

Health Systems in Transition

Vol. 17 No. 4 2015

Switzerland

Health system review

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Switzerland:

Health System Review 2015



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Keywords:

DELIVERY OF HEALTH CARE

EVALUATION STUDIES

FINANCING, HEALTH

HEALTH CARE REFORM

HEALTH SYSTEM PLANS – organization and administration

SWITZERLAND

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Printed and bound in the United Kingdom.

Suggested citation:

De Pietro C, Camenzind P, Sturny I, Crivelli L, Edwards-Garavoglia S, Spranger A, Wittenbecher F, Quentin W. Switzerland: Health system review. *Health Systems in Transition*, 2015; 17(4):1–288.

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Preface

The Health Systems in Transition (HiT) series consists of country-based reviews that provide a detailed description of a health system and of reform and policy initiatives in progress or under development in a specific country. Each review is produced by country experts in collaboration with the Observatory's staff. In order to facilitate comparisons between countries, reviews are based on a template, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a report.

HiTs seek to provide relevant information to support policy-makers and analysts in the development of health systems in Europe. They are building blocks that can be used:

- to learn in detail about different approaches to the organization, financing and delivery of health services and the role of the main actors in health systems;
- to describe the institutional framework, the process, content and implementation of health-care reform programmes;
- to highlight challenges and areas that require more in-depth analysis;
- to provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries; and
- to assist other researchers in more in-depth comparative health policy analysis.

Compiling the reviews poses a number of methodological problems. In many countries, there is relatively little information available on the health system and the impact of reforms. Due to the lack of a uniform data source, quantitative data on health services are based on a number of different sources, including

the World Health Organization (WHO) Regional Office for Europe's European Health for All database, data from national statistical offices, Eurostat, the Organisation for Economic Co-operation and Development (OECD) Health Data, data from the International Monetary Fund (IMF), the World Bank's World Development Indicators and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate review.

A standardized review has certain disadvantages because the financing and delivery of health care differ across countries. However, it also offers advantages, because it raises similar issues and questions. HiTs can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health systems. This series is an ongoing initiative and material is updated at regular intervals.

Comments and suggestions for the further development and improvement of the HiT series are most welcome and can be sent to info@obs.euro.who.int.

HiTs and HiT summaries are available on the Observatory's web site <http://www.healthobservatory.eu>.

Acknowledgements

The Health Systems in Transition profile on Switzerland was produced by the European Observatory on Health Systems and Policies.

This edition was written by Carlo De Pietro (University of Applied Sciences and Arts of Southern Switzerland), Paul Camenzind (Swiss Health Observatory, Obsan), Isabelle Sturny (Obsan), Luca Crivelli (University of Applied Sciences and Arts of Southern Switzerland), Suzanne Edwards-Garavoglia, Anne Spranger, Friedrich Wittenbecher and Wilm Quentin (all from Berlin University of Technology). It was edited by Anne Spranger and Wilm Quentin (Berlin University of Technology). The European Observatory on Health Systems and Policies' Research Director responsible for the Swiss HiT was Reinhard Busse (Berlin University of Technology). This edition is partially based on the previous HiT, which was published in 2000, and written by Andreas Minder, Hans Schoenholzer, Marianne Amiet and Anna Dixon

The European Observatory on Health Systems and Policies and the authors are grateful to a wide range of experts and officials for providing support and reviewing the report. Special thanks go to Ljubiša Stojanović (Federal Office of Public Health, FOPH) who organized an extensive review process of the HiT involving experts at the FOPH and at the Conference of the Cantonal Ministers of Public Health. In addition, the draft was reviewed by Valerie Paris (OECD) and experts of the advisory board of the Swiss Health2020 strategy, including Willy Oggier, Thomas Zeltner and Peter Suter. Furthermore, we are grateful to Lea von Wartburg (FOPH), Matthieu Leimgruber (University of Geneva), Peter Berchtold (Forum Managed Care), Martina Knecht (OdASanté) and Tobias Schoch (Ecoplan) for supporting our work with the provision of data or figures.

Special thanks are extended to the WHO Regional Office for Europe for their European Health for All database, from which data on health services were extracted; to the OECD for the data on health services in western Europe;

and to the World Bank for the data on health expenditure in central and eastern European countries. Thanks are also due to the Swiss Federal Statistical Office for providing data. The HiT reflects data available in September 2015, unless otherwise indicated.

The European Observatory on Health Systems and Policies is a partnership, hosted by the WHO Regional Office for Europe, which includes the Governments of Austria, Belgium, Finland, Ireland, Norway, Slovenia, Spain, the United Kingdom and the Veneto Region of Italy; the European Commission, the World Bank, UNCAM (French National Union of Health Insurance Funds), the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. The European Observatory has a secretariat in Brussels and it has hubs in London (at LSE and LSHTM) and at the Berlin University of Technology.

The Observatory team working on HiTs is led by Josep Figueras, Director; Elias Mossialos, Martin McKee, Reinhard Busse (Co-directors); Richard Saltman, Ellen Nolte and Suszy Lessof. The Country Monitoring Programme of the Observatory and the HiT series are coordinated by Gabriele Pastorino. The production and copy-editing process of this HiT was coordinated by Jonathan North with the support of Caroline White, Alison Chapman (copy editing) and Pat Hinsley (typesetting).

List of abbreviations

AHV-IV / AVS-AI	old-age and survivor's insurance
AL/LA	positive list of analyses
ALOS	average length of stay (in hospitals)
AMI	acute myocardial infarction
AMZV/OEMéd	Ordinance on Requirements for Marketing Authorization
ANOVA	analysis of variance
ANQ	National Association for Quality Improvement in Hospitals and Clinics
ASPS	Association Spitex Privée Suisse
BBG/LFPrf	Federal Law on Vocational Training
BDP	Conservative Democratic Party
BetmKV/OCStup	Ordinance on Narcotics
BMI	body mass index
BStatG/LSF	Federal Statistics Act
BSV/OFAS	Federal Social Insurance Office
CAM	complementary and alternative medicine
CED	coverage with evidence development
CH-IQI	Swiss Inpatient Quality Indicators
CHOP	Swiss Procedure Classification System
CME	continuing medical education
CSSH-N	Committees for Social Security and Health of the National Council
CSSH-S	Committees for Social Security and Health of the Council of States
CT	computed tomography
CVD	cardiovascular disease
CVP	Democratic People's Party
DALE	disability-adjusted life expectancy
DALY	disability-adjusted life year
DETEC	Department of the Environment, Transport, Energy and Communications
DMFT	decayed, missing or filled teeth
DRG	diagnosis related group
DSA	digital subtraction angiography

DVSP	Swiss Patient Federation
EAER	Federal Department of Economic Affairs, Education and Research
EAK/CFM	Federal Drug Commission
EAMGK/CFAMA	Federal Commission for Analyses, Products and Devices
EC	European Commission
EFTA	European Free Trade Association
EHIC	European Health Insurance Card
ELGK/CFPP	Federal Commission for Medical Benefits and Basic Principles
EL/PC	complementary payments of AHV-IV/AVS-AI
EPA	European Practice Assessment
EPDG/LDEIP	Federal Law on Electronic Health Records
EpG/LEp	Federal Epidemics Law
EQUAM	External Quality Assurance in Medicine
EU	European Union
EU13	EU Member States joining the EU in 2004, 2007 and 2013
EU15	EU Member States before 2004
EU28	The 28 EU Member States as of 2015
EU-SILC	European Union Statistics on Income and Living Conditions
FDC	Federal Drug Commission
FDHA	Federal Department of Home Affairs
FDP	Liberal Party
FFS	fee for service
FHSG/LHES	Federal Law on Universities of Applied Sciences
FiLaG/PFCC	Federal Law on Fiscal Equalization
FINMA	Financial Market Supervisory Authority
FMH	Swiss Medical Association
FoIA	Freedom of Information Act
FOPH	Federal Office of Public Health
FOPI	Federal Office of Private Insurance
FOSPO	Federal Office of Sports
FSO	Federal Statistical Office
FSP	Federation of Swiss Psychologists
FTE	full-time equivalent
GDK/CDS	Conference of the Cantonal Ministers of Public Health
GDP	gross domestic product
G-DRG	German Diagnosis Related Group system
GesBG/LPSan	Federal Law on Health Professions (draft)
GP	general practitioner
GST/VSV	Association of Veterinarians
H+	Swiss Association of Hospitals
HFKG/LEHE	Federal Law on University Education and Coordination

HIA	health impact assessment
Hib	<i>Haemophilus influenzae</i> type B
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
HLY	healthy life year
HMG/LPTh	Federal Law on Therapeutic Products
HMO	health maintenance organization
HSM	highly specialized medical care
HTA	health technology assessment
ICD-10	International Classification of Diseases, 10th revision
IKS/OICM	Inter-cantonal Office for the Control of Medicines
IMF	International Monetary Fund
IPA	independent practice association
ISCE	International Standard Classification of Education
IV/AI	disability insurance
IVHSM	Inter-cantonal Agreement on Highly Specialized Medical Care
IVR	Association for Rescue and Emergency Care
KGR/LEMO	Federal Law on Cancer Registration
KLV/OPAS	Health Care Benefits Ordinance
KS	hospital statistics
KUVG/LAMA	Federal Law on Sickness and Accident Insurance
KVAG/LSAMal	Federal Law on the Supervision of MHI
KVG/LAMal	Federal Health Insurance Law
KVV/OAMal	Health Insurance Ordinance
LAMA	Federal Law on Sickness and Accident Insurance
LMT	List of Medicines with Tariff
LS	List of Pharmaceutical Specialties
MEBEKO	Commission for University Medical Professionals
MedBG/LPMéd	Law on Medical Professions
MepV/ODim	Ordinance on Medical Products
MFE	Association of Primary Care Physicians
MHI	mandatory health insurance
MiGeL/LiMA	List of Medical Devices and Aids
MRI	magnetic resonance imaging
MS	medical statistics
MSS	Medical Services Section
MTK/CTM	Medical Tariff Commission
MV/AM	military insurance
NCD	non-communicable disease
NGO	non-governmental organization
NICER	National Institute for Cancer Epidemiology and Registration
OAQ	Swiss Centre of Accreditation and Quality Assurance in Higher Education

Obsan	Swiss Health Observatory
OECD	Organisation for Economic Co-operation and Development
OOP	out of pocket
OTC	over the counter
PET	positron emission tomography
PET	professional education and training
physiosuisse	Swiss Association of Physiotherapists
PISA	Programme for International Student Assessment
PLAISIR	Planification Informatisée des Soins Infirmiers Requis
PP	physical person
PPO	preferred provider organization
PPP	purchasing power parity
PSa	hospital outpatient statistics
PsyG/LPsy	Federal Law on Psychology Professions
PsyKo/PsyCo	Commission for Psychological Professionals
RAI-RUG	Resident Assessment Instrument – Resource Utilization Group
ResV-EDI/ Ore-DFI	Ordinance on Reserves of MHI Companies
RVK	Association of Small and Medium Insurers
SAMW/ASSM	Swiss Academy of Medical Sciences
SAQM	Swiss Academy for Quality in Medicine
SBK/ASI	Swiss Association of Nurses
SDR	standardized death rate
SECO	State Secretariat for Economic Affairs
SERI	State Secretariat for Education, Research and Innovation
SGNOR	Swiss Society for Emergency Medicine
SHV/FSSF	Swiss Association of Midwives
SI	social insurance
SIWF/ISFM	Swiss Institute for Postgraduate and Continuing Medical Education
SL	List of Pharmaceutical Specialties (prefabricated drugs)
SMIFK/CIMS	Joint Commission of the Swiss Medical Schools
SNHTA	Swiss Network for Health Technology Assessment
SNZ	emergency call centre
SP	Social Democratic Party
Spitex	Swiss-German term for home care (<i>Spitalexterne Hilfe und Pflege</i>)
Spitex Verband/ ASSASD	Swiss Association of Home Care Services
SPO/OSP	Swiss Patient Organization
SRC	Swiss Red Cross
SSO	Swiss Dental Association
SUVA	Swiss National Accident Insurance Fund

SVBG/FSAS	Swiss Federation of Healthcare Professional Associations
SVBGF	Swiss Association of Occupational Health Promotion
SVP	Swiss People's Party
SVV/ASA	Swiss Insurance Association
Swissmedic	Swiss Agency for Therapeutic Products
SwissREHA	Swiss Association of Rehabilitation Hospitals
THE	total health expenditure
TPA	Therapeutic Products Act
UOE	UNESCO/OECD/Eurostat
US\$PPP	US\$ purchasing power parity
UV/AA	accident insurance
UVG/LAA	Federal Law on Accident Insurance
VAM/OMéd	Ordinance on Pharmaceuticals
VASV/OASMéd	Ordinance on Simplified Marketing Authorization
VAT	value added tax
VBGF/ARPS	Swiss Association of Cantonal Chiefs for Health Promotion
VET	Vocational Education and Training
VEZL/OLAF	Regulation on Limiting the Licensing of New Providers
VHI	voluntary health insurance
VKS/AMCS	Association of Cantonal Officers of Health
VLSS	Association of Chief Physicians
VSAO	Association of Employed Physicians
VUV/OPA	Ordinance on Prevention of Accidents and Occupational Diseases
VVG/LCA	Insurance Contract Law
WHO	World Health Organization
ZVK	Association of Hospitals in Canton Zurich

Abbreviations for names of cantons

AG	Aargau
AI	Appenzell Innerrhoden
AR	Appenzell Ausserrhoden
BE	Bern
BL	Basel-Landschaft
BS	Basel-Stadt
FR	Fribourg
GE	Geneva
GL	Glarus
GR	Graubünden
JU	Jura

LU	Lucerne
NE	Neuchâtel
NW	Nidwalden
OW	Obwalden
SG	St. Gallen
SH	Schaffhausen
SO	Solothurn
SZ	Schwyz
TG	Thurgau
TI	Ticino
UR	Uri
VD	Vaud
VS	Valais
ZG	Zug
ZH	Zurich

Source: FSO, 2015a.

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Abstract

This analysis of the Swiss health system reviews recent developments in organization and governance, health financing, health care provision, health reforms and health system performance.

The Swiss health system is highly complex, combining aspects of managed competition and “corporatism” (the integration of interest groups in the policy process) in a decentralized regulatory framework shaped by the influences of direct democracy. The health system performs very well with regard to a broad range of indicators. Life expectancy in Switzerland (82.8 years) is the highest in Europe after Iceland, and healthy life expectancy is several years above the European Union (EU) average. Coverage is ensured through mandatory health insurance (MHI), with subsidies for people on low incomes. The system offers a high degree of choice and direct access to all levels of care with virtually no waiting times, though managed care type insurance plans that include gatekeeping restrictions are becoming increasingly important. Public satisfaction with the system is high and quality is generally viewed to be good or very good.

Reforms since the year 2000 have improved the MHI system, changed the financing of hospitals, strengthened regulations in the area of pharmaceuticals and the control of epidemics, and harmonized regulation of human resources across the country. In addition, there has been a slow (and not always linear) process towards more centralization of national health policy-making.

Nevertheless, a number of challenges remain. The costs of the health care system are well above the EU average, in particular in absolute terms but also as a percentage of gross domestic product (GDP) (11.5%). MHI premiums have increased more quickly than incomes since 2003. By European standards, the share of out-of-pocket payments is exceptionally high at 26% of total health expenditure (compared to the EU average of 16%). Low- and

middle-income households contribute a greater share of their income to the financing of the health system than higher-income households. Flawed financial incentives exist at different levels of the health system, potentially distorting the allocation of resources to different providers. Furthermore, the system remains highly fragmented as regards both organization and planning as well as health care provision.

Executive summary

Introduction

Switzerland is a small Alpine country, with a population of about 8.1 million people and four official languages (German, French, Italian and Romansh). Switzerland has a highly decentralized administrative and political structure, organized around three levels of government: the federal level (the “Confederation”), 26 cantons and 2352 municipalities. The country has a unique political system, arguably the closest in the world to a direct democracy with almost all issues of importance being decided upon through public referendum.

Switzerland is a wealthy country; its GDP per head is among the highest in Europe, and indeed the world. It attracts highly skilled migrants (principally from other OECD countries), leading to a particularly high proportion (27%) of foreign-born nationals living in the country. Switzerland has a thriving financial sector and is one of the world’s top 20 exporters specializing in chemicals and high-technology products. It is home to many of the world’s major international organizations, including the World Health Organization (WHO).

Like many western European countries, Switzerland faces an ageing population, with the ratio of older people to people of working age having risen to 26.1 per 100 (although this is still below the EU average of 28.1). Both life expectancy and healthy life expectancy are among the highest in Europe and well above the averages for the EU. Although life expectancy is higher for women (84.9 years compared to 80.7 for men), unlike for the EU, Swiss women have fewer healthy life years to look forward to than men (67.6 compared to 68.6). Similarly to many of its neighbours, Switzerland’s two most important causes of mortality are cardiovascular diseases (CVD) and cancers, despite drops in mortality rates for both in recent decades. The incidence of some infectious diseases, including for HIV, is higher in Switzerland than the EU average.

2 Organization and governance

The Swiss health system is highly complex, combining aspects of managed competition and “corporatism” (the integration of interest groups in the policy process) in a decentralized regulatory framework shaped by the influences of direct democracy. This explains the sharing (and some would say fragmentation) of decision-making powers between:

- 1) the three different levels of government (the federal level, the cantons, and for social services the municipalities);
- 2) recognized civil society organizations (“corporatist bodies”), such as associations of health insurers and health care providers; and
- 3) the Swiss people, who can veto or demand reform through public referenda.

The federal setup of the country gives all power to the cantons except in areas where the constitution has explicitly assigned competences to the federal level. Historically, the federal level had very little legislative power in the area of health. This led to the emergence of different patterns of financing and health care provision across the country. Today, as the result of a slow but steady process of greater centralization over recent decades, the federal level plays an important role in regulating most areas of the health system, including:

- 1) the financing of the system (mandatory health insurance (MHI) and other social insurances);
- 2) the quality and safety of pharmaceuticals and medical devices;
- 3) public health (control of infectious diseases, food safety, some areas of health promotion); and
- 4) research and training (tertiary education, training of non-physician health professionals).

Switzerland ensures access to health care through a system of MHI, which has been compulsory for all residents since 1996 (although some cantons had compulsory insurance as early as 1914). Citizens who want to purchase MHI cannot be turned down by insurers, and cantons provide subsidies for people on low incomes (although the nature and level of these vary widely by canton). The standard benefits package is regulated by federal legislation and includes most general practitioner (GP) and specialist services, as well as inpatient care and services provided by other health professionals if prescribed by a physician.

Cantons are responsible for securing health care provision for their populations, although they may also include hospitals from other cantons on their lists of providers, and they finance about half of inpatient care. Cantons are also in charge of issuing and implementing a large proportion of health-related legislation, and they carry out prevention and health promotion activities. In order to coordinate their activities, in particular for highly specialized medical care, the cantons work together in the Conference of the Cantonal Ministers of Public Health (GDK/CDS).

Corporatist actors, in particular associations of MHI companies and providers (associations of physicians and hospitals) play an important role in the Swiss health system. They are charged with determining tariffs for the reimbursement of services, they negotiate contracts and they oversee their members at the cantonal level.

Popular initiatives and referenda have a pervasive influence in shaping health policy-making. Certain reforms of the health care system require a positive referendum by the Swiss population, in particular when concerning the reallocation of responsibilities between the three levels of governance. In addition, popular initiatives often drive legislative activity, responding to citizens' demands for change.

3 Financing

In 2013, total health expenditure (THE) in Switzerland was 11.5% of GDP, one of the highest shares in Europe and well above the EU average of 9.5%. In Europe, only the Netherlands and France spent an even larger proportion of GDP on health. When looking at per capita spending on health, Switzerland spends US\$ 6187 (when measured in purchasing power parities, PPP) approaching double the EU average of US\$ 3379; in Europe, only Luxembourg and Norway spend more.

Financial flows are fragmented and split between different government levels and different social insurance schemes. Resources are collected mostly through taxes (32.4% of THE in 2012) and MHI premiums (30.0% of THE) but a considerable part of tax resources are subsequently allocated to the different social insurance schemes, in particular as subsidies to lower- and lower middle-income households for the purchase of MHI. As a result of this reallocation, MHI companies are the largest purchasers and payers in the system, financing 35.8% of THE. The next largest components are out-of-pocket (OOP) payments,

amounting to 26.0% of THE, and government spending (mostly from the cantons) covering 20.3% of THE. By European standards, the share of public spending is relatively low at 66% of THE (compared to the EU average of 76%), while the share of OOP payments is exceptionally high at 26% of THE (compared to the EU average of 16%). Private financing is the main source of funding for dental care, and is also substantial in ambulatory care and long-term institutional care; public financing is predominant for hospital services.

MHI premiums are community-rated, i.e. they are the same for every person enrolled with a particular insurance company within a given region (meaning a canton or part of a canton) independent of gender or health status. Progressively higher premiums apply to three different age classes: (1) from 0 to less than 19 years; (2) from 19 to less than 26 years; (3) 26 years and above. In 2012, 29% of the Swiss population had to pay a reduced premium only, or no premium at all. MHI premiums are collected by MHI companies and are subsequently reallocated between the MHI companies, based on an increasingly refined risk-equalization mechanism that takes account of age, gender, prior hospitalization and (from 2017) pharmaceutical expenditure. Additional voluntary health insurance (VHI) plays a rather small and declining role, financing about 7.2% of THE in 2012.

MHI companies offer different types of MHI policy, which vary with regard to the size of deductible (the amount that people have to pay themselves before their MHI coverage kicks in) and restrictions on their choice of provider. The minimum annual deductible is Sw.fr.300 (around €75) for adults, while the maximum deductible is Sw.fr.2500 (around €300). In addition, a 10% co-payment rate applies to all services (which can not be covered by voluntary insurance). However, total user charges (deductible plus co-payment) are capped at Sw.fr.1000 (around €20) or Sw.fr.3200 (around €945), depending on the size of deductible chosen. Insurance plans with some restriction of choice of provider (e.g. managed care-style insurance) have gradually become the dominant form of insurance in Switzerland, with more than 60% of insured opting for these plans in 2013; this proportion was below 10% in 2003. MHI cannot be profit-making, but the same companies may also offer VHI, which is allowed to make profits; many MHI companies offer such products as well.

Fee-for-service is the dominant method of provider payment in Switzerland. The tariffs for ambulatory care and, since 2012, also for acute inpatient care, are based on national frameworks developed jointly by associations of insurers and providers. For inpatient rehabilitation and inpatient psychiatry, work on developing national tariff frameworks is ongoing. For long-term care, MHI pays

a contribution that depends on the care needs of the patient; the patient pays a contribution capped at 20% of the MHI contribution; and the canton covers the remaining costs.

4 Physical and human resources

There are 293 hospitals in Switzerland, which can vary greatly in size from those with 2–3 beds to more than 2000 beds. On average, hospitals are rather small when compared with other countries, but the number of hospitals per population is comparatively high. About 21% of hospitals are publicly owned and managed either as part of the administration or as public companies; 25% are run by a non-profit organization, which can be a foundation, an association or a cooperative; and more than half of all hospitals are privately owned (including stock companies, limited liability companies and individuals). Nevertheless, almost two thirds (about 65%) of all beds are in public or non-profit hospitals.

The number of acute care hospitals decreased by about 50% between 2000 and 2013 and the number of beds in acute care hospitals was reduced by about 20% over the same period of time. There were 2.9 beds in acute care hospitals per 1000 people in Switzerland in 2013, which was below the EU average of 3.6 beds per 1000 people. Average length of stay in acute care hospitals fell by 37% since 2000 to 5.9 days in 2013, which was also below the EU average of 6.3 days.

Owners of health care institutions are responsible for managing capital investments and, since the introduction of payment based on diagnosis-related groups in 2012, hospital investments are – at least in theory – also financed from revenues received for services. However, cantons sometimes still have dedicated budgets for investment as they did before the introduction of this system. Switzerland also has one of the highest densities of medical imaging technologies in Europe, although this varies considerably across cantons.

