card, providing them with easy access to health services.⁴⁸⁹

Some individuals suffering from specific conditions or requiring specialized care may be restricted with regard to their treatment options because appropriate or sufficient facilities are scarce. This is the case, for instance, with facilities for outpatient neuro-rehabilitation, palliative and hospice care and psychotherapy.⁴⁹⁰

As in many other countries, disadvantaged and vulnerable population groups – especially those who are not covered by the social health insurance system – receive a considerable amount of assistance and care from NGOs and charities. These face significant financial pressure and often operate under difficult conditions, with lack of financial and human resources, insufficient backing, and restrictive legislation. Several health care institutions or providers also offer services at reduced fees or free of charge to illegal immigrants, for example, or the homeless.

The next two subsections examine issues surrounding equity of access to curative and public health services. Equity of access is based on the idea of equal access for equal need. Data on utilization are frequently used as a proxy to assess and describe equal access but can be incomplete. Research performed on the linkage of utilization patterns and socioeconomic characteristics of individuals is still very limited in Austria.

Promoting access to care and healthy lifestyles of disadvantaged groups

As described earlier, social health insurance coverage in Austria is very extensive and includes almost the entire population. In the past, social insurance has tried to extend cover to as many people as possible, by including, among others, individuals with atypical employment arrangements.

A central problem in providing health care services to individuals or population groups in need is the difficulty of identifying and reaching the individuals in

⁴⁸⁸ The amount is based on the maximum of the compensatory allowance for reduced earnings (*Ausgleichszulage*).

⁴⁸⁹ BMASK. Frequently asked questions [web site], Vienna, Federal Ministry of Labour, Social Affairs and Consumer Protection, 2010 (<http://bmask2.cms.apa.at/cms/site/dokument.html?channel=CH0052&doc=CMS1218620091441>, accessed 15 February 2010).

⁴⁹⁰ BMASK. *National report on strategies for social protection and social inclusion*. Vienna, Federal Ministry of Labour, Social Affairs and Consumer Protection, 2008 (http://www.bmask.gv.at/cms/site/attachments/8/5/4/CH0121/CMS1218101293137/strategy_report_2006%5B1%5D.pdf, accessed 25 October 2009).

question. This is particularly complicated with individuals who do not have stable living conditions, including the homeless and illegal immigrants. It is necessary to provide easy and low-threshold access and, if possible, to find such people in situ, wherever they are.

Representatives of disadvantaged groups are at present hardly involved in the definition, development and implementation of appropriate services. Lack of research makes it difficult to know whether these individuals are being reached adequately and effectively. The direct involvement of those at risk and the design of services based on their needs are essential measures in order to provide appropriate services.

Disadvantaged individuals often experience several closely (inter)related difficulties that aggravate their situation, such as poverty, lack of education, migrant background and poor health. Another problem is the absence of coordination and integration between health and social services, which can result in gaps in service provision. Individuals who live in difficult and often unstable conditions – such as illegal immigrants – will find it hard to attain continuity of care.

Many measures are undertaken to ensure and promote equal access to health care services for those in need. To reach certain groups, however, further information is required on how to identify and approach them most effectively. Measures and services aimed at securing and promoting equal access to care for disadvantaged groups include those listed here.

- Social insurance contributions are defined on the basis of income (contribution base) and are independent of risk, sex, age or any other personal characteristics.
- Individuals who are lacking insurance cover for whatever reason can take out voluntary health insurance, sign up for private health insurance or completely forego social insurance cover. Dependants can usually be insured without charge, although the insurance of partners living in the same household may be subject to a defined fee.
- Insurance coverage is frequently lacking because of losing entitlement, for example, to unemployment benefits. Individuals may then, under certain circumstances, be entitled to emergency benefits that may include social health insurance cover.
- The benefits package is fairly comprehensive and, although a variety of user charges exist, exemptions are widely applicable to vulnerable individuals or population groups.
- Services can generally be reached within a maximum of about 90 minutes in rural areas; in cities the number of service providers is higher and travelling

distances are shorter. Some specialists may be difficult to access either because of their scarcity (child psychiatrists), restricted consulting hours, or long waiting lists.

- Access to and free choice of health service providers can be limited for people with special needs because disabled access to buildings does not exist in all places or suitable information is not provided for people with, for instance, hearing loss or impaired vision. Since 2001, group practices signing a contract with social insurance have had to ensure disabled access to their facilities.
- Information on health services is not always available in languages other than German and translation services are frequently lacking. Cultural understanding and sensitivity among providers is also variable.
- Access to certain services – for example, eligibility for a long-term care cash benefit – may be linked to EU citizenship and thus may not be available to migrants.
- Individuals who cannot work because they have to care for a sick family member are, under certain circumstances, covered by social health insurance. Many of these carers are overburdened and neglect their own health. They may experience considerable emotional and physical strains and stresses. Very few services are targeted specifically at this group.
- Lack of awareness of the need for health care may be a problem rooted in low health literacy, lack of education and information, but also in the existence of mental illness and a distorted perception of reality.
- Travel expenses arising in connection with accessing health services are covered by social health insurance under certain conditions.
- Health insurance funds cooperate to some extent with associations offering assistance to foreigners and migrants, such as the Austrian Integration Fund, or with self-help groups.
- Several pilot projects exist to improve the access to care for migrants and individuals that do not speak German.
- A range of initiatives exists to inform and educate the insured and the general population and to increase their health awareness.
- A range of health services is also available for individuals without insurance coverage. These include:
 - o the right to undergo an annual preventive health check, free of charge (for everybody)

- o the right to access emergency care in hospitals (hospitals are legally not allowed to send away individuals in need of emergency care – they may claim costs back after the patient is discharged but expenses are not always recovered);
- o access to treatment of communicable diseases, such as TB, free of charge (for everybody)⁴⁹¹
- o testing for HIV/AIDS and treatment, free of charge (in selected institutions);
- o mother–child pass examinations, free of charge for all mothers and their children;
- o a range of health services, including various vaccinations, free for children up to the age of 15 years.

Equity of access to curative services

Results of a Survey of Healthy Ageing and Retirement in Europe (SHARE) showed that the proportion of Austrians opting to forego treatment was very low (3.63%, of which 2.89% was because of costs and 0.74% because care was not available), when compared with other countries (8.46% in France, 6.89% in Germany, 10.51% in Greece, 8.58% in Italy and 6.16% in Sweden). The proportion was only lower in Denmark (3.32%) and the Netherlands (2.54%).⁴⁹²

In Austria the probability of visiting any doctor, of visiting a specialist, or of visiting a hospital shows income-related inequity in favour of the more affluent, while the probability of visiting a GP does not show any such effects.⁴⁹³ Based on the Micro-census, socially disadvantaged individuals visit GPs more often than people with a higher level of social background,⁴⁹⁴ but visit specialists, dentists or outpatient departments less often.⁴⁹⁵

Access to outpatient care for individuals with a lower socioeconomic status may entail longer travelling and waiting times.⁴⁹⁶

491 PICUM. *Access to health care for undocumented migrants in Europe*. Brussels, Platform for International Cooperation on Undocumented Migrants, 2007.

492 Survey of health, ageing and retirement in Europe (SHARE). In: Mossialos E et al. *Incentives and payment systems for physicians in selected countries with a special focus on Austria*. Vienna, Report for the Main Association of Austrian Social Security Institutions (HVB), 2006.

493 Mossialos E et al. *Incentives and payment systems for physicians in selected countries with a special focus on Austria*. Vienna, Report for the Main Association of Austrian Social Security Institutions (HVB), 2006.

494 Habi C. Social inequality and health. In: Dimmel N, Heitzmann K, Schenk M, eds. *Handbook poverty*. Innsbruck, Studienverlag, 2009:172 ff.

495 Ibid.

496 Pochobradsky E et al. *Social inequality and health care*. Study commissioned by the then BMGF. Vienna, Federal Ministry of Health and Women, 2002.

Analyses from GÖG (division ÖBIG) confirm these findings and state that people with lower incomes – independently of their age or sex – use more health services than individuals with a higher income. They access specialists less often than high-income earners, however, and often receive less expensive medication.⁴⁹⁷

A study of the regional sickness fund of Carinthia confirmed the correlation between poverty and illness, showing that insured individuals that are exempt from the prescription charge (about 20% of the insured population) caused higher expenditures for the sickness fund than other insured groups.⁴⁹⁸

The average number of visits to GPs falls with a higher level of education. Outpatient clinics in hospitals also appear to be used more often by individuals with a lower level of education. The contrary applies in terms of visits to dentists, the services of which are accessed more often by individuals with a higher level of education.⁴⁹⁹

Hofmarcher and colleagues analysed data from the European Community Household Panel (ECHP) in 2003 and reported that women with the lowest level of education consulted GPs most often. Specialists are visited more frequently by individuals with a higher level of education, both men and women.⁵⁰⁰

Regulations on user charges are variable and thus unevenly distributed across the different social health insurance funds. Individuals insured through the ASVG pay on average more user charges than the self-employed population or farmers.⁵⁰¹

Both Hofmarcher and colleagues and Wurzer and colleagues report that the elderly insured population use more health services than their younger counterparts and cause higher expenses for the health insurance funds.⁵⁰²

Both unemployed and working women consume far more than the average amount of prescription-free drugs. A total of 70% of patients receiving psychotherapeutic care are women.⁵⁰³ Women have also been reported to

497 BMGF (2003), cited in Habl C. Social inequality and health. In: Dimmel N, Heitzmann K, Schenk M, eds. *Handbook poverty*. Innsbruck, Studienverlag, 2009:172 ff.

498 Wurzer A, Robinig R, Rodler J. *User charges, a review for orientation*. Klagenfurt, Regional sickness fund of Carinthia, 2004.

499 Statistik Austria. *Microcensus. Special census on the health status and consumption of medical services*. Vienna, Statistics Austria, September 1999.

500 Hofmarcher M, Röhrling G. What do new user charges in Austria entail? *MIMEO*, 2003:1–10.

501 Probst J. User charges – Social and health policy contradiction. In: Wurzer A, Robinig R, Rodler J. *User charges, a review for orientation*. Klagenfurt, Regional sickness fund of Carinthia, 2004.

502 Hofmarcher M, Röhrling G. What do new user charges in Austria entail? *MIMEO*, 2003:1–10. See also: Wurzer A, Robinig R, Rodler J. *User charges, a review for orientation*. Klagenfurt, Regional sickness fund of Carinthia, 2004.

503 Schleicher B, Hlava L (2003), cited in Habl C. Social inequality and health. In: Dimmel N, Heitzmann K, Schenk M, eds. *Handbook poverty*. Innsbruck, Studienverlag, 2009:172 ff.

receive two thirds of all antipsychotic drugs and tend to self-medicate (non-prescription medicines) more often than men.

Equity of access to public health services

A report by GÖG/ÖBIG states that socially disadvantaged people tend to make less use of free preventive health services, such as the preventive health check-ups and mother–child pass examinations.⁵⁰⁴ This fact is underlined by the Micro-census data from 1999, which also showed that participation in the preventive health check-ups increased with the level of education.

Individuals with a migrant background use free health examinations (preventive health check-ups, cancer examinations) less often than the rest of the population. This is confirmed by a report of the regional sickness fund of Upper Austria that shows that migrants use free health check-ups – also available for individuals without insurance – far less often (< 2.0%) than those with Austrian nationality (10.9%).

Studies show that women with a migrant background are more likely to use curative than preventive services.⁵⁰⁵ Fewer women originally born in Turkey or one of the countries of former Yugoslavia undergo a cervical smear or breast examination than Austrian women (78% versus 90%). Findings from the Micro-census from 1999 show that visits to gynaecologists decreased with the age of the woman.

Acceptance of vaccination is generally higher among the working population than among the unemployed. Individuals with a migrant background (Turkey, countries of the former Yugoslavia) are less likely to be vaccinated than individuals of Austrian origin.

People with lower social status access preventive health check-ups less often than those with higher social status and make fewer efforts to maintain their health status. Access may also be restricted for these people to information on health care and provision of health services.⁵⁰⁶

In their study on social inequality and health care, Pochobradsky and colleagues investigated whether individuals exempt from the prescription charge were more or less likely to attend the preventive health check-ups. Women exempt from the prescription charge were more likely to attend the examination, whereas men who were exempt from the prescription charge went to the examination

504 Pochobradsky E et al.. *Social inequality and health care*. Study commissioned by the then BMGE Vienna, Federal Ministry of Health and Women, 2002.

505 BMGEJ. *Austrian women's health report 2005/2006*. Vienna, Federal Ministry for Health, Family and Youth, 2006.

506 Habl C. Options for reducing social inequalities in health care. *WISO*, 2004, 2:93–104.

less often than men who were not exempt. Of the women exempt from the prescription charge, 43% attended the examination.⁵⁰⁷

Data from the Austrian health survey show that willingness to be vaccinated increases with the level of education and that the actual uptake of vaccinations (TBE, Hepatitis A and B) increases with level of income.

The Austrian health survey also proved that uptake of preventive health examinations – preventive health check-up, prostate-specific antigen (PSA) test, PAP smear and mammography – increases with the level of education and also with the level of income. Professional status appears to be significant as far as participation in PSA testing, health examinations and cancer smears is concerned.

Results of this health survey showed that individuals with a high level of education display a lower tendency towards risky behaviour. They also use preventive measures more often than individuals with a low level of education.

The first Austrian men's report concluded that men welcomed a personal invitation to the preventive health check-up. It also showed that men tended to wait longer before seeking care than women, often waiting until they had experienced symptoms for a longer period of time. The proportion of men in Austria taking advantage of the preventive health check-up was about 8.8% (1991–2002),⁵⁰⁸ and in Vienna about 13% (1999).

Selected health services for disadvantaged groups

Several services exist for individuals who belong to one or more than one of the disadvantaged or special needs groups identified in this chapter. It was not possible, within the scope of this project, to undertake a comprehensive assessment of these services or to analyse or define regional differences in need.

Various NGOs and charities offer health services or facilitate access to health services for vulnerable individuals, either by cooperating with health care institutions and providers or by requesting reduced fees or free access. Several of these initiatives and services are listed here.

Free treatment or low-threshold access to free health services appears to be mostly concentrated in Vienna.

507 Pochobradsky E et al.. *Social inequality and health care*. Study commissioned by the then BMGF Vienna, Federal Ministry of Health and Women, 2002.

508 ÖBIG. *First men's health report*. Vienna, Austrian Health Institute, Commissioned by the Federal Ministry of Health and Women, 2004 (http://www.oebig.org/upload/files/CMSEditor/1._Oesterreichischer_Maennergesundheitsbericht.pdf, accessed 9 June 2009).

AMBER–MED (Medical and Social Advisory Services in Vienna) is operated by the Deacony/Protestant Relief Organization (*Diakonie/Evangelisches Hilfswerk*) in cooperation with the Austrian Red Cross and offers anonymous and discreet outpatient medical care, easy access to medical treatment and social counselling and medication for individuals without social health insurance and in need of special care.⁵⁰⁹

Aidshilfe Wien provides counselling, testing and treatment to individuals with HIV/AIDS. Care is anonymous and illegal immigrants can receive retroviral treatment as well as social and psychological support.⁵¹⁰

Other initiatives are organized by **Caritas**, **Asyl in Not** (Asylum in Need: support committee for individuals who are subject to prosecution for political reasons), **Verein Ute Bock** (Ute Bock Association: refugee project providing counselling, educational programmes and practical help) and **Deserteurs- und Flüchtlingsberatung** (Counselling for Deserters and Refugees: offers counselling to refugees and migrants and refers them to other facilities and organizations which may assist them). All of these are situated in Vienna.⁵¹¹

Karwan House is run by Caritas and offers temporary accommodation services to asylum seekers. It provides accommodation for about 180 individuals and families and allows stays from two days to up to about 18 months. The Hippokrates Project in the house aims to offer asylum seekers basic medical care.

Ganslwirt in Vienna⁵¹² is a project run by the Association of Vienna Social Projects in the form of an outpatient clinic. Individuals without insurance coverage are offered medical consultations and treatment, wound treatment, HIV testing, vaccinations against hepatitis and influenza, treatment of medical conditions related to detoxification, pregnancy tests, advice on safe sex and information on the use and adverse effects of drugs, as well as any other questions related to drug abuse.⁵¹³

Association Hemayat is specialized in providing medical, psychological and psychotherapeutic treatment and counselling to survivors of torture and war.⁵¹⁴

509 Ambulant medizinische Versorgung, soziale Beratung und Medikamentenhilfe für Menschen ohne Versicherungsschutz (AMBER-MED): <http://amber.diakonie.at/goto/de/wer/ueber/leitbild> (accessed 8 October 2009).

510 PICUM. *Access to health care for undocumented migrants in Europe*. Brussels, Platform for International Cooperation on Undocumented Migrants, 2007. For further information, see also the Aidshilfe Vienna web site (<http://www.aids.at>, accessed 10 February 2011).

511 PICUM. *Access to health care for undocumented migrants in Europe*. Brussels, Platform for International Cooperation on Undocumented Migrants, 2007. See also the Association Ute Bock web site for further details (<http://www.fraubock.at>, accessed 10 February 2011); and that of Asyl in Not (<http://www.asyl-in-not.org>, accessed 10 February 2011).

512 Named after the restaurant which previously used the premises.

513 Ganslwirt. Ambulatorium [web site]. Vienna, Ganslwirt (<http://www.vws.or.at/ganslwirt/general-info/ambulatorium.html>, accessed 10 February 2011).

514 For more information, see the Hemayat web site (<http://www.hemayat.org>, accessed 10 February 2011).

The **ZEBRA**⁵¹⁵ **association** (Centre for medical, judicial and cultural assistance for foreigners – migrants and refugees – in Austria) in Graz offers health-related services such as counselling and medical treatment.

Several health care institutions (for example, hospitals of religious orders such as the Hospital of the Brothers of Saint John/Krankenhaus der Barmherzigen Brüder in Vienna or Graz or the Hospital Göttlicher Heiland in Vienna) provide a wide range of services related to inpatient and outpatient care to undocumented migrants free of charge.

A range of medical specialists cooperates with the above-mentioned institutions.

Organizations in other Austrian regions, for example in Styria, include **OMEGA** in Graz, which cooperates with **Caritas Graz** to deliver the project *Marienambulanz*,⁵¹⁶ offering primary care services to uninsured and homeless people in the city of Graz.

The **Red Cross Pharmaceutical Depot** gives prescribed medication to uninsured people free of charge.

The **Louise-Bus Caritas Mobile Unit** – which started operating in 1991 and is run by the Caritas and the Fund for a Social Vienna (*Fonds Soziales Wien*) offers medical assistance to homeless and uninsured people at seven different locations in Vienna. In 2008, more than 1700 individuals received attention, including about 7000 treatments. Most of these were related to dermatological problems, diseases of the respiratory system and diseases of the musculoskeletal system.⁵¹⁷

Several **state-run advice centres** offer information for illegal immigrants.

5.4 Potential role of social insurance

It is the responsibility of social insurance to put the needs of its insured population at the centre of its focus and to represent them in the best possible way. It also aims, however, to take a broad-based approach to identifying the needs of the population who lack insurance coverage and, ultimately, to include them in the system.

Social insurance can act as a spokesperson, opinion leader and representative of both its insured population and also the general population.

⁵¹⁵ See the Interkulturelles Beratungs- und Therapiezentrum (Intercultural Centre of Counselling and Therapy) web site for more details (www.zebra.or.at, accessed 10 February 2011).

⁵¹⁶ For more details, see the Caritas web site (<http://www.caritas-steiermark.at/hilfe-einrichtungen/fuer-menschen-in-not-gesundheit/marienambulanz/>, accessed 10 February 2011).

⁵¹⁷ Teufel I. Die rollende Arztpraxis. *Kurier*, 2009, p. 19.

Before implementing measures for a specific population group or selected individuals, it is essential to identify these target groups and explore their needs and problems. Research and data on aspects related to the health status, health behaviour, utilization of health services and health outcomes of disadvantaged groups are still quite limited. Social insurance could promote the introduction of new indicators (such as ethnicity) to its insurance data and could encourage the building of adequate and practicable databases, as well as funding external or undertaking its own research. External research could also be based on research cooperation.

Social insurance has a large network of contract providers who provide services to a very diverse population. Through these provider structures the individuals in special need could be identified and reached using a low-threshold approach. Reimbursement and incentive mechanisms could play a crucial role in this context. Providers also need to be trained to be sensitive to the specific needs of certain patient groups and individuals.

As a key rule, representatives or members of the particular disadvantaged groups should be involved in the definition, development and implementation of any new measures aimed at improving and promoting their health.

Within the elderly population, specific problems which urgently require attention include the prevention of falls (promotion of stability and independence), the over-, under- and misuse of resources, poly-medication co-morbidities, and the appropriate provision of services for these. To improve continuity of care, approaches such as disease management and case management should be promoted.

Information, access to information, understanding of the language used and knowledge can determine whether individuals decide to utilize or forego health services, as well as having an influence on the effectiveness of their service use (as expressed for example, by the compliance of service users). Social insurance could support individuals by making sure that administrative structures are easily accessible and that relevant information is provided in a low-threshold, user-friendly and understandable way, making use of various communication channels and multilanguage services. Social insurance should aim to create awareness, build knowledge and educate the population. Readability of the information provided and the provision of information that is matched to the individual's status of health competence and knowledge are crucial.

Special services and strategies are necessary for individuals with a migrant background. With this particular population, it is vital to involve their representatives in the development of new concepts. The provision of

multilanguage information using a variety of media and widespread translation services are important requirements in reaching this target group.

Individuals at risk of or threatened by poverty must be approached in their own settings. Some are simply fighting to survive and have given up taking care of their health. Social insurance could create additional channels to reach these people, and projects and initiatives to help them (see section 2.4) could be supported financially, or by other means.

The promotion of the health of children and young people should be a core interest of social insurance, and special strategies for this population group could be developed accordingly.

5.5 Conclusions

Promoting the health of disadvantaged and special needs groups is a social responsibility that should involve the efforts of all stakeholders in a concerted and structured way. In Austria these population groups and their health status are not high on the political agenda. The concepts of *disadvantage* and *special needs* are not sufficiently clearly defined and many of these groups lack representatives to speak on their behalf.

Austria has a very high level of health insurance coverage through the statutory social insurance system, with only 1–2% of the population remaining without cover. These vulnerable individuals require special attention. Although most of the population is covered, not everybody has equal access to or shows equal utilization of health services. Barriers to access remain for financial, geographical, information, knowledge, system-related and cultural reasons.

Groups identified as being disadvantaged or having special needs in this chapter are as follows: those at risk of poverty, those with a low level of income and/or education, unemployed individuals, those with atypical working arrangements, those without insurance coverage and those with a migrant background, in particular illegal immigrants and/or asylum seekers. Specific groups of vulnerable children or elderly people are also in need of special assistance or protection. Within all these groups, the size of the population affected and the potential impact of their circumstances on their health have been outlined.

Research on the health of disadvantaged and special needs groups has developed in Austria over recent years, but is still limited. Findings give an indication of the core problems and suggestions can be made for action, but further research – especially quantitative research – is needed.

In order to address and reach vulnerable individuals and population groups it is necessary for them to be more clearly identified and documented. This is complicated, due to the difficulty of linking existing databases, gaps in data collection and reporting, and also because of the complex nature of the issue itself – namely, the multiple and interacting determinants of poor subjective and objective health.

The topic of disadvantaged and special needs groups concerns all sectors and involves a large number of different professionals. At present, institutions involved in health and social services do not cooperate as effectively as they could. The publication of the *Austrian report on strategies for social protection and social inclusion 2008–2010* by the then BMSK (now the BMASK) in 2008⁵¹⁸ is a promising example of how different stakeholders can cooperate successfully. However, closer cooperation and structured and standardized communication are urgently needed.

The literature examined shows that certain population groups tend to utilize fewer preventive services, including those that are free of charge, than the average population. Influencing factors seem to be levels of education and income. Aspects such as cultural behaviour (migrant background) and gender also appear to influence utilization patterns. Failure to access preventive services can result in individuals only seeking help when health problems are more severe or have even developed into chronic conditions. This should be avoided where possible by emphasizing the importance of early intervention.

GPs and other professionals acting as points of first contact within the health care system are of considerable importance in identifying and approaching individuals in need. Data from the SHARE survey and the ECHP have shown that individuals with a lower income are more likely to visit GPs than specialists. GPs also tend to follow patients over a longer period of time and are thus more likely to detect unfavourable developments or events at an early stage.

Various services exist for individuals in the disadvantaged and special needs groups identified here, although these are more common in Vienna than in other Austrian cities. The services listed, however, represent only a selection of those available. A comprehensive assessment of the scope and cost–effectiveness of existing services as well as a projection of future demand based on needs is necessary to be able to draw further conclusions.

Social insurance has a range of potential roles when it comes to promoting the health of disadvantaged and special needs groups. An improvement in the quality and availability of data could facilitate their identification. Social

⁵¹⁸ BMSK. *Austrian report on strategies for social protection and social inclusion 2008–2010*. Vienna, Federal Ministry of Social Affairs and Consumer Protection, 2008 (http://www.bmsk.gv.at/cms/site/attachments/4/4/0/CH0121/CMS1222677019004/strategiebericht2008_engl_neu.pdf, accessed 22 April 2011).

insurance could also act as advocate and opinion leader in this field and promote further research and research cooperation.

Social insurance could also take various steps towards an improvement in service provision. It could define targets and priority measures for selected groups – for example, the elderly, children, non-nationals, unemployed people, individuals using the system a great deal – and lend more weight to the topic in general. It could also improve access to services by reducing barriers and by providing high-quality, accessible information through various channels.

Activities for disadvantaged or special needs groups should involve those that are directly affected, to ensure that their needs are addressed in the most adequate and effective way.

Chapter 6

Health professionals and public health

6.1 Public health professionals in Austria

The field of public health in Austria is strongly dominated by medical professionals who work either as medical officers for one of the public health authorities at different levels of the health system, for a health system stakeholder such as social insurance, at a university or at another research institution.

Physicians operating in the clinical environment, in hospitals, private practices or rehabilitation centres, and doctors working in the occupational health setting also undertake services related to prevention, disease control or health promotion that are central to public health.

The focus of activity, however, is predominantly on curative services. This is motivated by professional training as well as the general finance and reimbursement structures applied in the Austrian health system, which do not encourage providers to undertake preventive or health promotion services. The responsibilities involved in the provision of many of these services are not clearly regulated and they are usually poorly remunerated when compared with curative services.

Other health professionals, such as nurses, pharmacologists, midwives and therapists are slowly moving into the public health field by acquiring formal training in the form of, for example, an MPH degree. For most of these professionals and especially for nurses, however, it is still difficult to be accepted for such programmes and to use the training effectively. There is no automatic acknowledgement of such training in the form of a competitive salary and extended responsibilities.

Individuals without a health background, including social science graduates, are also increasingly represented in public health positions and in training programmes. In general, acceptance of multidisciplinary working is increasing.

Career paths in public health are not well defined in Austria. Careers in medical specialties are well defined but career paths for nonmedical professionals are still unclear. Research and other public health positions are often poorly paid and offer limited career opportunities and perspectives. For physicians there are two main motivating factors in a decision to enter the public health field. One is a genuine interest in the topic and its importance and the other is the ability to work clearly defined hours without the need to be on call. The specialty is therefore particularly attractive for female doctors with children. Further details on career paths and opportunities for public health professionals can be found in section 6.2 of this chapter.

A considerable number of physicians in Austria still believe that the field of public health lies within medicine and view the involvement of other professionals in multidisciplinary work with some suspicion. Doctors who do not pursue the specialty of social medicine or occupational medicine or who do not work as medical officers for the health authorities, as company physicians or in universities in public health positions, however, will normally have acquired only a very small amount of training in public health during their medical studies or afterwards. The curriculum for medical students was modified in 2002 after a selected number of students had piloted it in 2001. Since then several changes have been made, as detailed in the following subsections.

Through the postgraduate training programmes in public health and the undergraduate programmes in the related subjects of health promotion and health care management, which have been established in Austria over recent years, more individuals with different professional backgrounds are gradually moving into the field and contributing to the emergence of a multidisciplinary public health community. These individuals have backgrounds in the social sciences – economics, business administration, sociology and psychology – statistics, nursing, midwifery, social work, pharmacy or law, and are spread across a range of different institutions and levels of the health system. Several also operate outside the health sector, for instance in other ministries or public authorities.

The first subsection of this chapter describes the roles of various health professionals in public health in Austria. It begins by looking at the role of physicians in general and of medical officers specifically, continues by describing the contribution of other health professionals (such as nurses and midwives) to public health and concludes by discussing the role of non-health professionals operating in the field. The second subsection deals with capacity-building for public health.

Physicians and public health

Physicians in general

During their medical education at university, physicians in Austria have in the past received only a very limited amount of training on issues related to public health. No postgraduate medical specialization for public health exists.