The number of physicians and nurses has increased relatively strongly over the past two decades, while the number of dentists, pharmacists and midwives has remained more or less stable. With 4.1 physicians and 17.7 nurses (including midwives) per 1000 people in 2013, Switzerland had the highest number of nurses and the second highest combined number of physicians and nurses in the entire European Region after Monaco; for comparison, the EU averages are 3.5 physicians and 9.1 nurses per 1000 people. In contrast, the number of dentists, pharmacists and midwives per 1000 people are low in comparison to

EU averages. The composition of the medical workforce is changing noticeably, with older male physicians being increasingly replaced by younger female physicians. There is a high reliance on foreign-trained health workers; almost 30% of all active physicians in Switzerland held a diploma from a foreign medical university in 2013, mostly from Germany.

5 Provision of services

Responsibilities for the legislation, implementation and supervision of public health services are split between the federal level and the cantons. Consequently, public health activities are not well coordinated and vary greatly across cantons.

Ambulatory care is provided mostly by self-employed physicians working in independent single practices offering both primary care and specialized care. In general, patients have a very large degree of freedom concerning choice of physician and hospital. Easy access to all levels of care, including inpatient care, without need for a referral, has been a key characteristic of the Swiss health care system. However, the past decade has seen a rise in physician networks and health maintenance organizations (HMOs), which contract with insurers to provide care. In 2012, about 20.8% of all insured were estimated to be insured by either an HMO plan or a physician network plan. Such plans include gatekeeping by a GP.

Acute care hospitals provide inpatient care and play an increasingly important role for the provision of ambulatory and day care services. Traditionally, choice of hospital was somewhat restricted by cantonal borders. However, since the implementation of a hospital financing reform in 2012, patients can choose any hospital located outside the canton of residence as long as the hospital is included on the hospital list of the canton of treatment. Nevertheless, reimbursement follows the rules of the canton of residence, which means that it is limited to the level of costs that would have had to be paid if the patient had been treated in the canton of residence.

Cantons are responsible for the organization of long-term care, rehabilitation care, palliative care and psychiatric care, but may delegate responsibility to municipalities. In addition, informal carers play a substantial role; about 4.7% of the population are estimated to provide informal help on a daily basis, and an additional 9.6% are estimated to provide informal help about once a week.

Better integration of care across different institutions and providers has been under discussion for some years, especially for mental health care activities, but progress in this direction remains limited.

Expenditure on pharmaceuticals was €652 per head in 2012 – the highest of all European countries for which data are available. Considerable efforts have been made in recent years to reduce the relatively high retail prices in Switzerland and to increase the use of generics. The market share of generics as a proportion of all reimbursed pharmaceuticals in terms of volume rose from 6.1% in the year 2000 to 23.9% in 2013, but remains far below the share of generics in other countries, such as Germany (78.2% in 2012) or Austria (48.5% in 2012). A Swiss particularity is that pharmaceuticals are not only distributed by pharmacies but – in some cantons – also by so-called self-dispensing doctors, who sell about 24% of all sold pharmaceuticals in Switzerland (in terms of value) through their in-practice pharmacies.

6 Principal health reforms

Since the year 2000, numerous reforms have been made, which have optimized the MHI system, changed the financing of hospitals, improved regulations in the area of pharmaceuticals, strengthened the control of epidemics, and harmonized regulation of human resources across the country.

Making health reforms in Switzerland is difficult as a broad consensus of the main stakeholders is required. Reaching such a consensus is complicated, sometimes impossible, and almost always takes a very long time. Yet, the complex political and institutional structure of the country is very successful at negotiating compromises that are supported (or at least not opposed) by all relevant stakeholders. This leads to lengthy reform processes but also to solid reforms, which are – once implemented – almost never reversed. This characteristic feature of policy-making in Switzerland is also supported by a high degree of political and personal continuity within political institutions.

One important trend across all reforms since 2000 (and even before that) has been a tendency towards more harmonization of national health policy-making. Many reforms have strengthened the role of the federal government, which has obtained more influence over hospital inpatient care provision, insurance supervision and public health. In addition, cantons are increasingly coordinating their activities, and this has led to a stronger role for the Conference of the Cantonal Ministers of Public Health, in particular in the area of highly

specialized medical care. Nevertheless, reforms strengthening the federal level are often highly contested as cantons are reluctant to allow more federal intervention in health care, as they perceive this to be one of their core areas of responsibility; other stakeholders exploit and support this cantonal attitude. A consensus seems to be emerging that a greater role for the federal level is necessary, at least for coordination of activities. Most current reform proposals confirm this trend towards more influence for the federal level, although the constitutional distribution of competences will likely remain untouched.

Future reforms are guided by the federal government's Health 2020 strategy paper, which outlines the reform priorities for the coming years. Three particularly important areas of reform are: (1) improving the use of information; (2) improving planning of ambulatory care; and (3) improving health care provision for people with specific needs. Given the lengthy process of making health reforms, most of these areas have already been on the political agenda for quite some time, but it will still be several years before institutional or legislative changes materialize.

7 Assessment of the health system

Population health indicators are very good in Switzerland. Patients are highly satisfied with the health system, perceive quality to be good or very good, and there are virtually no waiting times. Avoidable hospital admissions are relatively low and OECD quality indicators confirm that health care quality is high – although not exceptional.

Nevertheless, there is room for improvement, in particular concerning the health care financing system. Financial protection of Swiss households from the costs of medical care is good – and better than in many European countries when all forms of social protection are taken into account. However, the very high share of OOP payments – related to the exclusion of certain services from coverage (notably dental care) and to the relatively high user charges – means that financial protection is more limited than, for example, in Austria, Germany or the Netherlands. Surveys indicate that almost 3% of the poorest income quintile have an unmet need for medical examination or treatment because of costs – a share that is considerably higher than in Austria, Germany or the Netherlands.

Low-income households contribute a greater share of their income to the financing of the Swiss health system than higher-income households. In addition, individuals and households at the same level of income often contribute very different shares of their income depending on their place of residence. The cantonal mechanisms of premium subsidies do not sufficiently reduce the financial burden on lower-income households and they contribute to the variation in financial burden depending on the place of residence.

In view of escalating costs, it is very likely that resources could be used more efficiently. Research indicates that the variation in expenditures across cantons is at least partially related to supplier-induced demand, resulting from flawed incentives of (unlimited) fee-for-service reimbursement, subsidized hospital investments and fragmentation of provision. So far, there is limited use of independent health technology assessments (HTA) to inform coverage decisions and to limit expenditures on existing and new services of uncertain benefit. The use of medical guidelines could be strengthened to help professionals “choose wisely” when examining and treating patients.

In addition, the large number and the small size of hospitals in Switzerland implies that there is considerable room for efficiency improvement by exploiting economies of scale. Furthermore, prices of pharmaceuticals remain higher than in Austria, the Netherlands or France, while the share of generics remains relatively small. Finally, efficiency and quality could be increased by systematically addressing patient safety issues and by improving coordination of care.

8 Conclusion

The Swiss health system is highly valued by patients and scores very well on a broad range of indicators. However, financial protection and fairness of financing could be further improved and achieving greater effectiveness and efficiency of the system remains an important challenge. Controlling the high and rising costs of MHI premiums, which have increased more quickly than incomes since 2003, is likely to require a more systematic and stringent process of HTA, which could assess products and services for both inclusion in and removal from the MHI benefits basket. Greater use of medical guidelines, investments in patient safety, and the reduction of waste by improving coordination within and between different levels of care would further improve efficiency. The trend towards more managed care-type insurance may help to

realign the incentives of insurers and providers, and current reform plans for better planning of ambulatory care might eventually lead to a more needs-based distribution of providers.

Improving financial protection and fairness of financing is becoming more important because rising premiums and OOP payments place an increasingly large financial burden on households with lower and middle incomes. Current discussions about possible financing and payment reforms aiming to change the way in which cantons and MHI companies split the bill of health care provision could potentially address not only the distortion of incentives resulting from the current system of financing but also improve horizontal and vertical equity. However, given the tradition of slow and incremental reforms in Switzerland, more radical changes are very unlikely.

Finally, strengthening disease prevention and health promotion with a focus on non-communicable diseases remains an issue. Favourable living conditions in Switzerland, such as good housing conditions, a high-quality education system and low rates of unemployment contribute to healthy living conditions. However, prevention of non-communicable diseases, in particular through health promotion and health education, could potentially have a large impact on further improving the very good health status of the population, while avoiding the costs associated with the treatment of these diseases.

1. Introduction

Switzerland is a small country, with a population of about 8.1 million people. It has four official languages (German, French, Italian and Romansh) and a highly decentralized administrative and political structure, organized into three levels of government: the Confederation, cantons (26) and municipalities (2352). The country has a unique political system, arguably the closest in the world to a direct democracy with almost all issues of importance being decided upon through public referendum.

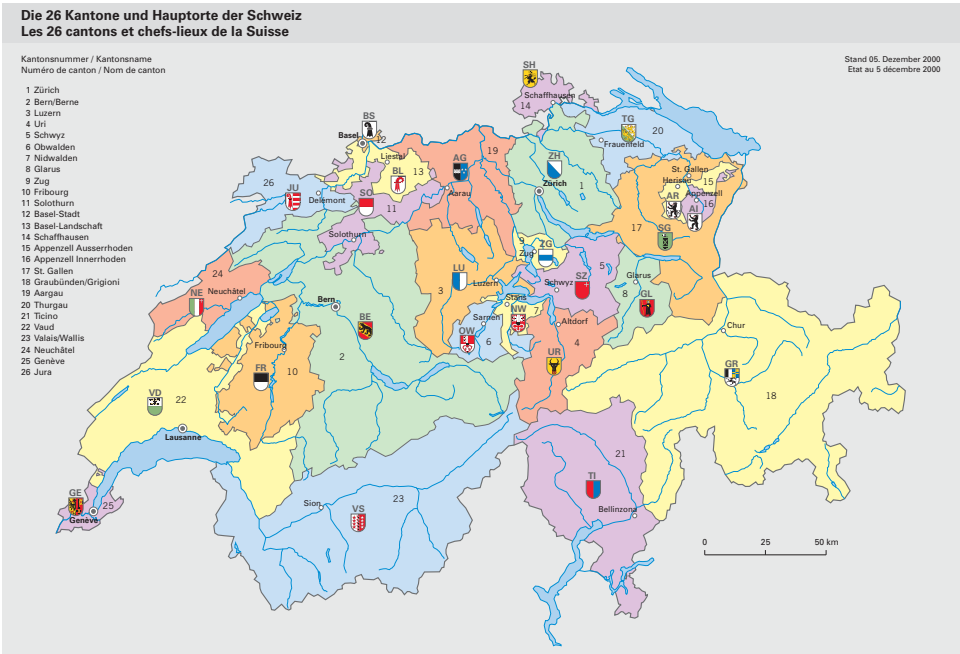
Switzerland is a wealthy, stable country with one of the highest per capita gross domestic products (GDP) in Europe. It has a highly skilled labour force and attracts highly skilled migrants from other OECD countries, leading to a particularly high proportion of foreign-born nationals living in the country (the second highest proportion in Europe). Switzerland has a thriving financial sector and is one of the world's top 20 exporters specializing in chemicals and high-technology products. It is an important partner to, and indeed home to, many of the world's major international organizations, including the WHO.

Like many western European countries, Switzerland faces an ageing population. It has the second highest life expectancy in Europe at 82.8 (2013) and a below EU28 average fertility rate (1.5). Similar to many of its neighbours, Switzerland's two most important causes of (age-standardized) mortality are cardiovascular diseases (CVD), which are – despite a drop in mortality by more than 40% since 1990 – responsible for slightly more than 30% of deaths, and cancers, which are responsible for slightly less than 30% of deaths. Although life expectancy is higher for women, they have fewer healthy life years to look forward to and they receive more treatment for chronic conditions than their male counterparts.

1.1 Geography and sociodemography

Switzerland, officially known as the Swiss Confederation, is a federal republic made up of 26 cantons. It lies in central Europe and is bordered by France to the west and northwest, Germany to the north, Austria and Liechtenstein to the east and Italy to the south. It covers an area of 41 285 km². Major cities include Bern (the capital), Zurich, Basel, Lausanne and Geneva. The country is dominated by the Jura Mountains in the northwest and the Alps in the south central part, which together occupy about 70% of the country’s area. The Rhine and Rhône rivers both rise in Switzerland, and there are many lakes, including Lake Geneva and Lake Constance. The majority of the population lives in the Swiss Plateau, a narrow, hilly region between the two mountain ranges. Switzerland has a temperate climate with conditions that vary with relief and altitude (Fig. 1.1).

Fig. 1.1
Map of Switzerland



Source: Map based on the Federal Office of Statistics, ThemaKart, 2005

Switzerland has four national languages which represent the four principle language communities: 63.5% of the population speak German; 22.5% speak French; 8.1% speak Italian; and 0.5% speak Romansh (a Rhaeto-Roman dialect) (FSO, 2015d). About 38% of the population are Roman Catholic, 27% Protestant, and 21% do not belong to a religious community (FSO, 2015d). The total population in Switzerland was 8.1 million in 2013. This meant a rise in population by almost 30% since 1980 and annual population growth rates were around 1% between 2010 and 2013.

About 27% of the population were born abroad, making Switzerland the country with the second highest proportion of foreign-born inhabitants in Europe (after Luxembourg) (OECD, 2015a). Immigration is dominated by those from other OECD countries (between 65% and 85%) and is characterized by a high proportion of persons with tertiary education (Dumont & Lemaître, 2005). Switzerland's status of net beneficiary of highly skilled migrants reflects the historic need for qualified personnel in many sectors in Switzerland, amongst others in the health care sector.

In 2008, Swiss voters agreed to join the Schengen Area but in February 2014 a diplomatic spat with Europe was triggered when Swiss voters supported a referendum limiting the freedom of movement of foreign citizens to Switzerland. Despite naturalization being a lengthy and complex process and the growing domestic resistance to the size of the immigrant workforce, these factors are likely to remain in tension, politically, with the economy's need for highly skilled personnel across sectors and the continued appeal of Switzerland's high standard of living.

As in many other European countries, the Swiss population is ageing. The share of the population aged 65 and above was 17.7% in 2013, a rise of almost 4 percentage points since 1980. In the same period the share of those aged 0–14 years fell by roughly 5 percentage points to 14.8% in 2013 (see Table 1.1).

An increasing share of the Swiss population lives in urban areas (73.8% in 2013). More than a third of the population lives in the five largest Swiss agglomerations and population density differs considerably between different cantons and regions (OECD/WHO, 2011). For decades the fertility rate has been about 1.5 children per woman.

Switzerland has a primary school net enrolment ratio of 99.5% (2008–2011) (UNICEF, 2014) and its secondary school children (at 15 years old) are in the group of countries where mean educational performance is above the

OECD average as assessed by the 2012 Programme for International Student Assessment (PISA) study results (OECD, 2014e). The share of the population aged 30–34 years who have successfully completed tertiary-level education¹ in 2013 was 46.1% compared to an EU28 average of 36.9% and is generally a little above that of its neighbouring countries (Eurostat, 2014e).

Table 1.1

Trends in population/demographic indicators, Switzerland, 2013 and selected years

	1980	1990	1995	2000	2005	2010	2011	2012	2013
Total population	6.3	6.7	7.0	7.2	7.4	7.8	7.9	8.0	8.1
Population, female (% of total)	51.4	51.2	51.2	51.2	51.1	50.8	50.7	50.7	50.7
Population aged 0–14 (% of total)	20.0	17.0	17.6	17.4	16.1	15.1	14.9	14.8	14.8
Population aged 15–64 (% of total)	66.2	68.4	67.7	67.3	67.9	68.0	67.9	67.8	67.5
Population aged 65 and above (% of total)	13.8	14.6	14.7	15.9	15.8	16.9	17.2	17.4	17.7
Population aged 80 and above (% of total)	2.7	3.7	4.0	4.0	4.5	4.8	4.8	4.9	n/a
Population growth (average annual %)	0.4	1.0	0.7	0.6	0.6	1.0	1.1	1.1	1.2
Population density (people per km ²)	158.0	167.9	176.0	179.6	180.1	189.5	186.4	187.1	195.7
Fertility rate, total (births per woman)	1.6	1.6	1.5	1.5	1.4	1.5	1.5	1.5	1.5
Birth rate, crude (per 1 000 people)	11.5	12.5	11.7	10.9	9.8	10.3	10.2	10.3	10.0
Death rate, crude (per 1 000 people)	9.4	9.5	9.0	8.7	8.2	8.0	7.8	9.0	8.0
Age dependency ratio (% of working-age population)	51.1	46.2	47.7	48.7	47.3	47.0	47.2	47.6	48.1
Urban population (% of total)	57.1	73.2	73.6	73.3	73.3	73.6	73.7	73.8	73.8
Educational level: literacy rate (% of people aged 15+)	100.0	99.0	99.0	99	n/a	n/a	n/a	n/a	n/a

Sources: WHO Regional Office for Europe, 2014; WHO Regional Office for Europe, 2015; World Bank, 2014.

Interestingly, Switzerland is one of only a small number of countries (including Luxembourg and Turkey) where tertiary education attainment is still higher for men than women. However, national statistics show that this is related to a higher proportion of men completing tertiary education at vocational schools, while more women than men complete tertiary education at universities (see Table 1.2 below).

¹ International Standard Classification of Education (ISCE) level of 5–6 in 2012 based on the 1997 methodology from a combined UNESCO/OECD/Eurostat (UOE) survey.

Table 1.2
Highest educational level in % of residential population aged 25–34 years, 2014

	Total (%)	Men (%)	Women (%)
Compulsory school	9.0	8.9	9.1
Secondary school (vocational)	34.2	35.2	33.1
Secondary school (general)	10.9	9.7	12.1
Tertiary education – vocational schools	12.7	14.2	11.2
Tertiary education – universities	33.3	32.0	34.6

Source: FSO, 2015c.

1.2 Economic context

Switzerland is an economically stable and prosperous country with a GDP per capita among the highest in Europe and the world. It has a highly developed service sector, led by financial services, and a manufacturing industry that specializes in high-technology, knowledge-based production. Switzerland has few natural or mineral resources (hydroelectric power being a notable exception). Principal products are machinery, precision instruments, chemicals, pharmaceuticals, watches, jewellery, textiles and foodstuffs.

Since 2004, high exports, stable domestic consumption and a strong financial sector have contributed to stable economic growth. Only in 2009, GDP declined in the wake of the financial crisis of 2008. Yet, despite the importance of the financial sector, the Swiss economy recovered swiftly and, in 2010, GDP growth rates were already as high as 2.9% (see Table 1.3). Switzerland’s economy has continued to grow in recent years and its purchasing power parity (PPP) was around US\$ 53 700 per capita in 2013. The total labour force in 2013 was about 4.7 million and the unemployment rate was at 4.4% (see Table 1.3), which is very low by international standards.

Table 1.3

Macroeconomic indicators, 2013 and selected years

	1980	1990	1995	2000	2005	2010	2011	2012	2013
GDP (in billion current US\$)	112.5	244.0	324.0	256.0	384.8	549.1	658.9	631.2	650.4
GDP, PPP (in billion current international \$)	90.1	169.8	192.9	233.6	274.9	381.2	405.3	417.0	433.7
GDP per capita (in thousand current US\$)	17.8	36.3	46.0	35.6	51.7	70.6	83.3	78.9	80.5
GDP per capita, PPP (in thousand current international \$)	14.2	25.3	27.4	32.5	37.0	48.7	51.2	52.1	53.7
GDP annual growth rate (%)	4.60	3.67	0.48	3.67	2.69	2.95	1.79	1.05	1.93
General government final consumption expenditure (% of GDP)	9.8	11.3	11.8	11.1	11.6	11.0	11.0	11.2	11.3
Cash surplus/deficit (% of GDP)	n/a	n/a	n/a	n/a	-0.53	0.02	0.56	n/a	n/a
Tax revenue (% of GDP)	n/a	n/a	8.5	n/a	9.9	9.6	9.8	n/a	n/a
Public (central government) debt, total (% of GDP)	n/a	n/a	21.4	n/a	40.5	23.8	24.3	n/a	n/a
Value added in industry (% of GDP)	34.5	31.3	29.6	26.5	26.4	26.3	26.9	26.8	26.4
Value added in agriculture (% of GDP)	n/a	2.5	2.1	1.3	0.99	0.8	0.8	0.7	0.8
Value added in services (% of GDP)	n/a	66.2	67.6	72.2	72.6	72.9	72.3	72.5	72.8
Labour force (in million people, total)	n/a	3.8	3.9	4.0	4.2	4.5	4.6	4.6	4.7
Unemployment, total (% of labour force)	n/a	2.1	3.3	2.7	4.4	4.5	4.0	4.2	4.4
Real interest rate	n/a	2.7	4.7	2.7	2.9	2.4	2.3	2.6	2.8
Official exchange rate (Sw.fr./US\$)	1.7	1.4	1.2	1.7	1.2	1.0	0.9	0.9	0.9

Sources: World Bank, 2014; World Bank, 2015.

1.3 Political context

Switzerland's political system is special in so far as the lower levels of government, i.e. cantons and municipalities, have a very high degree of autonomy. Cantons are sovereign in all matters that have not specifically been designated by the Federal Constitution as the responsibility of the Confederation. In addition, the population is involved in the process of political decision-making more directly than in most other countries. Almost all federal, cantonal or municipal decisions of greater importance may be decided upon directly by the people.

The Swiss Confederation is generally considered to consist of 26 cantons. However, some count only 23 cantons because six cantons are for historical reasons known as half-cantons, even though they have the same degree of autonomy as cantons. In addition, there are 2352 municipalities (since 2014) with considerable autonomy.

The Confederation

The senior executive body of the federal government is the Federal Council, which consists of seven federal councillors (or federal ministers) of equal rank. The Parliament elects them individually for a four-year term, and each year one of them is elected to be President of the Confederation. The President does not hold any additional power except to chair meetings of the Federal Council and to carry out certain representative duties.

The Federal Council is usually composed of representatives from all of the most important parties in Parliament. The party composition of the Federal Council remained unchanged between 1959 and 1999. Since 2009, the Federal Council has been composed of two representatives of the Liberals (FDP), two of the Social Democratic Party (SP), one of the Swiss People's Party (SVP), one of the Conservative Democratic Party (BDP, although she was originally representing the SVP) and one of the Christian Democratic People's Party (CVP).

Executive bodies at all levels of authority are based on a collegial system. Although the members are from different political parties, they do not form a coalition. Members of the executive bodies vote according to their convictions, but the decisions they take must be upheld by all the members collectively. Each of the seven members of the Federal Council also takes responsibility for one administrative department (or Ministry).

The Parliament consists of two chambers:

- The *National Council* represents the population as a whole. Its 200 members are elected for a term of four years and the seats are distributed according to the number of votes received by each party.
- The *Council of States*, with 46 members, represents the cantons. Each canton, regardless of size, elects two members according to its own electoral system, but the six half-cantons only have one member each.

Cantons

Each canton and half-canton has its own constitution and a comprehensive body of legislation stemming from its constitution. The legislative authority is a unicameral parliament that, in most cantons, is elected by proportional

representation. Like the Swiss Confederation, the cantons have an executive body that is a collegial group of between five and nine members. In contrast to the Federal Council, the members of the cantonal executives are directly elected by popular vote. Each canton organizes its administration in its own way. The cantons finance the activities of their administration primarily through income tax and property tax on individuals and corporations in the cantons.

The people have the right to call referenda and organize popular petitions at the cantonal level. Some cantons also allow petitions relating to laws and a financial referendum in which expenditure decisions made by the cantonal parliament have to be approved by popular vote.

Municipalities

The rights and duties of municipalities are laid down in the different cantonal laws and differ considerably across cantons. The most obvious sign of municipal autonomy is their tax sovereignty. Like the Confederation and the cantons, the municipalities are entitled to levy income tax and property tax on individuals and corporations and to set the rate of tax. Swiss municipalities vary greatly in their size and organization. In many small municipalities, especially in the part of Switzerland in which German speakers predominate, all citizens with the right to vote can take part in the municipal assembly, which is the highest legislative body, whereas the larger municipalities have municipal parliaments. In most places, the executive authority is the municipal or town council, which is directly elected and functions as a collegial authority. The municipalities can formulate policies in many areas. Depending on the rules laid down by the canton, these can include policies in nurseries, schools, energy supplies, refuse collection, building regulations, transport, social care, cultural activities, adult education and sport. Numerous tasks of political leadership in many smaller and medium-sized municipalities are carried out on a voluntary basis or in return for merely symbolic compensation.

The federal legislative process

Most proposals for reform are developed by the responsible department of the executive body (at the national level, the Federal Council). Subsequently, the reform proposal is made publicly available to all relevant stakeholders, including cantons, political parties and other interested groups, as part of a formal consultation process. A new law is then drafted on the basis of the comments received from stakeholders and submitted as a proposal to the parliament. After discussion by the concerned parliamentary committees at the national level,

both chambers of parliament have to pass the same version of the law. Finally, depending on the proposed law, the people will be asked to vote on the law or they have the possibility to demand a referendum.

Making health reforms is particularly complicated in Switzerland as a large consensus is required among the main stakeholders (see Chapter 6). The different steps of the legislative process aim to allow stakeholders to make their opinion known in the early phases of the process in order to avoid a law being rejected by popular referendum at the very end of the legislative process.

Petitions, ballots and referenda

Various instruments of direct democracy exist, which allow the people to veto new laws or to demand change. First, petitions allow the population to demand changes to the constitution. This requires the signatures of 100 000 voters to be collected within a period of 18 months. Petitions may either be presented in the form of a general proposal or contain the exact amended text of the constitution. Cantons and Members of Parliament have a similar, although less binding, right to make proposals (a so-called state petition).

Second, a referendum is compulsory for any amendments to the Federal Constitution (i.e. a ballot of the whole population). For an amendment to pass, it must have the support of the majority of valid votes cast (known as a popular majority) and of the majority in more than half of the total number of cantons (known as the majority of states). Third, a referendum must be held for decisions about accession to certain international organizations. Finally, referenda may be held (optional referenda) on all laws and federal decrees passed by Parliament if requested by 50 000 citizens who give their signatures within 90 days. Eight cantons acting together may also seek a referendum.

Swiss international health policy

The Federal government's Health2020 strategy paper, which highlights health priorities for the coming 8 years (2013–2020) (FDHA, 2013), has “reinforce international integration” as one of its 12 objectives. As part of this, Switzerland aims to conclude an agreement with the European Union (EU) which will bring together many existing relations and agreements particularly focusing on health protection. In addition, Switzerland aims to implement its foreign health policy in order to contribute to improving global health (FDFA/FDHA, 2012). On a global scale, Switzerland is an important partner of the WHO (and vice versa), which has its headquarters in Geneva, along with many other international health organizations.

1.4 Health status

Life expectancy and healthy life expectancy: far above average

Life expectancy at birth in 2013 was 80.7 years for men and 84.9 years for women (see Table 1.4), with average life expectancy of 82.8 being the second highest in the European Region (after Iceland). This was an increase in overall life expectancy of roughly 7 years compared to 1980, when life expectancy was 75.5 years. While female life expectancy has been above 80 years since 1990, male life expectancy has only surpassed 80 years since 2010.

Table 1.4
Mortality and health indicators, 2013 and selected years

	1980	1990	1995	2000	2005	2010	2011	2012	2013
Life expectancy at birth, total	75.5	77.2	78.4	79.7	81.2	82.3	82.7	82.7	82.8
Life expectancy at birth, male	72.2	73.9	75.3	76.9	78.7	80.1	80.5	80.6	80.7
Life expectancy at birth, female	78.9	80.7	81.7	82.6	83.9	84.5	85.0	84.9	84.9
Mortality rate, adult, male (per 1 000 male adults)	144.9	126.6	117.6	99.4	84.0	71.0	68.5	n/a	n/a
Mortality rate, adult, female (per 1 000 female adults)	73.2	62.3	61.5	54.0	46.2	42.6	40.0	n/a	n/a
Mortality rate, neonatal (per 1 000 live births)*	n/a	3.8	3.5	3.4	3.3	3.1	3.0	3.0	2.9
Mortality rate, infant (per 1 000 live births)**	8.4	6.7	5.2	4.6	4.3	3.8	3.8	3.7	n/a

Source: World Bank, 2015.
Notes: *Neonatal mortality rate is the number of neonates dying before reaching 28 days of age, per 1000 live births in a given year;
**Infant mortality rate is the number of infants dying before reaching one year of age, per 1000 live births in a given year.

The disability-adjusted life expectancy (DALE) in 2012 was 70.5 years for women and 73.8 for men (see Table 1.5). Similarly, in 2012, healthy life year (HLY) expectancy, which is the number of years lived without any long-term activity limitations, was more than a year higher for men (68.6) than for women (67.6), meaning that women on average experience longer periods of sickness during their overall longer lifetime. Both for total life expectancy and for HLY Swiss averages are far above those of the EU28, indicating excellent population health.

Table 1.5

Disability-adjusted life expectancy (DALE) and healthy life years (HLY), selected years

	Switzerland			EU28	
	2007	2010	2011	2012	2012
DALE (years)	75.0	n/a	n/a	72.2	70.4
DALE, female (years)	76.0	n/a	n/a	70.5	68.3
DALE, male (years)	73.0	n/a	n/a	73.8	72.5
HLY, in years at birth, female	63.6	63.3	64.7	67.6	62.1
HLY, in years at birth, male	65.3	65.5	66.3	68.6	61.5
HLY, in % of total life expectancy, female	75.4	74.6	76.1	79.6	74.7
HLY, in % of total life expectancy, male	82.1	81.6	82.4	85.1	79.4

Sources: Eurostat, 2014b; Eurostat, 2015a; WHO Regional Office for Europe, 2014; WHO Regional Office for Europe, 2015.

Leading causes of death: circulatory disease and cancers

In 2012, the leading causes of death were diseases of the circulatory system with a standardized death rate (SDR) of 171 per 100 000 for men and 112 for women (see Table 1.6), closely followed by cancers (168 for men and 110 for women). Accidents and external causes were the third most important category but accounted for a much lower proportion of deaths (44.7 for men and 20.4 for women). While the SDR for circulatory diseases was reduced by more than 40% since 1995 for both men and women, the SDR for cancers was reduced by only 26.2% for men and 17% for women over the same period of time. The only group of diseases with a strong increase in deaths is dementia: the SDR for dementia almost doubled for women since 1995 from 17.6 to 33.9 and increased by about 72% for men (from 16.7 to 28.7, although lower numbers in earlier years might be partially related to differences in coding. Similar trends can be observed in neighbouring countries.

According to the Global Burden of Disease study 2013 (GBD, 2015), non-communicable diseases (NCDs) account for more than 85% of the burden of disease in Switzerland (measured by disability-adjusted life years, DALYs). They are also responsible for about 80% of total health expenditure (THE) (Wieser et al., 2014), with more than 50% related to seven NCDs (cardiovascular diseases, musculoskeletal diseases, cancers, psychological disorders, chronic respiratory diseases, dementia and diabetes).

Table 1.6

Age standardized^a main causes of death per 100 000 population by disease, selected years

	Men					Women					Change 1995–2012	
	1995	2000	2005	2010	2012	Change 1995–2012	1995	2000	2005	2010		2012
All causes	846.6	750.2	654.0	577.0	561.0	–33.7%	489.9	457.0	408.0	376.0	376.0	–23.2%
Communicable diseases	18.7	8.5	6.3	7.0	6.3	–66.3%	7.8	6.2	4.1	4.3	4.8	–38.5%
Tuberculosis	0.6	0.5	0.3	0.2	0.1	–83.3%	0.3	0.2	0.1	0.1	0.1	–66.7%
AIDS	11.7	2.1	1.2	0.7	0.7	–94.0%	3.8	1.1	0.5	0.2	0.3	–92.1%
All cancers	227.6	213.6	192.0	176.0	168.0	–26.2%	132.5	125.9	114.0	111.0	110.0	–17.0%
Stomach	10.8	8.4	7.1	6.0	6.2	–42.6%	4.7	3.8	3.2	2.6	2.6	–44.7%
Colon	16.9	16.5	13.9	12.8	11.1	–34.3%	9.9	9.4	7.8	7.2	7.5	–24.2%
Lung	53.6	52.0	47.0	41.1	37.2	–30.6%	13.2	15.9	16.5	18.7	19.2	45.5%
Breast	0.2	0.2	0.2	0.2	0.1	–50.0%	32.4	26.4	23.3	22.8	21.0	–35.2%
Prostate	33.6	30.8	26.0	25.1	21.7	–35.4%	*	*	*	*	*	*
Cervical	*	*	*	*	*	*	2.7	1.7	1.7	1.1	1.5	–44.4%
Diabetes mellitus	17.7	15.1	13.1	10.4	10.3	–41.8%	15.1	12.2	9.8	7.2	6.4	–57.6%
Dementia	16.7	18.9	22.0	27.4	28.7	71.9%	17.6	19.4	26.2	31.7	33.9	92.6%
Circulatory diseases	317.6	264.8	219.0	181.0	171.0	–46.2%	187.1	167.6	137.0	116.0	112.0	–40.1%
All heart diseases	240.0	204.8	170.0	141.0	135.0	–43.8%	133.4	123.2	101.0	87.4	84.8	–36.4%
Ischaemic heart	156.6	129.1	103.0	80.4	74.6	–52.4%	71.3	64.8	50.0	38.4	35.3	–50.5%
Pulmonary embolism	2.8	3.4	2.8	1.9	2.0	–28.6%	2.9	3.8	2.6	2.4	2.3	–20.7%
Cerebrovascular diseases	53.6	41.5	34.3	28.3	24.8	–53.7%	41.0	34.3	27.7	22.4	21.0	–48.8%
All respiratory diseases	56.6	57.4	46.9	36.0	35.4	–37.5%	22.4	28.1	23.9	18.6	19.5	–12.9%
Influenza	1.4	2.7	0.8	n/a	0.2	–85.7%	1.4	2.1	0.9	n/a	0.2	–85.7%
Pneumonia	14.2	18.8	14.6	9.2	10.2	–28.2%	8.7	12.2	9.4	5.9	6.2	–28.7%
Chronic bronchitis	29.4	26.2	23.8	19.3	18.3	–37.8%	6.7	8.3	8.4	8.7	9.3	38.8%
Asthma	4.2	2.0	1.0	0.5	0.4	–90.5%	2.1	1.5	1.0	0.8	0.7	–66.7%

Alcoholic liver cirrhosis	12.0	8.1	8.4	7.7	7.3	-39.2%	3.9	3.0	3.1	2.7	2.9	-25.6%
Urinary organs	6.4	5.5	4.2	7.1	7.1	10.9%	5.8	4.5	2.8	4.6	5.0	-13.8%
Congenital malformation	5.6	4.5	4.7	3.3	4.1	-26.8%	3.9	4.4	3.7	3.8	3.5	-10.3%
Perinatal causes of death	3.5	4.0	4.0	3.6	3.2	-8.6%	3.2	3.2	2.9	4.0	3.2	0.0%
Accidents and external causes	68.1	62.8	51.3	45.6	44.7	-34.4%	26.7	25.0	22.6	20.4	20.4	-23.6%
All accidents ^b	36.2	34.3	26.9	27.2	26.1	-27.9%	14.5	13.9	12.3	13.1	13.2	-9.0%
Transport accidents	9.7	11.6	7.3	6.1	5.1	-47.4%	3.1	3.7	2.0	1.6	1.6	-48.4%
Suicide	28.1	25.9	22.1	16.5	16.6	-40.9%	10.4	9.3	8.7	6.2	6.0	-42.3%

Source: FSO, 2014m.
Notes: ^aDirect method, European Standard Population; ^bFrom 2006 including accidental poisoning through psychotropic substances, in particular alcohol.

Health, health behaviour, lifestyle and prevention

The Swiss health survey from 2012 showed that the majority of the Swiss population perceives personal health as good or very good (see Table 1.7). Only a small share thinks of their health status as poor. This distribution has been fairly stable since the first health survey in 1992. When compared with other countries, the Swiss view their health status considerably more positively than people on average in the EU (see Table 1.7).

Table 1.7
Self-assessed health status of the population (≥15 years of age), selected years

	Good to very good	Moderate	Poor to very poor	Total sample	Total population
	% ^a	% ^a	% ^a	<i>n</i>	<i>N</i>
<i>Switzerland</i>					
1992	84.6	11.8	3.6	15 288	5 683 260
1997	83.2	12.8	3.9	13 000	5 880 186
2002	85.8	10.7	3.4	19 701	6 017 638
2007	86.8	9.8	3.4	18 750	6 186 711
2012	82.8	13.6	3.6	21 571	6 838 268
<i>EU28</i>					
2012	68.3	21.8	9.9	–	–

Sources: Eurostat, 2014b; FSO, 2013c.
Note: ^aCalculated percentage of total population after weighting of representative results.

In 2012, around 20% of the Swiss adult population claimed to be smoking daily (see Table 1.8). Smoking decreased considerably in the late 1990s and early 2000s, and the reduction was stronger than on average in Europe. However, in recent years, smoking has remained more or less stable in Switzerland as it did not change much between the Swiss health surveys in 2007 and 2012 (FSO, 2013c). Per capita alcohol consumption decreased by about 25% since 1990. At the time, it was still slightly above the EU average, while it was significantly below average in 2012 (see Table 1.8). According to multiple rounds of the Swiss health survey, obesity (body mass index (BMI) ≥30) almost doubled since 1992, with the proportion of the obese population increasing from 5.4% in 1992 to 10.3% in 2012 (FSO, 2013c).

Table 1.9 shows the percentage of the resident population (≥15 years of age) who received medical treatment for selected chronic diseases in 2012. High proportions of the population received treatment for high blood pressure (13%), rheumatoid arthritis (7.3%) and hay fever and allergies (6.6%). In general, more women than men are in treatment in Switzerland except for cardiovascular diseases and renal diseases (see Table 1.9). In 2012, 4% of women and 5.5% of men had a diagnosis of diabetes (FSO, 2013c).

Table 1.8

Factors affecting health status, selected years

	1990	1995	2000	2005	2010	2011	2012	2013	EU (latest available year)
% of regular daily smokers, age 15+	28.20	30.00	24.00	20.00	19.00	n/a	20.37	n/a	24.20 (2009)
SDR, selected smoking related causes, per 100 000	n/a	211.44	187.73	157.42	132.35	n/a	n/a	n/a	188.22 (2012)
Pure alcohol consumption, litres per capita, age 15+	12.99	11.45	11.28	10.21	10.04	9.92	9.79	9.66	9.87 (2012)
SDR, selected alcohol-related causes, per 100 000	–	64.24	58.73	50.72	45.83	n/a	n/a	n/a	55.22 (2012)
Obesity (% of population with BMI ≥30)*	5.40	6.80	7.70	8.20	n/a	n/a	10.30	n/a	–

Sources: WHO Regional Office for Europe, 2015 and *FSO, 2013c, for obesity rates, years are 1992, 1997, 2002, 2007, 2012.

Notes: n/a = not available; BMI = body mass index (body weight divided by the square of the body height).

Table 1.9

Percentage of resident population (≥15 years of age) who received medical treatment for chronic diseases in the last 12 months, 2012

	Total	Men	Women
Hypertension	13.0	13.2	12.9
Arthrosis, rheumatoid arthritis	7.3	5.6	9.0
Hay fever/other allergies	6.6	5.5	7.6
Migraine	3.0	1.6	4.3
Asthma	2.9	2.3	3.4
Osteoporosis	2.3	0.5	4.1
Cancer/tumour	1.8	1.3	2.3
Chronic bronchitis/emphysema	1.4	1.1	1.8
Kidney disease/kidney stones	1.1	1.1	1.1
Gastric/duodenal ulcer	0.9	0.8	0.9
Myocardial infarction	0.9	1.3	0.5
Stroke	0.4	0.4	0.4

Source: FSO, 2013c.

Interestingly, the incidence of selected infectious diseases is higher in Switzerland than in the EU on average (see Table 1.10). In particular, the incidence of gonococci infections has increased considerably and is now more than twice as high as on average in the EU. In addition, despite a decreasing

incidence of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), the incidence and prevalence of HIV is relatively high compared to neighbouring countries.

Table 1.10

Incidence of selected infectious diseases, selected years

	1990	1995	2000	2005	2010	2011	2012	2013	EU (latest available year)
Syphilis incidence per 100 000	4.92	3.15	2.39	n/a	4.89	5.25	n/a	n/a	3.6 (2011)
Gonococci infection incidence per 100 000	6.14	3.76	5.62	9.17	14.99	17.39	n/a	n/a	8.01 (2011)
AIDS incidence per 100 000	9.12	8.83	3.05	2.54	1.98	1.60	1.09	0.88	0.87 (2013)
HIV incidence per 100 000	27.87	14.36	8.05	9.72	7.80	7.24	8.05	7.11	5.72 (2013)
Prevalence of HIV, total (% of population ages 15–49)	0.20	0.30	0.30	0.30	0.40	0.40	0.40	0.40	n/a

Sources: WHO Regional Office for Europe, 2015; World Bank, 2013; World Bank, 2015.
Note: n/a = not available.

Screening programmes exist for metabolic diseases for newborns, and for gynaecological malignancies, breast cancer and colon cancer (Swiss Confederation, 1995). While screening rates for cervical cancer are comparable to neighbouring European countries, those for breast cancer are much lower than in most other European countries (OECD, 2012b; OECD, 2012c). This could be related to the absence of a structured national screening programme, reflecting a general lack of national coordination of prevention activities (see also section 5.1) but also a lack of consensus on the cost-effectiveness of breast cancer screening (Swiss Medical Board, 2013).

Maternal, child and adolescent health

Infant mortality in Switzerland was below the EU28 average and recorded 3.6 deaths per 1000 live births in 2012 (see Table 1.11). Generally, Switzerland has perinatal care indicators that are similar to EU averages. Health promotion and education have contributed to lowering adolescent birth rates over time. In 2013, more than 30% of live births were to mothers aged 35 years and above, indicating increasing proportions of higher risk pregnancies. In 2013, there were 126 abortions per 1000 live births, which is far below the EU average of 215.

Table 1.11

Maternal, child and adolescent health indicators, selected years

	1980	1990	1995	2000	2005	2010	2011	2012	2013	EU 2012
Live births										
% of all live births to mothers aged under 20 years	2.4	1.2	0.9	1.1	1.0	0.7	0.6	0.6	0.5	3.1
% of all live births to mothers aged 35 years or above	9.1	11.5	14.5	20.5	26.6	29.1	29.8	29.8	30.2	22.0
Adolescent fertility rate (births per 1 000 women aged 15–19 years)	9.8	6.4	6.0	5.5	4.8	2.9	2.4	1.9	1.7	n/a
Contraceptive use among currently married women aged 15–49 years (%), any method	n/a	n/a	82.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Termination of pregnancy (abortion) rate										
Abortions per 1 000 live births	215.0	154.7	144.3	156.9	148.4	138.3	137.4	132.7	126.2	215.3
Abortions per 1 000 live births, women aged under 20 years	n/a	n/a	n/a	n/a	n/a	1 807.2	2 057.0	1 861.4	1 946.2	1 222.1
Abortions per 1 000 live births, women aged 35 years or above	n/a	n/a	n/a	n/a	n/a	115.0	116.3	114.9	107.3	253.5
Perinatal, neonatal and child mortality										
Fetal deaths per 1 000 births	4.9	4.6	4.1	3.6	4.2	4.3	4.3	4.2	4.8	4.9
Perinatal deaths per 1 000 births	9.5	7.7	7.0	6.6	6.9	2.7	3.0	2.8	3.0	6.1
Infant deaths per 1 000 live births	9.1	6.8	5.1	4.9	4.2	3.8	3.8	3.6	n/a	3.9
Neonatal deaths per 1 000 live births	5.9	3.8	n/a	3.6	3.2	3.1	2.9	2.9	n/a	2.6
Early neonatal deaths per 1 000 live births	4.6	3.1	2.9	3.0	2.7	2.8	2.5	2.5	2.8	1.9
Late neonatal deaths per 1 000 live births	1.2	0.7	0.5	0.6	0.5	0.4	0.4	0.4	n/a	0.7
Postneonatal deaths per 1 000 live births	3.2	3.1	1.6	1.3	1.0	0.7	0.9	0.7	n/a	1.3
Mortality rate, under-5 (per 1 000 live births)	10.4	8.2	6.4	5.6	5.1	4.5	4.4	4.3	n/a	4.7
Maternal deaths per 100 000 live births	5.4	6.0	8.5	6.4	5.5	3.7	3.7	8.5	n/a	5.1
Immunization										
% of infants vaccinated against diphtheria	n/a	95.0	95.0	94.0	95.0	n/a	95.0	n/a	n/a	96.7
% of infants vaccinated against tetanus	n/a	95.0	95.0	94.0	95.0	n/a	95.0	n/a	n/a	96.7
% of infants vaccinated against pertussis	n/a	95.0	95.0	94.0	95.0	n/a	95.0	n/a	n/a	96.7
% of children vaccinated against measles	n/a	80.0	83.0	81.0	82.0	90.0	92.0	92	n/a	93.9
% of infants vaccinated against poliomyelitis	n/a	95.0	95.0	92.0	95.0	95.0	95.0	96	n/a	96.1
% of infants vaccinated against mumps	n/a	n/a	80.0	79.0	n/a	n/a	n/a	n/a	n/a	n/a
% of infants vaccinated against rubella	n/a	n/a	80.0	79.0	n/a	90.0	n/a	n/a	n/a	n/a
% of infants vaccinated against invasive disease due to <i>Haemophilus influenzae</i> type B (Hib)	n/a	n/a	n/a	85.0	91.0	94.0	95.0	95	n/a	98.9

Sources: WHO Regional Office for Europe, 2015; World Bank, 2015.

Note: n/a = not available.

Depending on the disease in question, immunization rates are around or slightly below the EU28 average (see Table 1.11). As in many other European countries, skepticism towards vaccination is growing in parts of the population. Regarding measles, there is a government initiative to increase immunization rates as there have been repeated outbreaks in recent years (FOPH, 2012d). A core component is improved political awareness and communication. Compulsory vaccination for the population is not envisaged.

The index for decayed, missing or filled teeth (DMFT) at age 12 (DMFT-12 index) in Switzerland was relatively high and above the EU average in the 1980s (see Table 1.12) but it has considerably decreased since then. It is now below the EU average and nearly all pupils finish school with intact teeth (SSO, 2013).

Table 1.12
Decayed, missing or filled teeth at age 12 (DMFT-12 index) in Switzerland, selected years

	Decayed, missing or filled teeth at age 12 (DMFT-12 index) in Switzerland				
	1980	1990	2000	2005	2009
Switzerland	6.10	2.30	0.95	0.90	0.80
EU15 average	4.70	3.40	1.40	n/a	n/a

Source: WHO Regional Office for Europe, 2014.