Since the revision of the medical curriculum in 2001/2002,⁵¹⁹ the amount of public health-related study content has been increased. It is now presented in the form of a teaching block entitled *Man in environment, family and society*,⁵²⁰ comprising 48 hours of lectures and 12 hours of tutoring in small groups. When compared to other countries, this amount of public health training is still fairly modest. GPs must be trained in prevention and health promotion in order to be accredited in most countries, an understanding accepted by the world federation, WONCA (World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians or, in short form, World Organization of Family Doctors).

The first students within the new curriculum have only recently graduated and it remains to be seen whether the change in the curriculum will have an impact on the work, career and career planning of medical doctors.

The Austrian health system still has a very strong emphasis on curative medicine. Physicians working in the clinical setting – as opposed to those in research – continue to follow a disease-orientated approach, rather than taking a broader view of health when dealing with their patients.

During their medical studies and their postgraduate training, physicians are trained to be solution-orientated, moving quickly from one case to another. A patient is rarely followed for a long time period and this hampers continuity of care and reduces the probability that a physician will apply preventive as well as curative measures. This has its origins in the training of physicians and is also encouraged by the structure of the system. It may reflect an element of understaffing in hospitals as well as reimbursement mechanisms and incentives in the outpatient setting, which do not allow physicians much time for thorough assessment of the social, living and working conditions of individual patients. Time spent with each patient tends to be short and focused on the treatment of the symptoms presented, without further investigation of underlying causes. In many cases, physicians also lack adequate epidemiological knowledge and this limits their ability to interpret and apply research findings and associated

519 A first pilot class was started in 2001; the first official course for all (new) medical students following the new curriculum was initiated in 2002.

520 The study block is composed of three chapters: (1) chapter 1 (21 hours): man in environment and workplace; (2) chapter 2 (20 hours): man in the social and evolutionary context; and (3) chapter 3 (19 hours): mental health, life cycle and family. For more details on study block content (in German), see the Medizinische Universität Wien web site (http://www.meduniwien.ac.at/index.php?id=92&content_id=sg/19/2023/5979.php, accessed 10 February 2011).

outcomes appropriately. The new medical curriculum appears to place more focus on research but the effects of this remain to be seen.

Physicians not only have insufficient time when it comes to patient consultations, they are also often poorly informed about the availability of support services that may be relevant to patients with particular medical conditions.⁵²¹

Medical specialties, such as social medicine or occupational and work medicine (see subsections *Social medicine specialists* and *Physicians working in occupational medicine* later in this section), or research fields, such as epidemiology, appear to not be very popular among students and medical graduates and there are only a very small number of training posts available for these specialties. Reasons for this include financial and structural aspects, the content of the curriculum, the potential fields of work or the lack of clearly defined and promising career opportunities in general.

Medical officers

No universally accepted English translation of the German term *Amtsarzt* exists in Austria. For reasons of consistency, the term *medical officer* is used throughout this report, as it has already been applied in the *Health Systems in Transition* series report on Austria produced for the European Observatory on Health Systems and Policies by Hofmarcher and Rack.⁵²²

Responsibilities

Medical officers play a central role in the provision of public health services in Austria. They work at all levels of the health system, for regional, district or local authorities but also for the Federal Government. There are about 300 medical officers in Austria, representing roughly 1% of all practising physicians.⁵²³ The duties of medical officers are regulated by the terms of the Imperial Sanitary Act and the *ÄrzteG*. The interpretation and implementation of the responsibilities laid out in these acts is subject to considerable regional variation.

Section 41 of the *ÄrzteG* stipulates that medical officers are employed by the public health authorities and are responsible for the execution of official duties. They operate in the interest of the population's health. Medical officers also operate as work safety inspectors, police physicians, medical officers in the Federal Police Directorate, Safety Directorate, or the Federal Ministry of Internal Affairs, or as army doctors.

⁵²¹ In hospitals, advice related to topics involving social services, long-term care or housing may sometimes be provided by professionals other than medical doctors, for example by social workers.

⁵²² Hofmarcher M, Rack HM. Austria. Health system review. *Health Systems in Transition*, 2006, 8(3):1–247.

⁵²³ Ibid.

The ÄrzteG provides a list of the institutions that are defined as public health authorities, and involve administrative district authorities, magistrates for cities with their own statute, regional governments (indirect federal administration), and the BMG.

The Imperial Sanitary Act of 1870 lists the responsibilities of the different actors within the public health service and is – regardless of its date of issue – still valid in many respects today. The duties of medical officers include the supervision of hospitals, the monitoring of epidemics and of water quality, the compilation of expert opinions, the documentation of statistics and the publication of reports, the documentation of the health status of the general population and the administration of vaccinations.

Medical officers in Austria have a wide variety of duties that vary according to the level of the health system at which they work (national, regional or local) and on the geographical area in which they operate. In very general terms they are responsible for promoting and ensuring the population's health.

Based on the ÄrzteG, medical officers act as authorized experts and compile expert opinions for the regional governor or the Federal Government. These relate to medical questions, including authorization to trade or to drive motor vehicles, environmental and hygiene issues or exposure to noise, pollutants and so on. Medical officers also appraise health promotion concepts and decide whether these should be supported financially.

Medical officers are also in charge of preventive services such vaccination and occupational safety – for example, performing safety audits in various settings or granting early maternity leave because of the risks to the health of the mother and unborn child. The duties of medical officers best known to the general public entail assessments or examinations following driving offences, the issuing of certificates for disabled parking and monitoring the issuing of prescriptions for narcotics. For most of the population and even for many people working in the health sector, the scope of responsibilities of medical officers is unclear. This is also partly because of the considerable regional variation in relation to this matter.

Training

Only physicians who are authorized to practise medicine can become medical officers in Austria. The authorization to practise (*ius practicandi*) is not granted to medical doctors automatically when graduating from university, but only after they have undertaken a period of practical training – usually in hospital and sometimes also in general practice – and have passed a final written examination. The training period is currently a minimum of three years to qualify as a GP and, depending on the specialty, five to six years to qualify as

a medical specialist. Hospitals or physicians (mostly working in solo practices) training young doctors must be recognized as teaching institutions by the ÖÄK. At present only a few doctors choose to undertake part of their training in physician practices, group practices or outpatient clinics. This is mainly because reimbursement is higher in hospitals and the work is seen as more varied. Because of a lack of funding and a new collective contract for doctors in training (valid from 1 January 2010), the numbers of private training practices is likely to continue to decline.

Physicians who wish to work as medical officers have to undertake further postgraduate training, which at present is provided in the form of a course (*Physikatskurs*). This training can only be undertaken in cities with a medical university, such as Vienna, Graz or Innsbruck. The organization and structure of the courses may vary. Graz, for example, offers a university degree (MPH) that covers more material than the standard course for medical officers. Others offer weekend or block training sessions (for example, three months in Innsbruck). The content of the different regional programmes is comparable and deals with subjects such as hygiene, sanitation, epidemiology, toxicology and veterinary inspection, but each of them has specific features. Graduates of these programmes can practise as medical officers throughout Austria, irrespective of where they trained.

Continuing education and further training for medical officers is largely based on the initiative of the individual. There are few courses specifically targeted at this group of physicians.

In recent years the workforce situation for medical officers has changed considerably. It has always been difficult to motivate highly qualified physicians to move into this area. Reasons for this include a lack of knowledge of what the work actually involves, the perception that it is not as interesting as clinical work, lower salaries in comparison to other medical jobs, or limited career prospects.

Demographic and labour force changes have recently led to more women qualifying in medicine and an increasing demand for part-time employment. These aspects encourage some physicians to apply for posts as medical officers, although restrictive training schedules – which may involve spending several months away from home while training – can pose a problem for applicants with children.

It appears that different types of physicians are especially interested in becoming medical officers:⁵²⁴

- those who have obtained postgraduate training in public health;

⁵²⁴ Expert interview, 27 August 2009 (Regional health authority).

- women who rejoin the workforce after maternity leave and/or seek part-time employment, which is not always easily available or granted in hospitals; and
- physicians who have been working in hospital for a long time and feel that they would like to change to a job which gives them a better work–life balance and does not involve on-call work or very long hours.

Few young doctors, however, seem motivated to become medical officers and it is important to make the profession more attractive to highly qualified individuals, in terms of career prospects and opportunities, fulfilling work and financial incentives.

Public health authorities in Austria have in the past had considerable difficulty in finding enough physicians who are qualified and willing to work as medical officers. This has led to shortages and disruptions in training schedules. Several physicians have been performing the duties of medical officers without having undergone the formal training required for the position.⁵²⁵ The training for medical officers is at present undergoing reform (see the following subsection). The outcomes and impact of the reforms on the future training of medical officers are not yet clear and various options are being discussed with the stakeholders involved.

The ÖGD – current reforms

Experts interviewed for this study stated that the ÖGD is overburdened and lacking appropriately trained staff. As already mentioned, it is difficult to find qualified individuals to fill the vacant positions.

The perceived necessity for reform of the ÖGD as well as the shortage of personnel were core motivators for starting the project *ÖGD Neu* (New public health service), which is part of the reform and development of the ÖGD, initiated in the course of the 2005 health care reform. The reform process was started in 2005 by the BMG together with the regions and was aimed at revising the list of duties of the ÖGD, as a first step in focusing on the definition of core responsibilities and promoting the harmonization of training for medical officers.

Initially, the ÖBIG, a subdivision of GÖG, was contracted by the BMG to oversee and document the process of reviewing and redefining the list of duties of medical officers working at district level. This was soon extended to medical officers working at all levels of the health system. Representatives of GÖG/ÖBIG are assisted by a working group composed of representatives of all the regional health authorities, as well as a number of other experts.

⁵²⁵ Expert interview, 27 August 2009 (Regional health authority).

It was argued that a revision of the duties of medical officers would require an assessment of their current responsibilities and a *Handbook for the new Austrian public health service* was therefore compiled. Work on the handbook began in 2006. It was published in its first version, as a basis for discussion, in November 2007 and outlines future potential fields of responsibility of medical officers, as well as providing suggestions on how these can be distributed across the different levels of the health system.

Following the publication of the handbook, discussions with regional representatives have been started. The next steps include the development of a training concept (intended to act as a framework for the definition of a training curriculum) for medical officers, based on the handbook, and the preparation of the implementation of the public health service reform in the regions. Another aim is to develop a legal basis for the ÖGD, an ÖGD Act, as well as adapting existing legislation.

The project in general and the handbook specifically currently only refer to physicians (medical officers) working within public health authorities. In future the duties of nonmedical professionals working for the ÖGD could be defined, along with the training they require.

Another topic for future discussion will be the transformation of the revised duties into a basic curriculum and the choice of a setting in which the training could be provided. Various strategies are being looked into, including:

- creating a medical specialty for public health (for medical professionals only);⁵²⁶
- maintaining the current character of a training course and offering it to medical doctors only;
- maintaining the current course character but opening it also to nonmedical professionals;
- creating a Master's programme which could be undertaken both by physicians and professionals without a medical background.

Over the next few years, a new training curriculum for medical officers should be finalized. The curriculum should be outcome orientated and it should be attached to an institution – for example, a university or an academy. The cross-validation of units from other programmes such as the MPH has yet to be discussed. The legislative basis of the training remains unclear. It could be integrated into the *ÄrzteG*, into a separate act, or into other legislation.

⁵²⁶ Medical officers are at the moment not obliged to join the ÖÄK. If the training were organized as a new medical specialty, the decision would have to be made as to whether medical officers need to join or not. Equally, potential overlaps with existing medical specialties – such as social medicine – would need to be discussed.

The model applied in Switzerland, where the training of medical officers was combined with the public health training, could serve as an example for Austria.

Social medicine specialists

Physicians who wish to specialize in social medicine need to complete a defined period of postgraduate training and pass a written examination. Medical specialists usually work in research.

The Institutes for Social Medicine at the three medical universities in Vienna, Graz and Innsbruck are very small and partially hold fairly conservative views on public health, limiting it to medical rather than multidisciplinary aspects. The departments are – according to expert opinion⁵²⁷ – understaffed, lacking funding, lacking wholehearted support from the medical faculties of which they are part, and struggling to find motivated and highly qualified doctors who wish to specialize in the subject. Research areas covered by these three institutes appear to be subject to considerable variation and could be looked into more closely.

The number of physicians with a specialization in social medicine in Austria is shown in Table 6.1. Currently only one full-time training post for social medicine is listed at the ÖÄK.⁵²⁸

Table 6.1 *Specialists in social medicine in Austria*

	Total	BG	CA	LA	UA	S	ST	T	VO	VI
Physicians with a specialization in social medicine	7	0	0	0	0	0	1	2	0	4

Source: Personal communication from a representative of the ÖÄK, received via e-mail on 29 July 2009.

Notes: BG: Burgenland; CA: Carinthia; LA: Lower Austria; UA: Upper Austria; S: Salzburg; ST: Styria; T: Tyrol; VO: Vorarlberg; VI: Vienna.

Physicians working in occupational medicine

Physicians interested in working in the field of occupational medicine can pursue two careers in Austria. One option is to become a specialist in occupational and work medicine, a medical specialty for which training can be entered after graduating from medical school. There are very few training posts for this specialty in Austria (12 full-time and 4 part-time posts)⁵²⁹ and most exist in centres of occupational medicine. Only one training post is located in a university hospital. The specialty is fairly new and has been in existence for less than two decades.

527 Expert interview (Research).

528 ÖÄK. Ausbildungsstättenverzeichnis der ÖÄK (Auszug). Fach: Sozialmedizin [web site]. Vienna, Austrian Medical Association, 2009 (http://www.aerztekammer.at/?type=module&aid=convert&curl=%2Fsrv%2Fdav%2Foak%2Fhtml_includes%2Fausbildstatt%2Fsozmed.htm, accessed 4 May 2009).

529 ÖÄK. Ausbildungsstättenverzeichnis der ÖÄK (Auszug). Fach: Sozialmedizin [web site]. Vienna, Austrian Medical Association, 2009 (http://www.aerztekammer.at/?type=module&aid=convert&curl=%2Fsrv%2Fdav%2Foak%2Fhtml_includes%2Fausbildstatt%2Farb.htm, accessed 3 October 2009).

Physicians trained in occupational and work medicine tend to work either as company physicians, in the clinical setting (currently mainly as doctors for internal medicine) or in one of the special centres. Some operate their own private practices.

The other option is to acquire a diploma in occupational medicine from one of the two academies for occupational medicine in Austria. In order to attend these diploma courses, physicians need to have a defined amount of previous practical training (acquired in hospital or in a physician practice), which is referred to as *ius practicandi* (the right to practise). The diploma entitles physicians to work as company physicians. Many physicians, usually GPs, decide to acquire the diploma as an additional qualification and a potential supplementary source of income.

The number of physicians with a medical specialization in occupational and work medicine and the physicians who have obtained a diploma in occupational medicine are shown in Table 6.2.

Table 6.2 Physicians with training in occupational medicine in Austria

	Total	BG	CA	LA	UA	S	ST	T	VO	VI
Physicians with a specialization in occupational medicine	115	0	2	15	21	4	14	15	5	39
Occupational medicine diplomas awarded	1560	41	89	296	194	106	219	147	82	386

Source: Personal communication from a representative of the ÖÄK, received via e-mail on 29 July 2009.

Notes: BG: Burgenland; CA: Carinthia; LA: Lower Austria; UA: Upper Austria; S: Salzburg; ST: Styria; T: Tyrol; VO: Vorarlberg; VI: Vienna.

Before the official training directive (*Ausbildungsordnung*) for the specialty in occupational and work medicine was defined, a temporary arrangement existed whereby certain physicians who could prove that they had worked in the field of occupational and work medicine for a defined number of years could be awarded the title of specialist without taking an examination. This explains why many specialists in occupational and work medicine also have another medical specialty, such as internal medicine. Today, a training directive for occupational and work medicine exists and physicians have to pass a written examination at the end of the training period. As part of their training, future specialists in occupational and work medicine need to undertake the 12-week diploma course at one of the above-mentioned academies.

Both medical specialists and physicians with a diploma can work as company physicians, either on an employed or part-time visiting basis. The responsibilities of a company physician are regulated in the Workers Protection Act.⁵³⁰

⁵³⁰ BGBl Nr. 450/1994; latest amendment BGBl Nr. 159/2001; see section 81–88.

They involve advising the employer, the employees and other staff and bodies on health protection and health promotion measures related to the workplace setting, as well as the design of individual workplaces. Company physicians also support employers in meeting their legal obligations with regard to workplace safety. Their responsibilities are detailed in section 81 of the Act. They can also work for public authorities or other bodies, ensuring that workplaces comply with certain safety regulations, or compiling expert opinions on related matters.

Even small enterprises are obliged to appoint a company physician. The Austrian Social Insurance for Occupational Risks (*Allgemeine Unfallversicherungsanstalt*, AUVA) supports small enterprises through the establishment of centres with qualified staff and equipment. Depending on the number of employees, a company may have to provide its own physician for occupational medicine and to install a working protection committee.

Employees tend not to consult their company physicians on personal health problems. They may ask them to administer a vaccination or for assistance when experiencing sudden health problems during working hours, but will usually prefer to consult a GP or specialist of their choice outside the workplace. This may be partly because they have doubts about confidentiality. Company physicians at present are in an ambiguous position with regard to their responsibilities to the employer and the employees of the company. In some cases employers and representatives of employees reach an agreement whereby company physicians undertake a variety of additional health checks or preventive measures and provide employers with access to anonymized examination data with the consent of the employee's representative(s).

Findings of a survey commissioned by the AUVA and the Austrian Society of Occupational Medicine in the year 2000, in the course of which 300 interviews with representatives of Austrian companies were undertaken, show that companies frequently perceive occupational medicine as a cumbersome compliance with legal requirements, rather than viewing it as a tool to promote the health and productivity of their employees.⁵³¹

Occupational diseases and the circumstances under which they are declared as such are clearly defined in Austria. Diseases are regulated in section 177 of the ASVG and listed in Annex 1 of the respective law. For these specific diseases, the exclusive causal relationship between the type of work carried out in a specific setting and its adverse effect on health has been proved. Under certain circumstances, individual cases that do not meet these criteria can be approved by the BMG. If this happens several times, a corresponding modification of

531 APA-OTS. Press statement, 15 January 2001 (*Aktuelle Studie von AUVA und Akademie für Arbeitsmedizin belegt: Humankapital in Österreichs Wirtschaft völlig unterschätzt*). Vienna, APA OTS Originaltext-Service Gesellschaft (http://www.ots.at/presseaussendung/OTS_20010115_OTS0069, accessed 6 September 2009).

the disease list is discussed. The Austrian list is not identical to the European list of occupational diseases that was published by the International Labour Organization (ILO) in 2002 and has been subject to discussion and revision since, in 2005 and again in 2009.⁵³²

*School physicians*⁵³³

The role and responsibilities of school physicians are topics of recurring interest and discussion in Austria. Several studies on this subject have been carried out and options for change discussed, but little has happened so far.

Role and responsibilities

Responsibility for the provision of health services in schools by school physicians is shared by the Federal Ministry of Education, Arts and Culture and the BMG. At the same time a division of responsibilities takes place across different levels, including the Federal Government, the regions, the communities and the school management boards.⁵³⁴

Doctors can apply for the position of school physician by applying to the school management board. In the area of compulsory education the position of a school physician is frequently part of the role of a community physician and is not reimbursed separately.

School physicians need to provide proof that they have acquired the *ius practicandi* (the right to practise). For a GP this currently involves about three years of practical training in a hospital and/or physician practice (the outpatient setting); a specialist will require about five to six years of practical training. There is also a final written examination. When applying for the position of a school physician, any diplomas of further education or training (school physician diploma, diploma of psychosocial medicine, nutritional medicine, occupational medicine or sports medicine) are considered beneficial; women and specialists in paediatrics are generally preferred.

532 ILO. *Meeting of Experts on the Revision of the List of Occupational Diseases*, Vienna, December 2005 (<http://www.ilo.org/public/english/protection/safework/health/expmtg05/english/index.htm>, accessed 1 October 2009).

533 Based on personal communication with a representative of the Federal Ministry of Education, Arts and Culture in August and September 2009, and on the following reports: Dür W et al. *Healthy school project. Final report*. Vienna, Main Association of Austrian Social Security Institutions in cooperation with the Federal Ministry of Education, Art and Culture and the Federal Ministry of Health, 2009 (http://www.gesundeschule.at/fileadmin/user_upload/Downloads_Diverse/ENDBERICHT_Gesunde_Schule.pdf, accessed 22 April 2011); Frank W, Konta B. *Foundations for a re-organisation of care provided by school physicians in Austria. Final report*. Vienna, Commissioned by the Federal Ministry of Health and Women (BMGF) in co-operation with the Federal Ministry of Education, Science and Culture, 2006; Kaminski A, Gartlehner G. *Screening of school-aged children*. Donau University Krems Department for Evidence-Based Medicine and Clinical Epidemiology, no date given. Report prepared for the Healthy Schools Project, commissioned by the Insurance Institution for the Austrian Railway and Mining Industries (VAEB).

534 Frank W, Konta B. *Foundations for a re-organisation of care provided by school physicians in Austria. Final report*. Vienna, Commissioned by the Federal Ministry of Health and Women (BMGF) in co-operation with the Federal Ministry of Education, Science and Culture, 2006.

The basic responsibilities of school physicians are regulated in section 66 (1) of the SchUG and involve the following requirements.

- School physicians must advise teachers on questions related to the health of their students, as well as carrying out necessary examinations.
- Students must take part in an annual health examination and any additional examinations agreed. Students are informed about abnormal results by the school physician.

Further responsibilities of school physicians are specified in the employment contracts between the physician and the respective school, but are not regulated by law. In general the present legislative basis is limited, although the regulations of the ÄrzteG also apply to school physicians.

In their 2006 report, Frank and Konta found considerable variation in the intensity of care provided to students at school.⁵³⁵ School boards are encouraged to appoint a school physician, but this is not a legal requirement. This means that some physicians will spend more time in a school than others, who attend schools on a visiting basis and spend their remaining time working as community, district or parish physicians or at other schools.

Information on the content of school examinations is provided in section 2.5 of this report.

Data collected from school examinations cannot be used for scientific studies or analysis, since there is no legislative basis for this. The forwarding of related data forms is problematic because of a possible infringement of data protection regulations.⁵³⁶ In several regions, data from schools are not forwarded for regional health reporting or used in any other way. Several regions are developing computer systems with which data can be assessed anonymously; the health department of the city of Vienna is planning to develop a directive together with the ÖÄK. The head of the School Physician Authority in Salzburg has commented that the health forms from school examinations would not be an adequate basis for scientific studies because the quality of data provided may show a high level of variation.⁵³⁷ So far no evaluation has been undertaken to assess the effectiveness of school examinations or the impact of these on health outcomes or benefits to individual students. Before reviewing the data situation, it would be beneficial to carry out an international review on the effectiveness of school examinations.

⁵³⁵ Frank W, Konta B. *Foundations for a re-organisation of care provided by school physicians in Austria. Final report.* Vienna, Commissioned by the Federal Ministry of Health and Women (BMGF) in co-operation with the Federal Ministry of Education, Science and Culture, 2006.

⁵³⁶ The forwarding of individual data requires consent of the student and her/his parents.

⁵³⁷ Anonymous. School physicians: Forwarding of data strictly regulated. *Der Standard*, 13 May 2009.

School physicians in Austria

There are between 2100 and 2500 school physicians in Austria (Table 6.3). They work at about 6500 compulsory education institutions and in various other types of public and private schools offering further education.

About 1500 physicians work in compulsory education institutions, partly as an element of their work as community, district or parish physicians, and their contractual agreements are very varied. In larger cities (Vienna, Graz, Salzburg, Linz, Steyr and Wels), school physicians in compulsory education institutions are often employed full time.

The remaining school physicians work in federal schools and are employed by the Federal Government, working one hour per week per 60 students.

Table 6.3 School physicians in Austria

	Total	BG	CA	LA	UA	S	ST	T	VO	VI
Registered school physicians	919	17	33	129	111	157	98	170	10	194
School physician diplomas awarded	441	5	17	91	58	44	16	69	31	110

Source: Personal communication from a representative of the ÖÄK, received via e-mail on 29 July 2009.

Notes: BG: Burgenland; CA: Carinthia; LA: Lower Austria; UA: Upper Austria; S: Salzburg; ST: Styria; T: Tyrol; VO: Vorarlberg; VI: Vienna.

There are various reasons for the discrepancies between the data reported in the text and the data presented in the Table 6.3. It is assumed that only school physicians who are actually being separately reimbursed for working as a school physician are registered with the ÖÄK. Physicians who undertake this type of work as part of their work as a community, district or parish physician do not receive any extra remuneration and therefore may not register. Employed physicians and those working on a full-time basis will be more likely to be registered. Many physicians work for several schools at the same time.

Discussion points

Since the 1960s, various initiatives have been started with the intention of reforming the professional profile of school physicians, as well as promoting and facilitating the execution of health-related activities in schools more generally. Most of these have unfortunately been met with resistance and have led to conflicts of interest between the many players involved, who are faced with the challenge of reaching an agreement on certain core issues.

Previous studies and activities appear not to have resulted in any major change.⁵³⁸ In their aforementioned 2006 report, Frank and Konta presented a

⁵³⁸ See, for example, Gamper M. The development of the system of school physicians in Austria. Vienna, Commissioned by the Federal Ministry of Education, Science and Culture, 2002 (<http://www.eduhi.at/dl/SAWesen.pdf>, 2 September 2009).

list of structural problems existing in connection with the provision of health care services by school physicians to school students. These are related to:

- competence
- unclear legislation
- lack of clarity
- actual provision of care
- variation
- objectivity
- documentation of services.

Based on their assessment of the situation, the authors included an extensive list of reform requirements, but this does not appear to have led to any fundamental changes in the system.

The Healthy Schools Project is an example of cooperation between the major stakeholders involved in the field – namely, the two relevant ministries and the social insurance system. The final project report has recently been published. The aim of the project was to develop quality standards for promoting systematic and sustainable as well as up-to-date health promotion activities and health care services in schools, based on existing national and international standards. Standards and recommendations developed in the course of the project should form the foundation for quality improvement interventions and measures related to the health status of school students.⁵³⁹

Whether the outcomes of the project and the suggestions made by the authors will result in a change of health-orientated activities at schools remains to be seen.

Nurses ⁵⁴⁰

The Austrian health system is heavily dominated by physicians. The responsibilities and roles of other health professionals such as pharmacists or nurses are clearly differentiated from those of medical doctors. Most nurses in Austria perform work which is focused on the individual not the population, working either in hospitals, rehabilitation centres or the field of long-term care (institutional or outpatient home care). This is rooted in their training, as well as in tradition and in other factors described in more detail in this section.

⁵³⁹ Dür W et al. Healthy schools project. Final report. Vienna, Main Association of Austrian Social Security Institutions in cooperation with the Federal Ministry of Education, Art and Culture and the Federal Ministry of Health, 2009 (http://www.gesundeschule.at/fileadmin/user_upload/Downloads_Diverse/ENDBERICHT_Gesunde_Schule.pdf, accessed 22 April 2011).

⁵⁴⁰ Based on two expert interviews (Research, University) conducted in October 2009.

Most nurses in Austria still work in the hospital sector. About 400 000 individuals receive long-term care benefits⁵⁴¹ and about 100 000 take advantage of mobile nursing services.⁵⁴² The demand for outpatient nursing services (mobile nurses for long-term care) is increasing rapidly. At present this demand is partially met by unregistered nurses (estimates of about 40 000 individuals caring for 20 000 patients),⁵⁴³ who work in private households in which they look after individuals requiring long-term care. This represents between 5 and 20 times the number of registered nursing staff operating in this field. No exact figures exist on this issue.

So far very few positions exist which require a nurse to take a population-based rather than an individual perspective. Because of educational standards, system structures, funding and the image of nursing in society, as well as attitudes among health system stakeholders, the public health responsibilities of nurses are still very limited in Austria. Further education and training in public health or palliative care are not rewarded by increased remuneration, so there are few incentives for nurses to engage in such activities. Reimbursement is not performance related. Some employers try to motivate their nursing staff to undertake further education by either paying for their training or by offering them educational leave from work. Nurses who have acquired an MPH degree, for example, can at the moment only expect an increase in salary if they move into another field of work, such as university teaching or research. The professional contribution nurses can make to public health does not seem to be sufficiently valued or acknowledged in Austria.

Specialist professions (such as family health nurses, community health nurses or public health nurses) do not exist in Austria. In the early 2000s, WHO defined a concept for family health nurses, which was supposed to be implemented in various countries. In Austria the implementation process was headed by the Austrian Red Cross and supported by a multidisciplinary group of experts. A final report was presented in 2007 but the concept has not been put into practice.⁵⁴⁴

It is very difficult to compare the roles and responsibilities of different health care professionals across countries as these are subject to considerable variation. Tasks carried out by nurses in some countries may be performed by other professionals, such as physicians, social workers or therapists, in

⁵⁴¹ 315 000 of these from the Federal Government, the remaining amount from the regions (HVB. *Social insurance in figures*. Vienna, Main Association of Austrian Social Security Institutions, August 2009 (http://www.sozialversicherung.at/mediaDB/561595_Sozialversicherung_in_Zahlen_Ausgabe23_August_2009.pdf, accessed 3 June 2010)). Data on long-term care benefits recipients as of December 2008.