2. Organization and governance

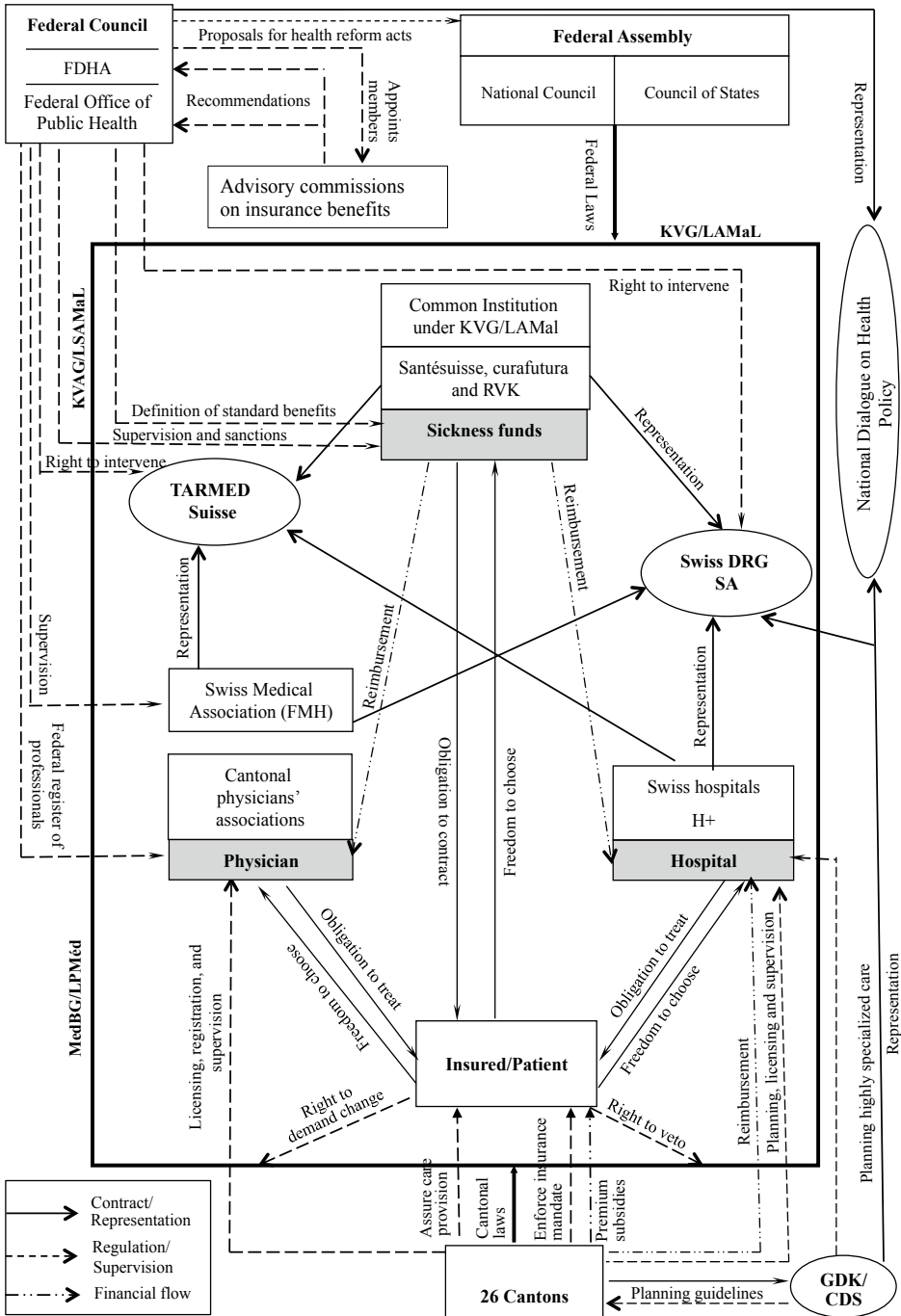
2.1 Overview of the health system

The Swiss health system is highly complex, combining aspects of managed competition and corporatism in a decentralized regulatory framework shaped by the influences of direct democracy. Fig. 2.1 provides an overview of the organization of the health system in Switzerland, illustrating regulatory and contractual relationships between the different actors. The system is characterized by the sharing (and some would say fragmentation) of decision-making powers between: (1) three different levels of government (the Confederation, the 26 cantons and the 2352 municipalities); (2) legitimized civil society organizations (so-called corporatist bodies) of – amongst others – mandatory health insurance (MHI) companies and providers; and (3) the people who can veto or demand reform through public referenda.

The Confederation (or federal level) can act only in areas in which the constitution has granted it explicit power to do so. The most important areas of legislative responsibility of the Confederation (as defined by the constitution) include: (1) the financing of the health system (MHI and other social insurance); (2) the quality and safety of pharmaceuticals and medical devices; (3) public health (control of infectious diseases, food safety, some parts of health promotion); and (4) research and training (tertiary education, training of non-physician health professionals). The most important law, defining the legal framework of the MHI system is the Federal Health Insurance Law (KVG/LAMal).

The cantons are responsible for securing health care provision for their populations and this right is often codified in cantonal constitutions. They are also in charge of issuing and implementing a large proportion of health-related legislation. In addition, the cantons finance an important share of inpatient care; provide subsidies to low-income households enabling them to pay for insurance, and coordinate prevention and health promotion activities. The role and

Fig. 2.1



Source: Authors' own compilation.

influence of municipalities in providing health care services and other social support services varies across Switzerland and depends on decisions within each canton.

The Swiss Conference of the Cantonal Ministers of Public Health (GDK/CDS), which was founded in 1919 in order to improve coordination between cantons, has partially evolved into a decision-making body of its own with the power to take binding decisions in the area of highly specialized medical care. In addition, the National Dialogue on Health Policy, established in 2003, has become an important forum to discuss common challenges and facilitate consensus between the Confederation and the cantons.

All residents in Switzerland have to purchase health insurance from competing MHI companies. Persons who want to purchase MHI cannot be turned down by insurers. Premiums are community-rated, i.e. they are the same for every person insured with a particular company within a region independent of gender or health status but varying for three age categories (see section 3.3.2). Since 1996, insurers are private companies competing for market share although they are not allowed to make a profit from their MHI activities. In 2012, MHI paid for about 35.8% of THE (see section 3.2), while the cantons (the second most important payer) contributed 17.2% of THE.

The benefits of MHI, prices of pharmaceuticals, and certain national quality and safety standards are defined by the Confederation. However, corporatist actors, in particular associations of MHI companies (*santésuisse*, *curafutura* and *RVK* – the association of small and medium insurers) and associations of providers (physicians, hospitals, medical homes, etc.) also play an important role. They are charged with determining tariffs for the reimbursement of services; they negotiate contracts; and they may control and sanction their members at the cantonal level. If corporatist actors fail to reach an agreement, the Confederation or cantons may intervene and define tariffs or set standards themselves.

A unique feature of the Swiss political system is the role of direct political participation by the population via initiatives and referenda. Certain reforms of the health care system, particularly concerning the reallocation of responsibilities between the three levels of governance, require a positive referendum by the Swiss population. Other reforms of federal law, e.g. concerning the introduction of MHI (adopted in 1994) or the expansion of managed care (rejected in 2012), are put before the electorate if a sufficient number of signatures demanding a referendum is collected. The effect of direct political participation has been twofold: on the one hand, reforms of the health sector have often been

blocked by referendum; on the other hand, referenda were often at the origin of legislative activity, which resulted in reforms that aimed to respond to citizens' demands for change (see also sections 2.2 and 6.1.).

2.2 Historical background

2.2.1 From the emergence of health insurance to the Federal Law on Sickness and Accident Insurance (LAMA) (1912)

The first health insurance schemes (literally help funds or *Hilfskassen*) emerged from initiatives of entrepreneurs, trade unions or religious organizations. The coverage and scope of these schemes varied significantly across regions and principally provided financial support to workers and their families in case of illness, occupational disability or death. However, over time they also took on responsibility for the reimbursement of treatment costs (Leimgruber, 2011). By 1880, there were 1085 funds with a total of 209 920 insured, corresponding to about 7.5% of the Swiss population at the time. Insurance funds evolved in certain milieus and kept high entry barriers by limiting their services to workers, employees of a certain company, local inhabitants, or members of a church. Conditions and premiums varied significantly across cantons and even across municipalities (Muheim, 2000; Uhlmann & Braun, 2011).

Until the late 19th century, almost all legislative responsibility in the area of health remained with the cantons (see section 2.4). However, in response to a typhoid epidemic in Valais in 1866, the Confederation started to play a role in health policy-making (Achtermann & Berset, 2006) and, in 1893, a predecessor organization of the Federal Office of Public Health (FOPH) was founded. In 1890, the federal government was given a constitutional mandate to legislate on sickness and accident insurance. However, the first attempt to introduce a system of health insurance failed in 1900, when a draft health and accident insurance law was rejected by referendum.

After years of discussions and following substantial modifications to the initial proposal, the Federal Law on Sickness and Accident Insurance (KUVG/LAMA) was finally adopted by referendum in 1912. KUVG/LAMA required health insurance funds that wished to take advantage of federal subsidies to register with the Federal Office for Social Insurance and to abide by its rules. These rules included the obligation to provide a defined package of benefits, which included ambulatory care, drugs and hospital stays of limited duration, and to allow people a certain degree of freedom to change funds.

Affiliation remained voluntary and insurance conditions varied greatly across insurance funds. Funds could only be changed under certain conditions, e.g. in the case of a change of residence (because many funds were regional funds), or in the case of a change of job (because funds were often related to a specific company or professional association). Funds were not allowed to make a profit. Premiums were calculated on the basis of sex and the age of entry in the fund (Colombo, 2001). Consequently, premiums were higher for women than for men (although the difference was not allowed to exceed 10%), and premiums of people who entered when they were older were higher than those of the young. In fact, funds were allowed to refuse elderly persons or the chronically ill.

KUVG/LAMA left it to the cantons to mandate compulsory insurance. Basel city was the first canton to make health insurance compulsory in 1914. Over time, about half of all cantons introduced mandatory insurance for at least certain parts of their populations.

2.2.2 Expansion of services, growth of costs, and revisions of KUVG/LAMA until 1994

Over the course of the 20th century, the health system underwent massive expansion, in particular after the Second World War. This led to continuously increasing health expenditures and rising insurance premiums. Inpatient health care was expanded by the cantons and developed in a largely uncoordinated fashion. The number of health professionals, including physicians, dentists and nurses, was also increased but distribution remained unequal across the cantons. Increasing specialization of hospitals, the application of technological innovations and the expansion of the use of pharmaceuticals contributed to ever increasing health care costs (Minder, Schoenholzer & Amiet, 2000).

Consequently, the main motivation behind multiple revisions of the KUVG/LAMA was to control the rising costs of the health care system, to limit the increase of premiums, and to improve fairness in the distribution of subsidies to insurers. In 1964, a reform revised the system of subsidies to insurance funds and made user charges (deductible and co-insurance) compulsory in the statutory health insurance system.

The proportion of the population with health insurance increased steadily from about 11% in 1915 to about 40% in 1930, 60% in 1947 and 80% in 1959, reaching almost full insurance coverage even before the introduction of MHI in 1996 (BSV/OFAS, 1998; Leimgruber, 2011). There were several attempts at major reforms of the KUVG/LAMA, including an attempt to introduce

mandatory insurance in 1974, and an attempt at improving the regulation of health insurers with the aims of controlling costs and expanding maternity insurance in 1987. However, both failed at referendum.

While curative care in the early 20th century was largely left to insurers and providers, both the cantons and the Confederation were relatively active in the area of prevention. They introduced measures to control infectious disease, to improve water and sanitation, and to control alcohol consumption (Achtermann & Berset, 2006). After the Second World War, health protection measures were also introduced, e.g. aiming to control poisonous substances. Since the 1980s, the Confederation has introduced prevention programmes in the area of AIDS (1985), drugs (1991), tobacco (1995) and alcohol (1997). However, overall preventive strategies have remained selective and have suffered from a lack of coordination (see section 5.1).

2.2.3 The new Federal Health Insurance Law (KVG/LAMal) (1994)

In 1991, the Federal Council proposed a new Federal Health Insurance Law (KVG/LAMal) with three main aims (Federal Council, 1991): (1) to strengthen solidarity by introducing universal coverage and ensuring that people with low incomes receive subsidies for purchasing insurance; (2) to contain the growing costs of the health system by a host of measures targeting both the demand and the supply side; and (3) to expand the benefits basket and ensure high standards of health service provision. By Swiss standards, this law completed the legislative process relatively quickly: it was passed by Parliament in March 1994 and accepted in a public referendum in August of the same year. Since 1996, when KVG/LAMal came into force, it has been the most important legislative document regulating or influencing most areas of the health care system.

The law made the purchasing of health insurance compulsory, introduced community-rated premiums, and made significant changes to the system of subsidies. Insurance companies were mandated to accept anyone applying to them for insurance. In addition, the law defined the general conditions by which health services are assessed for reimbursement and compelled cantons to plan acute care hospital and inpatient long-term care provision.

While the law was successful in achieving (near to) universal coverage (see section 3.3.1), it has been criticized for having been ineffective in controlling the growth of health expenditures. Several revisions of the law have been made since the year 2000, primarily with the aim of containing the growth of expenditures (see section 6.1). Further reforms are planned with the aims of improving: the use of information in the health system; planning in ambulatory care; and health care provision for people with specific needs (see section 6.2).

2.3 Organization

The federal level (section 2.3.1) defines the legal framework for managed competition in the statutory health system and supervises developments at lower levels of the system. Cantonal governments (section 2.3.2) are responsible for the provision of health care and for the implementation of federal policies. Several coordination bodies exist to improve the collaboration of cantons amongst each other and with the federal government (section 2.3.3). Corporatist actors of payers (section 2.3.4) and providers (section 2.3.5) negotiate contracts for service delivery. A number of joint institutions of payers and providers exist (section 2.3.6), which are particularly important for developing national frameworks for tariffs. Finally, other actors include foundations and civil society organizations (section 2.3.7).

2.3.1 Federal level

The legislative and executive branch of government

The Parliament, i.e. the *Federal Assembly*, consisting of the *National Council* (with seats proportional to the population) and the *Council of States* (with one or two seats per canton) is responsible for defining the legal framework of the health system within the constitutional powers of the Confederation (see section 1.3 for general information about the political system). The *Committees for Social Security and Health of the National Council* (CSSH-N) and of the *Council of States* (CSSH-S) examine the health-related legislation put forward by the government and review other pressing health-related issues. After review, the committees may put forward motions to their respective chambers of parliament and to the government. Some of the most important federal laws are: (1) the Federal Health Insurance Law (KVG/LAMal), determining the legal framework for the MHI system; (2) the Law on Medical Professions (MedBG/LPMéd), regulating university-based training and continuous education of health professionals as well as accreditation of foreign health professionals; (3) the Law on Therapeutic Products (HMG/LPTh), regulating the licensing and monitoring of pharmaceuticals and medical devices; and (4) the Federal Epidemics Law.

The Federal Council is the collective head of state and consists of seven members (councillors), each heading one of the seven ministries. The Federal Council can pass and modify ordinances with a majority vote. Ordinances specify implementation details of federal laws. The two most important ordinances are: (1) the Health Insurance Ordinance (KVV/OAMal), specifying the organizational framework for MHI, and detailing amongst others the

processes for the definition of the benefits package, the operating conditions for service providers, and general rules for premium calculations and subsidies; and (2) the Health Care Benefits Ordinance (KLV/OPAS), specifying in detail the benefits available under MHI.

The Federal Department of Home Affairs (FDHA) has been headed by Federal Councillor Alain Berset since 2012. The FDHA has a broad area of responsibilities, including social security, health, culture, statistics, and gender and racial equality. It has a General Secretariat coordinating the work of eight federal offices, several of which are relevant to the health system. The FDHA is the very final authority for decisions concerning the day-to-day work of the health insurance system, including for the reimbursement of health care services, and for the pricing and reimbursement of pharmaceuticals. However, the bulk of administrative work, as well as the preparation of laws and regulations, is carried out by the Federal Office of Public Health.

Institutions under supervision of the FDHA

The Federal Office of Public Health (FOPH) is part of the FDHA and has almost 550 employees (FOPH, 2015j). It has similar functions to a Ministry of Health in other countries. The FOPH has been headed by its director Pascal Strupler since 2009, and represents Switzerland in international organizations (e.g. at WHO). The FOPH is responsible for public health and the development of health policy at the national level. It prepares regulations and laws for health insurance (MHI) and accident insurance (UVG/LAA), and has supervised MHI companies since 2004, when it took over this function from the Federal Social Security Office. The FOPH prepares decisions of the FDHA specifying which services are excluded from coverage or paid under restrictions, and it administers the federal premium subsidies (for cantons) worth almost Sw.fr.2.33 billion in 2015 (FOPH, 2015j) (see section 3.3.3). It is also responsible for drafting regulations and laws concerning the basic and advanced training of so-called academic health professionals (i.e. doctors, dentists, etc.), and for awarding Swiss degrees for these professionals.

The FOPH has four directorates (Health and Accident Insurance, Health Policy, Public Health, Consumer Protection), each heading several divisions. Five more divisions come directly under the director (communication, legal affairs, international affairs, management services, resource management). The FOPH issues guidance amongst others on: consumer protection (particularly in relation to food, chemicals, therapeutic products, cosmetics and consumer goods); infectious disease control; radiological protection; and substance dependence (tobacco, alcohol, illegal drugs). It is also responsible for disease surveillance and has a role in the promotion of healthy lifestyles

(nutrition and physical activity), plus it manages the tobacco prevention fund (Sw.fr.13.5 million raised annually through a levy on cigarettes) supporting tobacco prevention projects in the country. Finally, the FOPH is tasked with drafting regulations and laws in the fields of biological safety, research on humans (including stem cell research) and transplant medicine, and it has supervisory functions in these areas.

The FOPH is supported in its work by **three advisory commissions on insurance benefits**, providing advice to the FDHA and the FOPH concerning the definition of the benefits package (Art. 37a KVV/OAMal). The Federal Council elects the members of these commissions but the size and composition of the commissions are determined by the KVV/OAMal. Members of the commissions always represent specific interests and expertise in the health system.

1. The Federal Commission for Medical Benefits and Basic Principles (ELGK/CFPP) advises the FDHA on the basic principles governing MHI and on the benefits covered by MHI (see section 2.8.1). The ELGK/CFPP determines the criteria for the inclusion of innovative technologies into the benefits basket. The commission has seats for 18 members (Art. 37d KVV/OAMal): four seats for physicians; two for insurance medicine physicians (*Vertrauensärzteschaft*); two for health insurers; two for the insured; two for medical ethics; and one seat each for professors in laboratory analytics, hospitals, cantons, medical devices industry, pharmacists, and for the EAMGK/CFAMA (see below).;
2. **The Federal Drug Commission (EAK/CFM)** provides advice to the FOPH concerning the inclusion of pharmaceuticals in the benefits basket (see section 2.8.4). The EAK may consult external experts for assistance. It has seats for 16 members: three representing physicians (including one for complementary and alternative medicine); three representing pharmacists (including one for complementary and alternative medicine); two representing health insurers; two representing the pharmaceutical industry; two for the insured; and one each for medical and pharmaceutical faculties, hospitals, cantons, and Swissmedic (see below).
3. **The Federal Commission for Analyses, Products and Devices (EAMGK/CFAMA)** advises the FDHA both in appraisal and reimbursement decisions for analyses and medical devices (see section 2.8.5). The EAMGK/CFAMA has seats for 15 members: two for professors of laboratory analytics; one for physicians; one for pharmacists; two for laboratories; two for health insurers; one for insurance medicine physicians; two for the insured; and four for producers and distributors of products and devices.

The Federal Social Insurance Office (BSV/OFAS) is also part of the FDHA and is responsible for the administration, monitoring and steering of parts of the social security systems. In particular, it is responsible for the old age and survivors' insurance (AHV/AVS), invalidity insurance (IV/AI), occupational pension funds, and for compensation for loss of earning during maternity leave (see also section 3.6). In 2004, the BSV/OFAS lost an important part of its influence on the health system, when responsibility for regulating and monitoring MHI was transferred to the FOPH.

The Swiss Agency for Therapeutic Products (Swissmedic) is a public institution of the Swiss government affiliated with the FDHA but not formally part of it. The legal basis of Swissmedic is the Federal Law on Therapeutic Products (HMG/LPTh). Swissmedic started operation when the HMG/LPTh came into force on 1 January 2002. The agency was formed from a merger of the Inter-cantonal Office for the Control of Medicines and the Therapeutic Products Section of the FOPH. Swissmedic is financed from fees (which companies have to pay when applying for marketing authorization), payments from the Federal government in return for services of public interest and from services rendered to third parties (Swissmedic, 2014).

The Federal Statistical Office (FSO) is yet another institution that is part of the FDHA. It produces statistics on health care provision in Switzerland and on the health of the Swiss population (see section 2.7.1).

Other federal offices with relevance to health

The Federal Office of Private Insurance (FOPI) is part of the Federal Department of Finance and is responsible for regulating and supervising private health insurance.

The Federal Office of Sports (FOSPO) within the Federal Department of Defence, Civil Protection and Sport is responsible for promoting health (sport, exercise and health) and preventing doping.

The Price Supervisor is part of the Federal Department of Economic Affairs, Education and Research (EAER). It plays an important role in monitoring prices in the health care system, including of physicians, hospitals and pharmaceuticals. Federal or cantonal offices responsible for setting or approving prices in the health care system have to take into consideration recommendations of the Price Supervisor and have to make their reasons known if they do not follow these recommendations.

The State Secretariat for Economic Affairs (SECO) within EAER is active in the field of health protection and prevention in the workplace and the safety of technical equipment and systems.

The State Secretariat for Education, Research and Innovation (SERI), also within EAER, regulates the vocational and continuing training of the so-called non-university health professionals.

2.3.2. Cantons and municipalities

The cantons have a declining but still relatively high degree of independence concerning health and health care (see section 2.4). Cantons generally have their own health departments (also called health directorates) and they define legislation in all areas in which the constitution has not explicitly transferred legislative power to the federal level. Even in areas under the responsibility of the federal government, cantons generally have considerable autonomy in the implementation of laws and ordinances passed at the federal level, which often require supplemental cantonal legislation for the implementation of policies.

Cantons have responsibility in several important areas: first, they are responsible for ensuring the availability of the health care infrastructure (in particular hospitals, nursing homes and emergency medical services). In order to do so, cantons own the majority of hospitals and they finance about half of all costs of inpatient care. Second, they administer the system of premium subsidies for low-income people. Third, cantons license health professionals in independent practice (physicians, physiotherapists, etc.). Finally, they engage in prevention and health promotion (in collaboration with the federal government and the municipalities), and they monitor food safety. Cantonal health laws may delegate responsibility for certain areas of health care, e.g. the provision of inpatient care, to larger municipalities.

The municipalities (or communes) differ greatly concerning their involvement in the health system. Smaller communes (several have less than 50 inhabitants) generally take on fewer responsibilities than larger communes (with more than 50 000 inhabitants). The role of municipalities is most important in the area of long-term care (nursing homes and home care services) and other social support services for vulnerable groups. Larger municipalities and associations of municipalities may run their own hospitals. In addition, the school health services of larger cities play an important role in public health. Smaller communes often join together to meet their obligations or they delegate specific tasks to private organizations.

2.3.3 Coordination bodies

Coordination bodies play an increasingly important role in the health system. The two most important coordination bodies aim to improve the coordination of: (1) cantons amongst each other; and (2) cantons with the federal government.

The Conference of the Cantonal Ministers of Public Health (GDK/CDS) is an intergovernmental coordination body uniting the government officials responsible for public health from the 26 cantons. The GDK/CDS was originally founded (under a different name) in 1919 and a permanent secretariat was established in 1978. Representatives of the federal government and the Principality of Liechtenstein have the status of permanent non-voting members (guests) of the plenary, which meets twice a year. The GDK/CDS seeks to facilitate coordination amongst cantons as well as between the cantons and the federal government and other relevant actors in the health sector.

Decisions taken by the GDK/CDS generally have the status of recommendations and are, in general, not legally binding for cantons. However, since 2009, the GDK/CDS has also assumed the role of a decision-making body in the context of the inter-cantonal agreement on highly specialized medical care (IVHSM). This agreement aims to coordinate and concentrate the distribution of highly specialized medical care across Switzerland and decisions relating to the IVHSM are binding for cantons (GDK/CDS, 2014a). In addition, the GDK/CDS can take binding decisions concerning the nationwide examination of osteopathy candidates.

The National Dialogue on Health Policy started as a project in 1998, and was institutionalized in 2003 through an agreement of the GDK/CDS with the FDHA. The National Dialogue is a platform for information exchange, deliberation and the identification of issues that require coordinated action. As part of the dialogue, the board of directors of the GDK/CDS and the relevant officials from the federal level (in particular of the FOPH) meet two or three times a year behind closed doors to define common positions and recommendations. In addition, the partners may decide to initiate projects – often consisting of several subprojects and working groups – in areas that are of common interest.

So far, projects or platforms have been initiated amongst others for the development of the e-health infrastructure, the development of national strategies for certain areas of health care (e.g. dementia and cancer), and for ensuring the future of medical education. In 2001, the National Dialogue created the **Swiss Health Observatory (Obsan)**. Obsan is responsible to a

steering committee consisting of one representative each of the GDK/CDS, the FOPH and the FSO. Obsan analyses existing health-related information and provides support to the Confederation, the cantons and other health-related institutions in their planning, decision-making and actions.

2.3.4 Payers and their institutions

Mandatory health insurance (MHI)

MHI is the most important payer in the health system (see section 3.2). Since the introduction of KVG/LAMal, all statutory health insurers have become private companies. **MHI companies** must accept all citizens who are willing to purchase insurance with the company and they are not allowed to make a profit from their MHI activities. In 2014, there were 61 insurance companies that offered MHI policies in Switzerland. This represents a considerable decline in number, when compared to roughly 100 companies who offered MHI in 2000 (FOPH, 2014k).

Associations of MHI companies

All MHI companies are members of three associations: **santésuisse**, **curafutura** and/or **RVK** – the association of small and medium insurers. **Santésuisse** is the largest association and was founded in 2002 as the result of a merger between the national association of MHI companies and previously existing cantonal associations. Traditionally, **santésuisse** represented the interests of all MHI companies to political bodies and served as the public relations arm of MHI companies amongst the public. In 2013, four large MHI companies, which together account for about 40% of all insured, left **santésuisse** and founded **curafutura**. In addition, **RVK** (the association of small and medium insurers) represents about 10% of the insured. Members of **RVK** are usually also members of **santésuisse**.

The associations of insurers are represented in corporatist organizations of insurers and providers: **santésuisse** is a shareholder of **SwissDRG SA**, a company that is responsible for the development of the hospital reimbursement system, and is a partner in **TARMED Suisse**, a company that is responsible for the development of the tariff structure for ambulatory care. The representation of **curafutura** in these structures was still under negotiation at the time of writing. Associations of insurers also negotiate contracts with providers. For this task, **tarifsuisse SA** was founded in 2010, which can be contracted by MHI companies for the negotiation of contracts with providers. According to **tarifsuisse SA**, they represent about 75% of the total market (Tarifsuisse, 2015).

The Common Institution under the KVG/LAMal

The Common Institution is a foundation that carries out several important tasks for the MHI system. It was established in 1996 by the Association of Swiss Health Insurers (the predecessor of *santésuisse*) and the Swiss Union of Private Illness and Accident Insurers (now part of the Swiss Insurance Association, SVV/ASA) in order to comply with requirements of Art. 18 KVG/LAMal. The foundation is financed mostly by MHI companies but receives contributions also from the federal government. In 2013, it managed a financial volume of Sw.fr.2.0 billion, of which almost Sw.fr.1.8 billion were related to the risk adjustment scheme between MHI companies. The rest was mostly spent on tasks related to international coordination (concerning both reimbursement of care for foreigners treated in Switzerland and for Swiss residents treated abroad). Furthermore, the Common Institution manages an insolvency fund, which ensures that treatment costs of patients are covered in the case of insolvencies of insurers, and it assists cantons in managing their system of premium subsidies.

Other payers

Voluntary health insurance (VHI) companies accounted for about 7.2% of THE in 2012 (see section 3.5). Independent branches of MHI companies dominate the market for VHI. In 2013, branches of 15 MHI companies offered supplementary VHI and there were 21 insurance companies exclusively offering VHI (FINMA, 2014).

Compulsory accident insurance is mandatory for all employees and its health-related expense contributed about 3.0% of THE in 2012 (see section 3.6). The largest accident insurer is the **Swiss National Accident Insurance Fund (SUVA)**, an independent non-profit company under public law. The compulsory accident insurance has a **Medical Tariff Commission (MTK/CTM)**, which deals with all questions related to the reimbursement of providers and is represented in the corporatist bodies of payers and providers.

Old-age (AHV/AVS) and disability insurance (IV/AI) cover an important part of the costs of long-term care and also play a role in the financing of rehabilitation care (see section 3.6).

2.3.5 Providers and their associations

Ambulatory medical and dental care is traditionally provided mostly by independent professionals who work in single or group practices (see section 5.3), and patients are free to choose any provider that they find suitable for their needs. Hospitals do not only provide inpatient care but are also increasingly important

for the provision of secondary ambulatory care (see section 5.3.2). Nursing care at home is provided by so-called Spitex organizations (see section 5.8.1). Corporatist associations of health professionals and of hospitals play an important role in the organization of care and in negotiating tariffs with insurers.

Professional associations

The Swiss Medical Association (FMH) is the professional organization for physicians and the umbrella organization for 24 cantonal associations of ambulatory physicians, the association of employed physicians (VSAO) and, since 2006, the association of chief physicians (VLSS). About 95% of all medical doctors are members of the FMH, although membership is not compulsory. The highest decision-making body is the 200 member “parliament”, which comprises 100 delegates of cantonal medical associations, 58 delegates of recognized specialty organizations, 40 delegates of the VSAO and two delegates of the VLSS.

The FMH is responsible for setting and enforcing professional and ethical standards. It aims to influence health policy developments and was – prior to the creation of the **Swiss Institute for Postgraduate and Continuing Medical Education (SIWF/ISFM)** in December 2008 (see section 2.8.3) – responsible for the regulation and accreditation of postgraduate medical education. In addition, the FMH is a shareholder of **SwissDRG SA** and a partner in **TARMED Suisse**, where it represents the interests of physicians in the development of tariffs. **Cantonal associations of physicians** are responsible for tariff negotiations, accreditation of professional training and provision of ambulatory emergency care services (FMH, 2013a, 2013b).

The Swiss Dental Association (SSO) fulfils the same tasks as the FMH. The SSO is directly responsible for regulating and accrediting postgraduate dentist education (specialization). In addition, it provides legal advice to its members and support in establishing and developing dental practices.

ChiroSuisse, pharmaSuisse and the Federation of Swiss Psychologists (FSP) are the professional associations of chiropractors, pharmacists and psychologists respectively. Their main functions are similar to those of the medical associations and include responsibilities for the regulation and accreditation of postgraduate education and the negotiation of tariffs.

Practitioners of other health-related professions (often called “non-university health professionals” in Switzerland) are represented by associations specific to their occupation (e.g. the association of nurses – SBK/ASI; the association of midwives – SHV/FSSF; and the association of

physiotherapists – physiosuisse). Many of these organizations are united in the Federation of Healthcare Professional Associations (SVBG/FSAS). All organizations represent the interests of their members to policy-makers and support their members in dealing with employers. In addition, many of these organizations offer courses of advanced and specialist training in their professional fields.

Provider associations

The Swiss Association of Hospitals (H+) represents the interests of all hospitals (public and private), including acute, psychiatric, geriatric and rehabilitation hospitals. H+ provides in-service training for managers as well as training courses for nurses and other hospital workers (e.g. about hygiene). It also develops management tools (such as cost accounting) and compiles comparative statistics, e.g. on wage costs, length of stay and service intensity. H+ is a shareholder of **SwissDRG SA** and represents the interests of hospitals in the development of the inpatient payment system.

There is a range of **other hospital associations**, which fulfil different tasks. In some cantons, public and publicly subsidized hospitals have formed **cantonal hospital associations** that negotiate reimbursement contracts with insurers. For example, in the Canton of Zurich all hospitals included in the cantonal hospital list have formed an association of hospitals (ZVK). In other cantons, tariffs are negotiated between individual hospitals and insurers.

Private hospitals are members of the **Swiss Association of Private Hospitals**. The main functions of this association are public relations, legal advice, information provision and political representation. More recently (in May 2015), an association of university hospitals was founded by a group of representatives of medical universities known as the **G15**. Finally, **Swiss REHA** is the most important **association of rehabilitation hospitals** in Switzerland, representing the interests of its members and participating in the development of quality measurement initiatives for rehabilitation care.

The Swiss Association of Home Care Services (Spitex Verband/ASSASD) is the national umbrella organization of 24 cantonal Spitex associations representing 600 local non-profit Spitex organizations. The association represents the interests of its members and collaborates in the development of guidelines for education, quality management and communication.

2.3.6 Joint institutions of payers and providers

The corporatist bodies of payers and providers are legally mandated to develop the national tariff frameworks for payment of providers for both ambulatory and inpatient care. In addition, service delivery contracts between payers and providers should include provisions for quality of care. In order to comply with these mandates, payers and providers have founded three joint institutions.

TARMED Suisse is a company that is responsible for developing and updating the national tariff framework for ambulatory medical care provided by physicians and hospitals. Payers and providers have equal influence in the company (according to the principle of parity). The payer side is represented by *santésuisse* and other payers (MTK/CTM, military and invalidity insurance). The provider side is represented by FMH and H+. TARMED Suisse has three commissions, which can take decisions only if payers and providers come to an agreement. In early 2015, *curafutura*, FMH, H+ and MTK/CTM founded a new company called **TARMED SA** with the aim of revising the existing TARMED system. However, *santésuisse* opposes the new organization and the future role of the two organizations remains uncertain.

SwissDRG SA is a company that is responsible for developing and updating the Swiss Diagnosis Related Group (SwissDRG) based hospital payment system. The company was founded in 2008 and its shareholders include payers (*santésuisse* and MTK/CTM), cantons (GDK/CDS) and providers (H+ and FMH). The payment system for acute inpatient care was introduced in 2012. SwissDRG SA is also developing a payment system for psychiatric care based on preparatory work by H+ and the department of health of the Canton of Zurich. For rehabilitation care, responsibility for developing a payment system has been delegated by SwissDRG to H+ and MTK/CTM.

The National Association for Quality Improvement in Hospitals and Clinics (ANQ) was founded in 2009 as the result of a merger of two previously existing voluntary quality initiatives. The steering committee of the association includes six representatives of hospitals, three of cantons and three of payers (two for *santésuisse* and one for MTK/CTM). Hospital membership in the ANQ is voluntary although some cantons require hospitals to join the ANQ if they want to be included on the cantonal hospital list (see section 2.5.2). All hospitals that are members are obliged to provide their data for the various quality measurement initiatives of ANQ (see sections 2.8.2 and 5.4.3).

2.3.7 Other relevant actors

Health Promotion Switzerland

Health Promotion Switzerland is a semi-autonomous foundation that was originally set up by the GDK/CDS together with the federal government, santésuisse and SUVA in 1989. The KVG/LAMal gave it an official mandate and specified that the Foundation Council has to be composed of representatives from the federal government, the cantons, santésuisse, SUVA, medical and other health care professions, public health researchers, and associations active in health promotion and consumer protection. The foundation initiates, coordinates and evaluates health promotion activities and is financed through mandatory contributions of every insured person. The foundation is financed through annual deductions of Sw.fr.2.40 of each resident's insurance contribution.

Civil society organizations

The Swiss Red Cross (SRC) is a non-profit organization with several subdivisions. The SRC has 24 cantonal Red Cross organizations, which provide support to disabled people and to the elderly. The SRC owns a company that organizes blood donations in Switzerland, and it has several sub-organizations for emergency care. In addition, the SRC plays an important quasi-public role for the accreditation and registration of non-university health professionals (e.g. nurses, physiotherapists) with a foreign diploma.

The two most important **patient organizations** are the **Swiss Patient Federation (DVSP)** and the **Swiss Patient Organization (SPO/OSP)**. Both organizations represent the interests of patients to policy-makers and provide general information about insurers and providers. In addition, they are important for providing advice and support in case of patient complaints (see section 2.9.4). Both organizations are funded mostly by contributions from individual members.

Finally, there are a large number of disease-specific patient (self-help) organizations, such as the **Swiss Cancer League**, the **Swiss League against Rheumatism**, the **Swiss Lung Association** and support organizations for people with AIDS. Many of these are organized in an umbrella organization called GELIKO. They fulfil important functions, including prevention, public relations, counselling and liaison with patients.

2.4 Decentralization and centralization

Despite increasing centralization of regulatory powers, the Swiss health system still remains highly decentralized by international standards. The first Federal Constitution of 1848 only mentioned sanitary measures in the case of epidemics as a federal competency in the field of health. Cantons were responsible for all other health-related legislation and regulation. Since then, almost all health reforms have meant a transfer of certain regulatory powers to the federal level, usually in response to specific problems, where greater coordination was required.

In 1877, a federal law was passed to standardize the qualifying examinations for doctors, pharmacists and veterinarians. In 1890, the federal government was given a constitutional mandate to legislate on sickness and accident insurance, and KUVG/LAMA was passed in 1911 (see section 2.2). Federal legislation on food and consumer safety came into force in 1909. Sera and vaccines have been monitored at the federal level since 1931. Further competencies were transferred to the federal level through the federal law on narcotic substances in 1952 and through a law on trade in poisons in 1972. The federal law on radioprotection of 1960 gave the central government a mandate to regulate this matter. The Federal Epidemics Law of 1974 contributed to a centralization of powers in the area of infectious disease control and a revision of the law in 2012 (coming into force in 2016) has further centralized competencies in this area (see section 6.1.4).

The introduction of KVG/LAMal in 1996 was another important step towards more centralization and harmonization: health insurance became mandatory for all residents and the standard benefits package has been centrally defined. Since the introduction of KVG/LAMal the federal government also determines the general requirements (quality and efficiency) for service provision. However, cantons remain responsible for the licensing and supervision of providers, as well as for the planning of inpatient service provision (see section 2.5.2).

The Federal Law on Therapeutic Products (HMG/LPTh) in force since 2002 transferred responsibility for awarding marketing authorizations for pharmaceuticals and medical devices from the cantons to the federal level. As part of this, the Swiss Agency for Therapeutic Products (Swissmedic) was created as a new national regulatory body, replacing the previously existing Inter-cantonal Office for the Control of Medicines (IKS/OICM). Subsequently, in 2007, the new MedBG/LPMéd led to the standardization of federal training requirements for and examinations of health professionals with university education and to the introduction of a national register for these professionals.

In 2009, cantons were mandated to coordinate their planning activities in the area of highly specialized medical care (by adding Article 39, 2bis to KVG/LAMal) with the aim of ensuring sufficient concentration of care. If they fail to designate hospitals for the provision of highly specialized medical care, the Federal Council has the right to become active and to define which hospitals are eligible to provide which services.

Since April 2014, when a proposal of the Federal Council was accepted by public referendum, primary health care provision is explicitly mentioned in the Federal Constitution as an area of federal co-responsibility (see section 6.1.4). This is the first time that the federal level has been constitutionally recognized as carrying responsibility in the area of health care provision. Finally, in September 2014, a Federal Law on the Supervision of MHI (KVAG/LSAMal) was passed by the Federal Assembly, giving greater power to the FOPH concerning the supervision of MHI companies and allowing for federal intervention regarding the size of premiums charged. The federal level is also becoming increasingly important in the area of health care quality assurance with the creation of a national quality institute currently on the reform agenda as well as several other reform proposals which illustrate that centralization is likely to continue (see section 6.2).

Nevertheless, the Swiss health care system remains highly decentralized when compared with other countries. First, cantons remain important actors in the area of health care provision of both inpatient and ambulatory care. Second, decentralized decision-making is supported by the corporatist tradition of the health system as responsibility for several regulatory tasks has remained in the hands of the joint decision-making bodies of purchasers and providers (see section 2.8). Third, the regulatory model of managed competition implies that many decisions are taken by private actors, i.e. MHI companies, providers and patients. This means that investment decisions are taken at various levels (see section 4.1.1) and that different models of care delivery co-exist, e.g. managed care type versus traditional health care provision (see section 5.2).

2.5 Planning

2.5.1 National strategic planning

The main national strategic planning document for the health system is the federal Health2020 strategy (FDHA, 2013). The document identifies four priority areas of the Federal Council for policy-making: (1) ensuring quality

of life; (2) achieving equal opportunity for all while reinforcing individual responsibility; (3) safeguarding and increasing the quality of health care provision; and (4) creating transparency, better control and coordination (see section 7.1). The Health2020 strategy provides an overall direction for federal health policy-making. However, it does not directly relate to the planning of health care service provision in the country.

An important platform for national strategic planning is the National Dialogue on Health Policy, which has developed several specific national strategic planning documents, often related to the Health2020 strategy. For example, strategic planning documents exist for: the introduction of e-health (FOPH, 2007b); for improving cancer prevention and care (FOPH/GDK/CDS, 2013); for the scale-up of palliative care (FOPH/GDK, 2013a); and for developing adequate care provision structures for people with dementia (FOPH/GDK/CDS, 2014).

2.5.2 Cantonal healthcare provision planning

The most important actors in the planning of health care service provision are the cantonal health departments. Traditionally, the planning process varied widely across cantons as regards both the objectives and criteria of planning. However, planning is becoming more harmonized and the federal level is increasingly involved in determining the planning process and the criteria of planning. Since 1996, KVG/LAMal has mandated cantons to develop plans for the provision of hospital inpatient care (including psychiatric and rehabilitation care) and long-term nursing care according to the needs of their populations (Art. 39 KVG/LAMal). This planning process leads to the establishment of a list of hospitals and nursing homes that are eligible for reimbursement under compulsory health insurance.

Hospital planning process and criteria of planning

As a consequence of the 2007 revision of the law (revised Art. 39 KVG/LAMal), uniform planning criteria were introduced into the Ordinance on Mandatory Health Insurance (Art. 58a-e KVV/OAMal). Planning has to be based on transparent and objective criteria, using available data. Acute care hospital is output (performance) based, while planning for psychiatric and rehabilitation hospitals can be either output or input based. Planning for long-term (nursing) care should be input based. The selection of providers for inclusion in the hospital list should be based on quality, efficiency and geographic accessibility. Plans have to be reviewed every few years but the frequency of revision can be determined by the cantons. Cantons have to coordinate their planning, in particular to account for cross-cantonal service provision.

The GDK/CDS has developed relatively detailed planning guidelines for acute hospital care based on the federal planning requirements (GDK/CDS, 2009a), and similar guidelines are also available for psychiatric hospitals (GDK/CDS, 2008). The guidelines suggest that minimum volume thresholds should be defined in order to ensure quality and efficiency and that potential increases in the volume of treated cases could be controlled either by defining maximum numbers of cases and/or degressive tariffs, or by limiting the capacity of hospitals (infrastructure/equipment) as part of the planning process. In addition, the GDK/CDS has recommended that cantons follow a hospital planning model (for acute care) that was originally developed by the Canton of Zurich (GDK/CDS, 2011a). This model defines about 140 groups of hospital services, e.g. one neurology group is “cancers of the nervous system” and another is “cerebrovascular diseases” (Canton Zurich, 2014). For each of these service groups, certain structural requirements are specified concerning the availability of an emergency department, an intensive care unit, other specialty departments and minimum volume thresholds. Providers can then apply to be included in the hospital list for each of the about 140 service groups and the cantonal department of health determines if the structural requirements are met by the hospital.

In 2012, the final Canton of Zurich list included 28 providers, of which only the University Hospital of Zurich was allowed to provide almost all the service groups (Canton Zurich, 2011). Most other hospitals were allowed to provide only a small proportion of the service groups. Depending on the size of the canton and the assessed health needs of its population, cantonal hospital lists may be limited to only hospitals in the canton or may include many hospitals in other cantons. For example, the hospital list for acute inpatient care for the Canton of Geneva includes only hospitals located in Geneva or owned by the canton (but located in another canton). By contrast, the hospital list for acute inpatient care for the Canton of Appenzell Innerrhoden includes six hospitals located in other cantons, including in St. Gallen and Zurich, in addition to one cantonal hospital. In Zurich, 34 providers applied to be included in the hospital list of 2012–2014, including five hospitals located in other cantons (Canton Zurich, 2011). However, only one hospital from outside the canton was included in the final list because the others were found to be less accessible (due to longer travelling times) than hospitals inside the canton.

An important issue in the context of the national introduction of DRG-based hospital payments (see section 3.7.1) is the question of how to control a potential increase in the number of cases. The guidelines of the GDK/CDS (GDK/CDS, 2009a) recommend that potential increases in the volume of treated cases can

be controlled either by defining maximum numbers of cases per service group (e.g. per DRG) and/or degressive tariffs, or by limiting the capacity of hospitals (infrastructure/equipment) as part of the planning process.

Inter-cantonal coordination for highly specialized medical care (HSM)

Also since the 2007 revision of KVG/LAMal, cantons have been obliged to coordinate their planning activities for highly specialized medical care (Art. 39, 2bis KVG/LAMal). In response to this requirement and to avoid federal regulation in this area, the GDK/CDS adopted an inter-cantonal agreement on highly specialized medical care (IVHSM) in January 2009 (GDK/CDS, 2014a). Since then, 39 various highly specialized medical fields were regulated, including stroke, neurosurgery, severe trauma and severe burns, organ transplantations, as well as stem cell transplantations, proton therapy, cochlea implants and visceral surgery. The planning for these highly specialized areas of medical care is carried out jointly by all cantons, and decisions taken by the IVHSM Decision-Making Board (consisting of 10 cantonal ministers of health, elected by the GDK/CDS) are binding for all cantons. A board of medical experts (HSM-Scientific Board) advises the Decision-Making Board on all relevant medical, health care and scientific issues, and elaborates on the quality requirements for the highly specialized health care services. Based on the proposals of the Scientific Board, the Decision-Making Board adopts for each defined medical field a national list of hospitals that are allowed to perform these highly specialized medical services in Switzerland. So, in addition to the hospital plans of the 26 cantons, an inter-cantonal hospital list exists, specifying for each field of highly specialized medical care, where these services can be provided in Switzerland.

Complaints against planning decisions

The cantons' planning decisions and the resulting lists can be challenged by providers by submission to the Federal Administrative Court (Art. 53 KVG/LAMal). There have been a number of cases where hospitals have complained against cantonal hospital lists and against planning decisions in the area of highly specialized medical care (GDK/CDS, 2015a). In 2014, the federal administrative court confirmed the exclusion of a hospital from the 2012–2014 Zurich hospital list. In the same year, a rehabilitation hospital in the Canton of Aargau was successful in complaining against its exclusion from the hospital list because the canton had estimated the need for rehabilitation in the area of oncology on the basis of insufficient data. Several other complaints were still under examination at the time of writing.

Also in 2014, the court considered for the first time a case in which one canton (Zurich) lodged a complaint against the (psychiatric) hospital list of another canton (Graubünden). The reason for the complaint was that, since

2012, patients can claim reimbursement from MHI companies and also cantons if they are treated in other cantons, as long as the provider is included in the list of the canton of treatment (see section 5.4.2). Therefore, the hospital list of one canton can have implications for another canton's budget. According to the Federal Administrative Court, Zurich has the right to challenge the inclusion of a specific provider on Graubünden's list because the decision of Graubünden has an influence on Zurich's planning (Peterli et al., 2014). If cantons do not find a way to resolve such disputes in the future, the Court could potentially play an increasingly important role in the area of hospital planning.

Furthermore, there have been a number of decisions of the Federal Administrative Court related to highly specialized medical care. The court has criticized the procedures for establishing the list of hospitals eligible to provide highly specialized medical care. Therefore, the procedure has been reformed and is now conducted in two phases: first, the domain of highly specialized medical care (e.g. transplantation surgery) is defined and sent for consultation to the stakeholders; second, the designated hospitals are proposed.

2.5.3 Planning of ambulatory care provision

In general, there is no systematic planning of ambulatory care provision structures. The local availability of ambulatory care is largely determined by the willingness of individual physicians and other providers to set up a practice in the area. The existing regulatory measures (see section 2.8.2) do not allow cantons or insurers to actively manage the supply of ambulatory providers in an area. Consequently, a high supply of physicians in urban areas co-exists with low supply in rural areas (see section 5.3). Improving planning in the ambulatory sector is an important ongoing area of reform (see section 6.2). A new law on this issue was proposed by the Federal Council in February 2015, which proposes to regulate the planning of ambulatory care in a similar way to inpatient care (FOPH, 2015i).

As working conditions in Switzerland are highly attractive for foreign physicians (see section 4.2.2), concerns emerged prior to Switzerland signing the EU free movement of persons agreement in 1999 that the number of physicians could potentially increase beyond needs. Consequently, the Federal Council introduced a temporary ban in 2001, enabling cantons to withhold licences for the provision of MHI-reimbursable services (see section 2.8.2) if there was no need for additional providers in the canton (Art. 55a KVG/LAMal) (Bolgiani, 2009). The ban was continuously renewed until the end of 2011 and – following a strong increase in the number of applicants for a licence in 2012 – it was again renewed for three years in July 2013.