⁵⁴² Ruddy J, Marschitz, W. Reform der Pflegevorsorge in Österreich II. *Soziale Sicherheit*, November 2007. (Shortened version available at http://www.sozialversicherung.at/mediaDB/MMDB127501_Ruddy_Pflege-Artikel.pdf, accessed 23 March 2010).

⁵⁴³ Ibid.

⁵⁴⁴ Wild M et al. *Implementation of the concept of the family health nurse of the WHO in Austria*. Vienna, Austrian Red Cross in Co-operation with the (then) Federal Ministry of Health, Family and Youth (BMGFJ), the region of Styria (health department) and the Austrian Association for Health and Nursing, 2007.

others. Comparisons are further hampered by the use of different categories of professional groups, along with varying training and professional structures.

As already indicated, the involvement of nurses in public health is very limited in Austria. The main fields of work for nurses employed by the regional health authorities were identified several years ago⁵⁴⁵ by the working group Nurses in the public health service.⁵⁴⁶ As a result of this, the regional health authorities increased the number of nurses working for them. Regardless of this development, the scope of the nurses' responsibilities has not undergone a major change. Nurses are still predominantly occupied with operational tasks instead of being actively involved in strategic decisions or in structural changes. The tasks performed by them vary across the regions but mostly involve training and quality assurance and monitoring functions, such as performing audits in hospitals or in nursing homes.

Experts who were interviewed for this study reported that nurses have generally become more active in the areas of prevention and health promotion and that their contribution to these fields has increased. Further involvement and the extension of their responsibilities are, however, restricted because of limited funding and the lack of adequately qualified nursing staff. As already mentioned, nurses tend to be occupied with operative rather than strategic tasks. Nurses who wish to advance in their career must by law undergo training, part of which involves topics such as health promotion or public health.

Several pilot projects currently assess the role nurses could take with regard to prevention and health promotion, for example, within home care. They show promising results (for example, Health network Tennengau Salzburg, Living independently when ageing in Vorarlberg). Other potential future responsibilities for nurses cited by experts include further involvement in long-term care (assessment of care need to enable definition of the financial long-term care benefit), the collection and assessment of epidemiologically relevant data or the organization and management of community activities.

In addition to the nurses who work for the ÖGD, a few nurses with postgraduate training in public health hold research positions in universities or independent research institutions, or work for one of the large, system-level stakeholders in Austria, such as social insurance, the ministries or the regions. The size of this group may change because more nurses appear to be interested in undertaking further training, and also as a result of changes in the training structures.

⁵⁴⁵ These involved: quality assurance of education, further education and continuing education according to the Nursing Act; health promotion and prevention; health reporting and planning; quality assurance of nursing care, both in ambulatory and inpatient care; general duties/involvement in decision-making processes relevant to nursing; financial benefits for long-term care; and public relations work, as well as counselling/provision of information.

⁵⁴⁶ Klampfl-Kenny M. *Was kann (ein) Public Health (Experte)? Am Beispiel Public Health im öffentlichen Gesundheitsdienst – Hauskrankenpflege. Veranstaltungsreihe "Vernetzung von Lehre – Forschung – Praxis"*. Vienna, Forschungsinstitut für Pflege- und Gesundheitssystemforschung der Johannes Kepler Universität Linz, October 2001.

Previously, nurses in Austria were trained for three years in schools that were part of hospitals. Recently, the regions have been given the chance to organize the training of nurses in the form of a degree from universities of applied sciences.⁵⁴⁷ So far, this has only been taken up to a very limited extent as it involves various administrative issues, such as the shifting of funding from the hospitals to universities of applied sciences and a change in the admission criteria. Nursing schools accept students who have completed 10 years of schooling and no school leaving examination is required. Universities of applied sciences require students to hold a school leaving examination certificate or a certificate of general educational development. In Vienna the course for nursing is being offered again at the University of Applied Sciences FH Campus Vienna and in Salzburg the first course started in autumn 2009. Graduates of these courses are awarded a Bachelor's degree. In order to ensure the practical training of the nurses, universities are cooperating with local hospitals and hospital associations.

Most regions have not yet modified the training structures of nurses for the reasons already discussed. Whether the change in training will have an impact on the salaries and responsibilities of nurses remains uncertain. At the moment nurses who have completed a course at a university of applied sciences and those who have undergone training at one of the traditional nursing schools are treated in the same way when it comes to work arrangements.

Midwives

In the same way as nurses, midwives in Austria mainly operate in the clinical inpatient or outpatient settings. They are not involved in the national screening programme for pregnant women and mothers, the mother–child pass programme. Examinations in the programme are only carried out by physicians, mostly gynaecologists. Midwives lead birth preparation courses and offer advice on birth and any other issues (such as breastfeeding) related to motherhood in hospitals, mother–child centres or parent centres. They work mainly in hospitals, in which they assist at births and/or work on a self-employed basis, counselling pregnant women, accompanying them to hospital for the delivery of their children and overseeing home births.

Several midwives have already undertaken or are currently undertaking postgraduate training in public health. Until recently, midwifery was not taught at universities but at schools. Training now takes place at universities of applied sciences.

⁵⁴⁷ Amendment of the Nursing Act (June 2008), available at <http://www.oegkv.at/fileadmin/docs/Bundesverband/findbgbl.pdf> (accessed 2 September 2009).

Other public health professionals

Other health professionals involved in the provision of public health services in Austria include physiotherapists, speech therapists, nutritionists and psychologists.

Social scientists dealing with public health issues include statisticians, sociologists and economists who usually work in multidisciplinary research institutions or in health promotion departments. Health authorities and other health system stakeholders (social insurance, ministries) also employ individuals from a variety of professional backgrounds. Both for public health practice and research it is vital to draw on the knowledge and skills of professionals from a wide range of disciplines, involving, for example, experts in medicine, economics, statistics, business/management, psychology, epidemiology, sociology, law, anthropology and/or history.

A very specific group of professionals operating in the field are epidemiologists. Austria does not offer any training in epidemiology and only has a very few epidemiologists who have been trained abroad. These individuals usually work in small university departments that are either part of or attached to the department of social medicine. Within these departments, not all employees will have undergone specific training in epidemiology, but are often statisticians or nurses who learn through work experience with instruction from their supervisors or colleagues. No data on the number of trained epidemiologists in Austria exist.

Nonmedical employees of the health authorities at various levels of the health system do not receive professional training as a general rule. Even at the BMG, the training of individuals (with rare exceptions) does not correspond with minimum professional standards.

6.2 Capacity-building in public health

The concept of capacity-building

Based on the definition of Hawe and colleagues (1999),⁵⁴⁸ capacity-building is “an approach to the development of sustainable skills, organisational structures, resources and commitment to health improvement in health and other sectors, to prolong and multiply health gains many times over”.

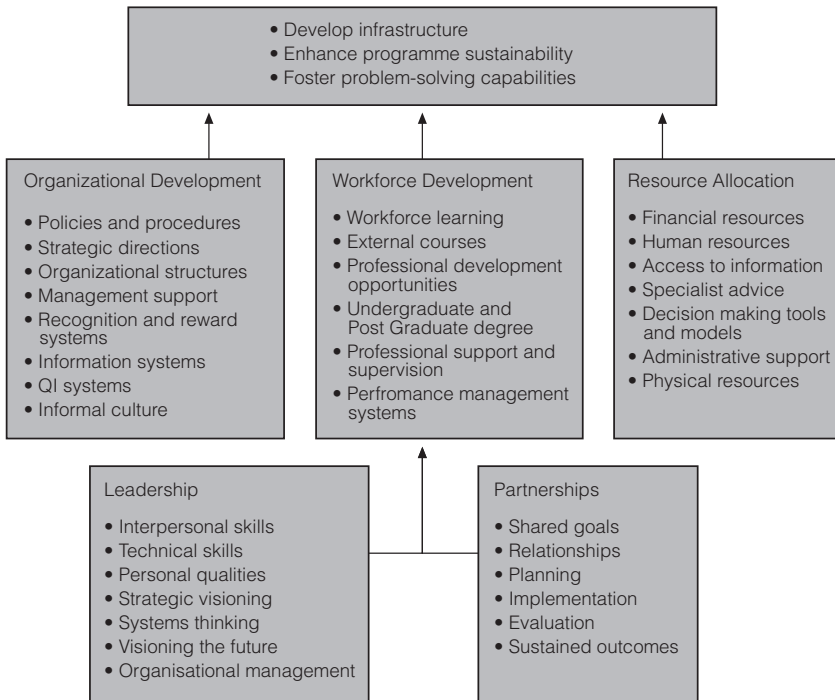
In Austria, capacity-building – when mentioned in connection with public health – is frequently limited to workforce development in the form of public

⁵⁴⁸ Cited in: NSW Health Department. *A framework for building capacity to improve health*. North Sydney NSW; New South Wales Department of Health Nutrition and Physical Activity Branch (http://www.health.nsw.gov.au/pubs/2001/framework_improve.html, accessed 22 April 2011), p. 3(i).

health education or training of professionals. In this report a broader approach to capacity-building is recommended, involving other aspects than solely workforce development.

The capacity-building framework presented by the New South Wales Health Department in 2001 (Fig. 6.1) suggests that capacity-building involves several dimensions – developing infrastructure, enhancing programme sustainability and fostering problem-solving capabilities – and key action areas include organizational development, workforce development, resource allocation, partnerships and leadership.

Fig. 6.1 *New South Wales Health Department capacity-building framework*



Source: NSW Health Department (2001).⁵⁴⁹

Many of the action areas have already been discussed or referred to elsewhere in this report and are, therefore, covered only briefly in this chapter. The strong focus on workforce development measures in the following sections reflects the understanding and the current situation with regard to capacity-building in Austria, as this is the most prominent field at present.

⁵⁴⁹ NSW Health Department. *A framework for building capacity to improve health*. North Sydney NSW, New South Wales Department of Health Nutrition and Physical Activity Branch (http://www.health.nsw.gov.au/pubs/2001/framework_improve.html, accessed 22 April 2011).

Leadership and commitment

To promote implementation of and commitment to public health measures, it is crucial that somebody assumes leadership and shows commitment by backing and promoting the ongoing process and taking responsibility for any outcomes. The assignment of a leadership role depends on the topic in question.

Currently, selected activities are taking place that do not appear to be coordinated at national, regional or sometimes even institutional levels. The development of public health may also be restricted by politicians or other decision-makers who fail to assign budgets or to show personal commitment to the topic because they tend to define their priorities in line with legislative terms and are reluctant to make major investments in the present (which may have an impact only several years or even decades later).

Large investments – especially when compared to other expenditure on public health measures (see section 2.3) – have recently been made in the context of fighting the A (H1N1) 2009 influenza virus but experts fear that expenditure on public health will continue to remain very low. The allocation of additional resources or the shifting of selected resources from clinical to public health services is strongly recommended in order to promote the further development of public health in Austria.

In contrast with politicians, social insurance is not bound to legislative terms and could, therefore, act in a more independent and sustainable way by taking a leading role in the development and implementation of a national public health strategy. Public health responsibilities are not clearly defined in Austria, however, and there is no consensus about what it actually involves. This leads to reduced commitment and uncertainty among stakeholders when it comes to discussing and planning further steps.

No financial incentives and very few fixed budgets are dedicated to public health practice and research. No national public health strategy or framework exists to enable stakeholders to define their own role in a more detailed way.

Resources

Resources and funding for public health are very limited in Austria. There are no ring-fenced budgets and experts interviewed in the course of the study reported great difficulties in trying to obtain public funding. In many cases they are forced to seek external or EU-level funding. Both within and outside of social insurance, a lack of resources has repeatedly been reported as one of the major obstacles to the successful implementation of public health measures.

Structures and organizational development

Some organizational public health structures are in place (see section 2.4), but these are mostly still lacking across all levels of the health (and other) sector(s). Several specific institutions for health promotion and HTA have been established since the early 2000s but an overall framework and strategy are still missing, not only at national level but also for individual health system stakeholders, such as social insurance. Some public health functions appear to be more developed than others. The development and standing of areas and of institutions can be heavily influenced by the individual or individuals associated with them. For most of these institutions in the health sector, public health appears to be one of many topics they deal with, but this may not be recognized as being the case.

The responsibilities of existing stakeholders with regard to public health agendas are in many cases not clear. Activities are only partially assessed and evaluated and many initiatives are still in a pilot phase. There is no national institute for public health, although there are rumours that one may be established in the near future. The growth and development of a national public health infrastructure, however, would still require the definition of a legislative base and the revision of existing legislation.

Networking and partnerships

Cooperation with sectors other than health is rare in Austria. New measures of coordination within the health sector have recently been developed with the Health Care Agency across national and health platforms at regional levels. The effectiveness of their activities has not yet been evaluated.

With regard to networking, intersectoral cooperation on public health issues between ministries and health institutions at national level is very restricted, event- and topic driven and not standardized. This is generally the case in the Austrian health system, in which the formation of partnerships and cooperation are not actively encouraged and are not standard practice.

Social insurance does try to promote communication and initiate discussions. There is an example of this in the Upper Austria region, where an institute for health planning (IGP) was formed jointly by the regional sickness fund, the regional government and the major cities. Examples of cross-sectional cooperation between national stakeholders include the Healthy Schools Project – which involves social insurance, the BMG and the Federal Ministry of Education, Arts and Culture as partners – or the compilation of the *Austrian*

report on strategies for social protection and social inclusion 2008–2010,⁵⁵⁰ which was published by the (then) BMSK (now the BMASK) in September 2008 and is based on contributions of a wide range of stakeholders.

Several insurance funds claim to have formed partnerships with universities and NGOs but the terms of these are not always clear or well defined. There is no common understanding of networking and its implications in terms of evaluation and quality of outcomes within social health insurance and more generally.

In some areas the regional sickness funds seem to cooperate more closely with their regional government than in others, and competition between sickness funds restricts the sharing and exchange of knowledge.

The lack of cooperation between different health system actors is, to a certain extent, the result of the fragmented funding structure of the health system, the lack of incentives this produces, and the absence of clearly defined responsibilities for different public health functions, such as prevention or health promotion. National and international partnerships, especially in research, are not at present being used to their full potential.

Among public health professionals in Austria, networking works fairly well. Many individuals in public health positions are linked by the ÖGPH, which provides them with a forum for discussion and on occasions becomes involved in giving an opinion on health policy issues. Further information on the ÖGPH can be found in section 2.4 of this report.

Workforce development

There are various postgraduate training programmes for public health in Austria and these are described in considerable detail in subsequent sections. Little funding is available to support the programmes. All of them appear to be struggling to find participants and a merging of programmes is a possibility.

The government programme for 2008–2013⁵⁵¹ envisages the establishment and expansion of health economics and public health at public universities and tertiary education institutions.

Social insurance has made education and training in public health one of its key priorities. This is seen as a positive step but requires stronger commitment. Although a number of social insurance employees are regularly engaged in

550 BMSK. *Austrian report on strategies for social protection and social inclusion 2008–2010*. Vienna, Federal Ministry of Social Affairs and Consumer Protection, 2008 (http://www.bmsk.gv.at/cms/site/attachments/4/4/0/CH0121/CMS1222677019004/strategiebericht2008_engl_neu.pdf, accessed 22 April 2011).

551 Republik Österreich. *Regierungsprogramm 2008–2013. Gemeinsam für Österreich. Regierungsprogramm für die XXIV. Gesetzgebungsperiode*. Vienna, Republic of Austria, 2008 (<http://www.bmlfuw.gv.at/filemanager/download/38941/>, accessed 10 February 2011).

further education and training courses, there is a clear need for the further building of qualified human resources and this may be hampered by a lack of financial resources.

The incentives for employees qualified in these areas to stay within social insurance are also limited as their further training is not usually reflected in salaries. Potential benefits associated with further training may be that training costs are covered and that it may lead to job enrichment and professional development as well as enhanced career prospects.

Public health training in Austria

Stakeholders

The Austrian landscape of public health training is defined and formed by various universities and universities of applied sciences. Others involved in the development and regulation of public health training in Austria are the Federal Ministry of Science and Research and the BMG, as well as certain individuals working in the ÖGD and selected experts operating in the field.

Three university institutions in Austria have incorporated the term “Public health” into their title.

The **Centre for Public Health** at the Medical University of Vienna⁵⁵² consists of eight departments or institutes for epidemiology, general and family medicine, ecotoxicology, ethics in medical research, history of medicine, medical psychology, social medicine and environmental hygiene. It lists a total of about 160 employees on its web site.

The **Institute of Public Health, Medical Decision-Making and HTA** at the UMIT in Hall in Tyrol lists 33 employees on its web site.

The **Institute for Public Health** at the Paracelsus Private Medical University in Salzburg⁵⁵³ is a small university institute with two employees listed on its web site.

The first two university institutions organize public health programmes. Other university departments/institutes offering Master's programmes in public health are detailed in the following subsections.

Training paths and public health programmes in Austria

A range of training paths exist to obtain training in public health and related fields. Individuals can:

⁵⁵² Centre for Public Health, Medical University of Vienna (<http://www.meduniwien.ac.at/zph>, accessed 3 October 2009).

⁵⁵³ Institute of Public Health at the Paracelsus Private Medical University Salzburg (<http://www.pmu.ac.at/de/145.htm>, accessed 22 April 2011).

- undertake a postgraduate course in public health – this is possible for individuals who have an undergraduate university degree in any discipline. In some cases, proof of a specific amount of work experience or other training/education can be accepted as a substitute for undergraduate university education;
- obtain undergraduate or postgraduate training in health management, health promotion, hospital management and so on at university, universities of applied sciences or other institutions;
- train to become a specialist in social medicine (a medical specialty) – this is only possible for graduates of medical universities;
- undergo training to become a specialist in occupational and work medicine (a medical specialty) and/or acquire a diploma for occupational medicine, which is offered at one of the two academies for occupational medicine in Austria and involves undertaking a 12-week practical course. This is only possible for medical graduates or physicians who have already obtained a defined amount of practical medical training (*ius practicandi*); and
- join the ÖGD as a medical officer – this requires enrolling in a specific training course which is only open to physicians who have completed their training to become a GP or a medical specialist (any medical specialty).

Public health programmes do not have a long history in Austria. The first programme began in 2002 in Graz in the Styria region and before this several Austrians had already undergone training abroad. About 20 of these were supported by a scholarship programme which was initiated by the regional government of Styria and aimed at giving selected Austrians the opportunity to enrol in postgraduate training in public health and related disciplines at international universities in Germany, Switzerland, the United Kingdom or the United States. Scholarships were awarded to students between 1997 and 2001.

In 1998 Schulte and Noack undertook an assessment of qualification needs for public health in Austria and concluded that Austria possessed considerable medical, nursing, psychosocial and medico-technical and pharmaceutical human resources, but that, in contrast, resources for public health were lacking in terms of health services management, health promotion management, prevention and social medicine.⁵⁵⁴

Since the early 2000s the topic of health has received increasing attention at Austrian universities, universities of applied sciences and private education institutions. The first Austrian Master's programme relating to public health

⁵⁵⁴ Schulte P, Noack RH (1998). Development of training and research in health sciences – demand for qualifications in the field of public health in Austria – Analysis of the status quo in Austria. Cited in Püringer U. History of the university programme public health in Graz or who is ahead of his time has to wait for the others in dark caves – part 1. In Sprenger M, ed. *Public health in Austria and Europa*. Graz, Festschrift Horst Noack, 2005.

was developed in Graz at the beginning of 2000 and the first course started at the Medical University there in autumn 2002.

Further programmes for public health were subsequently started at the Johannes Kepler University in Linz (Upper Austria), at the UMIT (Health Management) in Hall in Tyrol, and at the Medical University of Vienna in cooperation with the University of Vienna. The curriculum taught in Graz is also taught at the University of Applied Sciences (Centre for Research and Continuing Education) in Schloss Hofen, in cooperation with the University of Applied Sciences in Dornbirn (both Vorarlberg). Various universities (for example, in Krems and Klagenfurt) and universities of applied sciences (in Pinkafeld, Steyr or Bad Gleichenberg) followed the trend and started programmes for health care management, health promotion, hospital management and other related fields containing public health elements.

So far only the programme in Graz has undergone external evaluation. One programme coordinator (Pinkafeld) carries out surveys among graduates to find out how they have progressed professionally and how they have benefited from attending the programme. Graz also tries to keep track of former students and promotes networking among alumni, but has not yet undertaken a formal graduate assessment. All programme organizers are planning to carry out evaluations and alumni assessments in the future.

Public health programmes in Austria vary in terms of their scope (European Credit Transfer System (ECTS) points), tuition fees, duration, teaching schedules (several blocked weeks per year or weekly/two-week blocked sessions), contents and topical focus, number of participants, and background of the lecturers. All programmes are postgraduate and are offered on a part-time basis. Most students participating in the programmes work full time and study part time.

Based on Austrian legislation, universities do not support study programmes for public health financially. All public health programmes are largely funded through tuition fees, partly covered by employers. At an information event at which the different public health programmes in Austria were presented, all programme representatives stated that the support and the understanding of employers was a crucial factor for students when coping with their studies and their regular job commitments.⁵⁵⁵ With regard to funding, certain institutions act as sponsors and offer scholarship support by financing a defined number of places on every course or by making contributions to the tuition fees (for example, the FGÖ).⁵⁵⁶ Others regularly send selected employees to attend

⁵⁵⁵ Information Evening on Public Health Programmes in Austria. Organized by the International Department of the Regional Medical Association of Vienna. Vienna, 19 February 2009.

⁵⁵⁶ Scholarships of the FGÖ are available for a maximum of 50% of all participants. The focus lies on health promotion and studies must be passed with positive marks within the period requiring students to be present. The Master's thesis must deal with a health promotion topic and receive a positive mark/evaluation.

the programmes (social insurance funds, HVB). Some regional sponsoring opportunities exist and universities normally have arrangements with local banks to offer special student loans. Recruiting sufficient students has proved to be a challenge for all programme organizers.

Table 6.4 compares the Master's programmes relating to public health offered in Austria according to the following criteria: name of programme, location, duration in existence, academic level, mode of attendance, degree awarded, duration of course, ECTS points, language, funding, costs, eligibility, number of graduates and current students, taught modules and courses, topical focus, Master's thesis, practical training/internship, lecturers (background), student mix, career paths of graduates and any additional information.

Only programmes for which an MPH degree is awarded are listed, with the exception of the programme at the UMIT, which is completed by awarding graduates a Magister degree (previously an MSc) and allows students the possibility of continuing with a doctoral programme.

A considerable number of other health-related undergraduate and postgraduate study programmes are offered at universities, universities of applied sciences, private universities or academies in Austria. These are not detailed here because a comprehensive description would go beyond the scope of this study. There are no undergraduate or postgraduate training programmes for epidemiology in Austria.

A university course for public health nursing (*Public health im Pflegewesen*) was offered for the first time at the Medical University of Graz in 2002. This development was based on a European training initiative.⁵⁵⁷ The curriculum had been defined by nursing representatives of the then 15 European Member States (EU15) and the PCN (Permanent Committee of Nurses), together with the European Commission's DG Sanco. The course was held three times before it was interrupted due to reduced student demand. Previous organizers state that the drop in demand could be partly related to the introduction of a similar programme that enabled participants to gain a university (Bachelor's) degree instead of a diploma. Apparently, graduates who worked either in research or in the outpatient setting (home care) benefited more from the training course than the nurses working in inpatient care, who could not easily manage to apply their newly acquired knowledge to their daily work in hospital.

⁵⁵⁷ Guidelines: Development of a continuous professional training programme for nurses in public health within the EU (Standing Committee of Nurses of the European Union).

Table 6.4 Public health programmes in Austria – an overview

	Medical University of Graz/Schloss Hofen – Centre for Research and Continuing Education in cooperation with the University of Applied Sciences in Dornbirn	Medical University of Vienna and University of Vienna	Private University for Health Sciences, Medical Informatics and Technology in Hall in Tyrol, UMIT	University of Linz in cooperation with the Academy of Health and Education of the Holy Cross Sisters (Kreuzschwester)	University of Linz in cooperation with the Academy of Health and Education of the Holy Cross Sisters (Kreuzschwester)
Institute/Department	Institute for Social Medicine and Epidemiology	Medical University of Vienna and University of Vienna (Centre for Sports Sciences and University Sports)	Institute of Public Health, Medical Decision-Making and HTA	Institute for Nursing and Health system research	Institute for Nursing and Health system research
Name of programme	Universitätslehrgang Public Health (University course Public Health)/Public Health MPH Management in der Krankenversorgung und Gesundheitsförderung (Management in Health Services Provision and Health Promotion)	Universitätslehrgang Master of Public Health (University course MPH)	Gesundheitswissenschaften (Health Sciences): Linking Health Sciences and Public Health	Aufbaustudium "Public Health and Hospital Management" (Postgraduate study programme Public Health and Hospital Management)	Postgraduales Studium "Public Health and Health Systems Management" (Postgraduate study programme Public Health and Health Systems Management)
Location (City/Region)	Graz (Styria) Lochau and Dornbirn (both Vorarlberg)	Vienna (Vienna)	Hall (Tyrol) Linz (Upper Austria) and Vienna (Vienna)	Linz, Wels (Upper Austria)	Linz, Wels (Upper Austria)
In existence since	Graz: 2002 Schloss Hofen: 2006	2005	2002	2004	2007
Academic level	Postgraduate study	Postgraduate study	Postgraduate study	Postgraduate study	Postgraduate study
Mode of attendance	Part time	Part time	Part time	Part time	Part time

Degree awarded	MPH	MPH	Previously MSc, now Magister (Mag.) A doctoral programme can be joined thereafter	Professional Master in Public Health (PMPH)	MPH
Duration (terms) ^a	4 (attendance) + 2 (Master's thesis) (max. total of 8 terms)	4 (including Master's thesis)	4 (including Master's thesis)	4 (including Master's thesis)	5 (including Master's thesis and summer school)
ECTS points	120	120	120	65	80
Language	German	German	German	German	German
Funding	Several lectures in English Tuition fees Scholarship programmes Region of Styria	Several lectures in English Tuition fees Scholarship programmes Third-party funds (for example, for internships)	Several lectures in English Tuition fees Scholarship programmes	Several lectures in English Tuition fees Scholarship programmes Local/regional funding	Several lectures in English Tuition fees Scholarship programmes Local/regional funding
Cost (for 4 terms) in □	12 980	11 500	9 200	12 400	12 000
Eligibility	University degree or comparable international/foreign degree + minimum of 2 years of work experience (in the health sector). Individuals without a university degree: long-standing work experience, Certificate of General Educational Development + 180 ECTS points from courses, studies, etc. Interview with the head of the course. Proof of sufficient knowledge of English.	University degree or Certificate of General Educational Development + 5 years of specific work experience or + 3 years of work experience in an executive position or + 120 ECTS + 2 years of work experience	University degree or 6-term post-secondary education (University of Applied Sciences)	University degree (undergraduate degree, Master's degree, diploma, doctorate or comparable studies) or Comparable qualifications (limited to 50% of all students): work experience and Certificate of General Educational Development (entitled to study at university)	University degree (undergraduate degree, Master's degree, diploma, doctorate or comparable studies)

Table 6.4 *cont'd*

<p>Medical University of Graz/Schloss Hofen – Centre for Research and Continuing Education in cooperation with the University of Applied Sciences in Dornbirn</p>	<p>Medical University of Vienna and University of Vienna</p>	<p>Private University for Health Sciences, Medical Informatics and Technology in Hall in Tyrol, UMIT</p>	<p>University of Linz in cooperation with the Academy of Health and Education of the Holy Cross Sisters (Kreuzschwester)</p>
<p>Number of graduates and current students</p>	<p>Maximum of 30 students Currently 17–14 participants, 45 graduates</p>	<p>Maximum of 50 students per study location (Tyrol, Upper Austria or Vienna)</p>	<p>15–25 students; 27 graduates</p>
<p>Schloss Hofen: 1 graduate; 14 completed time of attendance; 23 are still studying</p>	<p>Maximum of 50 students per study location (Tyrol, Upper Austria or Vienna)</p>	<p>15–25 students; 8 graduates</p>	<p>15–25 students; 27 graduates</p>
<p>Taught modules/ courses</p>	<p>Concepts and Methods of Health Sciences Social- and self-competence information and knowledge management, health sciences and public health, statistics, demography & epidemiology, organizational and management sciences, systems of social services, health services and health care services provision, steering of the health system</p>	<p>Basic studies Biostatistics, epidemiology environmental health sciences, health services administration, social and behavioural sciences, ethics in public health Further studies Health sciences and public health, organizational and management sciences, management sciences, physiology, sports medicine anatomy, biomechanics, traumatology, orthopaedics, nutrition, psychology,</p>	<p>Methodological competence health management/ management sciences, health systems and public health (introduction to health sciences and public health practice, the Austrian health system and international health systems, health economics, quality interfaces in the health sector, health and gender), organization and human resource management economics and controlling, quality management hospital management</p>

Taught modules/ courses (contd)	workplace health promotion lifestyle factors, lifestyle management, health communication, target populations	data collection, research), empirical health research and public health (biostatistics, epidemiology, EBM)
Topical focus	Lifestyle medicine Prevention Health promotion Sports medicine Physical activity Nutrition	Management Information technology
Master's thesis	Management in health promotion Management in health services provision Health sciences and social sciences	Health care management Hospital management Austria
Practical training/ internship	Yes (during 5th and 6th terms)	Yes (during 3rd and 4th terms, max. 3 months extension granted)
Lecturers (background)	Yes Internship in various fields: 12 ETCS points (300 hours including preparation and follow-up work)	Yes (during 4th term) No
	<ul style="list-style-type: none"> • From the Medical University of Vienna • From the University of Vienna • International lecturers: <ul style="list-style-type: none"> - from partner universities: Ottawa, Freiburg, Hannover and Rome - from international organizations: WHO, World Bank 	<ul style="list-style-type: none"> • From national universities and from universities abroad • From institutions operating in the health sector : <ul style="list-style-type: none"> - from international health organizations (WHO, EU) - from national research institutions - researchers versus practitioners

Table 6.4 *contd*

	Medical University of Vienna and University of Vienna	Private University for Health Sciences, Medical Informatics and Technology in Hall in Tyrol, JUMIT	University of Linz in cooperation with the Academy of Health and Education of the Holy Cross Sisters (Kreuzschwester)	University of Linz in cooperation with the Academy of Health and Education of the Holy Cross Sisters (Kreuzschwester)
Lecturers (background) (contd)	<p>Practitioners who partially also provide internships: e.g. Statistics Austria, FGO, Fund for Social Affairs Vienna, Media representatives</p>	<p>Between 25% and 75% medical doctors (varies each year), multidisciplinary, participants of 10 nations. A few German and Swiss participants.</p>	<p>From various disciplines: law, business administration, economics, medicine, sociology, statistics, communication, linguistics, etc.</p>	<p>From various disciplines: law, business administration, economics, medicine, sociology, statistics, communication, linguistics, etc.</p>
Student mix	<p>Multidisciplinary: Background in medicine, social sciences, psychology, pedagogy, nutrition, pharmacology, nursing, social work, law, sports sciences. Mostly Austrians.</p>	<p>About 1/3 medical doctors, 2/3 from multidisciplinary background.</p>	<p>Multidisciplinary: Organization of social and cultural events Background in medicine, social sciences, law and nursing.</p>	<p>Multidisciplinary: Organization of social and cultural events Background in medicine, social sciences, law and nursing.</p>
Career paths of graduates	<p>Many graduates experience a change in their career path due to the programme (about 1/3 to 1/2 of all graduates). Others remain with their current employer and chose to undergo training, primarily to widen</p>	<p>Some stay in positions. Physicians need to do so for Primariat (becoming the head of a department at hospital).</p>	<p>Most return to their previous jobs. Other examples: from senior physician to head of department, from hospital to public health position in social insurance, moving into management positions. Most return to their previous</p>	<p>Most return to their previous jobs. Other examples: from senior physician to head of department, from hospital to public health position in social insurance, moving into management positions. Most return to their previous</p>

Career paths of their professional graduates (contd) perspective/horizons.