The current ban differs slightly from the previous one as physicians who completed at least three years of their specialization training in Switzerland are exempt from the ban, while the previous ban exempted primary care physicians. Quotas determining the maximum allowable number of physicians (distinguished per specialty) per canton are specified in the Regulation on Limiting the Licensing of New Providers with a Right to Provide Services Reimbursable by MHI (VEZL/OLAF). These are based on the number of providers in November 2012 and do not take into account population needs (except if these were reflected in the historical number of physicians).

2.6 Intersectorality

The Concept Note for the Development of Intersectoral Health Policies of the FOPH (FOPH, 2005) published in 2005 recognizes that national health policy should aim for better integration of health aspects in the policies of all relevant sectors. Also, the Federal Council's Health2020 strategy (FDHA, 2013) mentions that health is influenced by education, social security, transport, the environment and income, as well as more general working and living conditions; and government departments should increase their collaboration to address these social determinants of health.

Improving population health is included as one of 10 action areas in the Federal Sustainable Development Strategy (2012–2015) (Federal Council, 2012b), which is currently being updated for the period 2016–2019 by the Federal Department of the Environment, Transport, Energy and Communications (DETEC). The strategy lists several ongoing intersectoral activities in the area of health. These include the National Programme for Nutrition and Physical Activity (2008–2012), involving the FOPH, the Federal Office of Sports, the Foundation Health Promotion Switzerland and the cantons; and the National Programme for Migration and Health (recently prolonged for 2014–2017), involving the FOPH, the State Secretariat for Migration and the GDK/CDS. The FOPH is also collaborating with multiple federal offices with the aim of developing public infrastructure that promotes physical activity.

Health is also taken into consideration by multiple policies in different areas. The Federal Office of Sports within the Federal Department of Defence, Civil Protection and Sport is promoting physical activity by coordinating sport programmes. The State Secretariat for Economic Affairs (seco) within the Federal Department of Economic Affairs, Education and Research (EAER) is responsible for workplace health protection and prevention. The State Secretariat

for Education, Research and Innovation (SERI), also within EAER, regulates the vocational and continuing training of non-academic health professions. Responsibility for food safety is split across several ministries, including the Federal Office for Agriculture within EAER and the FOPH.

However, permanent intersectoral structures do not exist at the federal level except for certain specific areas (e.g. substance abuse). Instead, intersectoral policies affecting the health sector are usually dealt with in ad hoc interministerial working groups. Health inequalities, which are affected by a wide range of social determinants, are mostly considered from the limited perspective of equity of access to health care services and the focus is mostly on migrant populations and gender (OECD/WHO, 2011).

Formal health impact assessments (HIAs) have not yet been institutionalized at the federal level, although some cantons (in particular Geneva, Jura and Ticino) have considerable experience with HIAs. A guide for HIAs was published in 2010 by the Swiss Platform for Health Impact Assessments and the Foundation Health Promotion Switzerland (GFA, 2010). The proposed Federal Prevention Law planned to introduce HIA at the federal level but was rejected by Parliament in September 2012 (see section 6.1). Currently, there are no plans for introducing formal HIA at the federal level.

2.7 Health information management

2.7.1 Information systems

Data collection and analysis of health-related information is regulated by different federal laws, most importantly the 1992 Federal Statistic Act (BStatG/LSF) and the KVG/LAMal. Since the 2007 revision of KVG/LAMal (see section 6.1), the law specifies that the Federal Statistical Office (FSO) collects the data necessary for monitoring the effects of the law, including data collection from insurers, providers and the population.

Table 2.1 provides an overview of the most important health-related statistics in Switzerland. All statistical reports are usually available for download from the responsible institutions free of charge. The FSO and the FOPH are the two most important institutions for the collection of information. The FSO aggregates data from municipal bureaus of vital statistics (via the registry Infostar) into the federal cause of death statistics; collects data on the health status of the population through the Swiss Health Survey every five years;

and summarizes data from cantonal cancer registries. It is also responsible for different hospital statistics and for statistics on Spitex (home care) providers and sociomedical institutions (particularly nursing homes) (see Table 2.1) as well as for the national statistics of costs and financing of the health system, which follow the international standard System of Health Accounts (OECD/Eurostat/WHO, 2011).

The FOPH collects data on MHI (OKP/AOS statistics); operates the register of notifiable diseases; and organizes the Swiss Inpatient Quality Indicators (CH-IQI) database. The FOPH also monitors the development of costs and expenditures of MHI based on a data pool operated by SASIS Inc. – a subsidiary organization of *santésuisse*, which collects data from all providers with a billing number for services reimbursable by MHI (about 99% of providers). The physician statistics of the FMH provide information about practising physicians, medical graduates, postgraduate training (specialization), places in hospitals, etc.

Another important resource for information on the Swiss health system is the Swiss Health Observatory (Obsan). Obsan carries out analyses of health-related data with the aim of informing health policy-makers and the wider public. It publishes reports on a wide range of issues, based on data collected by the above mentioned statistics.

The availability of data on health service provision has improved considerably since the late 1990s, when mandatory collection of structural and service provision data was introduced for hospitals, Spitex organizations and sociomedical institutions. A first step towards more transparency about resource utilization in hospitals was made with the introduction of the voluntary hospital (DRG) case costing statistics in 2005, which has been coordinated by SwissDRG SA since 2008. Also quality of care in hospitals has become more transparent since the introduction of the CH-IQI (see section 5.4.2).

However, information on service provision in the ambulatory sector remains rather limited (except for provider billing information). Currently, the FSO is preparing to improve data availability for ambulatory care: first, the hospital statistics (KS) will be extended to include information on ambulatory care provision structures in hospitals; second, additional hospital outpatient statistics (PSa) will be introduced in 2015; third, the introduction of statistics for structural data on other ambulatory providers (practices and health centres) is planned.

Table 2.1
Overview of the most important health-related statistics in Switzerland, 2015

Statistic	Responsible institution	Included variables (examples)	Year of introduction
Health status			
Cause of death and stillbirth statistics (eCOD)	FSO	Cause of death (ICD-10), age, sex, civil status, occupation, residence, nationality	1876
Swiss Health Survey (SGB/ESS)	FSO	State of health, diseases, health competencies and resources, health service utilization, health insurance situation, living conditions, health-related lifestyle characteristics	1992, every five years
Cancer epidemiology (KE)	FSO/NICER (based on cancer registries for 20 cantons, the Swiss Child Cancer Registry and eCOD)	Mortality (ICD-10)/new diseases (ICD-0–3) according to age, sex and canton of residence under civil law	1983 (NICER), 1998 (FSO)
Register of notifiable diseases	FOPH	Weekly case numbers for 36 notifiable diseases, age, gender, canton of case notification	
Provision structures and service utilization			
Hospital statistics (KS)	FSO	Hospitals, ownership, fields of activity, facilities and equipment, beds, days of hospitalization, employees, costs	1997
Medical statistics of hospitals (MS)	FSO	Sociodemographic patient variables (age, sex, canton of origin), characteristics of hospitalization and discharge, up to 50 diagnoses and 100 procedures, etc.	1998
Swiss Inpatient Quality Indicators (CH-IQI)	FOPH (based on KS and MS of FSO)	Case numbers, raw and risk-adjusted mortality, care patterns (e.g. proportion of caesarean sections births to total births), etc.	2008
Hospital (DRG) case costing statistics (FKS)	FSO/SwissDRG	All patient characteristics of the medical statistics (MS) plus cost per case following standard costing guidelines according to nature of costs (personnel and material costs).	2005
Hospital outpatient statistics (PSa)	FSO	Patient information (age, sex, etc.), service information (based on billing information), diagnostic information, provider information	2015
Statistics of care and assistance at home (Spitex)	FSO	Range of services and fields of activity; number and structure of the workforce and clients; business income statements	1997
Statistics of sociomedical institutions (SOMED)	FSO	Business according to legal form, equipment and facilities; number and structure of the workforce and cared-for persons	1997
Physician statistics	FSO (in KS)	Age, sex, and nationality of physicians working in the hospital (inpatient) sector	2007
	FMH	Number of working physicians	1960
		Number of physicians according to sector	2001
		Average age of physicians	2006
		Number of training places by specialty	2005
		Number of specialist degrees awarded	2001
		Number of medical students	1980
		Number of medical degrees obtained	1990
		Number of GPs and specialists	2004
		Number of physicians with foreign diplomas	2009

<i>Costs and financing of health care</i>			
Costs and financing of the health system (COU)	FSO	Health expenditures by function, provider and financing scheme	1985
Mandatory health insurance statistics (OKP/AOS)	FOPH	Insurance premiums and expenditures for different categories (physicians, hospitals, pharmaceuticals, etc.)	1996
Mandatory health insurance data pool (DP/PD)	SASIS Inc. (based on provider billing numbers for mandatory and voluntary insurance)	Service provider statistics (physician practice, pharmacy, hospital, nursing home, etc.), information on all billed services	1998

Source: Author's own compilation.

In October 2014, the Federal Council proposed a new Federal Law on Cancer Registration (KGR/LEMO). The law aims to improve the available epidemiological data on cancers, currently derived from cancer registries covering 20 cantons aggregated by the National Institute for Cancer Epidemiology and Registration (NICER). The law proposes to build on the existing cantonal infrastructure but to introduce mandatory notification of diagnosed cancers (with the option for patients to veto). In addition, it plans to give the Federal Council the right to provide financial support to other registries, e.g. for cardiovascular diseases and diabetes.

2.7.2 Health technology assessment

The FOPH is responsible for assessing whether new – and, if controversial, also existing technologies – comply with the principles of effectiveness, appropriateness and cost-effectiveness, as required by KVG/LAMal. The exact procedures required prior to inclusion in the benefits package differ depending on whether they concern a new service provided by physicians, a new lab test or medical device, or new pharmaceuticals (see section 2.8.1 for a description of the necessary steps required for inclusion of technologies in the benefits basket). There are two units of the FOPH involved in the assessment of new technologies: (1) the Medical Services Section (MSS), which is responsible for assessing health services, lab tests, devices and products for use by patients; and (2) the Pharmaceuticals Section, which is responsible for assessing (and reassessing) pharmaceuticals (for more details on assessments of pharmaceuticals, see section 2.8.4, and for medical devices and aids see section 2.8.5).

The assessments of the FOPH are inspired by international standards for health technology assessment (HTA) and follow these standards to a certain extent (Federal Council, 2014). However, assessments of new technologies are mostly carried out by the FOPH based on documents provided by applicants

who aim to have a certain technology included in the MHI benefits basket (FOPH, 2011a). Detailed guidelines exist for applicants concerning the required documentation they have to submit as part of their proposal to support the assessments by the FOPH. The FOPH may request additional documents from applicants, can commission external evaluations, and may conduct its own research as part of its assessment. However, the ability of the FOPH to carry out its own research is limited because of resource constraints in the responsible units (FOPH, 2014g). Assessments are, therefore, mostly based on: existing (usually international) studies; commissioned external evaluations/reviews; or reports by HTA agencies of other countries. Formal cost-effectiveness analyses are very rarely conducted by the FOPH. Evaluations are not generally made publicly available. Subsequently, the relevant advisory commission (i.e. ELGK/CFPP, EAMGK/CFAMA or EAK/CFM) appraises the evidence produced as part of this assessment process (see section 2.8.1).

The procedures for the assessment of technologies were subject to inspections and criticism by the parliamentary control of the administration office in 2008 (Parlamentarische Verwaltungskontrolle, 2009) and there has been a vast amount of public discussion about the need to introduce a system of systematic horizon scanning, harmonizing procedures of HTA for different types of technologies and increasing transparency. Partially in response to this criticism, official criteria for the assessment of services provided by physicians were developed in 2011 (FOPH, 2011a) with the aim of operationalizing the principles of effectiveness, appropriateness and cost-effectiveness. However, similar formal criteria do not yet exist for lab tests, medical devices for home use by patients or pharmaceuticals, although there are plans to introduce such criteria (FOPH, 2014g). A handbook for the preparation of reimbursement applications of pharmaceutical companies to the FOPH (FOPH 2013g) provides a rough operationalization of the criteria of cost-effectiveness, which are based mostly on internal and external reference pricing approaches.

A Swiss Network for Health Technology Assessment (SNHTA) was set up as early as 1998 to bring together all HTA-related activities in Switzerland. Its members include the different units of the FOPH, the GDK/CDS, FMH, as well as several universities and hospitals. A development with potentially important consequences for HTA in Switzerland was the inclusion of measures aiming to improve HTA through a proposed Federal Law on the Centre for Quality in MHI (Federal Council, 2014). This would have supported the FOPH by: (1) introducing a system for horizon scanning in order to identify whether new services should undergo HTA; (2) introducing a system for

re-evaluating currently covered technologies; (3) producing HTA reports; and (4) developing and updating a methodology for HTA in Switzerland. However, due to considerable opposition from different stakeholders, the proposed law was withdrawn and it remains to be seen how the HTA process will develop over the next few years (see section 6.2.1).

Another important actor, the Swiss Medical Board, is also actively campaigning for improving (or completely overhauling) the current system of technology assessment in Switzerland (Swiss Medical Board, 2015). This initiative originally started in 2008 as the Medical Board of Zurich. In 2011, the GDK/CDS, FMH, Swiss Academy of Medical Sciences (SAMW/ASSM) and the government of Liechtenstein joined the initiative. In 2015, *santésuisse*, *curafutura* and *interpharma*, which had originally set up another network called *SwissHTA*, also joined the Swiss Medical Board initiative with the aim of forming a common and more efficient HTA organization for Switzerland, partially because they felt that the FOPH had not fulfilled its role in this domain. The Swiss Medical Board has produced 14 HTA reports (up until September 2015), some of which have been highly controversial (in particular the report on systematic mammography in 2013 (Swiss Medical Board, 2013)).

2.8 Regulation

The result of the slow but steady process of greater centralization described above (see section 2.4) has been that there remains almost no area in which the cantons have exclusive regulatory responsibility. Table 2.2 provides a simplified overview of regulatory responsibilities in the health system, specifying the responsible bodies for different tasks and sectors.

Health insurance is a responsibility of the federal level and health care providers have to comply with many rules set out in KVG/LAMal. Consequently, health care provision is effectively co-regulated by the cantons and the federal level. Pharmaceuticals are tightly under the regulation of the federal level since the introduction of HMG/LPTh. Similarly, public health is co-regulated by federal legislation (e.g. the Epidemics Law, EpG/LEp) and cantonal implementing legislation. Responsibilities for the health workforce are shared between the federal level, which determines training requirements, and the cantons, which often bear the cost of training (see section 2.8.3).

Table 2.2

Responsibilities in the Swiss health care system by sector, 2015

	Legislation	Planning	Licensing/ accreditation	Pricing/tariff setting	Quality assurance	Purchasing/financing
Health insurance	KVG/LAMal, KVAG/ LSAMal	Confederation	FOPH	MHI companies determine premiums, approved by FOPH	Federal Council	Households, Confederation, cantons
Public health services	KVG/LAMal, Epidemics Law (EpG/LEp), cantonal implementing legislation	Confederation, cantons, municipalities	Cantons	Medical services, medical prevention/screening and products by the MHI-System, others by cantons and FOPH	FOPH, cantons, Health Promotion Switzerland, tobacco prevention fund	MHI, cantons, FOPH, Health Promotion Switzerland, tobacco prevention fund
Ambulatory care (primary and secondary care)	KVG/LAMal, cantonal implementing legislation	None (but cantons may limit number of new licences since 2002)	Cantons	Corporatist TARMED e.g. for the national tariff framework/MHI companies; FMH and hospitals for the cantonal price level	FMH, cantons	MHI, patients
Inpatient care	KVG/LAMal, cantonal implementing legislation	Cantons	Cantons compile annual cantonal lists, contracting individual hospitals for certain services	Corporatist SwissDRG SA for the national tariff framework/MHI companies; individual hospitals for the hospital price level	Hospitals, MHI, FOPH, ANQ (voluntary), cantons	Cantons, MHI, VHI, patients
Long-term care	KVG/LAMal and KLV/ OPAS	Cantons	Cantons	FDHA, cantons, AHV-IV/AVS-AI	Cantons, municipalities	Patients, cantons, municipalities, MHI, AHV-IV/AVS-AI
Dental care	KVG/LAMal, KLV/OPAS	None (but cantons may ban new licences)	Cantons	SSO + MTK/CTM, MHI companies	SSO, cantons	Patients, VHI, UV/AA, IV/AI
Pharmaceuticals (ambulatory)	KVG/LAMal, details regulated by HMG/LPTh	n/a	Swissmedic	FOPH by positive lists	Swissmedic, cantons	MHI, patients, VHI
Education of university health personnel	MedBG/LPMéd	Confederation in consultation with cantons	Confederation	n/a	FOPH + OAQ	Cantons, Confederation

Source: Authors' own compilation.

2.8.1 Regulation and governance of third-party payers

Mandatory health insurance is the most important payer for health services in Switzerland (see section 3.2). Regulation of MHI is the responsibility of the federal government. The Federal Health Insurance Law (KVG/LAMal) is the most important legal document determining the rules of MHI. In 2014, a new Federal Law on the Supervision of MHI (KVAG/LSAMal) was passed, which will strengthen the federal competencies in surveillance and sanctioning of MHI companies (see section 6.1).

The FOPH is the federal administrative body responsible for accreditation and supervision of MHI companies. The benefits basket of MHI is determined by KVG/LAMal and two related ordinances (see below). KVG/LAMal demands that a “Common Institution” of all insurers has to operate a system of risk equalization to make sure that insurers receive sufficient resources according to the risk structure of their insured (see section 3.3.3). The exact risk equalization formula has been reformed several times over the past decade (see section 6.1).

The role of cantons as payers in the health care system is also regulated by KVG/LAMal. The law determines the rules of hospital planning (see section 2.5) and financing of inpatient care (see section 3.7.1). However, cantons have considerable autonomy in making decisions about how to spend their resources. In addition, cantons are responsible for ensuring that all of their citizens purchase insurance and they are responsible for subsidizing insurance premiums (see section 3.3.3).

Compulsory accident insurance is regulated by the Federal Law on Accident Insurance (UVG/LAA) of 20 March 1981, which came into force on 1 January 1984. The FOPH is responsible for the supervision of compulsory accident insurance. The regulation of accident insurance is discussed in section 3.6.1.

Voluntary health insurance is supervised by the Financial Market Supervisory Authority (FINMA). The main legal document regulating VHI is the Insurance Contract Law (VVG/LCA). The regulation of VHI is discussed in section 3.5.4. Regulatory arrangements relating to cross-border health care are discussed under section 2.9.6.

Accreditation and supervision of MHI insurers

In 2014, 61 companies were accredited by the FOPH to offer MHI. The KVG/LAMal outlines the operating conditions for MHI companies: (1) companies must be non-profit, i.e. excess earnings have to be reinvested for the benefit of the insured; (2) they are not allowed to refuse an individual's application for coverage; (3) they have to offer a standard benefits package (see below);

and (4) every company has to offer voluntary monetary sick-leave benefits insurance in addition to MHI. Companies may offer voluntary (supplementary and complementary) health insurance policies (see section 3.5), and they may make profit from selling these policies. However, companies have to keep for-profit activities clearly separate from their MHI activities.

The new KVG/LSAMal more clearly specifies the conditions for accreditation and supervision of insurers. In addition, the position of the FOPH has been strengthened and more resources have been made available to enable the FOPH to effectively carry out its supervisory functions. A company that wants to be accredited by the FOPH has to submit its business plan and detailed information on managers and capital owners. It also has to prove that it disposes of a sufficient level of reserves. Since 2012, when an Ordinance on Reserves of MHI companies came into force (ResV-EDI/Ore-DFI), the sufficiency of reserves is assessed in relation to the risk structure of the insured, instead of merely taking into account the number of insured.

Once accredited, the FOPH supervises the financial position of health insurers based on their reports, budgets and annual accounts. In response to insolvencies of some insurers during the financial crisis (KK Zurzach, KBV and Accorda), the KVG/LSAMal demands higher reserves and external review of insurers' financial positions. In case of financial problems, the FOPH can enforce emergency measures to avoid insolvencies, and it can impose sanctions of up to Sw.fr.500 000 for non-compliance.

MHI premium rates that companies intend to charge in the following year have to be approved by the FOPH in order to become effective. The KVG/LSAMal has specified that premiums will not be approved by the FOPH if they are either too high (i.e. higher than necessary to cover the costs) or too low (i.e. threatening the long-term viability of the insurer). In addition, according to the new law, if the FOPH discovers that charged premiums were too high, it can mandate insurers to pay back their excess revenues to the insured. Cantons can participate in the supervision of insurers by demanding the same documents that are used by the FOPH for assessing whether premiums are justified, and they can comment on intended premium rates.

Since KVG/LSAMal, companies have to follow corporate governance guidelines, which ensure that for-profit and non-profit activities are separated. In the past, companies could use information about the health status of their insured gathered through MHI activities in order to decide to whom to offer voluntary insurance (although this was illegal). As a result of the new KVG/

LSAMal, supervision of companies that offer MHI and voluntary insurance has to be coordinated by FOPH and FINMA. In fact, companies have to notify FINMA and FOPH simultaneously if they want to be accredited for offering both VHI and MHI.

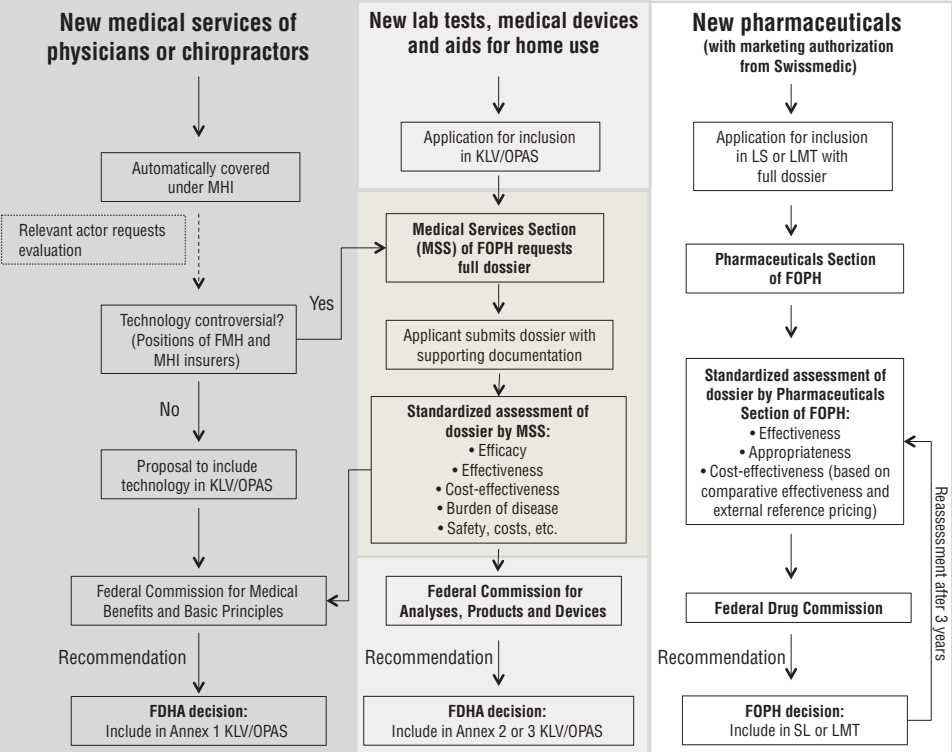
Definition of the MHI benefits package

The MHI benefits package is standardized across all insurers and defined in broad terms by KVG/LAMal (Art. 25-31), while the details are specified in the regularly updated Health Insurance Ordinance (KVV/OAMaL) and the Health Care Benefits Ordinance (KLV/OPAS). Services included in the benefits package have to be effective, appropriate and cost-effective (Art. 32 KVG/LAMal). Companies are not allowed to offer other optional benefits as part of the MHI scheme.