- Vienna: Migrant commissioner
- Advisor to Minister of Health
- Robert Koch Institute Berlin
- ÖBIG

jobs. Other examples: from senior physician to head of department, from hospital to public health position in social insurance, moving into management positions.

Source: Web sites and folders of the universities, personal interviews, written correspondence (July 2009).

Notes: ^a The university year is normally divided into two terms.

Most programme organizers argue that it is not possible to demand a compulsory internship or practical experience from their students as the studies are part-time postgraduate programmes and students generally work full time in addition to pursuing their studies. Only the programme in Vienna requires students to undertake an internship or to undergo some practical training as part of their studies. Practical training and experience do, however, constitute key features of successful public health training.

Many graduates of public health programmes remain attached to the university from which they graduate, through the alumni network but also by returning as external lecturers. Networking between students of public health programmes appears to be working well and takes place, for example, via the online forum of the ÖGPH or at public health events, including conferences.

Harmonization, coordination and standards

Public health and related programmes are currently not well coordinated but operate in isolation from each other. Most are orientated towards international standards, although, according to experts they do not yet fully meet these. Each programme operates according to its own concepts and definitions and thus produces students with different perspectives. At present no official national targets, concept or standards exist relating to public health or public health training and education. Discussions were started on the development of a concept for coordination when the heads of the various programmes came together to define a common strategy, but this foundered because of lack of commitment.

The quality of the training offered in Austria and how it compares to international standards are not known, since there is no capacity or funding to evaluate the training programmes. The quality of the programmes depends very much on the individuals organizing and managing them, as well as on the lecturers and the students.⁵⁵⁸ Selected programmes show a considerable focus on management issues. It is not clear whether the basic public health disciplines of epidemiology, statistics and health economics are covered adequately for a postgraduate training course. Minimal evaluation is undertaken in terms of student feedback but it remains uncertain whether any of the Austrian programmes would currently pass the quality criteria as defined by ASPHER.⁵⁵⁹

Two students on the public health programme in Graz are writing their Master's thesis on the topic *Development of standards for part-time (extra-occupational) public health training*. The implementation of ASPHER standards is being discussed. Austrian experts would welcome a stronger emphasis on networking,

⁵⁵⁸ Expert interview, 22 June 2009 (University).

⁵⁵⁹ Ibid.

cooperation as well as coordination and dialogue between the different training locations. A presentation on standards of public health education was planned for the annual conference of the ÖGPH in October 2009.⁵⁶⁰

Students of public health programmes

Students of public health programmes and related programmes in Austria have a multidisciplinary background. The composition of the student body changes with each new course and no generalizations can be made. Universities offering public health courses have different points of focus, such as prevention, health promotion or management. The emphasis on attracting international students also varies and some courses are composed of national students only. The programme in Vienna appears to show the highest proportion of international students. Programmes – with the exception of lectures given by international lecturers – are taught in German.

The academic training represented most commonly among the students enrolled on these programmes is based on medicine, social sciences (economics, business administration and sociology), nursing, psychology or pharmacy. Professionals without undergraduate university training (nurses, medical technical assistants and midwives)⁵⁶¹ can usually enrol in one of the programmes if they present evidence of sufficient working experience and in some cases a Certificate of General Educational Development (evidence of entitlement to study at university) or proof of a certain number of ECTS points.

Labour market and career paths of public health professionals

The labour market for public health experts and for experts with an education in a related discipline in Austria has slowly changed since the early 2000s, partly as a result of the higher number of graduates. Before the first programme was introduced it was argued that graduates would not be able to find jobs. Based on expert opinion and when talking to public health graduates themselves, however, it seems that graduates have no difficulty in finding placements and there remains a need for more public health professionals.⁵⁶²

Adequate and challenging job profiles and career paths for public health experts are still largely lacking in Austria. This is partly because organizational public health development is not keeping up with individual professional development. Although most of the graduates find a job or, in many cases, return to their previous employment, financial incentives to undergo training to advance career prospects are low, as most jobs for public health professionals are not well paid. Working at the BMG, public health authorities, for social

⁵⁶⁰ Expert interview, 23 June 2009 (University).

⁵⁶¹ Training at universities of applied sciences has only been introduced recently for these professions.

⁵⁶² Expert interview, 22 June 2009 (University).

insurance, a university or another research institution (for example, GÖG, IHS, Ludwig Boltzmann Institutes) usually implies joining a fixed-income scheme which may not reflect the additional value of postgraduate education. Doctors in particular – who have the prospect of working in hospital and later on in private practice with a considerable salary – may be discouraged for economic reasons from working in the field of public health.

According to experts interviewed, many participants in public health programmes (especially those enrolled in postgraduate programmes) view the programme as job enrichment and do not leave their job immediately after graduating. This is very often also motivated by the fact that employers support students during their studies and in several cases also provide at least partial funding. After graduation, public health students may sometimes change position within their organization or take on new responsibilities. Several graduates are members of management or in leading positions when embarking on the training programme, thus reducing their motivation to leave their job. Some graduates actively search for a new placement after completing their training or are presented with new professional opportunities during their studies.

At present it is difficult to track the professional development of public health graduates because, as already mentioned, only one university undertakes graduate surveys, although others are planning to do so in the future. Most course organizers are reasonably well informed about the progress or career paths of their students after graduation.

The number of posts for public health graduates is slowly increasing and job advertisements are starting to demand training in public health or comparable qualifications. Subjects such as HTA, EBM and health economics are slowly but surely finding their way into the Austrian health system culture. This is visible through the establishment of departments for EBM/HTA at social insurance institutions or universities, as well as through the founding of the LBI-HTA in 2005, the declaration of HTA as one of the core areas of the National Institute of Quality in Health Care (*Bundesinstitut für Qualität im Gesundheitswesen*, BIQG, a section of GÖG) and the establishment of a Department for Evidence-Based Medicine and Clinical Epidemiology at the Danube University in Krems.⁵⁶³

Several graduates of public health programmes work with local or regional governments. There are, however, still some governments that do not have any employees trained in public health. Some public health professionals operate at

⁵⁶³ For further information, see the web site of the Donau-Universität Krems (<http://www.donau-uni.ac.at/de/departement/evidenzbasiertemedizin/index.php>, accessed 10 February 2011).

national level, within the BMG or across other ministries.⁵⁶⁴ Further institutions in which graduates work include social insurance funds and HVB, regional or local health authorities, universities, universities of applied sciences or research institutions, GÖG or NGOs. Several also operate as freelance consultants or managers of health care institutions and a small number work for international health organizations, such as WHO.

More than half the graduates of public health programmes with a management focus (for example, from Linz University) are medically qualified. In many cases these doctors use their newly obtained university education to advance their clinical careers, perhaps by becoming heads of hospital departments. This management orientation of public health may be viewed critically by outsiders but some Austrian experts felt it to be a positive development if doctors in management positions had an understanding of public health and carried some public health knowledge into the hospital setting.⁵⁶⁵

Graduates receive little guidance on the execution of public health jobs. Decision-makers and managers still do not have even a basic understanding of public health, which they require to make the best use of qualified employees and to communicate effectively with them.

In 2002 there were about 50 graduates of postgraduate public health training in Austria, most of whom had acquired their training abroad. Since then a considerable number of students have graduated from Austrian or international programmes, resulting in a total of about 200–250 graduates. Several students have already finished their theoretical public health training at university (for example, in Graz), but still have to complete their Master's thesis in order to graduate.

Trends

Programmes for public health and related topics in Austria have developed positively and professionally in the recent past, but most are still struggling to obtain sufficient financial and human resources. All have reported difficulties with recruiting students and a programme's financial viability currently depends, to a considerable extent, on the number of scholarships provided by institutions in the health sector.

The impact made by graduates of national and international programmes is gradually becoming noticeable in Austria. It will be important to reach a critical mass of trained professionals in order to work effectively and careful consideration of appropriate qualifications is required when filling vacant job positions.

⁵⁶⁴ Expert interview, 22 June 2009 (University).

⁵⁶⁵ Expert interviews, 22 June 2009 (University).

The career path of public health professionals in Austria is still far from being well defined, as the market is only developing very slowly in terms of the potential fields of work and awareness of the demand for public health skills. So far no national strategy or plan exists for public health. The difficult financial situation of social insurance in Austria – as well as the current economic crisis – may result in organizations in the health sector becoming more interested in hiring or consulting health economists, HTA specialists, public health professionals or health policy advisors.

Capacity-building in social insurance

Over recent years social insurance has placed an emphasis on public health workforce development and knowledge building. Several research projects have been started.

A document from the regional health insurance fund of Upper Austria, published in April 2008, suggests the formation of a critical mass of public health knowledge spread across strategic and operational levels. Qualified staff can be newly recruited from the graduate population or existing staff encouraged to undergo further training. In the medium and long term, Austrian social insurance intends to pursue a systematic and comprehensive process of capacity-building based on the various components of the New South Wales capacity-building model described at the start of this section (see also Fig. 6.1).⁵⁶⁶

Another short report commissioned by the HVB deals with capacity-building in health economics and public health at Austrian universities.⁵⁶⁷ The author identifies a need for the formation of research capacity in these two disciplines and suggests possible reasons for the absence of these in Austria. He cites little orientation towards health determinants, a focus on curative and individual medicine, and neglect of health inequalities and health, as well as advocating the establishment of research departments at universities. The recommendations are supplemented by cost estimates and calculations for such an endeavour.

To date, a considerable number of social insurance employees have undergone training in public health, health management or a related subject. Most of these individuals, however, still work at an operational level, and are responsible for overseeing specific projects. Some work in strategic positions and are, for instance, heads of departments, group leaders or senior physicians.

Within social insurance in 2009, 92 individuals were either undergoing or had already finished a programme in public health (15 students/17 graduates) or

⁵⁶⁶ Regional Health Insurance Fund of Upper Austria. *Approaches for a concept to create public health expertise in social insurance*. Linz, Department for Research Co-operation, April 2008.

⁵⁶⁷ Patera N. *Capacity-building health economics and public health at Austrian universities*. Vienna, Internal report commissioned by the HVB. Vienna, Main Association of Austrian Social Security Institutions (HVB), 2008.

health management (17 students/43 graduates). Insurance funds with the most employees trained or engaging in one of the training programmes were those of Lower Austria, Upper Austria and Vienna, along with the VAEB and the IfGP. Details are shown in Table 6.5.

Table 6.5 Workforce development in Austrian social insurance institutions, 2009

Social insurance fund	Total	Public health		Health management	
		Graduates	Students	Graduates	Students
AUVA	3			3	
BGKK	1			1	
BVA	1				1
HVB	5	1	1	3	
KGKK	3			2	1
NÖGKK	11	1	2	4	4
OÖGKK	11	8		1	2
PVA	8			8	
SGKK	1			1	
StGKK	8	2	2	2	2
SVA	7		1	3	3
SVB	3		1	1	1
TGKK	1				
VÄB	5	1	1	1	2
IfGP ^a	9	4	2	3	
VGKK	5		4		1
WGKK	11		1	10	
TOTAL	92	17	15	43	17

Source: Personal communication from a representative at the HVB, 25 August 2009.

Notes: ^a100% owned by the VÄB; BGKK: Regional sickness fund of Burgenland; BVA: Insurance Institution for Public Service Wage and Salary Earners; KGKK: Regional sickness fund of Carinthia; NÖGKK: Regional sickness fund of Lower Austria; OÖGKK: Regional sickness fund of Upper Austria; PVA: Pension Insurance Institution; SGKK: Regional sickness fund of Salzburg; StGKK: Regional sickness fund of Styria; SVA: Social Security Institution for Trade and Industry; SVB: Social Security Institution for Farmers; TGKK: Regional sickness fund of Tyrol; VGKK: Regional sickness fund of Vorarlberg; WGKK: Regional sickness fund of Vienna.

Social insurance has also introduced public health as part of the training of their medical doctors. Basic training of physicians involves three modules over a total of 11 days, in which the following topics are covered:⁵⁶⁸

- organization of social insurance and branches of social insurance – unemployment insurance, health insurance, accident insurance and pension insurance;
- legal matters – registration with social insurance, employment law, public services law, international affairs, contractual relationships with providers;

⁵⁶⁸ Personal communication from a representative at the HVB, 3 March 2010.

- EBM – compilation of an HTA;
- health economics – methods of economic evaluation;
- presentation skills – self-presentation, conflict management, communication.

Social insurance strategic targets are now taking public health topics much more fully into consideration and this is reflected in projects and research activities.

One difficulty for social insurance is how to retain its qualified workforce. Several graduates have left their previous jobs in social insurance, despite the fact that their employers supported their training. Reasons for this may be the limited career development options and the strict hierarchical promotion systems, which make it difficult to advance professionally. There are no financial incentives to undertake further training because of the fixed reimbursement scheme. It is unfortunate if a highly qualified employee leaves a particular social insurance institution, but it can still be considered a benefit if they remain within the Austrian health system and can use their training to good effect.

In April 2009, the HVB commissioned the IfGP to carry out the study *Capacity-building within social insurance*.⁵⁶⁹ A survey was conducted among all insurance funds and initial results were presented in July of the same year. A draft list of recommendations was expected for late September 2009 and a detailed plan outlining the financial resources required – along with a schedule for implementation – was planned for the end of November.

Capacity-building must be focused both on individuals and organizations, and training should also contain practical elements. The experts interviewed suggested the capacity-building strategies listed in the following subsections for Austrian social insurance.⁵⁷⁰

Resources

- Allocating a fixed budget to training and research.
- Sponsoring about 20–30 employees per year to undertake further training.

Workforce development

- Professionalization in the form of organized and targeted public health training of social insurance employees.
- Placing a stronger focus on the professional development of employees in general, not only in the field of public health.

⁵⁶⁹ Internal study.

⁵⁷⁰ Based on the answers given in seven expert interviews (public health authorities, university/research, other).

- Participation in educational programmes of varying intensity (ranging from the Vienna Healthcare Lectures⁵⁷¹ to enrolment in an MPH).
- Encouraging critical thinkers.

Organizational development

- Redefining and adapting duties and organizational structures.
- Ensuring top management are prepared to use the newly acquired skills appropriately by giving trained individuals the opportunity to work in areas in which they can apply their acquired knowledge and skills.
- Increasing transparency within the system.

Networking and partnerships

- Engaging in continuous cooperation with universities and other research organizations (exchange of expertise, definition of joint projects (for example, Master's thesis), suggesting research questions).
- Promoting the formation of networks.
- Public relations work – conferences, media, increased use of Internet-based services, promoting public discussion and participation.

6.3 Public health research

No national research strategy for public health research exists in Austria. Discussions involving the foundation of a national institute of public health are currently taking place but little is publicly known as yet about this proposed institution.

Austrian experts interviewed in the course of the study reported that it is very difficult to obtain public funding for public health research. Funding comes partly from universities and researchers often have to seek funding from external sources or apply for European sponsorships.

Health services research and population-based research in general – involving a cohort of individuals followed over a long period of time – are neglected in Austria. There is no tradition of this type of very valuable research and few research institutions or hospitals are active in this area. Epidemiological fieldwork and longitudinal studies are very expensive but crucial for public health research.

Projects in Austria normally last between one and two years. Long-term projects or programmes rarely exist and there is little involvement in EU research

⁵⁷¹ Course offered by the Austrian Social Insurance in cooperation with the London School of Economics and Political Science.

activities. It has also proved to be difficult to introduce the results of successful short-term projects into routine practice.

Research is not only limited because of a lack of funding but also because of problems in access to and use of data. Data that could be analysed without enormous expense are not accessible to researchers and use of individual patient data generally requires the consent of the patients involved, which presents a huge barrier. Pseudonymization of data, which is possible in the HVB, is already used in several cases and could prove to be very useful in the future.

To improve the quality and use of data and consequently to increase research output would require the assessment of existing databases and the revision of these to make them meet the needs of researchers.

Few institutions use data for economic or statistical analysis and possess knowledge of health economics, economic evaluation methods or epidemiology.

There are too few adequately trained researchers, especially epidemiologists. Multidisciplinary working is vital for public health research and practice. Experts should come from a range of backgrounds, including medicine, economics, business/management, statistics, sociology, psychology, epidemiology, anthropology, history and others.

At present, staff involved in the provision of postgraduate public health training have too little time for research because of a preoccupation with organizational issues, such as teaching and course management.

Independent research is crucial but not very common in Austria. Research is often event driven or trend orientated instead of planned,⁵⁷² and there are few examples of ongoing research cooperation or ongoing fixed budgets available for research.

Austria has no independent national HTA institute. The responsibility for HTA currently lies mainly with a division of GÖG that is wholly owned by the Federal Government and with the LBI-HTA, which is funded by the Ludwig Boltzmann Society and its funding partners, who to some extent can influence the selection of research topics covered.

That said, there are some welcome developments. The situation appears to experts to be changing from a retrospective planning focus to the increasing application of prospective planning. In addition, the inclusion or exclusion of benefits from the social insurance/hospital benefits package is in many cases being decided on the basis of professional assessment and evidence.

⁵⁷² Expert interview, 22 June 2009 (Research).

In many cases, public health initiatives or measures in Austria do not have scientific backing, or they lack an evidence base. Evaluation is rarely planned for in advance and is not yet common practice.

Public health research topics in Austria

Public health research in Austria is only just beginning. Because of the limited amount of national research, researchers in the field are currently trying to incorporate international knowledge into the local Austrian setting. No defined budget exists for public health research and resources are very scarce. Participation in EU projects is (according to several experts) barely possible, as there are insufficient resources to file a good application.

Research topics covered depend on the particular interest of the individual research institution and its head, and may show a medical or a socioeconomic focus. Medical topics discussed in connection with public health research in Austria include health promotion, prevention, HTA, chronic illnesses, integrated care, life expectancy, influenza or risk factors/behavioural determinants of health.

Research areas with a socioeconomic or sociological focus include questions related to inequality (poverty, unemployment and health), gender, health reporting, or health system analysis.

Research topics and findings are not in general being effectively communicated. Professional debate tends at present to be focused on describing the status quo instead of on the description and analysis of processes.

Seven experts (researchers and policy-makers) were asked to list future trends in public health research in Austria and the topics they quoted were:

- health services research
- health economics
- health promotion
- health determinants
- prevention.

Another noticeable trend (according to experts) is the demand for action-orientated research, followed by implementation of actual measures.

6.4 Conclusions

Public health in Austria is still strongly dominated by the medical profession. Physicians operate either in the clinical setting (in hospitals or private practice), are employed by one of the medical authorities operating at various levels of the health system, or work for health system stakeholders such as social insurance, universities or research institutions. Several work as school or occupational physicians.

Nonmedical professionals are gradually moving into the field. However, most of them – particularly nurses – still find it very difficult to enter Master's programmes relating to public health and to obtain acknowledgement of their further training after graduation, in terms of an extension of duties and/or an increase in salary. Other countries involve nonmedical health professionals to a much greater extent than Austria, where public health, family and community nurses do not actually exist.

Decision-makers must also accept that there is a shortage of nurses and an expected future shortage of physicians. Although these problems are not confined to Austria, they will need to be urgently addressed.

Understanding of the term *public health* and its concepts and scope varies considerably in Austria. Physicians and other health professionals and institutions may have very different perceptions of their own roles and responsibilities in the provision of public health services. Several may believe that they already work in accordance with public health principles, although this is not entirely the case; others may be providing public health services without recognizing them as such. The fact that no accepted German translation of the term exists⁵⁷³ adds to the confusion, as does the current tendency to use public health as a catchphrase, without necessarily having a real understanding of the underlying concepts involved.

Since the first postgraduate public health programme was started at the Medical University of Graz in 2002, several other programmes have followed in Vienna, Tyrol and Upper Austria. These have resulted in the formation of a body of about 150–200 national public health professionals, including those who trained abroad. The impact of these professionals is noticeable but a critical mass has yet to be reached. System stakeholders subsidize public health programmes in part, usually by enrolling a defined number of their own employees or by funding grants. Without these subsidies, the programmes would not manage to

⁵⁷³ In German the terms *Gesundheitswissenschaften* and/or *Öffentlicher Gesundheitsdienst* are used, which are believed to be too broad (translating the first term as “Health Sciences”) or (specifically in the Austrian context) too narrow, respectively, as the latter term is literally translated as “public health service”, which may seem appropriate, but is used in Austria to denominate the public health authorities (public bodies) only, thereby neglecting other important public health stakeholders and agents.

survive and, even with them, most are struggling to attract enough participants to secure their financial viability.

The quality of public health education in Austria is not known and so far only the programme at Graz has undergone external evaluation. Several university and research experts questioned in the course of the current study were uncertain as to whether the programmes could currently meet the ASPHER criteria. Several programmes seem to place their central focus on subjects or disciplines other than public health (for example, management). Programmes should offer certain core modules and be comparable as well as more flexible, enabling students to gain accreditation on study units completed within another programme.

A critical mass of public health professionals is gradually developing and graduates seem to have no difficulty in finding jobs. A high proportion of graduates remain, at least initially, with their present employer, especially if their training was co-funded. A degree in public health is often perceived as job enrichment, leading not necessarily to a change in job but to an extension of responsibilities within the organization. Many of the organizations within the health system have fixed reimbursement structures that do not acknowledge postgraduate training, so that public health professionals in Austria are in many cases underpaid.

Practical training is only required as part of one programme (Vienna) and this means that graduates normally have only theoretical education in public health disciplines and subjects. The number of public health professionals in Austria is still fairly low, so that, within their organizations, they will often find themselves being the only person with such training and without the guidance of a more senior colleague. They could be faced with the challenge of conveying public health concepts and ideas to a superior, who does not have even a basic understanding of public health, potentially leading to resistance, conflict and frustration.

There is no definition of the term *public health professional* in Austria; further, no national strategy or targets for public health education, training or research exist. Career paths are only just developing and lack clarity, structure and coordination. Organizational development is still lagging behind workforce development, and organizations are often unprepared to make the best use of the skills that public health professionals have to offer. Attractive career paths with competitive reimbursement will need to be developed in the public sector in order to keep public health professionals from moving to the private sector or from leaving Austria to work abroad.

Financial resources for public health research are very limited in Austria. Research studies are often event driven and are mainly short projects or initiatives lasting about one to two years, without much likelihood of extension. Even if results seem promising, implementation can be difficult. University departments with public health programmes do engage in some research, but they are mostly understaffed and individuals can be overwhelmed with multiple responsibilities and/or organizational and administrative duties, leaving them little time for research. The lack of qualified researchers in the public health field also hinders the development of relevant research programmes.

Aspects recognized by experts as being highly relevant for research at present include: the formation of highly qualified teams of research staff; obtaining funding; implementation of long-term research projects; establishment of high-quality, transparent, up-to-date and easily accessible databases; conducting independent research; and the further promotion of subjects such as HTA, evaluation and evidence-based research.

Chapter 7

Recommendations

7.1 Immediate recommendations

The immediate recommendations should be implemented without delay. Other recommendations are to be understood as medium or long term in scope. Selected recommendations may be interrelated and this aspect should be borne in mind when planning their implementation.

Definition

For the definition of measures and activities and for better communication, it is essential to achieve a common basic understanding of the core elements and features of public health. A legal or national definition of the term *public health* ought to be agreed and, if possible, a German translation decided upon. This will facilitate the definition of the key functions of public health in Austria, as well as the development of a strategy and priorities. Based on discussions within the project team, the term *Bevölkerungsgesundheit* is suggested as the German translation for *public health*. A universal and acceptable working definition of public health might be the one put forward by Acheson in 1988 and mentioned in section 1.1 of this report: “public health is the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society”.⁵⁷⁴

Overall framework and strategy

The development of an overall framework and strategy for public health should be initiated by defining national health targets as well as a national public health strategy. There should be a clear concern for improving the health status of the entire population by tackling the social determinants of health and not only by concentrating on saving health care costs by means of health promotion and prevention. In the development of health targets, whether at local or national level, it is crucial that those who set targets take into account the resources

574 Acheson D. *Public health in England. The report of the Committee of Inquiry into the future of the public health function (the Acheson report)*. London, Her Majesty's Stationery Office, 1988.

required in order to achieve them, the methods for implementation and the appropriate evaluation strategy.

This process will require the definition of clear responsibilities for and commitment to public health. More coordination of activities is needed, as well as networking among stakeholders. Initiatives and their outcomes must be clear.

At the same time, capacity-building – which involves aspects such as organizational development, workforce development, leadership, allocation of resources and the formation of partnerships – will need to be promoted.

As part of the process it will be important to look closely at *legislation* (assessment of existing legislation with regard to how well it meets the needs of the users and addresses pending issues) and *funding* (discussion of the definition of fixed budgets and an increase in funding).

More human resources are required for public health in the form of individuals with training in epidemiology and social sciences, including health economics, statistics, mathematics or information sciences. A national strategy for public health education needs to be defined. It is crucial that the medical course includes (and examines in) epidemiology and public health. Coordination of different training locations should be encouraged, cross-validation enabled and synergies used. Minimum training standards should be developed. Core modules could be identical for all programmes, with additional courses being chosen freely. The role, responsibilities and standing of public health professionals must be clearly defined and future demand for different specialists made clear. To reach a critical mass of well-trained and effective professionals, workforce development needs to be intensified and extended. Most importantly, this must be accompanied by efforts to create a national commitment to public health with respected leadership, adequate resources and investment in organizational development. Decision-makers must have at least a basic understanding of the core principles of public health.

For the introduction of any new measures, international experience and evidence should be taken into consideration. Reliable data and evidence should form the basis for health policy-making and planning. Independent research is crucial and must be encouraged.

7.2 General recommendations

Public health has been receiving more attention in Austria in recent years, but understanding of the field is varied and many people still do not know what it entails and use the term in different ways. It is now essential to try to achieve a

common basic understanding of the elements and features of the specialty, and to raise its profile and increase awareness among stakeholders at all levels of the health system.

Austria must adopt a universal and acceptable definition of public health. As suggested in the previous section, the definition in the introduction to this report – “public health is the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society”⁵⁷⁵ – might be suitable. Almost every other developed country has adopted a definition of public health and understands the meaning of that definition for the determination of appropriate health policies in their own country. Austria must follow suit.

There is no clearly defined modern public health structure in Austria, nor is there an overall public health framework, strategy or plan. A national priority-setting process has not been put in place and there are no national health targets. Austria does not have a Ministry of Public Health or a modern Public Health Act. Currently, legislation is often outdated or missing. Public health in Austria does not have an institute, department or expert to represent the specialty⁵⁷⁶ and it does not form an integral part of organizations. In summary, the discipline still lacks organizational and structural integration, clearly defined responsibilities, targets and strategies, as well as a formal legislative base.

There needs to be a new central institution to coordinate public health, or a senior position for an experienced public health professional to represent the specialty, or both. To enable this, an up-to-date legislative base must be created, adequate funding must be made available and an overall strategy – including planning, target definition, forecasting, and resource distribution – must be defined.

By adopting a proper structure and function for public health, Austria can have a system in which the specialty is recognized and the qualifications of practising public health professionals are transferable to other countries within the EU.

Public health is a field in which success or failure in investments, actions and initiatives cannot be measured within a short period of time, except in the control of outbreaks of infectious disease or toxic attacks. Modern public health, relevant to the 21st century and beyond, requires long-term commitment by decision-makers to the control of disease and improvement of the health of the population. Social insurance, as an organization that does not depend on legislative structures, should promote long-term initiatives.

⁵⁷⁵ Acheson D. *Public health in England. The report of the Committee of Inquiry into the future of the public health function (the Acheson report)*. London, Her Majesty's Stationery Office, 1988.

⁵⁷⁶ An exception is, for instance, the FGO with its responsibility for the field of health promotion and primary prevention.

A large number of small-scale public health activities and initiatives exist in Austria, but in many cases these are uncoordinated and of variable or unknown quality. Phrases used by experts to describe the situation include “pieces of a puzzle” or “rag rug”. Responsibilities, activities and outcomes are also perceived to lack clarity and interdisciplinary activity is missing. More coordination of activities, better networking among stakeholders and clear initiatives and outcomes are needed.

Austria must move from focusing on the funding of short-term projects to funding a more effective mix of short-term and long-term projects and research programmes. The implementation of research results into routine practice has been problematic in the past, even if targets have been defined and the pilot project successful. This may be related to a lack of both funding and commitment.

Few decision-makers in Austria have even a basic knowledge of public health to enable them to define and prioritize relevant strategies and targets. There is also the danger that they may not be able to interpret the findings of their subordinate public health professionals effectively or react appropriately to these. In addition, this lack of knowledge could result in a reluctance to assume commitment to and responsibility and leadership of public health. Decision-makers require at least a basic understanding of the core principles of public health.

With regard to funding and responsibilities, the Austrian health care system shows considerable fragmentation and responsibilities are not always clearly defined. This can inadvertently compromise the quality of patient care, for example in terms of continuity of care, transparency, coordination of treatment or medication, and communication among and between providers. These issues should be addressed by taking a broader view of the system and by better coordination and cooperation.

The Austrian health system still shows a very strong emphasis in favour of individualized and curative health services. This is evident both in its funding and resource allocation, as well as in service provision and training structures. This is unfortunate in view of the changes in the age structure and incidence of disease occurring in every western country. A change in weight and the increase in obesity have major implications for the incidence, for example, of arthritis, cardiovascular disease and diabetes. It is therefore vital that much greater attention is paid to long-term issues and in particular to methods of improvement in public health activities, in order to prevent problems in the future.

Scientific evidence of benefit should be required for services provided to the insured population. Social insurance could be in charge of quality control to

ensure that defined standards are met. It should also encourage the development of standards for education and training, as well as the alignment of training programmes, and could promote the definition of requirements to be met before agreeing reimbursement.

Legislation and regulations on data protection and data confidentiality in connection with accessing, linking and sharing data are strict in Austria. Public health authorities, universities and other research institutions need to be able to work with data and have access to them for specific projects. Institutions holding a key position in data collection should take the necessary initial steps here and should subsequently be supported by other health system stakeholders, including social insurance. Before data protection regulations are modified, however, the current data situation must be clarified and actual data needs determined.

When developing any measures it is absolutely essential to involve those directly concerned – that is, those in the target population, migrants, people with special needs, the poor, certain groups of health professionals, and/or a specific stakeholder. Without this involvement, there can be no certainty that the measures taken will be appropriate to the needs of the target population or be accepted and taken seriously.

Experts report that awareness of personal health status appears to be fairly low among a large proportion of the Austrian population. Health awareness and self-responsibility needs to be increased by educating, informing and involving people. Information provided must be readable and appropriate to the particular target audience. A cooperative and accountable approach, in line with HiAP, is recommended and will require the active involvement and cooperation of all relevant players. Increasing awareness of health cannot be limited to efforts targeted at the individual alone.

7.3 Specific recommendations

Chapter 2 – Analysis of the Austrian public health system

Understanding of public health, terminology

The understanding of public health is variable in Austria, both in general and also within different levels of the health system or institutions, including social health insurance. However, it is characterized by some common elements that are recognized among most professionals operating in the field. For the definition of measures and activities and for better communication, it will be essential to achieve a common basic understanding of the core elements and features of public health.

A legal or national definition of public health ought to be agreed and, if possible, a German translation determined. Based on discussions within the project team, the term *Bevölkerungsgesundheit* is suggested as the German translation.

Public health strategy and framework

There are no national strategy, targets or planning for public health. The responsibilities and potential powers of existing stakeholders are in many cases unclear.

The development of an overall framework and strategy for public health should be initiated by defining national health targets, as well as a national public health strategy.

This process will require the definition of clear responsibilities for and commitment to public health.

At the same time, capacity-building will need to be promoted.

As part of the process it will be important to look closely at *legislation* and *funding*.

Structures and organization

An expert interviewed in the course of the study described public health in Austria as “pieces of a mosaic, lacking a systematic programme for implementation”.

A clearly defined modern public health structure does not exist. Several topic-specific institutions (for health promotion and HTA, for example) have been established since the early 2000s but an overall framework and strategy is still missing. Some areas of public health appear to be more developed than others. The development and status of the specialty can be strongly influenced by the individual or individuals associated with the topic area or institution. For most institutions in the health sector, public health is only one of many topics they deal with, and public health activities are often not identified as such.

The integration and coordination of various subdisciplines of public health, such as health planning, health reporting and so on should be promoted, along with the integration of public health concepts into all health system issues at all levels. The overall aim must be to move towards the realization of the *HiAP* concept. Public health should become an integral part of all government departments and agencies, including health and social security, finance, environment and employment.

In the development of appropriate public health policies, it is crucial that all aspects are involved in both the formulation of targets, and the methods and financing of implementation. The Education Department, for example, must be involved in the effective development of educational policies to improve the

health of children and young people. The Environment Ministry must seek appropriate methods of improving housing, transport and so on. There should be a policy to increase the amount of exercise taken by the population – for example, by providing cycle tracks (as in the Netherlands), which would also reduce the use of public transport or cars.

To improve the visibility and contribution of public health it is essential that there is active and vocal representation, stating the case for public health. Local and national activities should be encouraged, to improve attitudes to exercise, diet and food consumption through the involvement of appropriate community groups, such as consumers and sportspeople. All these elements must be involved when considering appropriate plans for services, and given the opportunity to comment on the plans that the government or legislature puts forward. In this way a constituency can be created to press for public health action, as is common in most other western European countries.

Legislation

Issues related to legislation are referred to in the individual sections of the recommendations and will not be detailed again at this point.

In summary, Austrian legislation on public health issues in Austria is fragmented, often outdated and incomplete.⁵⁷⁷ There is no legal definition of public health and no modern Public Health Act; furthermore, the legislation does not define public health responsibilities clearly. Existing legislation must be reassessed with regard to how well it meets the needs of users and addresses pending issues.

Many examples of appropriate legislation are available from Denmark, Sweden and the United States, for instance, which can help to compare current legal provisions in Austria with those in other developed countries.

Funding

Most experts interviewed in the course of this study reported a lack of funding for public health in Austria as one of the central aspects hindering the further development of this field.

A comparison of the amount of health expenditure on curative services in Austria with that spent on services such as prevention or health promotion makes it clear that curative services and services for the individual (and within this area, especially hospital services) are dominant. On the positive side, it is also evident that the amount of money allocated to public health-related services has been increasing over recent years, indicating a rising awareness of the importance of these services.

⁵⁷⁷ According to expert opinion, this applies to the following fields: organizational structures and responsibilities, funding, education, health promotion and prevention structures and management of chronic diseases.

There are very few fixed or legally defined budgets for public health services, which have to compete for funding with curative services and receive less attention and therefore less in the way of financial and human resources. Public health services must receive higher priority and, if possible, fixed or ring-fenced budgets.

Statistically, the largest share of funding for public health services in Austria in 2001 was spent on medical rehabilitation services.⁵⁷⁸ Expenditure for primary prevention and health promotion should be increased.

Public health functions

The Austrian health system shows a distinct imbalance in favour of curative health services. This is reflected in funding, resource allocation, and service provision and training structures. Fuller discussion and consideration of health determinants should take place, moving the emphasis from health care to health.

Social health insurance funds currently have a very limited legal obligation to fund services related to health promotion and prevention. While several of these benefits are compulsory, most are voluntary, meaning that insured individuals have no legal right to them. The extent to which these services are provided may depend on the financial situation of the insurance fund in question and also on its own judgement and viewpoint. Health insurance funds do not have a uniform view on this issue and some are more active than others in this area. A uniform position on public health services should be reached among social insurance funds to strengthen their position and this could be presented in the form of a declaration or charter. It should be made clear who is responsible for the provision of which services and what these services entail. After explicitly defining its responsibilities in the field, social health insurance could take on the role as promoter and facilitator for health promotion and prevention, as well as encouraging the revision of databases and the creation of evidence on what works and what does not.

Prevention

Preventive activities in Austria show a strong medical focus. Various initiatives are undertaken for the early detection and prevention of illness. In many cases, the introduction of these was not backed scientifically or subject to evaluation. It seems that the introduction of new services may still be either based on expert opinion or the result of political negotiations instead of reflecting current scientific evidence or research findings. Before new measures of this

⁵⁷⁸ Habl C et al. *Public expenditure for prevention and health promotion in Austria 2001*. Report commissioned by the Federal Ministry of Health and Women. Vienna, Austrian Health Institute (ÖBIG), 2004.

sort are introduced, there should be international evidence of their effectiveness and evaluation, and quality assurance mechanisms ought to be in place from the start.

Austria is now beginning to introduce screening programmes. All currently existing programmes are opportunistic and focus on the healthy population, who do not have or have not recognized any signs or symptoms of the condition for which they are being screened. Prevention in the form of health examinations can only be effective if it forms part of a long-term intervention programme. For the introduction of any new programme, and also for the improvement and revision of existing screening activities, international experience and evidence should be taken into consideration. A considerable body of evidence exists on the outcome of selected types of screening. Introduction should be preceded by a pilot assessment in which the current situation (without screening) is compared to the future situation (screening). From the planning phase onwards evaluation should form an integral part of the process. Screening activities should be embedded in coherent programmes promoting risk reduction.

In view of the demand for and popularity of screening programmes, it is essential that scientifically valid criteria are used to identify those screening methods that are effective and efficient. In the United Kingdom, for example, there is an independent National Screening Committee which lists all screening activities which are effective and which are offered by the NHS. Similarly, in the United States there is a Preventive Services Screening Commission that assesses those tests found to be valid and helpful in preventing the development of disease. This type of national system of assessment exists in many other countries, including Canada, Germany and the Netherlands. A similar committee or commission should be established in Austria to evaluate the services that are available and paid for at the moment. Those that are not found to be effective should not continue to be reimbursed.

Quality standards for screening⁵⁷⁹ are demanded by experts and are essential both for existing and future screening programmes. The criteria for performing high-quality screening have been documented by Raffle and Gray,⁵⁸⁰ for example, and include local as well as regional or national prerequisites. Existing standards should be assessed with regard to their current validity and evidence base. Standards should generally be made transparent and available to anybody interested.

At present there is considerable uncertainty among patients as to whether or not they should undergo screening examinations. Patients must be appropriately

⁵⁷⁹ For example, for qualifications of health professionals performing the interventions, for the equipment used, and so on.

⁵⁸⁰ Raffle A, Gray M. *Screening – Evidence and practice*. New York, Oxford University Press, 2007.

informed about the implications and possible consequences of screening, with regard to drawbacks as well as benefits.

The preventive health check-up was introduced in Austria in 1974. It has, in the mean time, undergone considerable revision and a new programme was introduced in 2005. Austria is one of the few remaining countries to offer an annual health examination to the entire population. An evaluation of the results of the examination is currently being undertaken and in the course of the evaluation international evidence should be taken into account. There is no evidence that a preventive health check-up improves health. It merely increases utilization and thus also the cost of health services. A national registry documenting the outcomes of screening should be established and reliable call–recall systems established.

Epidemiology is public health's core discipline and unless Austria can establish an appropriate training programme in epidemiology, it seems unlikely that the country will ever be able to develop an effective public health system.

Vaccinations

All vaccinations for individuals up to the age of 15 years—which are recommended by the Supreme Sanitary Council in form of the annual vaccination plan – are funded through the *vaccination-concept* by social insurance funds, the regions and the Federal Government. The vaccination status and rates of the population are not systematically documented and assessed in Austria. Some data are available at the BMG and to a certain extent also at the regional health authorities, but it has so far not been possible to compile national trends. That said, according to a BMG official, such a development is planned. The vaccination status of the population needs to be documented electronically at national level and published.

Based on study findings proving vaccination effectiveness, *vaccination uptake* should be improved and promoted, even for compulsory vaccinations. Research also shows that willingness to be vaccinated and the decision to be vaccinated are correlated with the level of education and income of individuals. “Decisions regarding the promotion of vaccination uptake as well as decisions about the reimbursement of vaccinations should be based on cost–effectiveness criteria. Education, awareness campaigns and information should be used to encourage people to be vaccinated. The use of financial subsidies or incentives should be considered.”

Several disease outbreaks, including measles and rubella have occurred in the past as a result of lack of vaccination coverage among infants and small children. Parents should be encouraged and informed about the need to vaccinate their

children. Vaccination uptake among the adult and elderly population is low for the influenza vaccination and reasons for this should be investigated.

Health promotion

Health promotion is fairly well established in Austria and has undergone considerable development since the early 2000s, especially since the enactment of the GfG in 1998 and the creation of the FGÖ. Many challenges remain. Initiatives are usually short-term in outlook and often lack sustainable outcomes or continuity because they are not extended or pursued once the project funding has expired. Activities frequently take place in single settings, systematic cooperation among schools or companies is not common practice, and area-wide implementation or involvement is unusual. To have a sustained impact on population health, public health must combine legislation and policies at the political level, along with health promotion efforts in communities and social settings. The legal foundations for health promotion need to be extended and this would be possible if the PräVG – currently in draft form – was enacted. It is not clear why this has not yet happened, but in any case, most health promotion settings still suffer from a lack of commitment and resources.

Occupational health promotion for small and very small enterprises should be promoted and health promotion in schools implemented. Progress in the latter area is particularly challenging because of the wide variety of different ownership structures and the number of stakeholders involved.

Continuity of health promotion initiatives should be improved and sustainability of measures and outcomes promoted. Existing activities ought to be evaluated and coordinated. A joint structure and framework is still lacking and should be developed – this should be carried out as part of a national strategy and prioritization process.

Any activities should be accompanied by quality assurance and evaluation.

Continuity of care and quality

In terms of funding and responsibilities, the Austrian health care system shows considerable fragmentation and (as mentioned earlier) this can compromise the quality of patient care. A wider perspective on health should be taken to encourage integration of health care and public health and to deliver better continuity of care.

The situation for patients after discharge from hospitals is another area of concern, particularly in terms of the effective management of chronic diseases. So far only one disease management programme (for diabetes) has been implemented and this does not yet operate on a nationwide basis. The results of the evaluation of

the related randomized controlled study undertaken in Salzburg – and of any other relevant national and international research findings – should be assessed very carefully in the planning and implementation of future programmes.

Patients with several conditions taking multiple medications require supervision and periodic revision of their situation, with regard to possible interactions and effectiveness.

A lack of focus on patients, relating to inadequate consultation times and standard of information given – was highlighted by experts. The quality of treatment and services provided is often unclear. Outcomes should be made more transparent and understandable, and results of patient satisfaction surveys should be discussed with all involved, including the providers of health services.

Risk factors

The current smoking legislation is permissive when compared to measures taken in other European countries. Although many of the experts interviewed identified smoking as one of the main public health topics of the present and the future, measures undertaken to reduce smoking and passive smoking in Austria appear to be very much influenced by emotions and pressure groups. A ban on smoking in certain circumstances and a reduction in smoking in general must be made more of a priority and communicated effectively to decision-makers. Social insurance should take a stronger stance on this topic by lobbying for stricter legislation.

The number of young women smokers in particular has increased. Children, young people and women should be targeted specifically and smoking cessation programmes set up and widely advertised. Such programmes do not exist at the national level at the moment and could be initiated, provided and evaluated by social insurance.

The abuse of alcohol presents a serious health problem in Austria. Open discussion on the topic is rare and the problem tends to be trivialized by society. As with smoking, more women are now drinking and abusing alcohol.⁵⁸¹ Boys and girls have been shown to start experimenting with alcohol at an earlier age.⁵⁸² The population should be educated more effectively about the dangers of excessive consumption of alcohol, and awareness of the existence of alcohol problems and alcoholism ought to be increased. Children, young people and women should be targeted specifically.

581 BMGF. *The totally normal consumption of alcohol and its consequences for health. 2nd edition.* Vienna, Federal Ministry of Health and Women, 2007 (<http://www.api.or.at/lbi/pdf/07%20e%20645%20der%20ganz%20normale%20alkoholkonsum%20brosch%FCre.pdf>, accessed 2 September 2008). See also VIVID – Fachstelle für Suchtprävention. Alkohol [web site]. Graz, VIVID – Fachstelle für Suchtprävention, 2008 (http://www.vivid.at/de/wissen/zahlen/zahlen_alkohol/, accessed 4 September 2008).

582 Dür W, Griebler R. *The health of Austrian school students in their living conditions. Results of the WHO-HBSC Survey 2006.* Vienna, Federal Ministry of Health, Family and Youth (BMGF), 2007.

More than half of the Austrian population is overweight and weight problems are overrepresented in disadvantaged and special needs populations. Physical activity and weight loss should be promoted and facilitated among the general population, and especially among children and selected target groups of individuals who have shown to be exposed to a higher risk.

Chapter 3 – Information management and health reporting

Information management

There is no Austrian national information strategy or framework to define information needs, reasons for data collection and intended use of data. A wide variety of data is being collected but it is not clear whether data are relevant, sufficient or of good quality. Existing databases should be documented and assessed with regard to their relevance and actual use. Social insurance should make a major contribution to using data more efficiently, defining what data are needed for research or health reporting, and promoting quality.

Few data on objective health status, outcomes and quality are available. Transparency regarding health outcomes must be encouraged.

Evaluation of projects and other activities and measures does not appear to be part of the culture of Austrian health institutions. Evaluation must be planned and budgeted for from the beginning, to enable assessment of quality and effectiveness.

At present the national health survey is undertaken every 10 years. Consideration should be given to a more frequent national survey, with additional surveys on specific topics or data analyses. Results of all surveys should be comparable over time and relevant to health targets.

In comparison to other European countries, few disease registries exist in Austria. International evidence should be consulted and the extension of existing or the creation of additional registries considered. The quality of the current registries needs to be assessed. Minimum standards could be created.

Data collection and data quality should generally be improved, promoting more effective research, surveillance and reporting. Data should form the basis of health policy-making and planning.

Decision support systems should be developed to assist health professionals in their treatment decisions.

At national level, few data are collected on children (with the exception of the WHO HBSC Survey conducted every four years) or immigrants (an exception here being the national health survey). Data on diagnoses for outpatient care in

physician practices are not available. Gaps in data reporting should be detected and filled.

Several Austrian institutions have a good reputation for data analysis but there are still too few experts in this field and existing staff are often expected to concentrate on data collection and reporting, leaving little time for data analysis or research. More individuals with training in statistics, health economics, epidemiology, mathematics or information sciences are required in this area.

Social insurance should support the further development of databases and data analyses, in order to generate valuable evidence for health planning.

Health reporting

There is no legal basis for health reporting in Austria, apart from the obligation based on the Imperial Sanitary Act. Health reports are often used more like marketing reports than health reports per se. Legislation should be updated and responsibilities for health reporting specified.

Health reporting is not given a high level of priority. Funding for the development of health reports is limited, as are the human and financial resources invested in the production of reports in terms of time frame, scientific backing and methodology. Awareness of the need for and the benefits of health reporting should be increased, especially among decision-makers and funding entities.

Austria does not have many individuals with adequate training in producing good health reports and therefore more qualified epidemiologists, statisticians and public health experts must be trained. Decision-makers must be encouraged to recognize that the production of a good health report requires adequate funding and stakeholders should cooperate in producing a national report.

Health reports are still strongly focused on disease. This is partly related to the lack of research outcomes or longitudinal studies. Stronger emphasis should be placed on the reporting of health determinants and health-related data.

Health reporting should be an integral part of political advisory work. The main users of any report and their needs must be identified at the outset so that their requirements can be addressed effectively.

Reports should be standardized to a certain extent, to make them comparable. At the same time, allowance must be made for variety, data experiments, creativity and focus on areas of regional or local interest. General reports can be supplemented by targeted reports looking at defined population subgroups, diseases or regions.

Reports should be comprehensive but not too detailed. Local experts can be involved in their production but their contributions must be objective,

comparable in style with other sections and integrated appropriately into the final report structure.

For better communication and to reach the widest possible range of users, health reports should be made available on the Internet and their publication communicated to the main stakeholders, possibly by means of an e-mail newsletter.

The interval between reports on the same topic should be reasonable, between about three and five years, with additional monitoring and updates if necessary.

National reports do not seem to be used to their full potential or followed up in a standardized way. Collected and analysed data must be used as effectively as possible.

This limited use of reporting could be the result of the restricted understanding of public health among decision-makers and stakeholders, already mentioned several times in this report. These individuals are ultimately responsible for planning, compiling and implementing health reports and they are, therefore, crucial to ensuring the effective use of them. It is essential for decision-makers to have at least a basic understanding of core public health matters. Authors of health reports could also include summaries of the main findings and analyses, in order to highlight the most relevant facts briefly and succinctly.

Decision-makers may be subject to political influences and operate within legislative periods. Subjects that may not be considered politically appropriate at a particular moment may be presented in a biased way or excluded altogether. Health reports should be produced by independent institutions or departments and, wherever possible, their content should be unaffected by legislative periods or political bias.

Health reports in Austria do not always receive strong backing and commitment and are sometimes used as marketing tools rather than as health policy, planning or strategy instruments. While several health reports mention targets, few suggest specific measures and even fewer include evaluation. The inclusion of targets may increase the interest in and commitment to them and this will be enhanced if the report contains suggested measures on how to achieve the targets and how these can be evaluated. Collective commitment to health reports should be increased and transparent use of health targets encouraged.

It is not necessary for all stakeholders in the health system to publish their own reports but cooperation is essential. A good example of such cooperation can be seen in the IGP, which is co-funded by the regional health insurance fund of Upper Austria, the region of Upper Austria, the regional physician association and the cities of Linz and Wels.

The following steps are recommended to increase and improve the use of health reports.

- Potential users of health reports and their needs should be identified.
- Targets and expectations related to health reports should be expressed.
- Both long and short versions of reports could be made available.
- Practicability of the report (potential use by experts but also by lay people) should be ensured.
- Reports should not only present information but also indicate a strategy and identify means to amend and envisage measures for follow-up.
- The authors of health reports, who are considered experts in the field, should provide conclusions and a brief analysis of the report content.
- Uniform systems of data collection should be promoted and comparability ensured wherever possible.
- Language must be understandable and readable, and layout attractive.
- Health reports must be backed and led by enthusiastic and committed people. Commitment and leadership must be backed by the allocation of adequate funds, the provision of human resources and the communication of the report and its results.
- Health reporting should not be an isolated exercise but involve all concerned stakeholders right from the beginning. Effective cooperation among them should be encouraged.
- A significant amount of data is available in the Austrian health care system. It remains unclear to what extent these are suitable for use in health reports and this needs to be clarified and, if necessary, corrected.

In the field of health reporting, social insurance should be an active promoter and communicator. It should also contribute in providing data,⁵⁸³ undertaking pseudonymization of data and promoting high-data quality.

Integrated health reporting and intersectoral health reporting are current trends in health reporting and should be encouraged.

Health reporting in Austria has mainly been undertaken at regional level so far. Several health reports have been published at national level, with only a very small number at local level. Health reporting at local or community level should be encouraged, especially within regions that are subject to special circumstances.

⁵⁸³ Especially for data on outpatient care.

In 2008, Austrian social insurance published its first health report intended as a pilot, to show the potential contribution it could make to health reporting. The role of social insurance and its contribution to national health reporting need to be assessed and clearly defined. A new internal discussion of the topic should be started as soon as possible, to identify the main current health problems and to focus on topics such as special needs groups or health inequalities. Social insurance does not, however, plan to produce its own national reports in the future, but rather to contribute to reports published by other health system stakeholders.

Data protection, accessing data surveillance, monitoring, evaluation

Legislation and regulations on data protection and data confidentiality with regard to access, linkage and sharing of data are very strict in Austria. Public health authorities, universities and other research institutions need to be able to work with data and have access to them for specific projects. Institutions holding a key position in data collection should initiate making this possible and should be supported in this by other health system stakeholders, such as social insurance.

The linkage of health data may improve with the introduction of the ELGA. Social health insurance could take on a key role by facilitating the pseudonymization of data through the unit established at the HVB in 2008.

Physicians are the only professional group who state unconditionally that data protection should remain as it is at the moment. Before any modification of current data protection regulations, the situation regarding what data are collected, needed and actually used should be assessed. A committee should look into the Austrian data protection situation and consult on the international position, where relevant and applicable.

Outbreaks of disease, management of epidemics, infectious diseases, surveillance

The existing legislation and regulations on outbreaks of disease and disease surveillance appear at present to create problems in practice. Responsibilities in the context of the EpG, the Venereal Diseases Act and the TubG are not always entirely clear and this can lead to delays in the investigation of and the reaction to outbreaks and thus to inefficiencies. Current legislation ought to be assessed and revised to ensure efficient procedures and well-defined responsibilities.

Responsibilities and processes for decision-making in which more than one district or province are involved also need to be clearly specified.

One of the main problems of the EpG is that at present only those infectious diseases listed in a taxative way in the Act must be reported. This creates difficulties when new or relatively unknown diseases occur and should be assessed and revised accordingly.

There are also uncertainties and contradictions regarding current reporting practices and obligations. Should certain infections be reported or not? Which cases should be reported? How valid are the data? Who is obliged to report? These anomalies should be identified and clarified. With respect to the definition of responsibilities, the 2006 Zoonosis Act could serve as a useful model in stipulating a clear division of responsibilities where infections affect more than one district.

A considerable amount of money – especially in comparison with the general funding available for public health services in Austria – was spent on the management of the A(H1N1) 2009 influenza pandemic. Procedures and activities undertaken in the course of preventing and managing major disease outbreaks (such as the A(H1N1) 2009 influenza pandemic) should be evaluated retrospectively in order to assess their effectiveness as well as learning for future outbreaks.

Medical officers and other, nonmedical professionals do not in many cases have adequate training or qualifications for outbreak investigation and handling, because there are no training opportunities for these professionals within the Austrian system. A solution for this must be sought, either by training individuals abroad or by introducing appropriate training structures in Austria.

Chapter 4 – Health targets

The development of health targets is an important step in the political and societal process of giving *good health* a higher priority. Research into determinants of health has shown that the main factors influencing health lie beyond the health care system or the individual.

The concept of HiAP, presented in the course of the Finnish EU Presidency in 2006, takes this into account and describes the intersectoral responsibility and the necessity for cooperation between different policy areas in order to promote health. The *whole of government* approach offers a tool to implement the HiAP concept. The existence of a clear vision for health and a detailed health policy – including health targets – are among the main prerequisites for the success of this approach.