In general, procedures for the inclusion of new services or technologies in the benefits package differ depending on the type of service. Fig. 2.2 provides an overview of the different procedures for the inclusion of medical services, lab tests, medical devices and aids for home use by patients, as well as pharmaceuticals. New pharmaceuticals, lab tests, medical devices and aids always have to undergo an assessment (see section 2.7.2) in order to be included in one of the explicit positive lists. New services provided by physicians or chiropractors are automatically covered by MHI (according to the “principle of trust”) unless a relevant actor requests an assessment of the service. In this case there might be an assessment, if the ELGK/CFPP decides – after consultation with FMH and insurers – that the service is controversial.

Table 2.3 provides an overview of the different legal documents listing the benefits covered under MHI. In addition, the ultimate decision-making authority and relevant advisory commission are shown. There are several explicit positive lists for covered preventive services, maternity services, dental care, drugs, lab tests, medical devices and aids for home use by patients, as well as for services provided by non-medics (e.g. physiotherapists). For services provided by physicians and chiropractors, Annex 1 of KLV/OPAS lists explicit reimbursement decisions of the FDHA, specifying those services that were (following an assessment by the MSS of FOPH and appraisal with a recommendation by the Federal Commission for Medical Benefits and Basic Principles, see Table 2.3) found to be either appropriate (included) or inappropriate (excluded) for MHI coverage.

Fig. 2.2
Simplified illustration of procedures for the inclusion of services and technologies in the MHI benefits basket



Source: Authors' own compilation based on FOPH, 2008a; FOPH, 2013j.

In addition, there is the possibility for certain new technologies to be included under a coverage with evidence development (CED) scheme (FOPH, 2014a). This means that new medical services are temporarily listed in Annex 1 under the condition that a rigorous evaluation is conducted in order to enable an evidence-based coverage decision at a later point in time. Between 1996 and 2012, 60 medical services were temporarily listed, of which 30 were permanently included after evaluation, about 20 were rejected and the rest were still under review in 2014 (Perleth et al., 2014).

Table 2.3

Benefits covered under MHI, legal basis, responsible advisory commissions and ultimate decision-making authority

Category of benefit	Legal basis (positive list unless specified otherwise)	Advisory commission	Decision-making authority
Services provided by physicians and chiropractors	Covered unless listed as excluded in Annex 1 KLV/OPAS	Federal Commission for Medical Benefits and Basic Principles (ELGK/CFPP)	Federal Department of Home Affairs (FDHA)
Inpatient services	Covered unless Annex 1 KLV/OPAS lists the service as excluded or as covered under special conditions		
Prevention services	Art. 12-12e KLV/OPAS		
Maternity services	Art. 13-16 KLV/OPAS		
Dental services	Art. 17-19 KLV/OPAS		
Nursing care provided at home or in long-term care institutions	Art. 7 KLV/OPAS	Federal Commission for Analyses, Products and Devices (EAMGK/CFAMA)	Federal Office of Public Health
Services provided by non-medics (e.g. physiotherapists, speech therapists)	Art. 2, 5, 6, 9b, 9c, 10 KLV/OPAS		
Medical devices and aids for home use by patients	Annex 2 KLV/OPAS (MiGeL/LiMA)		
Lab tests	Annex 3 KLV/OPAS (AL/LA)		
Pharmaceuticals (extemporaneous preparations)	Annex 4 KLV/OPAS (LMT)		
Pharmaceuticals (pharmaceutical specialities)	List of Pharmaceutical Specialities (LS)	Federal Drug Commission (EAK/CFM)	

Source: Authors' own compilation based on Gurtner, 2008 and own research.

2.8.2 Regulation and governance of providers

Regulation of providers is carried out jointly by the Confederation and the cantons. On the one hand, the KVG/LAMal broadly outlines the types of providers allowed to provide services reimbursable by MHI and specifies certain conditions applicable to the different types of providers (Art. 35–39 KVG/LAMal). On the other hand, cantons are responsible for the licensing of ambulatory providers and they determine through their hospital planning decisions (see section 2.5) which providers (hospitals, long-term care institutions, etc.) are allowed to provide services reimbursable by MHI.

In addition, market mechanisms and corporatist agreements between MHI companies and providers play an important role in regulating providers and health care service provision (see section 3.3.4).

Ambulatory providers

Most physicians work as self-employed (see section 5.3). However, as a result of a trend towards more group practices, an increasing number of practices operate under the legal form of limited liability or joint stock company (SAMW, 2013). In addition, an increasingly large proportion of physicians is organized in physician networks or health maintenance organizations (HMOs) (see section 5.3).

The Federal Law on Medical Professions (MedBG/LPMéd; see also section 2.8.3) defines the necessary qualifications for and professional obligations of medical professionals working independently in ambulatory care. The law delegates to the cantons the responsibility to license these professionals (Art. 34 MedBG/LPMéd) and to monitor professional conduct. However, if professionals comply with the conditions outlined in the law (i.e. they have a confederate diploma and a recognized specialization title, have a good reputation, speak a national language and are healthy), cantons are not allowed to withhold the licence (SAMW, 2013). Licences are valid for 10 years and can be renewed if professionals comply with the requirements for continuing medical education (CME, see section 2.8.3). The licences of professionals above age 70 have to be renewed every three years. Cantons may pass additional legislation further specifying the conditions for licensing.

The professional obligations outlined in the MedBG/LPMéd include a requirement for physicians to provide assistance in the case of emergencies and to organize ambulatory out-of-hours care. These requirements are specified in cantonal laws, which may also define additional minimum requirements concerning medical practice equipment. The responsibility for the organization of out-of-hours care has been delegated to the cantonal associations of physicians, while emergency care is often organized directly by cantons (see section 5.5). Professional obligations of physicians are also specified in the corporatist professional code of conduct of the FMH. The FMH can sanction violations of the code with monetary penalties, can suspend membership and can inform the cantonal departments of health. However, as FMH membership is not compulsory for physicians, the corporatist sanctioning mechanisms are much weaker than, for example, in Germany.

In an attempt to limit the number of new physicians and to control escalating costs, a temporary ban on setting up new practices has been in place since 2001, which was after having been lifted in 2012, again renewed in mid-2013 until 2016 (Art. 55a KVG/LAMal, see section 2.5.3). Consequently, physicians have to obtain a (second) cantonal license if they want to provide services

reimbursable by MHI. However, because physicians who have completed more than 3 years of their specialization training in Switzerland are exempted from the ban, it is targeted mostly at foreigners. Cantons have a large degree of freedom concerning the implementation of the ban: Currently, eight cantons (AG, AL, AR, FR, GR, JU, ZG and ZH) do not apply the ban; other cantons restrict new providers only in certain specialties (e.g. Bern and Schwyz have exempted GPs, pediatricians and child psychiatrists from the ban); cantons may restrict only physicians in individual practice or also in outpatient departments of hospitals (SASIS, 2014).

Pharmacies

Pharmacies as well as internet pharmacies have to be licensed by cantons. Pharmacies have to comply with cantonal safety regulations concerning, e.g. quality controls, logistics, storage and pharmacovigilance. Internet pharmacies have to be operated by licensed pharmacists and have to ensure that all conditions for the sale of medicines are met. A special regulation concerning internet pharmacies is that they can send out medicines only if they have been prescribed by physicians even if the drug could be sold in a normal pharmacy without a prescription. This is to ensure that patients have been counselled about the potential side-effects of the drug.

Inpatient providers

The Federal Council regulates through the KVG/LAMal the conditions that have to be fulfilled by hospitals and other inpatient providers (rehabilitation, psychiatric, geriatric and long-term care) in order to be allowed to provide MHI-reimbursable services (Art. 39 KVG/LAMal). These conditions include certain structural requirements (sufficient personnel and adequate medical equipment), a mandate to admit all patients in need of care (Art. 41a KVG/LAMal) and inclusion in the cantonal hospital list (see section 2.5.2).

Cantons are responsible for the licensing of hospitals and pass legislation outlining cantonal conditions for the provision of inpatient care. Each hospital requires a cantonal operating licence, which is awarded if hospitals comply with the conditions outlined in cantonal legislation, e.g. concerning medical supervision, hygiene, structural requirements, hospital pharmacy and quality management.

Cantons are also responsible for the planning of inpatient care provision (see section 2.5.2). The result of this planning process is a list of hospitals, specifying those in the canton that are allowed to provide MHI-reimbursable services. Therefore, the inclusion of hospitals on the list effectively awards a licence to provide MHI-reimbursable services. Many cantons are owners of

hospitals and have traditionally subsidized inpatient care provision in cantonal or private non-profit hospitals but this has changed since the introduction of new regulations on hospital payment in 2012 (see section 3.7.1).

Quality assurance

The Federal Council regulates measures to assure the quality of medical services of providers reimbursed by MHI (Art. 58 KVG/LAMal). However, in the past, it has mostly delegated to associations of providers (e.g. H+, FMH) and insurers the responsibility for developing appropriate mechanisms for quality assurance as a precondition for contracting (Art. 77 KVV/OAMal). Cantons are required to define quality standards as part of their hospital planning process (see section 2.5.2). Yet, the availability of information on quality of care and the existing mechanisms for quality assurance of corporatist bodies have been criticized as fragmented and insufficient, especially in the field of ambulatory care (Federal Council, 2014; OECD/WHO, 2011), where providers and insurers have not yet succeeded in reaching agreement about appropriate quality indicators.

The Federal Council has become increasingly active in the area of quality measurement and quality improvement since the publication of its National Strategy for Quality Assurance in 2009 (FOPH, 2009). In 2012, after three years of piloting, the Swiss Inpatient Quality Indicators (CH-IQI) were introduced to monitor and evaluate quality of acute care hospitals (see section 5.4.3). In 2012, two national quality programmes (“progress!”) were initiated by the FOPH and the Foundation for Patient Safety aiming to reduce surgical errors and medication errors (FOPH, 2015c). A third national quality programme will focus on the reduction of specific nosocomial infections. Another ongoing project (“BAGSAN”) aims to explore the possibility of using routine data of ambulatory care providers for the development of quality indicators (Federal Council, 2014). In 2014, the Federal Council passed a draft Law on the National Centre for Quality, although plans have shifted in 2015 in the direction of a National Network for Quality (see section 6.2.1 for more details).

In addition, the National Association for Quality Improvement in Hospitals and Clinics (ANQ) publishes quality indicators for hospital inpatient (see section 5.4.3), psychiatric, rehabilitation and geriatric care. A national quality contract was signed by ANQ and its constituent members in 2011, regulating the financing of quality initiatives of the ANQ. If hospitals join the contract, they are obliged to provide their data for quality measurement and evaluation to the database of ANQ. By 2013, almost all hospitals had joined the contract and were participating in the different measurement initiatives of ANQ (ANQ, 2014a).

There are various other independent bodies and patient associations that aim to improve quality or patient safety, including the foundation SANAcert, EQUAM and the Foundation Patient Safety. In particular, the latter is working as a partner of the FOPH with the aim of introducing quality improvement programmes.

2.8.3 Registration and planning of human resources

Regulation of human resources in Switzerland distinguishes between three groups of health professionals (see Table 2.4): (1) university health professionals, including physicians, dentists and pharmacists; (2) psychological professionals, including psychotherapists and clinical psychologists; and (3) non-university health professionals, including nurses and midwives. New federal laws have harmonized regulations across Switzerland on training requirements for and accreditation of university health professionals since 2007 and psychological professionals since 2013. A similar law aiming to harmonize and strengthen regulation of non-university health professionals passed a preliminary parliamentary consultation phase in 2013 but the draft law was not yet available by autumn 2015.

Planning of human resources is under shared responsibility between the federal level and cantons. In 2015, the new Federal Law on University Education and Coordination (HFKG/LEHE) came into force, which aims to improve coordination of activities of cantons and the federal government. The new coordination bodies, including the Swiss University Conference, will coordinate cantonal and federal financial contributions to university education and jointly plan university capacities.

University education of physicians is financed mostly (55–75%) from cantonal budgets, and medical faculties accounted for between 16% and 38% of the total university budgets in the relevant cantons in 2011. There have been gradual increases in the capacity to accept more students at the medical faculties since 2006 (see also section 4.2.3). In 2013/2014, the medical faculty of Zurich increased training capacity to 300 places in order to be able to train an additional 60 students (FOPH, 2014f). The cantons of Basel and Bern also plan to increase training capacity but, because this has significant financial implications, they are looking for greater financial support from the federal level.

Table 2.4
Categories of health professionals according to Swiss legislation and responsible authorities

Categories of professionals	Included groups	Legislation, effective since	Responsible authority
University health professionals	<ul style="list-style-type: none">• Physicians• Dentists• Pharmacists• Chiropractors• Veterinary surgeons	Federal Law on Medical Professions (MedBG/LPMéd), 2007, revised in 2015	University education: FOPH and university for implementing study programmes Specialization training and CME: SIWF/ISFM of FMH, SSO, pharmasuisse, chirosuisse, GST/VSV Licensing and re-accreditation: cantons
Psychological professionals	<ul style="list-style-type: none">• Psychotherapists• Children's and adolescent psychologists• Clinical psychologists• Neuropsychologists• Health psychologists	Federal Law on Psychology Professions (PsyG/LPsy), 2013	University education: FDHA Specialization training and CME: FSP and FDHA/FOPH granted temporary accreditation Licensing and re-accreditation: cantons
Non-university health professionals (higher education path)	<ul style="list-style-type: none">• Nurses• Midwives• Nutritionists• Physiotherapists• Ergotherapists	Education regulated as part of the Federal Law on Universities of Applied Sciences (FHSG/LHES). A Federal Law on Health Professions (GesBG/LPSan) is planned	State secretariat for Education, Research and Innovation (SERI)
Non-university health professionals (professional/vocational training path)	<ul style="list-style-type: none">• Nurses• Medical laboratory officers• Specialists in medical radiology• Dental hygienists• Podiatrists• Ambulance officers etc.	Federal Act on Vocational and Professional Education and Training (BBG/LFPrf), 2002	SERI

Source: FOPH, 2015e.

University medical professions

Since the introduction of the Federal Law on Medical Professions (MedBG/LPMéd), the basic regulatory requirements are the same for the five groups of medical professionals (see Table 2.4). The law determines the conditions of: (1) university education; (2) specialization training; (3) licensing and reaccreditation; (4) registration in the register of medical professionals; and (5) CME (more details on the training of health workers are described in section 4.2.3). An important actor for the regulation of medical professionals is the Commission for University Medical Professionals (MEBEKO). Members of the MEBEKO are appointed by the Federal Council and include representatives of the federal government, the cantons, medical universities and relevant professionals.

The MedBG/LPMéd has given universities more freedom concerning the exact content of the medical curricula. However, all medical study programmes now have to be accredited by the independent Swiss Centre of Accreditation and Quality Assurance in Higher Education (OAQ). In addition, after the completion of their studies, students have to take a confederate exam in order to be awarded a confederate diploma. The content of this exam is determined by the FOPH after consultation with medical faculties and the MEBEKO. Professionals who have completed their basic training abroad are required to obtain accreditation by the MEBEKO, which accepts diplomas from all EU/EFTA (European Free Trade Association) countries and usually diplomas from other countries if they have been previously accepted in an EU/EFTA country.

Specialization training is organized by the associations of the different medical professionals, i.e. FMH, SSO, pharmasuisse, chirosuisse and the association of veterinarians (GST/VSV). For physicians, providers offering specialization programmes have to be accredited by the Swiss Institute for Postgraduate and Continuing Medical Education (SIWF/ISFM). For other professionals, specialization programmes have to be accredited through a process organized by the OAQ. The ultimate accreditation decision for all professionals is made by the FOPH. The MEBEKO is again responsible for the accreditation of foreign specialist diplomas, accepting diplomas from EU/EFTA countries and those accepted in these countries.

Licensing of medical professionals is the responsibility of cantonal departments of health although the general conditions for licensing are outlined by the MedBG/LPMéd. The licence gives physicians the right to practise without supervision and to open a practice (see also section 2.8.2). Since the introduction of the MedBG/LPMéd, completion of a specialization programme is a requirement for receiving a licence. Prior to the introduction of the MedBG/LPMéd, physicians could obtain a licence directly after completion of their basic medical training and start working as a GP. Professionals have to be reaccredited by cantons every 10 years (every three years above age 70).

The MedBG/LPMéd also introduced a national register of medical professionals. After issuing a licence, cantons are required to enter detailed information on education, specialization titles, accreditation number and the address of the respective person into the register. The register itself is managed by the FOPH and most information is freely accessible via the internet (<http://www.medregom.admin.ch>). Professional associations also have to enter information on awarded specialization titles into the register.

CME is a professional duty of university medical professionals. For physicians, the SIWF/ISFM awards CME diplomas if physicians can document at least 80 CME hours per year over a period of three years. In some cantons, professionals have to document that they have complied with CME requirements in order to be reaccredited and cantonal health departments may fine non-compliant professionals up to Sw.fr.20 000 (SAMW, 2013).

Psychological professions

Before the implementation of the PsyG/LPsy in 2013, psychological professions (see Table 2.4) were not regulated by specific legislation and there had been discussion about reforms since 1991. Similar to the MedBG/LPMéd, the PsyG/LPsy regulates the conditions of education, specialization, licensing and continuing education. A register of psychological professionals (similar to the register of medical professionals) is also envisioned in the law but the necessary implementing ordinance has not yet been passed. Physicians working as psychiatrists fall under the regulations of the MedBG/LPMéd.

The conditions for education, specialization and licensing outlined in the PsyG/LPsy are modelled after those for medical professionals. University education and specialization training have to be accredited by the FOPH and there are confederate diplomas for psychological professions. However, the Federation of Swiss Psychologists (FSP) does not yet play a similarly important role for the organization of specialization training as the SIWF/ISFM of FMH does for physicians. There is also a Commission for Psychological Professionals (PsyKo/PsyCo) with similar tasks as the MEBEKO. In addition, the PsyG/LPsy introduced the requirement for psychological professionals to be licensed and reaccredited by cantons.

Non-university health professionals

There are no specific regulations applying to non-university health professionals, such as nurses and midwives (see Table 2.4). These professions are regulated just as any other professional education by the State Secretariat for Education, Research and Innovation (SERI) within the Federal Department of Economic Affairs, Education and Research (SERI, 2013). Relevant legal documents include the Federal Law on Vocational Training (BBG/LFPrf) and the Federal Law on Universities of Applied Sciences (FHSG/LHES).

An important stakeholder providing advice on educational standards and planning of non-university health professionals is OdASanté. OdASanté was founded by the cantons (GDK/CDS) and the federal employer associations in the health sector (H+, Curaviva – the association of long-term care institutions – and the Spitex association for home care) in 2005. OdASanté drafts federal

guidelines for the training and examination of different non-university health professionals. It also plays a role in the accreditation of training programmes by SERI. The Swiss Red Cross is responsible for the accreditation of foreign diplomas of non-university health professionals.

A draft Federal Law on Health Professions (GesBG/LPSan) is currently being developed jointly by SERI and the FOPH. The aim is to regulate educational standards for non-university health professionals in a similar way as for university health professionals. The draft law is not yet available as of autumn 2015. As a result of a preliminary consultation phase, the Federal Council has decided that the new law should introduce a register of non-university health professionals. In addition, stakeholders are currently discussing the scope of the law concerning the level of professional training to be included (Bachelor level only or Master level training as well?) and the types of educational institution (education at Universities of Applied Sciences only or at Colleges of Professional Education and Training as well?) (SERI, 2014a).

It has been estimated that the need for non-university health professionals will increase over the coming years (Jaccard Ruedin et al., 2009). In response to this and in an attempt to reduce dependency on foreign health workers, a “Masterplan for Training of Health Professionals” was agreed upon by all relevant stakeholders in 2010 (SERI, 2010), including SERI, the FOPH, GDK/CDS and OdASanté (see also section 4.2.3).

2.8.4 Regulation and governance of pharmaceuticals

Legislation and policy in the field of pharmaceuticals are the responsibility of the FDHA, where these issues are dealt with by the FOPH. The Swiss Agency for Therapeutic Products (Swissmedic), a public institution affiliated with but formally outside the government (see section 2.3.1), is the most important regulatory body for marketing authorizations. The Federal Drug Commission (FDC) provides advice to the FOPH, in particular concerning reimbursement decisions.

The most important legal documents forming the basis for the regulation of pharmaceuticals are: the Federal Law on Therapeutic Products (HMG/LPTh) of 2002 (with the latest revision in 2014); the Ordinance on Requirements for Marketing Authorization (AMZV/OEMéd); and the Ordinance on Simplified Marketing Authorization (VASV/OASMed). In addition, KVG/LAMal and the more general ordinances on health insurance, i.e. KVV/OAMal and KLV/OPAS, are important for the regulation of reimbursement decisions.

When introduced in 2002, the HMG/LPTh harmonized pharmaceutical regulations across Switzerland and closed regulatory gaps. It was partially revised in 2008 (with changes in force since 2010) in order to make it easier for hospitals to import pharmaceuticals (without marketing authorization) and to produce pharmaceuticals in hospitals. At the time of writing, the HMG/LPTh was again undergoing revisions, which aim amongst others to promote the development of pharmaceuticals for children, simplifying market access for complementary and alternative medicines, and improving pharmacovigilance. The revised law is expected to come into force in mid-2017.

Swissmedic: Marketing authorizations and market surveillance, licensing of producers and retailers

Swissmedic is the responsible authority for assessing quality, safety and effectiveness of pharmaceuticals and for issuing marketing authorizations. Applicants for a marketing authorization have to submit information on therapeutic and adverse effects, as well as results of laboratory tests and clinical trials. In addition, they have to pay a fee, which depends on whether they apply for normal assessment or fast-track assessment (higher fee). Fast-track assessment is available for new medicines with potentially high therapeutic value or for medicines treating life-threatening conditions or conditions for which no satisfactory therapy is available. Normal assessment can take up to 330 days, while fast-track assessment will take less than 140 days. In 2013, Swissmedic approved 26 new medicines (substances), of which four gained market access through fast-track assessment (Swissmedic, 2014)

A marketing authorization is valid for a period of five years but can be renewed upon request if a review by Swissmedic determines that the drug still fulfils the regulatory requirements. Until 2017, marketing authorizations awarded by the predecessor of Swissmedic, the Inter-cantonal Office for the Control of Medicines (IKS), remain valid. After that, products will have to be re-evaluated by Swissmedic.

Approved medicines are categorized by Swissmedic into one of five categories (A to E, see Table 2.5) depending on the degree of harm that can be caused by inappropriate use of the medicine. Lists A and B contain prescription-only medicines, which can be dispensed only by pharmacists, doctors or hospitals. All other categories are over-the-counter (OTC) drugs that do not need a prescription. List C medicines can be dispensed at pharmacies; list D medicines at drug stores as well; and no restrictions apply to the sale of list E products. Public advertising is not permitted for prescription pharmaceuticals (categories A and B). Special regulations apply to narcotics and a separate category (A+) exists for these.

Table 2.5
Categories of pharmaceuticals

Categories of medicinal products		Dispensed by:
A+	Narcotics: with special prescription from a doctor	Pharmacies, hospitals, physicians
A	Prescription only: one time dispensation	
B	Prescription only	
C	No prescription but advice needed	Above + drugstores
D	Supply on technical advice	
E	Supply without technical advice	

Source: Authors' own compilation, based on the Ordinance on Pharmaceuticals (VAM/OMéd) and the Ordinance on Narcotics (BetmKV/OCStup).
Note: In many cantons, doctors can also dispense any category of medicinal products.

Drugs that have been approved by Swissmedic for the first time are protected from competitors for a period of 10 years. After that, potential competitors, i.e. generics producers/retailers, do not need to provide full documentation when they apply for a marketing authorization. Instead, if the producer/retailer proves bio-equivalence, Swissmedic will approve the application on the basis of the documentation originally provided by the producer/retailer who first applied for a marketing authorization.