Based on the fields of action discussed in sections 4.6 and 4.7 of this report, the following two subsections contain recommendations for aspects considered

particularly relevant to the process of developing national health targets in Austria. These recommendations focus on the target development process, not on their implementation or evaluation.

General recommendations

(a) Ensuring sufficient resources

A time period of about two to three years (for example, 2010–2012) is envisaged for the definition of national health targets. The target formulation process should be started as soon as possible: first, to ensure a comprehensive and concerted process; and second, to enable consideration of the targets in the next agreement according to the *15a Vereinbarung*, likely to come into force in 2014. The intention should, therefore, be to finalize national framework targets before the negotiations for the new formulation of the agreement begin.

For the complex process of defining national health targets, a project office should be equipped with skills and experience in both the management of complex projects and also, crucially, in public health. The individuals in charge of the management of the process should be entirely devoted to this task, as is the case with the IGP in Upper Austria. To avoid any conflict of interest, they should not form part of any working groups of stakeholders set up to develop the health targets. The existing structure of the Federal Health Agency could act as a commissioning agent and a project steering committee could be nominated from among the members of the Federal Health Commission.

The development of national health targets requires the definition of an agreed budget that must definitely include funding for human resources and for the structure and operation of the office. Other budgetary elements will depend on the structure of the process. Funding will need to be made available for the organization of regular meetings and communication within the working group, for the acquisition of a viable database and for competent interpretation of the data. Funding will also be required for consultations and public discussions and for the organization of a web site, media campaign and press conferences to ensure that the process is as open and transparent as possible.

(b) Integration of public health expertise

An indispensable requirement of the development of health targets is that the office must be equipped with public health expertise, and public health also needs to be represented among the range of experts nominated to form the working groups. Another option would be the establishment of a scientific committee, with external scientific support drawing on international experience and expertise. Public health expertise is essential at all stages of the PHAC (health reporting; investigation of health determinants; interpretation

of epidemiological data; assessment of the benefits of measures, development of indicators; design and execution of evaluation) and should, therefore, be in place from the start.

(c) Broad involvement of stakeholders

While the office would oversee and support the management of the target development process, including the consultation process and measures to ensure transparency, the working group would develop the contents of the Austrian framework targets for health. The working group would reflect the long-standing partnership between policy representatives, representatives of public institutions and experts. On a political level, the involvement of all the parties represented in the national parliament should be sought, with the intention that a cross-party consensus on sustainable targets can be reached.

Because of Austria's federal structure, it is essential that both the regions and the Federal Government should be represented in the working group. The ministries, social insurance, the professional associations (chambers), the trade unions, GÖG, Statistics Austria and a variety of other public institutions should also be represented. Experts from various fields of activity – such as public and private education and research institutions, NGOs, local representatives and patient representatives, as well as public health experts – would complete the working group.

To achieve the best possible stakeholder involvement, parties who are not represented on the working group should have the opportunity to contribute by means of selective consultations. The public must also be given the chance to comment and discuss. Participation should be promoted and facilitated through measures such as the creation of an interactive web site, public events, and a media campaign and publications.

(d) Assigning the leadership role and broad political commitment

The individual who accepts the role of internal motivator and external representative must be chosen very carefully. This individual will head the office and make sure that the process is properly managed and widely respected. To fulfil this function, the person in question will require a high level of acceptance among stakeholders, profound knowledge of the subject, sufficient time, and strong intrinsic motivation. The appointment should be independent of party politics but, in order to achieve a high level of political commitment, inclusion of the health targets in the agreement according to the *15a Vereinbarung* should be the aim.

Recommendations for social insurance

(a) Involvement as a long-term partner

Social insurance is a significant stakeholder in the Austrian health care system and must be fully involved in the development of national framework targets for health as part of the working group.

(b) Human resource development and organizational development in the field of public health

To be able to play a constructive part in the development of health targets, social insurance requires public health expertise. As part of the traditional curative health care structure, its fields of action in connection with public health activities such as health promotion and prevention are at present fairly underdeveloped. Public health expertise is only found at the moment in a few social insurance funds. The recent decision to follow a new path for the professional qualification of employees in public health should be pursued as a human resource strategy for the whole of social insurance. Special attention should be placed not only on training experts working on or being employed for specific tasks, but also on conveying public health knowledge to the decision-makers.

(c) Generation of financial resources

Adequate resources need to be available for the building of public health expertise through human resources and organizational development. Social insurance should have significantly more resources at its disposal for general public health agendas (for example, data-based problem definition, assessment of demand, quality management, planning of services, health economic assessment of interventions, increased information for the insured population), as well as for the specific action areas of health promotion and prevention, in order to provide high-quality services. Such resources should ideally be ring-fenced to limit any competition with the field of health care.

(d) Assuming leadership

In the process of developing national framework targets for health, it is essential that all social insurance funds assume a clear and united position. This means that a joint strategy must be adopted and described in a position paper. The prospect that social insurance can assume the role of a constant stakeholder, counteracting the way of thinking and planning in legislative periods, has considerable potential. Social insurance should try to assume leadership in this process and establish itself as an active and important health policy force.

(e) Creating commitment

With strong political will, commitment to health promotion and prevention within social insurance can be created and will then contribute to a corresponding national commitment for these fields of action. Favourable general conditions for health promotion, prevention and public health in the form of clearly formulated legal responsibilities and the creation of specific funding can be achieved if these topics are placed at the top of the political agenda. Social insurance should assume a leading role in this process.

(f) Taking on a role in the entire PHAC

Social insurance should not only assume an active role in the target development process, but also in the implementation of the targets. Social insurance represents an important actor in the phases of problem definition and evaluation, in which health reports have special significance. Social insurance already holds a considerable amount of data and should in the future play an even more prominent role as a provider of data for health reporting. This potential has been recognized and is described in the *2005 Social health insurance health report*.⁵⁸⁴

Chapter 5 – Addressing disadvantaged and special needs groups

Health inequalities and health inequity are not at present on the political agenda and experts urge that they should receive more attention.

“Disadvantaged” or “special needs” are relative terms that should be reassessed and redefined with objectivity and respect from time to time.

Responsibilities for these issues are fragmented in Austria and are not allocated to specific institutions, departments or individuals. Networking of stakeholders working with disadvantaged groups should be encouraged. There are examples of good practice, including the aforementioned *National report on strategies for social protection and social inclusion* (2008–2010) published by the then BMSK (now the BMASK).⁵⁸⁵ Social insurance should take further action in this area to try to increase awareness of the problem.

Disadvantaged and special needs groups often lack a voice or representatives to speak on their behalf. Where possible, individuals from the groups concerned should be directly involved in the development of health promotion or prevention measures.

584 HVB. *Gesundheitsbericht der sozialen Krankenversicherung 2005*. Vienna, Main Association of Austrian Social Security Institutions, 2005 (https://www.sozialversicherung.at/mediaDB/MMDB135573_Gesundheitsbericht%202005.pdf, accessed 21 April 2011).

585 BMSK. *Austrian report on strategies for social protection and social inclusion 2008–2010*. Vienna, Federal Ministry of Social Affairs and Consumer Protection, 2008 (http://www.bmsk.gv.at/cms/site/attachments/4/4/0/CH0121/CMS1222677019004/strategiebericht2008_engl_neu.pdf, accessed 22 April 2011).

Special needs groups should not be viewed in isolation. With regard in particular to the health and well-being of children, the disabled or the mentally ill, the family or carers play a very important role and should be involved in the development of any health promotion or prevention activities.

Membership of a disadvantaged or special needs group frequently brings with it an element of stigma that can have detrimental effects on health and well-being. Stigma should be taken very seriously and needs to be addressed.

Identification of disadvantaged and special needs groups and health inequalities

Disadvantaged and/or special needs groups and individuals must be identified so that their needs can be addressed in the most appropriate way. Identification of the population in need of certain services is difficult, however, as only data on health service utilization are usually available and these do not cover those who do not access care for whatever reason.

The linkage of datasets is problematic in Austria, mainly because of the country's strict data protection regulations. To carry out research on disadvantaged groups and/or special needs populations, it is essential to link health/epidemiological data with socioeconomic data.

Access to data should be granted for research activities and the use of anonymization and pseudonymization units should be encouraged. Existing databases should be assessed to find out whether the data required to analyse interdependencies between health and other factors are collected and, if this is not the case, relevant variables (such as ethnicity) should be included.

Research on disadvantaged groups is very limited in Austria and should be promoted by all those involved. Research on poverty, migration and children is slowly increasing, but remains neglected. Research on the elderly population and health outcomes in all these groups is very rare and needs to be encouraged.

Access to health services

Access to health services in Austria is comprehensive but it is not clear whether all population groups in need are reached and whether all receive the same quality of care. More research is required in this field to ensure that services reach and benefit those in greatest need.

Several services exist for individuals who belong to one or more of the disadvantaged or special needs groups identified in Chapter 5 of this report. Activities appear to show a strong focus on Vienna. A comprehensive assessment of these services should be undertaken and best practice models identified. Availability of services should be based on need. Better cooperation among

and between stakeholders should aim to ensure provision of health services for vulnerable groups.

Promoting the health of disadvantaged and special needs groups

Interaction with disadvantaged and special needs groups and individuals relating to their health and well-being is not purely a health agenda. Other policy areas – such as education, finance, social affairs, environment, and housing – are equally required to act. Initiatives aimed at these population groups should be standardized across all policy areas in line with the HiAP approach.

Such approaches should be developed not only for entire population groups but also for population groups and individuals exposed to a high risk – for example, those at risk of poverty (or are threatened by it), migrants or children – and those who are overrepresented among disadvantaged population groups and who need to be identified and addressed by means of targeted strategies.

Within the health sector, all stakeholders and policy-makers should work together to develop measures to facilitate and improve access to health services for disadvantaged groups. Health services ought to be readily available and easily accessible.

Study findings show that certain members of disadvantaged and special needs groups either do not access services at all or access them late, resulting in a higher prevalence of chronic or more acute conditions. Certain preventive services are used less by members of disadvantaged groups than by members of the general population. These include participation in preventive health check-ups, uptake of vaccinations and regular dental checks. Participation in these activities and easy access to preventive and curative services should be encouraged in various ways, including raising awareness, easily available and user-friendly information, education, and provision of translation and interpreting services.

The Austrian social health insurance benefits package is very comprehensive but several fields of care are still underrepresented or not well distributed across the country. These include outpatient rehabilitation in general and outpatient neuro-rehabilitation in particular, palliative and hospice care, psychotherapeutic services and psychosocial services for children and young people. The current structures should be assessed with regard to their ability to fulfil current population needs.

Poverty is the major risk factor for poor health. It has several poorly investigated dimensions, such as living conditions/housing (restricted living space, noise, damp), poor nutrition, dangerous working conditions and low level of education. Combating poverty requires cross-sectoral action. Education alone is not sufficient; language abilities need to be improved, access to educational

systems, the labour market and also health services should be facilitated, and individuals must experience stability and continuity instead of fear and stress in order to be able to concentrate on their personal development.

Several population groups still lack social insurance coverage. Society has a moral and ethical obligation to encourage cooperation among stakeholders in order to ensure access to at least basic health services for these individuals.

Austria has a high proportion of non-national residents. For some of these, language may pose a significant barrier to accessing health care services and to using these in the most effective way (adverse effects on compliance, adhering to treatment measures or advice given by the health service provider, medication intake, etc.). Relevant information should be provided in different languages and basic health messages and information translated. In addition, translation services should be made available in hospitals and other health care settings. Health education and information should be communicated through a variety of information channels, including use of foreign-language media.

Study findings indicate that individuals with a migrant background report poor subjective health status more frequently, access health services later and prefer to access curative rather than preventive health services more often than Austrian nationals. Most health service providers do not currently have any training related to cultural sensitivity and such training should perhaps be considered.

Individuals with a migrant background more often have only compulsory education. As a low level of education is negatively correlated with health status and health behaviour, it is vital to address educational issues in this context and to facilitate access to further education in these groups.

Individuals with a migrant background also tend to be underrepresented in public service and strategic positions, but they should be involved in developing health-related concepts for individuals in a similar situation in order to increase understanding of the needs of that population and to increase acceptance of services.

The proportion of individuals aged over 70 years (and thus also the proportion of the population requiring assistance and support) is expected to increase considerably in the future. Skilled human resources for long-term care are not available and Austria is at present not sufficiently prepared to meet future long-term care needs adequately.

A considerable number of elderly people live alone in Austria. This group of individuals should be specifically targeted by measures including fall prevention and mobility promotion, periodic revision of medication, management of chronic conditions, and wound management. Measures for social integration

and mobility should be undertaken to retain independence, and to prevent immobility, isolation and suffering related to depressive conditions.

Many elderly people do not have access to the Internet and may lack health literacy. A considerable number live alone and are not part of a family or social network. These people need to be reached where they live and informed, educated and empowered using appropriate methods of communication.

The elderly can feel isolated and lonely and are prone to depression. These problems could be counteracted or prevented by initiating cross-generational projects between, for example, nursing homes and nursery schools.

Continuity of care for elderly people should be promoted by the wider application of monitoring technologies. Patients suffering from several conditions require supervision and periodic revision of their medications, in terms of interactions and effectiveness.

The health literacy of individuals belonging to disadvantaged and special needs groups should be improved generally, by means of targeted measures.

Chapter 6 – Role of health professionals

The role of health professionals

Physicians and other health professionals undergo only very basic training in public health. Those working in the clinical field (for instance, in hospitals or private practices) deal mainly with individual cases in a problem-solving manner and often quickly. It is rare for patients to be followed for a long time period and this can hamper continuity of care, reducing the probability of them using preventive as well as curative measures. Many physicians lack adequate knowledge of epidemiology and this limits their ability to interpret research findings and outcomes appropriately.

More public health aspects were introduced into the medical curriculum in 2001/2002, although the amount of public health training is still modest in comparison with other countries. GPs must be trained in prevention and health promotion in order to be accredited in most countries – an understanding accepted by WONCA.

The implications of these changes in the medical curriculum are not yet clear and need to be assessed. As part of such an assessment, aspects such as numbers of graduates moving into the field, changes in the number of training posts available and changes in career paths, as well as reimbursement structures should be observed.

Medical officers form a sizeable group in Austria. Their training is currently undergoing reform and it is hoped that this will improve training standards and attract more individuals into this professional field. Currently their duties and areas of operation are very varied. Their career structure should be developed and the quality of their current training and work assessed. Multidisciplinary working should be encouraged in the future, with less reliance on medical professionals only.

The responsibilities and roles of occupational physicians and health professionals in schools should be assessed and, if necessary, revised using evidence from other countries.

At present the field of occupational and work medicine and the profession of a medical officer appear to attract certain groups of individuals. The type of target population wanted for these posts and their work priorities must be more clearly defined.

Unfortunately it seems that few young physicians are motivated to work in either social medicine or occupational and work medicine, or to become medical health officers. Reasons for this are manifold and include not being sure about work profile/content, limited career opportunities and low salaries in comparison with clinical work. The curricula, career paths and opportunities of these professional fields should be assessed and incentives developed to attract high-performing students or graduates with the promise of financial reward, career opportunities, and demanding and reputable work.

Medical specialties, such as social medicine or occupational and work medicine, are encountering difficulties in recruiting students. Small institutes for social medicine exist at the three Medical Universities of Vienna, Graz and Innsbruck. These still have fairly traditional structures and their small size may discourage them from active collaboration with each other. Very few training posts exist for both these medical specialties and the roles, responsibilities and standing of these professionals must be clearly defined and future demand for their services made clear.

The responsibilities of school physicians are at present defined in legislation in a very basic way. Data collected in the course of school examinations are not analysed, which makes it impossible to assess their effectiveness. Before changing the legislation or revising data-collection methods, a thorough assessment of the current situation (role, responsibilities⁵⁸⁶, scope of examinations) ought to be undertaken in the light of international evidence on the effectiveness of such examinations.

⁵⁸⁶ Partly already existing – see, for instance, Frank W, Konta B. *Foundations for a re-organisation of care provided by school physicians in Austria. Final report.* Vienna, Commissioned by the Federal Ministry of Health and Women (BMGF) in co-operation with the Federal Ministry of Education, Science and Culture, 2006.

Public health in Austria is an area still heavily dominated by medical doctors. Nurses, pharmacologists and other health professionals are only gradually moving into the field by acquiring postgraduate training in public health.

The role of nurses in outpatient care in Austria is not being used to its full potential and public health nurses do not exist as a separate professional group. Further areas of application and career paths should be discussed, using examples from other countries and taking account of national requirements.

Nurses are so far only partly involved in public health services, mainly responsible for operational tasks and only in very rare cases involved in decision-making. This needs to change and the substitution of other health professionals by nurses ought to be considered, especially in the light of the new academic training possibilities. Nurses should also be involved in strategic planning and decision-making. The nursing profession is not at present highly regarded and is not well paid. Incentives should be created and the profession made more attractive.

The training of midwives and recently of nurses has been changed from school-based education to university training. The implications of these changes are highly complex, particularly for nurses (in view of their large number), and need to be assessed very carefully in terms of career paths, reimbursement and division of responsibilities in general.

Training and education

Core disciplines of public health

Core disciplines involved in public health research and practice include: social sciences, social medicine, sociology, social psychology, health economics, political sciences, anthropology, history, environmental medicine, hygiene, management sciences, health services, demography, nursing sciences, pharmacology, epidemiology, health statistics, biometry or informatics.⁵⁸⁷

Training in some of these basic disciplines is not available in Austria. Public health career paths for professionals with a background in one of these areas need to be made more attractive and undergraduate as well as specialist training should be made available.

There are no training possibilities at present for epidemiologists in Austria and awareness of the need for such specialists is low. Epidemiology is included in the medical curriculum in almost all other western European countries and many specific career paths and colleges for epidemiologists exist – for example, the American College of Epidemiology in the United States and the Faculty of Public Health in the United Kingdom. Austrian epidemiologists trained abroad

⁵⁸⁷ Mossialos E et al. *Framework performance assessment. Report for the Main Association of Austrian Social Security Institutions*. Vienna, Main Association of Austrian Social Security Institutions, 2006.

should develop a suitable training structure with the knowledge and skills of international experts and involve other Austrian public health professionals and physician representatives.

Training programmes for public health

A national strategy for public health education needs to be defined. Coordination of different training locations should be encouraged, cross-validation enabled and synergies used. Minimum training standards should be developed. Core modules could be identical for all programmes, with additional courses being chosen freely.

There are various postgraduate training programmes for public health in Austria, but little money is available to support them and all appear to be struggling to find participants. The reasons for this should be assessed – financial barriers, lack of interest in the field, lack of job opportunities/career paths, and/or lack of knowledge about the field. Findings of such an assessment should be taken into consideration when revising programmes and a merging of programmes should be discussed.

Better coordination and cooperation among the existing Austrian public health programmes is essential, preferably in the form of a modular structure, to facilitate flexibility and the ability to study selected modules in other settings at home or abroad.

The quality of public health programmes and how this compares to international standards is not clear. The quality of a particular course appears to depend to a great extent on the director of the course, the student body and the calibre of the lecturers. Some programmes show a considerable focus on management issues. It is not clear whether programmes would meet ASPHER criteria or other international standards. Programmes need to be assessed in order to justify their funding and to enable improvements to be made where necessary.

Only one training programme has so far undergone external evaluation and there are no basic quality standards for the subjects/modules taught, although these are currently under discussion. The development of comparable core standards is desirable and coordination of the curricula offered and cross-validation of courses within the country should be encouraged.

Only one university of applied sciences has undertaken a follow-up survey of its graduates. Regular annual surveys should be performed to find out more about the career paths of graduates and to ensure that programmes are meeting the needs of users and the system.

The Vienna public health programme is the only programme that requires students to undertake a certain amount of practical training. All the

programmes are part time, with students expected to work full time as well as study. This makes it difficult to take time off for the practical training that is a very important part of the public health training experience. Universities should consider introducing this option for their students, despite the obvious difficulties.

Capacity-building in public health

Based on the capacity-building framework presented by the New South Wales Health Department in 2001, capacity-building involves several dimensions. These include developing infrastructure, enhancing programme sustainability and fostering problem-solving capabilities. Key action areas are organizational development, workforce development, resource allocation, partnerships and leadership. The subsequent subsections follow this framework.

Leadership and commitment

To promote implementation of and commitment to public health measures, it is crucial that somebody assumes leadership and shows commitment by backing and promoting the ongoing process and taking responsibility for any outcomes. The assignment of a leadership role will depend on the topic in question. Commitment to and leadership of public health are not widespread in Austria. Strategies to encourage these qualities must be devised and all relevant stakeholders involved. Commitment could be increased by various means, such as legislation, the allocation of fixed budgets or in the form of a position paper and openly accessible mission statements. A high-level, prestigious prize for public health endeavours could be established to promote the specialty and attract people and encourage relevant activities.

Public health knowledge and skills do not exist at all levels of the health system. In many cases decision-makers do not have even a basic understanding of public health. This knowledge gap can make it difficult for them to understand, judge, appreciate and use the outputs of their trained public health employees appropriately. The basic principles of public health should be part of the training curricula of all health professionals, albeit in differing degrees of intensity. Basic public health knowledge should also be conveyed to decision-makers and across all levels of the health system.

Social health insurance has the potential to take a leading role in developing and implementing a national public health strategy and it is important, therefore, that its planning does not depend on legislative periods or terms of government. Before it can assume a leadership role, it is essential that a consensus is reached within social insurance on the degree of commitment to public health in general and aspects such as health promotion and prevention

in particular, and to be clear what this role would imply, how it should be carried out and by whom.

Resources

To promote the implementation of and commitment to public health measures it is crucial to define budgets. Within and outside of social health insurance a lack of resources has repeatedly been reported as being one of the major obstacles to successful implementation.

Greater investment in public health services and the shifting of selected resources from clinical to public health services should be carried out, focusing on promoting the health of the entire population or specific population groups, rather than being of benefit to only a few individuals.

A clear legislative mandate accompanied by earmarked budgets would give social health insurance the authority and the funds to invest more resources in public health.

Structures and organizational development⁵⁸⁸

There is no national strategy for modern public health in Austria and a structure and a conceptual framework is needed both within and outside of social health insurance. Currently efforts towards capacity-building in public health are mostly directed at individual training. According to international models, however, capacity-building also involves factors such as organizational development, resource allocation, the encouragement of partnerships and leadership.

Some organizational structures for public health are in place but are often still lacking across all levels of the health system. The responsibilities and potential powers of existing stakeholders should be clarified. Their activities need to be followed closely and assessed regularly. No national institute for public health currently exists and the growth and development of a national public health infrastructure should be supported and will require legislation.

Over recent years, health system stakeholders have started investing in public health capacity-building, mostly by promoting workforce development measures and encouraging employees to obtain training in public health or a related subject. Organizational structures are only very slowly being adapted and appropriate and challenging positions created for trained individuals.

Networking and partnerships

Cooperation within the health sector and even within certain institutions (such as between different social insurance funds) is not widespread or standardized.

⁵⁸⁸ Organization and structures are also referred to in the recommendations for Chapter 2 (see section 7.3).

The building of such cooperation and encouragement of partnerships should become standard practice.

Cooperation with other sectors such as social services, the environment, education, or families is rare. New measures of coordination within the health sector have recently been developed with the Health Care Agency via national and regional health platforms at regional level. Their activities need to be assessed and the effectiveness of their measures evaluated. Further steps may need to be taken to develop health goals and to increase commitment to cooperation by means of legislative measures.

Standardized communication and coordination measures between health and social care should be introduced to promote continuity of care and ensure a smoother transition between these two sectors, especially in relation to the elderly, the chronically and mentally ill and those with multiple morbidities.

Social insurance already fulfils a role as communication promoter and initiator of discussions – for example, in the Upper Austria region where an institute for health planning (IGP) was formed jointly by the regional sickness fund, the regional government and the major cities. Such activities should also be undertaken elsewhere.

Several insurance funds claim to have formed partnerships with universities, universities of applied sciences or NGOs. The scope of these is not always clear and ought to be well defined. A common understanding of networking and its implications in terms of evaluation and outcomes is required, both within social health insurance and more generally. Current outcomes of networking arrangements are often poor and difficult to quantify.

Networking activities between regional sickness funds in particular require strengthening. Some funds seem to cooperate more closely with their regional governments than others. Politicians, for example, often see insurance funds as enterprises and demand more competition between them that would, in turn, reduce cooperation.

This lack of cooperation is partly also a result of the fragmented funding structure within the health system, the wrong incentives this produces, and the absence of clear responsibilities for different public health fields, such as prevention or health promotion. It is important that partnerships are formed and synergies used not only within Austria but also internationally, to encourage knowledge transfer.

Among public health professionals in Austria, networking works well. Many of those working in public health are linked through the ÖGPH, which provides them with a forum for discussion and on occasions also becomes involved in health policy issues and is asked for an opinion on relevant matters.

Workforce development – education, training

Capacity-building is not restricted to workforce development, but also involves a variety of different components such as organizational development, resource allocation, the formation of partnerships and the execution of a leadership function – factors that are equally important and should receive more attention. Initiatives in workforce development should be continued and extended, aiming to achieve a critical mass of public health professionals.

Social insurance has defined education and training in public health as one of its key priorities. This is an important first step, but requires extension. At the same time many funds warn of a lack of resources. Workforce development needs to be intensified and must be accompanied by efforts to create commitment for public health, assuming leadership in public health, devoting resources to this field and investing in organizational development.

A highly qualified capacity for public health research is essential and this implies strengthening the basic disciplines of public health – namely, epidemiology, medical statistics and the social sciences, including health economics.

The multidisciplinary nature of public health is obvious when looking at the composition of the wide variety of students participating in public health programmes in Austria. These include medical doctors, social scientists, nurses, pharmacists, pedagogists, administrators and individuals from many other backgrounds. Based on experience from other countries, flexibility of health professionals within the health care system should be considered, with, for example, pharmacists or nurses replacing doctors in some situations or working more closely with them. The involvement of other health professionals in public health services should be assessed and could result in a redefinition of professional roles and duties.

One current problem in public health training – both in universities and universities of applied sciences – is a serious shortage of suitably trained teachers and experienced supervisors for MPH theses. This situation may motivate some students to study abroad rather than in Austria. There is an urgent need for an Austrian teacher training programme in public health, or at least for funds to enable participation in summer schools or training opportunities abroad.

Career paths

Career paths for public health professionals are not well defined. Although most of the graduates do find jobs, or in many cases return to their previous employers, incentives to undergo training for career advancement are low, as most jobs for public health professionals are not well paid. Reimbursement is frequently defined by fixed payment schemes run by public authorities,

universities and social insurance, many of which do not recognize postgraduate training. An increase in the remuneration of those working in public health and the use of other incentive mechanisms should be considered to attract highly qualified people. Reimbursement schemes should be modified to take account of the postgraduate training that is becoming more widespread in Austria. Attractive reimbursement and career paths ought to be offered to public health professionals in order to attract them to work in certain areas. Social insurance should develop incentives to ensure that employees who have trained in public health remain within the social insurance system and do not leave after completion of the programme.

The number of qualified public health professionals is gradually increasing, largely as a result of the introduction of various Austrian training programmes. These individuals still often lack adequate practical training, however, partly because of the paucity of organizational structures ready to accommodate and make the best use of their newly acquired training. Organizations should make the most effective use of the expertise of public health professionals and ensure adequate practical as well as theoretical training.

Employers in many cases will not know how to make best use of individuals trained in public health and graduates will often have to learn by themselves what is required of them, without guidance from a senior colleague. This will lessen with time, as the impact made by graduates from national and international programmes gradually becomes more noticeable in Austria. For the moment it will be important, however, to achieve a critical mass of well-trained professionals in order to work effectively, as well as paying attention to qualifications when filling vacancies.

Those in postgraduate training in public health are usually aged between about 25 and 40 years and belong to the junior or middle-management level of institutions in the health sector. The exceptions include physicians who undertake courses to advance in their clinical career to become heads of department. Ideally, public health experts should be distributed across different organizational levels, with some in strategic or leading positions.

Decision-makers and managers should acquire at least a basic understanding of public health in order to make best use of employees trained in the specialty and to communicate effectively with them.

Public health research

Public health research in Austria is currently very limited because of a lack of prioritization, a shortage of qualified researchers and an absence of funding. Long-term epidemiological research – following cohorts over time – is rare, and

there is no national strategy for public health research. Such a strategy must be defined and should involve all the major stakeholders in the field.

Discussions on the foundation of a national institute of public health are currently taking place but details are not yet known. A competition should be initiated for the establishment of a major research unit with staffing and security for a minimum of five years.

For Austria to develop a modern system for the prevention of disease, the improvement of health and the provision of appropriate curative, preventive and rehabilitation services – all essential for any country at this time in view of changes in disease incidence and age structure – it is crucial that an appropriate understanding of public health becomes far more common. For this to happen, education in public health and its basic disciplines of epidemiology, health statistics and the social sciences must become a core part of the undergraduate and postgraduate training curriculum of all health professionals, including doctors. Only if this is achieved will it be possible for the qualifications of Austrian health professionals to equal those in other EU countries and further afield.

To demonstrate the relevance and benefits of a proper public health strategy, the funding and development of research is crucial. In the United Kingdom and in the United States, as well as in most other countries, research on cigarette smoking in the early 1950s demonstrated to decision-makers the importance of appropriate epidemiological research to identify the reasons for the increase in cancer of the lung, and thus develop appropriate strategies to mitigate the effects of smoking. This example served as a stimulus for the development of research in other fields, such as cardiovascular disease. Studies in Finland found a high mortality rate from coronary heart disease and investigated diet, smoking and lack of exercise as possible causal factors. As a result of this research, methods of control of coronary heart disease have been developed and the disease is now diminishing in importance as a cause of death in Finland. Similar studies could be undertaken in Austria with its strong record of university education and of research.

Only through the encouragement and development of appropriate education in the core disciplines of epidemiology, health statistics and social sciences will it be possible for Austria to develop a health system appropriate to the needs of the 21st and 22nd centuries. The current system needs to develop a method of quality assurance based on outcomes and not only on process. It needs to examine critically the efficiency and need for certain services that are currently available, in order to provide the resources for newer and possibly more relevant future services. This will only be possible if professionals are trained in the

appropriate disciplines of critical assessment. Similarly, much care that is at present being provided at institutions could be undertaken in the community if appropriately trained individuals were available. Only by a major change in the educational structure of the health professions is it likely that major changes will occur in attitudes towards public health and the application of modern science to solving some of the problems which the country is bound to face, whatever its economic status.

Austrian experts have reported that it is very difficult to obtain public funding for research. Researchers often have to seek third-party funding or apply for European sponsorship. Epidemiological fieldwork and longitudinal studies are very expensive, but crucial for research. Currently, projects in Austria usually last between one and two years. Long-term projects are scarce and it is difficult to introduce the results of successful short-term projects into routine practice. Several longitudinal studies should be established. The potential introduction of the results of short-term projects into routine practice should be discussed at the beginning of any project, to ensure attention to aspects such as funding and evaluation.

Health research in Austria is often driven by events rather than being carefully planned. There are few ongoing research partnerships or continuous fixed research budgets. With few exceptions, this also seems to be true for social health insurance funds, such as the IGP in Upper Austria or the IfGP in Styria. Long- and short-term research cooperation should be encouraged. Social insurance and other health system stakeholders should place a greater emphasis on research by generating research questions and devoting a fixed budget to research. Activities should be accompanied by measures of continuous evaluation. Existing expertise should be expanded and should be used effectively, especially in the long term.

Research is limited by restricted access to data and very strict data protection regulations. A considerable amount of existing data could be analysed without extensive funding but these are not accessible to researchers. Existing data and actual data needs should be assessed and anonymized data should be made available for research.

There are too few adequately trained researchers, especially epidemiologists, health economists and public health researchers. Qualified individuals need to be trained and attractive career opportunities created.

Only a few institutions use data for economic or statistical analysis and have advanced knowledge of health economics, economic evaluation methods or epidemiology. To increase capacity in these areas, additional staff could be employed or additional facilities created.

Independent research is crucial and should be encouraged. Funding could be made available on a competitive basis. Independent funding is also important in terms of activities encouraging the further education of health professionals. These are often currently financed by pharmaceutical companies and may involve a potential bias in terms of intentions and content delivered.

Implementation of public health measures in Austria should, wherever possible, be based on scientific evidence and subject to evaluation. It is important to follow the steps of the PHAC and to ensure continuous assessment.

A public health research programme should be proposed, with an adequate research grant guaranteed for at least 5–10 years.

Research careers are currently not very attractive for young people and university graduates. They are often poorly paid and may be perceived by doctors as less interesting than clinical work. Too few adequately trained researchers exist, especially epidemiologists. Research careers must be made more attractive for graduates and appropriately qualified people.

Initiatives should be evaluated and assessed with respect to their benefit. The development of methods should be encouraged and forecasting of future trends promoted.

Training programmes for public health in Austria are usually run by a small number of individuals. These resources are sufficient to ensure the smooth organization of the programmes, but do not allow for public health research. Among the research outputs of Master's programmes are the Master's theses papers. Master's programmes should have a defined number of core management staff, lecturers and researchers and the Master's theses and other research outputs should be clearly defined and published, for example, on the Internet.

Staff involved in providing postgraduate public health training are usually fully occupied with organizational issues, with insufficient time for research. Funding for additional staff and research must be increased.

Annexes

Annex 1: Terms of reference of the research project

Report⁵⁸⁹

After a brief general analysis of the Austrian public health system, the report focuses on a set of specific questions. Information provided in the report is tailored to the environment of the Austrian federal Social Health Insurance (SHI) system. International best practice examples presented in the report are accompanied by qualifications regarding why they are appropriate to inform the specific Austrian context. The aim of the report is, wherever possible, to produce specific and unequivocal recommendations – some of which can be directly implemented – especially in Chapters 5 and 6. The final document will not exceed 150 pages.

Chapter 2 **Analysis of the Austrian public health system** [maximum 20% of report]

- Legal context and structure
- Organization and financing
- Public health training and research (structure)
- Overview of key functions
- Balance of curative/preventive health services
- Key challenges of the Austrian public health system due to its context and structure

Chapter 3 **Information management and health reporting**

- Data collection/health reporting
 - Who is collecting information?
 - Disease registries
- Surveillance and monitoring of information
- Managing information and coordination of intervention
- Warning systems and intervention
- Evaluation
- *Recommendations*

⁵⁸⁹ Resource distribution bandwidth: 50–60%.

Chapter 4 Health targets

- Assessment of needs and outcomes
- Prioritization
- Evaluation
- *Recommendations*
 - Process for defining health targets in Austria
 - What is necessary to make SHI fit to enter into such a process?

Chapter 5 Addressing disadvantaged and special needs groups

- Addressing the underlying causes of ill health
- Equity of access to public health and curative services
- Identification of disadvantaged groups
- Identification of problems and special needs of the elderly population
- Influencing behaviour to promote healthy lifestyles
- *Recommendations/instant recommendations*

Chapter 6 Health professionals and public health

- Role of physicians employed by municipalities (*Öffentlicher Gesundheitsdienst*)
- Other health professionals involved in public health – school nurses, etc.
- Capacity-building in public health
 - Public health training and research (process of meeting international standards)
 - Career track for public health professionals
 - Capacity in SHI
- Reorienting providers
- Special focus on future strategy for practical capacity-building in SHI
- *Recommendations/Instant recommendations*

Chapter 7 Overarching recommendations

- Define a strategy to facilitate the development of the public health system and institutions in Austria
 - How can SHI/Main Association of Austrian Social Security Institutions (HVB)⁵⁹⁰ take an active part in developing public health policies on SHI and national levels?
- Pilot projects for general implementation.
- How do public health topics become relevant and heard in (national) health care reform debate?

⁵⁹⁰ Main Association of Austrian Social Security Institutions.

Annex 2: Chapter 4 Health targets – Field manual used for interviews⁵⁹¹

Introduction

In 2004, research cooperation was initiated between the Main Association of Austrian Social Security Institutions (*Hauptverband der österreichischen Sozialversicherungsträger*, HVB) and the London School of Economics and Political Science (LSE), spanning five studies. The current research project (2008/2009) focuses on public health in Austria. Among other topics, this project also deals with the issue of health targets.

According to article 11 of the agreement based on article 15a of the Federal Constitutional Act (*15a Vereinbarung*), signed by the Federal Government and the regions in July 2008, the contracting parties agree that the implementation of any measures of the aforementioned agreement will be orientated towards public health principles. The joint development of targets at national level is explicitly mentioned in this context.

The present draft of the Health Promotion and Prevention Act (*Bundesgesetz über Gesundheitsförderung und Prävention*, PräVg) envisions that the Federal Health Agency defines priority targets for health promotion and prevention. Various initiatives related to the development or implementation of health targets already exist at regional/provincial level. Progress of these is heterogeneous. As a result of the chapter on health targets of the project report compiled for the present public health project, recommendations should be developed which reflect upon the target development process in Austria and are intended to

⁵⁹¹ Translated by Joy Ladurner.

serve as a basis for social insurance to prepare for its active participation in the process. Our interview questions should be viewed in this context.

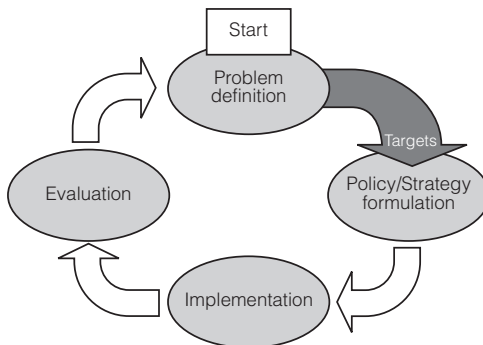
Introductory question

- At what development stage is the topic of health targets currently, in the area which you oversee (that is, in which you operate) (for example, region, Federal Government)? Are you in the phase of planning the introduction of health targets, in the development phase, in the process of implementation or already at the evaluation stage?

Further questions/topics

- What were the motivators (that is, decisive moments) for the development of health targets? Respectively, what are (from your point of view) motivators for – that is, factors that trigger the development of – health targets in Austria?
- How did you proceed or how are you proceeding when developing health targets? To what should special attention be paid?
- What is to be done so that health targets do not remain a singular event but instead become integrated into a Public Health Action Cycle (PHAC) (see Fig. 8.1) and how can it be ensured that the cycle continues?

Fig. 8.1 PHAC



Source: Adapted from National Academy of Sciences/Institute of Medicine, cited in Rosenbrock & Gerlinger (2006, p. 25).⁵⁹²

⁵⁹² Rosenbrock R, Gerlinger T. *Gesundheitspolitik. Eine systematische Einführung. 2. Auflage.* Bern, Verlag Hans Huber, Hogrefe AG, 2006.

- Which roles do the different stakeholders currently occupy and which should they occupy with regard to the development and implementation of health targets?
- Which preparatory work do you envision for social insurance, in order for them to enter a target development process well prepared?

Self-assessment of the interview partner concluding the interview

- I am directly involved in the process of the development of targets and their implementation.
- I have a consulting function but I am not directly involved.
- I am an interested observer.

Annex 3:

HEALTH21 – List of targets⁵⁹³

Target 1 – solidarity for health in the WHO European Region

By the year 2020, the present gap in health status between Member States of the European Region should be reduced by at least one third.

Target 2 – equity in health

By the year 2020, the health gap between socioeconomic groups within countries should be reduced by at least one fourth in all Member States, by substantially improving the level of health of disadvantaged groups.

Target 3 – healthy start in life

By the year 2020, all newborn babies, infants and pre-school children in the Region should have better health, ensuring a healthy start in life.

Target 4 – health of young people

By the year 2020, young people in the Region should be healthier and better able to fulfil their roles in society.

Target 5 – healthy aging

By the year 2020, people over 65 should have the opportunity of enjoying their full health potential and playing an active social role.

Target 6 – improving mental health

By the year 2020, people's psychosocial wellbeing should be improved and better comprehensive services should be available to and accessible by people with mental health problems.

Target 7 – reducing communicable diseases

By the year 2020, the adverse health effects of communicable diseases should be substantially diminished through systematically applied programmes to eradicate, eliminate or control infectious diseases of public health importance.

⁵⁹³ WHO Regional Office for Europe. HEALTH21. The Health for All policy framework for the WHO European Region. *European Health for All Series*, 1999, 6:163.

Target 8 – reducing noncommunicable diseases

By the year 2020, morbidity, disability and premature mortality due to major chronic diseases should be reduced to the lowest feasible levels throughout the Region.

Target 9 – reducing injury from violence and accidents

By the year 2020, there should be a significant and sustainable decrease in injuries, disability and death arising from accidents and violence in the Region.

Target 10 – a healthy and safe physical environment

By the year 2015, people in the region should live in a safer physical environment, with exposure to contaminants hazardous to health at levels not exceeding internationally agreed standards.

Target 11 – healthier living

By the year 2015, people across society should have adopted healthier patterns of living.

Target 12 – reducing harm from alcohol, drugs and tobacco

By the year 2015, the adverse health effects from the consumption of addictive substances such as tobacco, alcohol and psychoactive drugs should have been significantly reduced in all Member States.

Target 13 – settings for health

By the year 2015, people in the Region should have greater opportunities to live in healthy physical and social environments at home, at school, at the workplace and in the local community

Target 14 – multisectoral responsibility for health

By the year 2020, all sectors should have recognized and accepted their responsibility for health.

Target 15 – an integrated health sector

By the year 2010, people in the region should have much better access to family- and community-oriented primary health care, supported by a flexible and responsive hospital system.

Target 16 – managing for quality of care

By the year 2010, Member States should ensure that the management of the health sector, from population-based health programmes to individual patient care at the clinical level, is oriented towards health outcomes.

Target 17 – funding health services and allocating resources

By the year 2010, Member States should have sustainable financing and resource allocation mechanisms for health care systems based on the principles of equal access, cost-effectiveness, solidarity, and optimum quality.

Target 18 – developing human resources for health

By the year 2010, all Member States should have ensured that health professionals and professionals in other sectors have acquired appropriate knowledge, attitudes and skills to protect and promote health.

Target 19 – research and knowledge for health

By the year 2005, all Member States should have health research, information and communication systems that better support the acquisition, effective utilization, and dissemination of knowledge to support health for all.

Target 20 – mobilizing partners for health

By the year 2005, implementation of policies for health for all should engage individuals, groups and organizations throughout the public and private sectors, and civil society, in alliances and partnerships for health.

Target 21 – policies and strategies for health for all

By the year 2010, all Member States should have and be implementing policies for health for all at country, regional and local levels, supported by appropriate institutional infrastructures, managerial processes and innovative leadership.

Annex 4: “World Health Champion 2010” – Article taken from the archives of *Österreich Journal*⁵⁹⁴

Rauch-Kallat: Becoming World Health Champion 2010

*Vienna (ÖVP-PD)*⁵⁹⁵ – What Austria may not be able to achieve any time soon in football should become reality when it comes to health; to obtain the title of a world champion. The starting position is good and has been improved even more through the work of the Ministry of Health over the years. “We have set ourselves the goal of becoming world health champion in 2010,” proclaimed the Minister of Health, Maria Rauch-Kallat. In order to achieve this goal, the Minister of Health presented specific targets.⁵⁹⁶

Health targets for 2010

1. To reduce the number of deaths of individuals younger than 65 years caused by cardiovascular disease by up to 20%. Every year on average 2550 people die due to a cardiovascular disease before turning 65 years old. By changing lifestyle, especially with regard to nutrition and physical activity, but also mental health balance, the risk should be reduced. Moreover, immediate measures – which can, for instance, prevent permanent damage in the instance of an imminent heart attack and can prolong a life free of disability – are intensified. In total these measures should save up to 20% of the victims of cardiovascular disease under the age of 65 years by 2010.

⁵⁹⁴ Österreich Journal, Rauch-Kallat: Gesundheitsweltmeister 2010 werden. *Österreich Journal*, 27 July (Woche 25–31 July 2006) (<http://www.oe-journal.at/Aktuelles/!2006/0706/W4/32707Pgesundheits.htm>, accessed 22 April 2011). Translated by Joy Ladurner.

⁵⁹⁵ Österreichische Volkspartei – Pressedienst (Austrian People’s Party – Media Service).

⁵⁹⁶ (Note from the authors) The following targets were not detailed in the article but were included in the programme:

- Containing adiposity
- Improving dental health.

2. To reduce the number of deaths due to cancer by up to 7%. Nutrition, physical activity and coping with stress are important factors when it comes to developing cancer. Therefore a corresponding change of behaviour can constitute an important measure towards the prevention of cancer. Simultaneously, we support increased early detection by means of screening and the new precautionary health examination, which, combined with new methods of treatment and therapy, can prevent the outbreak of the disease or can cure the cancer in time. All these measures should save up to 7% of all cancer victims under the age of 65 years by 2010.
3. To reduce the health complications resulting from diabetes by a third. We have made the fight against diabetes a focus of the Austrian EU Presidency and are among the first European countries to develop a diabetes plan. At the centre of the plan is diabetes prevention, but this is accompanied by a strong focus on the correct treatment of the more than 300 000 individuals suffering from diabetes in Austria. Alongside appropriate medical treatment, we have also for the first time assessed individual cases regarding nutrition and physical exercise for diabetes patients, and will start with a tailored national exercise programme.
4. To reduce the number of accidents by 25%. About 10% of all treatment days in Austrian hospitals are related to accidents. We have therefore asked leading Austrian experts to suggest measures which should make Austria one of the safest countries in Europe by 2010. The resulting Austrian programme for accident prevention summarizes measures by which up to a total of 2500 lives can be saved by the year 2010.
5. To achieve a significant reduction in the number of suicides. By the year 2010, the psychosocial well-being of people should be improved and better institutions and treatment centres should be created. Access to these should be improved for individuals with mental health problems. The prevalence of mental illness and the negative impact of mental health problems on the health of an individual should be reduced substantially. People should receive more support to cope successfully with stressful living conditions.
6. To reduce tobacco consumption significantly. By the year 2010, the harmful consequences of tobacco consumption on health should be reduced considerably. Among all individuals in the population aged over 15 years, the share of non-smokers should amount to at least 80%, and among those under 15 years of age it should reach 100%.
7. To reduce the consumption of alcohol significantly. Alcohol consumption should not ascend to 6 litres per year or surpass this amount and it should be close to zero for those under the age of 15 years.

8. To reduce contagious diseases. This refers to the action plans for influenza epidemics and pandemics; protection of children and adults by means of vaccination in the form of higher vaccination rates for vaccinations such as influenza, hepatitis B and child vaccinations. Another focus is the prevention of new HIV infections and the provision of information regarding adequate risk behaviour.

We certainly belong among the best in the world; however, we do not want to rest on our laurels. “Where we are not yet occupying a place in the front row, we would like to improve”, states Rauch-Kallat.

Annex 5: Statement of the (then) BMGFJ⁵⁹⁷ on the situation regarding health targets in Austria (September 2008)⁵⁹⁸

Health targets in Austria

Preamble

Based on the distribution of responsibilities as defined in the Federal Constitution (articles 10 to 15 of the Federal Constitutional Act (*Bundesverfassungsgesetz*, B-VG)), the responsibility for health care lies – with the exception of hospital care – with the Federal Government. With regard to hospital care, the Federal Government is only in charge of basic regulations; the regulations on execution and the implementation thereof are the responsibility of the regions. In order to ensure a uniform Austrian *modus operandi* the Federal Government and the regions sign periodic domestic treaties, the so-called agreements according to article 15a of the Federal Constitutional Act (*15a Vereinbarung*). Among others, social insurance is involved in the corresponding negotiations.⁵⁹⁹

Thus, health targets are integrated in many areas and are developed by different actors in the health system, who try to implement these. You can find essential target concepts in the strategy report for the years 2008–2011, described in the following subsection.

⁵⁹⁷ Ministry of Health, Family and Youth.

⁵⁹⁸ BMGFJ, 2008. Personal communication by e-mail, 22 January 2009. Translated by Joy Ladurner.

⁵⁹⁹ Note from the translator: Social insurance can take part in the negotiations and is able to comment, but has no voting rights.

Strategy report for social protection and social inclusion for the years 2008–2011

Following on from the *Strategy report 2006/2007*, the EU Member States were asked to compile a new report on strategies and social integration for the period 2008–2011. This strategy report includes, along with the areas of social integration, pensions and labour market, a chapter on health and long-term care.

The *Strategy report for social protection and social inclusion 2008–2011* was composed by the involved federal ministries in cooperation with the regions and substantial NGOs, and was approved by the Council of Ministers (*Ministerrat*) in August this year. The report (with all its appendices) will shortly be downloadable from the home page of the Federal Ministry of Social Affairs and Consumer Protection (*Bundesministerium für Arbeit, Soziales und Konsumentenschutz*, BMASK).

Chapter 4 of the report presents strategies for health policy in Austria and the targets derived thereof for the years to come. The section on health is structured in the following way:

- Priority challenges and targets for health and long-term care
 - o Access to adequate health care services
 - o Quality of health service provision
 - o Financial sustainability of adequate and high-quality health care services.

Agreement based on the 15a Vereinbarung

When reading the report you will realize that the target of integrating the different sectors involved in health service provision – “Integrated health service provision” – presents a great challenge for the years to come.

As already mentioned, the Federal Government and the regions sign so-called agreements based on the *15a Vereinbarung*. The present agreement on the organization and funding of the health system was signed for the years 2008–2013 inclusive.⁶⁰⁰

In connection with the topic of health targets, the following regulations of this agreement should be referred to in particular.

- In the preamble, the contracting parties already commit themselves to providing comprehensive medical care for all individuals, independent of

600 BGBl No. 105/2008. Bundesgesetzblatt für die Republik Österreich Nr. 105/2008: 105. Vereinbarung gemäß Art. 15a B-VG über die Organisation und Finanzierung des Gesundheitswesens. Jahrgang 2008. Ausgegeben am 14. Juli 2008 (http://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2008_I_105/BGBLA_2008_I_105.pdf, accessed 06 May 2009).

their age and income. Thereby principles of solidary funding, equitable and low-threshold access to services apply, as well as high-quality and efficient service provision. Furthermore, contracting partners attribute the following target to the contractual agreement: based on the demand of the patients, health processes are to be organized such that prevention, diagnosis, treatment, rehabilitation and long-term care are provided in a purposeful sequence and by the correct body, within an adequate time frame, in line with assured quality standards and resulting in the best possible output. Contract parties furthermore agree to orientate their activities towards **central public health principles**.

They moreover agree to continue and intensify measures of joint steering and planning, which were approved and initiated in the last agreement period. Because of this, any specific steps required to (among other things) ensure uniform integrated and trans-sectoral planning, steering and funding should be taken, thereby involving both the intra- and the extramural field.

- In correspondence with the targets stipulated in the preamble, the subject and the priorities of the agreement are defined in article 1.
- Line 5 of article 11 on public health envisions the joint development of targets (especially involving the Federal Government, regions and social insurance).
- At the national level, the Federal Health Agency with the Federal Health Commission and at the regional/provincial level the health funds with the health platforms were established to take on duties related to the agreement. The composition of the aforementioned committees and their responsibilities are regulated in articles 15 and 16 respectively in articles 19 and 20.
- With regard to health targets, article 32 (promotion of transplantation units) and article 33 (funding of major trans-regional prevention programmes and treatment measures) should be emphasized.

Priority is also placed on **health promotion and prevention**:

With regard to the area of health promotion and prevention, the Federal Act on Measures and Initiatives for Health Promotion, -education and -information (Health Promotion Act 1998 (*Gesundheitsförderungsgesetz*, GfG)) should be mentioned. According to this Act, measures and initiatives must be undertaken which contribute to meeting the following targets:

- maintaining, promoting and improving the health of the population in a holistic sense in all phases of life;

- providing education and information on preventable illnesses and on factors influencing mental, psychological and social factors.

The Healthy Austria Fund (*Fonds Gesundes Österreich*, FGÖ), a division of Health Austria Ltd. (*Gesundheit Österreich GmbH*) was given the responsibility of executing measures and initiatives corresponding to this law.

Within its respective working programme, the FGÖ defines the priorities relating to its own activities as well as those relevant to the focus of the projects it sponsors, together with the board of trustees. Thereby, a stronger bundling together of resources in the field of health promotion should be achieved, as well as a faster development of areas considered important. The priority areas for the working year 2008 and beyond were:

- cardiovascular health
- community/region
- kindergarten/school
- workplace/company.

All activities and sponsoring of FGÖ take into consideration the two subordinate principles of “social status” and “gender mainstreaming”.

The Main Association of Social Security Institutions (*Hauptverband der österreichischen Sozialversicherungsträger*, HVB), as part of its innovation project “Strategy on the future of health promotion and prevention”, has defined 10 targets for social insurance. More information can be requested from the HVB.

Mental health

In the field of mental health, targets were formulated in the Helsinki Mental Health Declaration (initiated by the WHO Regional Office for Europe and signed by the ministers of health of all Member States in January 2005). As a result, the prevention of mental health problems and suicide should form part of national policies in the period 2005–2010.

Following the Helsinki Declaration, the ***Advisory Board for Mental Health*** was established at the (then) Federal Ministry of Health, Family and Youth (*Bundesministerium für Gesundheit, Familie und Jugend*, BMGFJ) in 2005. The Board deals primarily with combating stigma and discrimination against mentally ill people, as well as with improvement of the Austrian data situation with regard to prevalence and incidence of mental illness. Based on this information, the intention is to develop optimal services, but also to improve the integration of health and social services.

A primary responsibility of the Board is to develop a national strategy on mental health, based on the “Mental Health Action Plan for Europe” (ministers of health of the Member States of the WHO European Region, Helsinki, 12–15 January 2005) and the “European Pact for Mental Health and Well-being” (EU High-Level Conference, Brussels, 12–13 June 2008).

This strategy will include the following points.

1. Promote mental health and emphasize its central position.
2. Promote the provision of adequate services for vulnerable phases of life.
3. Prevent mental health problems and suicide.
4. Advance against stigma and discrimination.
5. Provide effective care to individuals with severe mental health problems by offering community services.
6. Ensure good primary care for mental health problems.
7. Create a reliable data basis for mental health.
8. Ensure an appropriate supply of competent health professionals.
9. Make available fair and adequate funding.
10. Assess effectiveness and gain new insights.

First steps towards meeting the aforementioned targets were undertaken in form of projects implemented by order of the BMGFJ.⁶⁰¹

⁶⁰¹ BMGFJ (then Federal Ministry of Health, Family and Youth), Department IV/A/3, September 2008.

Annex 6: Health targets of the Austrian regions⁶⁰²

Health targets of the Austrian regions are listed in table form in the subsections that follow. In addition, they have been classified according to the following criteria.

- **Types of targets**
 - **Goals:** The topic is given, for example “health of children and adolescents” or “cardiovascular disease”.
 - **Objective:** The direction of the target is given, but no SMART⁶⁰³ target formulated, for example, “Extending injury prevention among children and adolescents” or “Reduction of cardiovascular disease”.
 - **SMART targets:** The target is formulated in a SMART way, for example, “Reduction of the injuries of children and adolescents occurring in road traffic by xy per cent by the year 20xy, based on the year 20xy” or “Reduction of the mortality of individuals aged xy years from cardiovascular disease by the year 20xy, based on the year 20xy”.

Types of targets are not necessarily to be understood as part of a hierarchical system.

- **HEALTH21 target:** The target represents one or more topics of the HEALTH21 concept, independently of the indicators embedded in the HEALTH21 concept. The totals line states the number of HEALTH21 targets reflected in the concept of the region.
- **Time:** The target formulation and/or the target concept itself contain a time dimension.
- **Measures:** The document on health targets already contains defined measures to meet targets. It was decided to not list any existing measures as

602 Translated by Joy Ladurner.

603 The acronym SMART stands for Specific, Measurable, Achievable, Relevant and Time-phased.

this would go beyond the scope of the report. Instead, readers are asked to refer to the references.

- **Resources:** The document on health targets already contains defined human or financial resources required for the implementation and/or the evaluation of the targets.
- **Indicators:** Evaluable indicators as well as corresponding target values exist. Yes: Target value (e.g. 15%) + indicator (e.g. share of non-smokers) No: Target value + indicator are not stated. Partially: Target value is not stated, indicator is stated.
- **Topics:** This category reflects the *primary/predominant* topic area of the target. Topic areas referred to in the measures or supplementarily integrated topic areas were not taken into consideration. Always one topic was chosen, for example, the following target – “The primary targets are the reduction of the pulmonary diseases such as lung cancer, COPD (chronic obstructive pulmonary disease), as well as the reduction of cardiovascular disease, which represents an important risk factor induced by smoking.” – reflects primarily the topic area “tobacco/ addiction”, but also relates to “cancer” and “cardiovascular”.

The selection of the criteria does not follow a literature-based classification system. Subjectivity should be acknowledged when categorizing the targets according to the described classification system. Only public documents or documents which were made available in the course of the study were used.

6a Lower Austria

Health targets in Lower Austria	Type of target	HEALTH21	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No	Topic
General strategic targets							
Target 1: Integrated health planning							
Moving towards a comprehensive system of integrated planning, steering, financing and quality assurance; The currently separately organized and funded intra- and extramural health care should be consolidated and developed further by the regional health funds	Goal Objective	Target 15	2010	Yes	No	No	Health system
Target 2: Trans-regional coordination of the supply of health care services							
The entire supply of health care services should be coordinated together with the adjoining regions in a trans-regional manner Therefore, supply in suitable areas of service provision should be coordinated with the adjoining neighbouring states	Goal Objective Objective	Targets 15, 20 Targets 15, 20	2010 2010	Yes Yes	No No	No No	Health system Health system
Strategic targets with regard to regional development							
Target 3: Ensuring medical care in all sub-areas							
In the area of health care, quantitatively adequate, qualitatively assured and regionally balanced integrated medical care of the population should be ensured for all sub-areas	Goal Objective	Targets 2, 17	2010	Yes	No	No	Health system
<i>Cardiovascular diseases</i>							
Starting from the base year 2000, mortality of individuals below the age of 65 due to cardiovascular disease in Lower Austria should be reduced by 20% by 2010 and by another 10% by 2020	Goal SMART Target	Target 8	2010, 2020	Yes	No	Yes	Cardiovascular

Health targets in Lower Austria (cont'd)		Type of target	HEALTH21	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No	Topic
Starting from the base year 2000, morbidity of individuals below the age of 65 years DUE to cardiovascular disease in Lower Austria should remain stable until 2010 and should be reduced by 2020		SMART Target	Target 8	2010, 2020	Yes	No	Yes	Cardiovascular
<i>Cancer</i>								
Starting from the base year 2000, mortality due to cancer in Lower Austria should be reduced by about 15% by the year 2010 and by another 10% by the year 2020		SMART Target	Target 8	2010, 2020	Yes	No	Yes	Cancer
Mortality due to cancer in Lower Austria should on average (2005–2010) be situated below the Austrian average; on average (2015–2020) Lower Austria should be one of the three Austrian regions showing the lowest cancer mortality when subject to a regional comparison		SMART Target	Target 8	2010, 2020	Yes	No	Yes	Cancer
<i>Mental health and mental illnesses</i>								
By 2010 a separate institution for patients with mental disorders and illnesses, meeting existing demand to a large extent, should be created for each health care region of Lower Austria; The socio-psychiatric and therapeutic supply in the inpatient and ambulatory setting should BE REALIZED, based on the psychiatry plan of Lower Austria, with the intention of reducing adverse, individual, social and economic consequences		SMART Target	Target 6	2010	Yes	No	Yes	Psychosocial health
<i>Diabetes</i>								
By 2010 the identification of people at risk of diabetes type II should be as complete as possible; the frequency of Care required as a result of sequelae of diabetes – such as amputations, loss of vision, kidney failure, gestational complications and other health problems – should be reduced by 15%		SMART Target	Target 8	2010	Yes	No	Yes	Diabetes mellitus

<i>Illnesses of the musculoskeletal system</i>						
Starting from the base year 2000, the share of individuals below the age of 65 years suffering from illnesses of the musculoskeletal system should remain stable (not increase) until 2010 and should be reduced by 20% by 2020	SMART Target	Target 8	2010/ 2020	Yes	No	Yes Musculoskeletal system
Health care for age-related impairment of the musculoskeletal system should be improved	SMART Target	Targets 5, 8	2010	Yes	No	No Musculoskeletal system
<i>Alcohol, drugs and smoking</i>						
Starting from the year 2000, per-capita alcohol consumption should be reduced by 10% by 2010 and by 20% by 2020	SMART Target	Target 12	2010/ 2020	Yes	No	Yes Addiction
Initiation age for alcohol should be increased by the year 2010 and increased by two years by 2020	SMART Target	Target 12	2010/ 2020	Yes	No	Yes Addiction
Alcohol-related traffic accidents should be reduced to the level of 2000 by 2010 and should be reduced by 20% by 2020	SMART Target	Targets 9, 12	2010/ 2020	Yes	No	Yes Addiction
Based on the year 2000, the share of male and female non-smokers should be increased by 15% by 2010 and by 25% by 2020	SMART Target	Target 12	2010/ 2020	Yes	No	Yes Addiction
Based on the year 2000, the share of smokers below the age of 15 Years should be reduced by 30% by 2010 and reduced further to about zero by 2010. The initiation age for smoking should be increased by two years by 2010	SMART Target	Targets 4, 12	2010/ 2020	Yes	No	Yes Addiction
Experience with the consumption of illegal drugs, including Ecstasy, in the population group aged between 15 and 19 years should be reduced by 2010 and should be further reduced to about zero by 2010	SMART Target	Targets 4, 12	2010/ 2020	Yes	No	Yes Addiction

Health targets in Lower Austria (cont'd)		Type of target	HEALTH21	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No	Topic
<i>Occupational health promotion</i>		Goal						
By the end of 2005 the platform "Occupational prevention and health promotion" is to be established and a clearly defined working programme including operationalized targets for the activity of the platform is to be developed		SMART Target	Target 13	2005	Yes	No	Yes	Health promotion
Supply and demand of products and services of the nationwide network for Workplace health promotion (BGF) in Lower Austria are to be developed further with regard to qualitative as well as quantitative aspects; By 2010 the BGF network should have established itself (with regard to BGF projects) as the central contact point for companies in Lower Austria		SMART Target	Target 13	2010	Yes	No	Partially	Health promotion
<i>Assessing precautionary health examinations, caries prophylaxis; vaccinations</i>		Goal						
By 2010, participation rates for the precautionary health examination should be above the national average; By 2007, all children aged 3–10 years should have participated in the project of Lower Austria on caries prophylaxis, in order to meet the target for dental health as defined by WHO; By 2005, measles should be eradicated and vaccination rates for vaccinations for infants and toddlers should correspond to the criteria defined by WHO		SMART Target	Targets 7, 8	2005/ 2007	Yes	No	Yes	Prevention, Dental health
By 2020 the offer of the precautionary health examination should be taken up by a third of the population older than 19 years in Lower Austria		SMART Target	Target 8	2020	Yes	No	Yes	Prevention
<i>Geriatric care and hospice services</i>		Goal						
By 2010 the consistent implementation of the demand plan based on prognosis of the age almanac should be pursued further; Life years during which an individual may be in need of care should be reduced simultaneously with increasing life expectancy		SMART Target	Target 5	2010	Yes	No	Partially	Long-term care

<i>Healthy society</i>							
Goal	SMART Target	Target 13	2005/ 2010	Yes	No	Yes	Health promotion
By the end of 2005 at least 40% of all cities and communities in Lower Austria should actively participate in the healthy cities and/or healthy communities' networks;							
By 2010 this participation should be increased by another 25%							
By 2010, the share of the population of Lower Austria stating their health status as "good" or "very good" should amount to more than 80%	SMART Target	Target 11	2010	Yes	No	Yes	Health promotion
<i>Safeguarding of ambulatory care</i>							
Goal	Objective	Target 15	2010	Yes	No	No	Health system
	Ambulatory care in hospitals, independent outpatient clinics, GPs working in the ambulatory setting, specialists, therapists, ambulance and transportation services, mobile services (home care, home help, therapeutic services), pharmacies (hospital pharmacies, public and self-dispensing pharmacies of physicians)						
<i>Safeguarding of inpatient care</i>							
Goal	Objective	Target 15	2010	Yes	No	No	Health system
	Acute inpatient care (hospitals financed by the regional health funds = fund hospitals and specialized hospitals), psychotherapeutic and psychological care, inpatient care for the elderly and long-term care, inpatient rehabilitation, neuro-rehabilitation, vigil coma, hospice and palliative care services						
Target 4: Pushing prevention							
Goal	Objective	Target 8	2010	Yes	No	No	Prevention
	Preparedness of the population of Lower Austria to regularly respond to the offer of the precautionary health examination should be increased						
	Objective	Targets 11, 13	2010	Yes	No	No	Health promotion
	Individual skills of the population of Lower Austria should be increased by provision of targeted information related to health care and by encouraging a health-promoting lifestyle						

Health targets in Lower Austria (cont'd)		Type of target	HEALTH21	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No	Topic
Target 5: Implementation of new medical service areas		Goal						
Inpatient and outpatient structures for the new service areas of hospice and palliative care, re-mobilization and psychosomatic care should be established		Objective	Targets 15, 20	2010	Yes	No	No	Health system
Target 6: Cooperation to increase efficiency and quality assurance		Goal						
Intended hospital cooperation is to be established and the amount of regional and trans-regional hospital cooperation in Lower Austria should increase further; Hospital cooperation in the field of quality assurance in particular should be promoted in the field of new organizational structures of intramural health care		Objective	Target 15	2010	Yes	No	No	Health system
Target 7: IT cross-linking of health and social care		Goal						
A region-wide powerful IT infrastructure in the form of a high-speed data network should be implemented as the basis of the linking of all fund hospitals, as well as other health care institutions in Lower Austria; The system "patient index" should be introduced in all fund hospitals in Lower Austria; Physicians working in the ambulatory setting (in practices), rehabilitation institutions, nursing homes and other relevant health care institutions should be involved in this network		Objective	Target 19	2010	Yes	No	Yes	Health system
Target 8: Perennial training concept		Goal						
A perennial and modular training concept should be developed to ensure an adequate future number of health professionals in the area of health and social care		Objective	Target 18	2010	Yes	No	Yes	Training

Target 9: The hospital of the future – Health centre of the region	Goal
Hospitals in Lower Austria should, alongside their core competence curative medicine, also provide service, information and educational facilities; Health centres in selected areas should also be open to utilization through ambulatory physicians, health counselling services and self-help groups	Objective Target 15 2010 Yes No Yes Health system
Target 10: Reduction of the consumption of legal and illegal drugs	Goal
Per capita consumption of alcohol in Lower Austria should be reduced by 20% and alcohol-related traffic accidents should be reduced by 50%; The share of male and female non-smokers should be increased by 15% and the initiation age should be increased by two years	SMART Target Target 12 2010 Yes No Yes Addiction
TOTALS	22 Goals 13 Objectives 22 SMART Targets 15 WHO Targets 2000–2020 Yes No 22 Yes 11 No 2 Partially

Sources: Ledl (2006);⁶⁰⁴ Personal communication entitled “The 10 health targets of the region of Lower Austria” (13 May 2009).

604 Ledl E. *Gesundheitsziele im Hinblick auf die niederösterreichische Landesentwicklung bis 2010. Im Rahmen der Vorlesung “Gesundheitsplanung intra- und extramural”*. Krems and der Donau, Donau-Universität Krems, 2006 (http://cms.noegus.at/images/gesundheitsziele%20%2028_2_2006.pdf, accessed 6 May 2009).

6b Upper Austria

Health targets in Upper Austria	Type of target	HEALTH21	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No	Topic
Target 1: Long-term sequelae of diabetes							
By 2010 the frequency of sequelae of diabetes, such as amputations, loss of sight, kidney failure, gestational complications and other health disturbances should be reduced by 15% when compared to the year 2000	Goal SMART Target	Target 8	2010	Yes	No	Yes	Diabetes mellitus
Target 2: Dental health							
By 2010 at least 80% of the children at the age of 6 years should be free of caries and children at the age of 12 years should on average have at the most 1.5 teeth affected by caries, extracted teeth or filled teeth	Goal SMART Target	Target 8	2010	Yes	No	Yes	Dental health
Target 3: Occupational health promotion							
By 2010 at least 10% of all companies with more than 10 employees will have signed the Charter on occupational health promotion; By 2010 at least 30 companies should be OFFICIALLY approved, in terms of occupational health promotion	Goal SMART Target	Target 13	2010	Yes	No	Yes	Health promotion
Target 4: Psychosocial health							
By 2010 the mental health of the population of Upper Austria should show sustainable improvement – This will be assessed based on the suicide rate, diagnosis-related sick leave levels and hospital stays	Goal SMART Target	Target 6	2010	Yes	No	Partially	Psychosocial health
Target 5: Vaccinations							
By 2010 the vaccination rates for vaccinations against measles-mumps-rubella (2 vaccinations before the 6th birthday), pertussis (whooping cough) and haemophilus influenza type B (4-injection scheme before the 2nd birthday) should reach 90%	Goal SMART Target	Target 7	2010	Yes	No	Yes	Prevention

Target 6: Cardiovascular disease						
Goal						
By 2010 mortality due to cardiovascular disease in the group of individuals younger than 65 years should experience a sustained decline by at least 20% in comparison to the year 2000	SMART Target	Target 8	2010	Yes	No	Yes Cardiovascular
Target 7: Smoke-free living environments						
Goal						
Health requires smoke-free breathing air, which is ensured by smoke-free living environments; Therefore, the number of smoke-free living environments for all individuals living in Upper Austria should be increased significantly by 2010	SMART Target	Target 12	2010	Yes	No	Partially Addiction
Target 8: Addiction						
Goal						
By 2010 the population of Upper Austria should be informed about addiction, psycho-active substances and the possibilities existing to prevent addiction	SMART Target	Target 12	2010	Yes	No	No Addiction
Target 9: Health-promoting schools						
Goal						
By 2010 a total of 70 schools should be actively engaged in health promotion activities, thereby following the concept elaborated by the working group "Healthy school"	SMART Target	Target 13	2010	Yes	No	Yes Health promotion
Target 10: Healthy communities						
Goal						
By 2010, 25% of the communities of Upper Austria should have been awarded a quality certificate for healthy communities	SMART Target	Target 13	2010	Yes	No	Yes Health promotion
TOTALS	10 Goals 10 SMART Targets	5 WHO Targets	2000–2010	Yes	No	7 Yes 1 No 2 Partially

Source: Institut für Gesundheitsplanung (2009),⁶⁰⁵

⁶⁰⁵ Institut für Gesundheitsplanung. Ziele [web site]. Linz, Institut für Gesundheitsplanung, 2009 (http://www.gesundheitsplanung.at/index.php?option=com_content&view=category&layout=blog&id=11&Itemid=14, accessed 6 May 2009).

6c Salzburg

Health targets in Salzburg		Type of target	HEALTH21	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No	Topic
Target 1: Reducing cardiovascular disease		Goal						
The primary target is to influence those risk factors and lifestyle factors having a major impact on cardiovascular disease in the project communities in a positive way and to thereby reduce morbidity and mortality in the long term		Objective	Target 8	No	No	No	Partially	Cardiovascular
Target 2: Reducing pulmonary disease		Goal						
Primary targets are to reduce pulmonary diseases, such as lung cancer and COPD, as well as reducing cardiovascular disease caused by the significant risk factor smoking		Objective	Targets 8, 12	No	No	No	Partially	Addiction
Target 3: Reduction of illnesses related to cancer		Goal						
Primary targets are cancer prevention and early detection of the most common types of cancer – for women, these are breast cancer, colon cancer, lung cancer, and stomach cancer, along with cancer of the cervix and of the skin		Objective	Target 8	No	No	No	Partially	Cancer
Target 4: Reduction of mental illness		Goal						
The primary target is to reduce the suicide rate; Moreover, the project intends to promote an increase in psychological hygiene, including the early detection and treatment of depression and depressive episodes, as well increasing the capacity for solving conflicts in the environment surrounding individuals at risk of suicide		Objective	Target 6	No	No	No	Partially	Psychosocial health
Target 5: Reduction of accidents		Goal						
The primary target is the reduction of accidents occurring at home and during leisure activities in line with the Austrian average; By 2010, accidents taking place at home and during leisure activities should be reduced by at least 23%		SMART Target	Target 9	2010	No	No	Yes	Accident prevention

Target 6: Improved vaccination protection for adults						
The primary target is to ensure improved protection through vaccinations of adolescents and adults	Goal					
	Objective	Target 7	No	No	No	Prevention
Target 7: Dental prevention for risk groups						
The primary target is the reduction of caries among toddlers by undertaking counselling of women in childbed (shortly after giving birth)	Goal					
	Objective	Target 8	No	No	No	Dental health
Target 8: Promotion of physical activity in communities						
The primary target is to increase health-Promoting physical exercise in the entire population through the organizational unit "healthy community".	Goal					
	Objective	Target 13	No	No	No	Health promotion
Target 9: Reduction of burdens in the living environment						
The primary target is the creation of at least 15 lifestyle communities by 2010, with health resorts and the project communities mentioned in target 1 amongst these	Goal					
	SMART Target	Target 13	2010	No	No	Yes
Target 10: Early detection and reduction of diabetes mellitus (type II)						
Primary targets are the prevention, early detection, change of lifestyle and the prevention of late-sequelae complications caused by diabetes mellitus (type II)	Goal					
	Objective	Target 8	No	No	No	Diabetes mellitus
TOTALS	10 Goals	6 WHO Targets	2 Yes (2010)	No	No	2 Yes 4 No
	8 Objectives		8 No			4 Partially
	2 SMART Targets					

Source: Personal communication entitled "The 10 Health Targets of Salzburg" (12 February 2009).

6d Styria

Health targets in Styria	Type of target	HEALTH21	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No	Topic
Creation of healthy living environments							
Improve health conditions in the work setting	Objective	Target 13	No	Yes	No	No	Health promotion
Create healthy living conditions in the community and at home	Objective	Target 13	No	Yes	No	No	Health promotion
Facilitate healthy education	Objective	Target 13	No	Yes	No	No	Health promotion
Develop a framework for healthy living							
Goal							
Improve the health of the population in Styria with nutrition and physical exercise	Objective	Target 11	No	Yes	No	No	Health promotion
Reduce consequences for health related to tobacco use	Objective	Target 12	No	Yes	No	No	Addiction
Promote a healthy handling of alcohol in Styria	Objective	Target 12	No	Yes	No	No	Addiction
Facilitate good mental health and a high quality of life for the population in Styria	Objective	Target 6	No	Yes	No	No	Psychosocial health
Increase protection against infections	Objective	Target 7	No	Yes	No	No	Prevention
Enable a self-determined life with family, partnership and sexuality	Objective	Target 11	No	Yes	No	No	Health promotion
Create an environment to reduce the number of accidents and the resultant consequences for health	Objective	Target 9	No	Yes	No	No	Accident prevention
Create the prerequisites to improve dental health	Objective	Target 8	No	Yes	No	No	Dental health

Design a health-promoting health system		Goal					
	Objective	Target 15	No	Yes	No	No	Health system
	Reorientation of the health system in favour of health promotion, based on the aspects of patient, family and employee orientation, quality improvement, comprehensive and low-threshold access, a gender-sensitive perspective, as well as integration, cooperation and interdisciplinary cooperation						
TOTALS	3 Goals	8 WHO Targets	No	Yes	No	No	
	12 Objectives						

Source: FH Joanneum and HealthCare Pueringer (2007)⁶⁰⁶

606 FH Joanneum and HealthCare Pueringer. *Health targets of Styria*. A project commissioned by the Styrian Health Fund, Graz, FH Joanneum and HealthCare Pueringer, 2007 (http://www.gesundheitsportal-steyrmark.at/GesundL_eben/Gesundheitsziele/Downloads/Documents/Gesundheitsziele%20Steyrmark.pdf, accessed 6 May 2009).

6e Tyrol

Health targets in Tyrol	Type of target	HEALTH21	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No	Topic
A) Recommendations for measures specific to Tyrol							
Strategies and structures for health promotion in general							
In order to reduce the share of smokers in Tyrol, supply of primary prevention services for certain target groups – especially for children, adolescents, women and migrants – should be expanded; an expansion of smoke-free zones in gastronomy and a consistent implementation of smoking bans in the premises of public buildings should be key aims	Goal	Target 12	No	Yes	No	Partially	Addiction
As part of an overall strategy against an increase in adiposity, which features one of the primary risk factors for numerous illnesses and suffering, a target group-specific focus should be placed on central elements, such as healthy nutrition, sufficient physical exercise and awareness-raising for a healthy lifestyle, thereby placing an emphasis on health promotion in connection with parent education/counselling, in kindergartens and in schools	Objective	Target 11	No	Yes	No	No	Adipositas
With regard to the promotion of dental health, meeting the WHO target of 2020 should represent the long-term aim – data show that Tyrol is on the right path to reach this target; In addition to the measures already present, dental health of children from a migrant background should be promoted, specifically by implementing low-threshold measures	SMART Target	Target 8	No	Yes	No	Yes (indirectly because of the WHO-target)	Dental health
Vaccinations: As the current data on child vaccinations show that the WHO targets are not being met at present, measures should be initiated in the following areas:	Objective (with 3 measures)	Target 8	No	Yes	No	Yes (indirectly because of the WHO-target)	Prevention

- Further improvement of documentation quality by improving the quality of IT and training staff
- Additional detailed analysis (e.g. in further regional depth) to narrow down existing problem areas, or standardized surveys of physicians in a region with a low multiple-year recording rate to detect potential reasons for the low vaccination rate
- Development of specific vaccination programmes to achieve an early increase in the vaccination rates, together with the system partners; Possibilities include, for example, opinion-forming processes among physicians and legal guardians or recall systems

	Target 8	No	Yes	No	No	Prevention
Continuation of proven target group-orientated screening programmes;	Objective (including 3 measures)					
● with greater sensitization for the health examination among men;						
● with greater sensitization for participation in the 7th to 9th mother-child-pass examination;						
● with greater sensitization in order to obtain as complete a vaccination status as possible, including for adults						

B) Recommendations for nationwide measures

	Target 19	No	Yes	No	No	Health system
Data recording	1 Goal					
● removing the data deficit with regard to "morbidity in the ambulatory setting" (ambulatory care/physician practices, outpatient departments, ambulatory clinics);	4 Objectives					
● harmonization and improvement of the national documentation on vaccinations (predominantly for adults, vaccination database in Tyrol as an important starting point);						

Health targets in Tyrol (cont'd)	Type of target	HEALTH21	Time	Measures Yes/No	Resources Yes/No	Indicators Yes/No	Topic
B) Recommendations for nationwide measures (cont'd)							
<ul style="list-style-type: none"> recording of data in connection with the mother-child pass, the precautionary health examination and school examinations; obligation of the main association of Austrian social security institutions (HVB) to keep statistics (especially for mother-child pass examinations and precautionary health examinations); forwarding of the results (data) of the mother-child pass examinations, school examinations, precautionary health examinations and the military examinations to the Public Health Service (ÖGD), especially to the regional/provincial health directorates 							
Health Determinants							
Development of a national Austrian strategy for prevention, with special consideration of socially disadvantaged groups	Objective	Targets 1, 2, 15	No	No	No	Partially	Health system
Focusing health support on "endangered" groups (socially disadvantaged groups, migrants, etc.)	Objective	Targets 1, 2	No	No	No	No	Socially disadvantaged
Realization of the protection of non-smokers	Objective	Target 12	No	No	No	No	Addiction
Promotion of awareness-raising, for a more critical approach to alcohol and other drugs	Objective	Target 12	No	No	No	No	Addiction
Originator-related measures to reduce the burden caused by (fine) particulate matter and NO ₂ , given the repeatedly exceeded threshold values defined for human protection according to IG-L (Federal Immission Protection Law – Air)	Objective	Target 10	No	No	No	No	Healthy environment
Harmonization and extension of the training of individuals working in the Public Health Service (ÖGD)	Objective	Target 18	No	No	No	No	Training

	3 Goals	9 WHO Targets	No	6 Yes	No	2 Yes
TOTALS	14			6 No		8 No
Objectives						2 Partially
1 SMART Target						

Source: Regional Government of Tyrol (2008).⁶⁰⁷

⁶⁰⁷ Regional Government of Tyrol. *Health report Tyrol 2007*. Commissioned by the Regional Government of Tyrol. Innsbruck, GOE Forschungs- und Planungsgesellschaft mbH, 2008 (<http://www.tirol.gv.at/themen/gesundheits-gruppe-gesundheit-und-soziales/gesundheitsbericht/>, accessed 6 May 2009).

Annex 7: Methodology applied for the development of health targets in Carinthia⁶⁰⁸

Health target development in Carinthia, supported by a health policy reference framework

The project “Health targets for Carinthia” was moderated and scientifically accompanied by the Institute for Corporate Management (*Institut für Unternehmensführung*) at the Alpen-Adria University Klagenfurt. It was commissioned by the health department of the region of Carinthia. The project group was composed of representatives of self-administration and the service providers (Medical Association, social insurance, hospital carriers), representatives of users in the system (patient lawyers, self-help groups), as well as representatives of other policy areas (among others, social affairs, education, environment, sports, transport). This by all means demanding and challenging combination was chosen deliberately in order to allow for a Health in All Policies approach.

A first step for the project involved the analysis of the contents, mode of development and indicated results of existing health target programmes (Austria, Germany, and countries with a strong public health orientation, such as Canada, United Kingdom, Sweden and Norway). The outcome was that certain programmes (especially those in the German-speaking regions) showed little or no impact on the respective health systems. Explicit causes were identified. As a result thereof, an approach was developed, allowing responsiveness to the specific needs of the users and the special circumstances of the corresponding health system (e.g. at the national and regional levels in Austria and Germany).

The health policy framework, which was developed based on the results of the aforementioned analysis, represents a methodological and professional

⁶⁰⁸ Offermanns G. Personal communication by e-mail, 18 September 2009. Translated by Joy Ladurner.

framework enabling the integration of new and innovative instruments (almost as an impulse) into the activities of the different policy areas (e.g. determinants orientation, public health orientation, health impact assessment). In principle, scientifically verified findings or concepts – which have proven to be successful in practice – are included in the reference framework, as a combination of a scientifically grounded and a pragmatically conditioned approach.

The reference framework constitutes an innovative structure for health politics in Carinthia (as a coordinating area, with the other policy topics in mind). The analysis has shown vividly that the isolated definition of health targets (without a reference framework) would reduce the chances of successful implementation. Because of the “Health in All Policies” concept on which the reference framework is based, other policy areas in Carinthia are consistently involved in the examination. This offers political decision-makers manoeuvring room with regard to advances in target orientation across different policy areas.

Basic principles of the health and social system of Carinthia form the basis of the elaborated reference framework. In principle, in such situations politicians must define the corresponding framework, as well as being given the opportunity for political accentuation. The reference framework represents an instrument with which specific targets for individual population groups can be developed. Groups can either be individuals with specific illnesses (e.g. diabetes, mental health problems, cancer, cardiovascular diseases) or vulnerable groups (among others, individuals who are greatly affected by social and health inequalities or could experience future suffering – specifically children and young people). For each group, both the preventive and the health promotion approaches are always taken into consideration and act as basic pillars of any health–political definition of priorities and activity.

To differentiate between the different levels of action in the health care system, basic targets have been developed, which allude to fundamental problems in the system (among others, lack of integration, identification of health determinants for all policy areas, transparent planning of the services offered). The acute medical field is also addressed, with the introduction of seemingly new and prospective steering instruments (e.g. evidence-based medicine, quality and risk management, error reporting systems).

A central feature of the reference framework is the management-orientated approach, which is described by the generic term “cross-linked multi-sectoral health care and health promotion”. For the implementation of the group and basic targets, it is important to consider how care of the individual groups (identified in the targets) is organized and how processes are tailored to the needs of these people. Targets thereby establish a direct connection to the actual

care system, which can consequently be improved and coordinated in a stepwise fashion (and, where necessary, also according to a prioritization schedule, for example a value–benefit analysis, which is based on different criteria). It quickly becomes obvious which policy areas and stakeholders must be addressed for the implementation of a health target that refers to a special group. The main point is to decide who should make which contribution to solve the problem or task for the defined group. Which policy areas must collaborate? Which responsibilities need to be assumed? How can the target be quantified (definition of indicators)? What exactly should the situation be, following the implementation of the target for the group (qualitative perspective)?

Effects triggered by the projects and activities should be presented and captured appropriately. Influencing the system only becomes possible when a consistent orientation towards the targets and their outcomes is pursued (outcome orientation). The outcome of a system must be assessed within the health system and also in other policy areas. The health status of the population can only be presented in an adequate way and a new orientation promoted in the event that both perspectives are combined.

Ultimately, this new approach necessitates the disposition of the responsible actors to question existing system structures and also to reflect on their own roles critically. The reference framework offers an orientation, that is, a level of guidance for the different policy areas, as well as for the actual users of the system (e.g. patients, insured individuals, citizens, self-help groups). Of all the features of the system, this is the aspect that can provide the relevant impetuses for a new direction and exert additional pressure onto the decision-makers.

This book explores some of the key challenges facing Austria's public health system. It examines how, over the last 50 years, the Austrian system has developed, and adapted and how improved standards of living and education, and important advances in health care and medicine, have benefited the population. But the study also questions some of those developments and poses significant questions as to how the system needs to adapt to deal with the challenges presented by life in the 21st Century.

The book sets Austria firmly within context by outlining the history of public health in developed countries, and examining the scope, functions and responsibilities of public health. The relevant structures and actors, and key sectors, are discussed and an up-to-date overview of education, training and research in the field is presented.

The Austrian public health system is then analysed in detail and the book draws on national research and expert interviews to present a fully-rounded picture of the current situation within the country. The resulting research finds that the public health system, which is still at a comparatively early stage of development, is struggling to maintain essential services and develop policies for improvement. The study suggests ways in which strategies and policies can be formulated to tackle these developments, and looks, in particular, at change within the fields of education, research and training.

The book looks at such key areas as:

- public health services (including health promotion and disease prevention, but also health care services)
- information management and health reporting
- health targets
- public health training and research
- addressing disadvantaged and special needs groups.

The final section provides recommendations for further improvement.

This book is essential reading for policy-makers, advisers and analysts interested in developing a public health strategy and competence in both developed and developing countries, as well as researchers interested in the Austrian health system.

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