Swissmedic is also responsible for market surveillance. On the one hand, it operates the national pharmacovigilance system, to which producers and wholesalers of pharmaceutical products have to directly report adverse events. Pharmacists, medical doctors and other relevant health professionals report first to one of six regional pharmacovigilance centres, which then report to Swissmedic. On the other hand, Swissmedic receives periodic safety update reports from producers as part of its risk management system. Information on identified risks is either shared with the public or Swissmedic can recall a batch from the market. In 2013, in total 476 reports were assessed by Swissmedic and in 29 cases a batch was recalled from the market.

In addition, Swissmedic is responsible for the licensing of producers and wholesalers, and monitors the advertising ban. It is entitled to carry out inspections of producers and wholesalers to ensure compliance with regulations on quality assurance.

Reimbursement decisions: inclusion in the benefits basket

Once a drug has been granted a marketing authorization, it can be used by physicians in hospitals as part of normal inpatient treatment provided to patients. Usually, reimbursement is available as part of the DRG-based hospital payment, which is independent of the specific type of drug used during treatment (see section 3.7.1).

However, for use in ambulatory care, a new pharmaceutical has to be included in one of the two positive lists of medicines reimbursable under MHI. The first list includes prefabricated pharmaceutical “specialties” that are either produced by pharmaceutical companies in Switzerland or imported from abroad (<http://www.listofpharmaceuticalspecialities.ch>; SL). The other list includes medicines (substances) and corresponding tariffs (list of medicines with tariffs; LMT). Medicines included in the LMT can be used by pharmacists in pharmacies or hospitals in their laboratories for the preparation of medicines for individual patients.

The FOPH manages the two positive lists and is advised by the FDC (see section 2.8.1). Before including a new drug in the list, the FOPH will assess whether the drug complies with the criteria of effectiveness (in fact, often only efficacy), appropriateness and cost-effectiveness, as demanded by the KVG/LAMal (Art. 32). Effectiveness and appropriateness are assessed mostly on the basis of material provided to Swissmedic by the producer as part of the application for marketing authorization. Comparative effectiveness is (sometimes) assessed on the basis of clinical studies that have to be provided by the producer of the drug.

Concerning the criterion of cost-effectiveness, the KVV/OAMal defines that a drug is cost-effective if it provides the indicated therapeutic effect with minimal financial outlay (Art. 65b KVV/OAMal). This implies that in order for a new drug to fulfil the cost-effectiveness criterion, it has to be either cheaper or more effective than existing drugs for the same indication. Therefore, the FOPH performs a therapeutic price comparison, where costs of the new and of existing drugs are assessed on the basis of daily treatment costs at ex-factory price levels. In 2015, the KVV/OAMal and KLV/OPAS were adapted to improve transparency, efficacy and quality of the evaluation of cost-effectiveness. Since then, criteria for assessing the comparative effectiveness of a new drug have been specified, and new drugs are classified as having no, small, moderate, large or very large additional benefit (in comparison to existing drugs).

In addition, international price comparisons (external reference pricing) play an important role for the criterion of cost-effectiveness: the ex-factory price of a drug (net of value added tax; VAT) is not allowed to exceed by more than 5% the average of ex-factory prices in nine reference countries (since June 2015): Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, the Netherlands and Sweden (Art. 34a KLV/OPAS). Formal cost-effectiveness assessments, e.g. evaluations of the incremental cost-effectiveness per quality-adjusted life year, are not required by the FOPH prior to the inclusion of a new drug in the positive list.

The FDC appraises the information assessed by the FOPH and provides its recommendation separately for each of the three criteria (effectiveness, appropriateness and cost-effectiveness) and, since 2015, publishes the basis for its recommendations. The FOPH then makes the final decision on reimbursement based on the FDC recommendation (see section 2.8.1). Decisions are re-evaluated every three years and after patent expiry.

After market authorization by Swissmedic, the FOPH generally decides within 60 days on the inclusion of a new drug into the positive list (FOPH, 2013j). The total time from application for reimbursement until inclusion in the positive list depends on the meeting schedule of the FDC. There are six annual FDC meetings. If a new drug received its marketing authorization through the fast-track process, an accelerated reimbursement process is in place.

Generics, co-marketing products and new forms with identical price levels are included in the positive list by an abbreviated process without FDC assessment within about 6 weeks. OTC drugs and pharmaceuticals of alternative and complementary medicines can also be included in the positive list (SL).

At the end of 2013, the SL included a total of 2871 products in 9563 preparations. About 92% of these were prescription-only (categories A and B), and the remaining 8% were available without prescription (categories C and D). In 2013, around 41% of all SL preparations were generics, as were more than 61% of the preparations newly included in the SL in 2013 (FOPH, 2013j).

Pricing decisions

When assessing a pharmaceutical for inclusion in the positive list, its price is an important criterion. All pharmaceuticals are included in the lists with their prices specified by the FOPH. Prices are fixed on the basis of both external reference pricing and therapeutic price comparisons. In this process, the average of the external price comparison is considered as two thirds and the average of the therapeutic price comparison is considered as one third (Art. 65b KVV/OPAS).

Drugs that are more effective or have fewer side-effects can be awarded an innovation premium to cover costs of research and development. The size of the premium depends on the degree of innovation.

A generic is included in the positive list only if its ex-factory price is lower than its Swiss reference product after patent expiry. In 2012, five categories of price discounts were introduced: if the originator's market volume is small, the generic price will be set only 10% below the originator's price. Depending on

the market volume, the discount incrementally increases up to 60% for drugs with a high sales volume. The differential price decreases are intended to make it attractive for generics producers to enter the small Swiss market.

After a few rounds of irregular price revisions and aligning of prices with comparator countries, a new system of regular re-evaluation of drugs in the positive list was introduced in 2009 (Art. 65d KVV/OAMal). As a result, pharmaceuticals are re-evaluated every three years and after patent expiry or after change of indications and limitations. During re-evaluation, the FOPH determines whether a drug still fulfils the conditions for reimbursement, especially whether the price of the drug still fulfils the criteria for cost-effectiveness (Art. 65d KVV/OAMal). If the FOPH finds that the price in Switzerland is more than 3% above the cost-effective price (based on reference pricing and therapeutic price comparison), and if this difference has led to excess earnings of more than Sw.fr.20 000 for the pharmaceutical company, the FOPH can mandate the company to pay back the excess earnings to the health insurers (Art. 67 KVV/OAMal). Between 2012 and 2014 the prices of about 1500 drugs were reduced, which resulted in cost savings of over Sw.Fr.600 million.

Non-reimbursed drugs are not subject to price controls, although the Price Supervisor is involved in monitoring prices.

Retail pricing and measures to improve cost-effectiveness

The maximum retail price of drugs in the positive list is calculated from the ex-factory price by adding a distribution surcharge and a reduced VAT rate of 2.5% (FOPH, 2013j). The distribution surcharge for prescription medicines comprises a regressive mark-up of 0–12% (0% for drugs with an ex-factory price of Sw.fr.2570 or more, 7% for drugs with an ex-factory price between Sw.fr.2569 and Sw.fr.880, and 12% for drugs with an ex-factory price of less than Sw.fr.880), and a logistic related surcharge per pack ranging from Sw.fr.4 (for drugs with an ex-factory price below Sw.fr.5) up to a maximum of Sw.fr.240 (for drugs with an ex-factory price of Sw.fr.2570 or more). For OTC drugs included in the positive list, the price related surcharge is 80% of the ex-factory price.

To improve cost-effectiveness in the use of medicines and to overcome unintended consequences of a link between the payment of pharmacists and the financial volume of dispensed medicines, the remuneration of pharmacists was reformed in 2001 (Vaucher & Rohrer, 2015) (see section 3.7.1). Pharmacists are encouraged to substitute generics for branded drugs unless the prescribing physician explicitly demands that the branded drug be dispensed (Art. 52a KVG/LAMal). The act of substituting a generic is reimbursed separately (see section 3.7.1).

In addition, since the beginning of 2006, there have been differentiated co-insurance rates for branded drugs for which generic substitutes exist (Art. 38 KLV/OPAS). A 20% co-insurance rate (instead of 10%) applies if the price of the branded drug exceeds by more than 20% the price of the lower third of generic substitutes in the positive list. However, the market share of generics continues to be relatively small, when compared with other European countries (Ziegler, 2010). There have been no measures specifically targeted at influencing physician prescribing behaviour towards increased use of generics.

2.8.5 Regulation of lab tests, medical devices and aids

Marketing authorization

Regulations in Switzerland concerning marketing authorization and classification of medical products are in line with European regulations. The European directives 93/42/EEC on medical devices, 90/385/EEC on active implantable devices, and 98/79/EC on in-vitro diagnostics are also valid for Switzerland. They are enforced by national law, i.e. the Federal Act on Medicinal Products and Medical Devices (TPA/ LPT_H) and the Ordinance on Medical Products (MepV/ODim).

The Medical Devices Directive 93/42/EEC has established a four-part classification system for medical devices. The rules for classification take into account the risk associated with the device, its degree of invasiveness, and the length of time it is in contact with the body. A device's classification determines the type of assessment the manufacturer must undertake to demonstrate conformance to the relevant directive's requirements.

Switzerland recognizes conformity assessments of medical devices from EU Member States, EFTA States and Turkey (based on bilateral agreements or mutual recognition agreements). Devices that have been approved by a recognized (so-called notified) body in these countries receive the CE marking, which certifies that a product meets the requirements of the applicable directive. Producers of devices with a CE marking do not need to obtain authorization from Swissmedic and do not need to notify Swissmedic.

However, Swissmedic does have to be notified if companies would like to place on the market certain specified medical devices, which include low-risk (class 1) medical devices, in-vitro diagnostic devices manufactured in Switzerland, and implantable medical devices derived from human tissue which has been rendered non-viable. (This is because common conformity standards

have not yet been defined for these products). Advertising to the general public is not permitted for medical devices subject to prescription or for medical devices placed on the market for exclusive use by professionals.

Swissmedic is responsible for market surveillance and may carry out inspections in case of serious incidents. Cantons are responsible for surveillance of medical device retailers or small-scale manufacturers (craftsmen). All persons placing medical products on the market (manufacturers, importers, wholesalers, sales outlets, etc.) are required by the MepV/ODim to maintain a system for post-market surveillance of the products to monitor the safety, quality and durability of their products. In order to do so, customers and possibly (according to the risk) also individual patients have to be tracked. Serious incidents detected, e.g. in the course of customer satisfaction surveys or clinical follow-up studies, have to be reported to Swissmedic, which will monitor the corrective actions taken to avoid these incidents in the future.

Reimbursement decisions

Reimbursement decision procedures for medical products differ depending on whether they are used as part of medical or surgical procedures in the ambulatory or hospital sector (medical devices), whether they are lab tests (analyses and diagnostics), or whether they are directly used by patients (see section 2.8.1). Medical aids for everyday life, such as wheelchairs, are usually reimbursed by Invalidity Insurance (IV/AI) (see section 3.6.2).

All **medical devices** used as part of services and procedures performed by physicians or hospitals are automatically covered by MHI unless challenged by a health insurer and its medical reviewers (Müller, Amstad & Eldessouki, 2012). If the Federal Commission for Medical Benefits and Principles (ELGK/CFPP) determines – after consultation with FMH and santésuisse – that an assessment is necessary, the producer has to provide scientific and economic evidence, which will then be assessed by the FOPH in a standardized way. This assessment report is sent to the ELGK/CFPP for appraisal. The ELGK/CFPP makes recommendations to the FDHA for a final decision.

Lab tests and medical devices for home use by patients must be included in the positive List of Analyses (AL/LA, Annex 3 of KLV/OPAS) or in the List of Medical Devices and Aids (MiGeL/LiMA, Annex 2 of KLV/OPAS) in order to be reimbursed by MHI. The lists are updated with new items on an annual basis (Müller, Amstad & Eldessouki, 2012) upon application (often by producers) and after an assessment of products by the FOPH. The FOPH will request more or less extensive data from producers and care providers depending on the degree of novelty and extent of differences of the product in relation to

existing ones, and it may carry out supplemental research. The assessment will be forwarded for appraisal to the Federal Commission for Analyses, Products and Devices (EAMGK/CFAMA), which makes recommendations to the FDHA for a final decision.

Purchasing and pricing

Medical devices and analyses are purchased by providers (hospitals or physicians). All products with a marketing authorization can be used in the inpatient sector and reimbursement is available as part of the DRG-based hospital payment system. The DRG-based payment is independent of the costs of the specific product.

In the ambulatory sector, laboratory analyses used by physicians are reimbursed according to a tariff system consisting of relative weights (defined in the AL/LA) and a point value, which was Sw.fr.1.00 in 2015 (Federal Council, 2015).

Medical devices for home use by patients are purchased directly by patients. The MiGeL/LiMA specifies maximum reimbursements for groups of products (e.g. insulin pumps). If patients choose a particular product, which is more expensive than the maximum reimbursement price specified in the MiGeL/LiMA, they have to cover the difference out-of-pocket (OOP). In order for costs to be reimbursed by MHI, medical products have to be prescribed by a physician and purchased from an approved handover point (e.g. a pharmacy) that has a contract with insurers.

2.8.6 Regulation of capital investment

Capital investments in ambulatory care are the responsibility of providers (physicians, chiropractors, etc.) and have to be recovered from the revenues generated through reimbursements for service delivery. Cantons may specify certain minimum requirements for practice equipment, room size or flooring material. Regulation of investments for ambulatory care provided by hospitals is somewhat unclear because equipment can be used for both inpatient and outpatient care, and hospital owners may cross-subsidize investments.

Since the reform of hospital financing (see sections 3.7.1 and 6.1.2), hospital inpatient infrastructure should also – at least in theory – be financed exclusively by owners. However, cantons remain influential in determining investment decisions as they own a significant share of hospitals (see section 4.1.2 for more detail). In addition, cantonal planning procedures intend to ensure an equitable geographical distribution of capital and certain structural requirements can be

specified as prerequisites for inclusion in cantonal hospital lists. Finally, several cantons continue to operate systems of budgets or investment allowances that existed prior to the introduction of the new financing system or they support their cantonal hospitals by making available credits for investments (Widmer & Telser, 2013).

Investments in mental health care institutions and rehabilitation clinics are mostly financed by global budgets of cantons but this is likely to change as a result of current attempts to develop new payment systems for these institutions.

2.9. Patient empowerment

2.9.1. Patient information

Most people still regard their family physician, family members and friends, as their primary sources of information on personal health and the health care system. In addition, a growing number of information materials and counselling services are being made available free of charge by the various stakeholders of the system. For example, people can easily obtain information provided by various actors (comparis.ch, FMH, SAMV, health providers, SPO, Swiss Patient Federation) on different MHI companies, as well as on patient rights, medical treatment and, increasingly, on health care providers as well, especially for the inpatient sector (see section 5.4.3). However, differing cantonal regulations relating to information services (e.g. Ombudsman, cantonal patient information services, delegated patient organizations) leads to a complex and often non-transparent situation. A recent evaluation report on patient information by the FOPH concluded that a central information service run at the federal level would be desirable (FOPH, 2015g).

Since 2008, the FOPH has provided standardized information online about hospitals, including (self-declared) key indicators such as specialized departments, treated indications and economic performance (FOPH, 2015f). However, these data are of limited value as they do not allow easy comparison of results, outcomes or costs. In addition, quality indicators (CH-IQI) have been introduced, which enable direct comparisons between individual hospitals, e.g. risk-adjusted (age and gender) mortality of patients with acute myocardial infarction for age 65–84. However, there are concerns regarding the reliability of these and they are rarely used by patients or analysts. Information on

certain quality indicators is also published by the ANQ. This includes results of patient satisfaction surveys for the 187 participating hospitals in 2012 (ANQ, 2013, 2014a).

A Freedom of Information Act (FoIA) was passed in 2004, allowing access by the general public to data held by the federal administration or bodies enacting federal legislation. In some rare cases, this may have contributed to increased transparency as it has allowed access of media to certain documents, e.g. concerning reimbursement decisions or conflicts of interests in commissions.

2.9.2 Patient choice

The Swiss health system offers a lot of choice. First, residents are free to choose any company offering MHI in their canton of residence. Second, they can always choose between several plans offered by the same company, which may vary considerably as regards premium levels, deductibles or restrictions in the choice of doctor or hospital. Patients may switch sickness funds twice a year but must adhere to specific dates (e.g. written notification of switching health insurance funds must be submitted by 31 March or 30 November to switch funds by 1 July or 1 January, respectively). Details of the procedures for changes of insurance options are laid down in Art. 94 and Art. 100 KVV/OAMal (FOPH, 2014m).

Third, patients usually have considerable choice concerning their ambulatory care provider. In traditional MHI plans, patients are free to choose any licensed ambulatory provider, including a GP or specialist, and referrals are not required (see section 5.2). However, an increasingly large proportion of the population (more than 60% by 2013) is insured by managed care type insurance plans (FOPH, 2014k), where patients agree to limiting their choice (and direct access to specialists and hospitals) in exchange for lower premiums.

Fourth, patients may choose to be treated in any hospital (acute, psychiatric, rehabilitation) included in the cantonal lists (see section 5.4).

In some cantons, choice may be more limited than in others because of a lower density of physicians, specialists or hospitals. However, in general, the small size of the country and the excellent public transport infrastructure make it easy for patients to reach alternative providers within little time. In addition, certain financial incentives exist for patients to choose providers located in their canton of residence, unless treatment outside their canton is medically indicated. Tariffs of physicians and hospitals differ across cantons while, for inpatient services, MHI reimbursement is usually available only up to the level

that would have been paid to providers in the canton of residence. VHI is also available, which can cover the additional costs of choosing a provider located in another canton.

2.9.3 Patient rights

There is no specific piece of federal legislation summarizing patient rights in a clear and comprehensive fashion. The federal level can only legislate on patient rights in areas where the constitution gives it the right to do so (e.g. health insurance, transplantation medicine, reproductive medicine, epidemics, pharmaceuticals). Individual patient rights are enshrined in a range of cantonal laws and federal legislation, and they are included in private law, public law and penal law. This fragmented regulation contributes to considerable intransparency of patient rights and is perceived to be a barrier to increasing the mobility of patients, as it has resulted in legal uncertainty concerning the applicable law (cantonal state liability law versus federal private law) (FOPH, 2015g).

Enshrined in a variety of cantonal and federal laws, patients have the right to:

- choose their physician and hospital freely (although restrictions may apply depending on the insurance plan);
- receive timely, face-to-face and comprehensive information about a diagnosis and proposed treatment options;
- seek a second opinion (although restrictions may apply depending on the insurance plan or cantonal legislation);
- determine the type of treatment and the duration of treatment (except in the case of forced hospitalizations according to the Federal Epidemics Law);
- receive high-quality and appropriate medical treatment according to recognized standards of medical practice;
- be treated with pharmaceuticals or medical products that satisfy the legal quality and safety requirements;
- receive a written record of their diagnoses and treatments and access to their medical records;
- have their patient data treated with confidentiality;
- be accompanied by close relatives to consultations.

Cantonal regulations on patients' rights can vary in detail, degree and scope of regulation and may also touch upon formal mediating procedures through patient services either on a hospital or central cantonal level (Canton Bern et al., 2013).

One recent reform with relation to patients' rights was a revision in 2008 of the civil law book concerning the protection of the elderly and the young. The new legislation, in force since January 2013, enables patients to designate in advance (e.g. in the case of dementia) a legal guardian and to determine through a living will what kind of medical treatment they wish to receive (FOJ, 2012). In addition, the position of close relatives in determining medical treatments for a patient has been strengthened.

In 2014, an article was added to the Federal Constitution, which guarantees a right to sufficient and high-quality primary care (see section 6.1.4). Although this does not imply an important change with regard to patient rights (as the right to medical treatment has long been enshrined in cantonal legislation), this article means an important shift with regard to federal competencies in this regard.

2.9.4 Complaints procedure

Conflicts between patients and providers can be resolved at different levels. Most conflicts are resolved through out-of-court settlements. A majority of cantons have established mediating services either on a central cantonal level, for individual hospitals or mandated patient organizations. The two most important patient organizations – the Swiss Patient Federation (DVSP) and the Swiss Patient Organization (SPO/OSP) – play an important role in out-of-court settlements as they provide legal advice and medical expertise to their members. The DVSP and the SPO/OSP have specialist lawyers, who support their members in filing complaints and negotiating settlements. According to the DVSP, 95% of complaints can be resolved out of court under civil law, although out-of-court settlements are becoming more difficult (Züst & Baumgartner, 2015). According to the SPO, about 120 to 160 people per year are supported by the organization because of suspected medical negligence that qualifies for liability compensation, and about 70% of cases forwarded to their lawyers end with a positive decision for the patient (Züst & Baumgartner, 2015).

Out-of court settlements are also supported by the FMH through its malpractice review boards. These boards consist of independent experts and collect all the necessary information (e.g. patient's pathway, physician's notes, etc.) before providing an expert review to establish whether there has been medical malpractice. In 2013, 79 patient complaints were filed, and the review board decided in favour of the claimant in 30 cases (FMH, 2013a).

Overall, i.e. since 1982, the review board has decided in about one third of all 3534 received complaints in favour of the claimant. However, these decisions are not legally binding (although often used in court) and do not compensate harmed patients. The FMH demands Sw.fr.600 for their expenses but may reimburse this fee if medical malpractice is found.

Ultimately, patients harmed by negligent actions have the right to compensation according to either civil law or public law (depending on the type of provider – public law for public hospitals). It may take a long time for the courts to rule on such cases and the burden of proof lies with the patients. In some (rare) cases, it is also possible for patients to file a complaint for prosecution against health care providers, manufactures of pharmaceuticals or medical devices. In this case, the prosecution will collect the necessary evidence.

According to a survey conducted by H+, 55 hospitals out of 68 participating hospitals registered a total of 6212 liability cases in the past 10 years, of which 97% were resolved through out-of-court settlements (FOPH, 2015g). In 1.5% of cases liability claims were resolved under civil law and 1.5% of cases were resolved under penal law. In 32% of all cases, patients received financial compensation.

Self-employed physicians are required to take out liability insurance. Employed physicians, e.g. in hospitals, are insured via their employer. However, according to the DVSP, insurers are increasingly resisting paying out compensation to patients during out-of-court settlements, leading to more court cases (Züst & Baumgartner, 2015).

A no-fault compensation system, similar to medical treatment risk funds established in other countries does not yet exist in Switzerland. However, in response to a recent report published by the Federal Council (FOPH, 2015g), there are plans to evaluate the feasibility of introducing such a mechanism in the future.

For complaints against health insurers, there is an ombudsman office at the federal level, which provides counselling free of charge and mediates complaints for any area of health insurance. In 2013, 5668 claims were reported against health insurers, mostly regarding high levels of premiums or the listing of patients on cantonal black lists for negligent defaulters (Ombudsmann für Versicherungen, 2014). In general, these services are only provided for participating health insurers and are not legally binding. There is also an ombudsman to mediate conflicts and support patients in matters relating to VHI and accident insurance.

2.9.5 Public participation

There are various ways in which the public can considerably influence health policy-making. Patient organizations, in particular the DVSP and SPO, are represented on several decision-making bodies and patient organizations for various chronic diseases advocate for the rights of patients suffering from chronic diseases. The most prominent disease-specific patient organizations (e.g. Swiss Cancer League, Swiss League against Rheumatism, Swiss Lung Association, Swiss Heart Foundation, Swiss Association of Diabetes) are organized in a federation (GELIKO) and also focus on prevention, medical research and professional reintegration of their members.

Public participation is furthermore ensured through various aspects of Swiss democracy: first, citizens have the right to decide on almost all health-related legislation through (mandatory or optional) referenda. Second, key features of health service provision are organized by the cantons, where direct democracy allows local populations to be involved in decision-making and to vote on most issues of concern. Third, the legislative process includes a formal consultation process (*Vernehmlassungen/consultations*) in the early stages of drafting new laws, where all relevant stakeholders (academia, insurers, patients, providers) can make their opinions known to the government.

Finally, the Swiss health system offers formal public participation in several important institutions. For instance, all three advisory commissions on insurance benefits (ELGK/CFPP, EAK/CFM and EAMGK/CFAMA) offer two seats for the insured. Therefore, the two patient organizations (SPO and DVSP) are represented in the ELGK/CFPP and EAMGK/CFAMA as well as in the ANQ, Swissmedic and parliaments at different levels (Züst & Baumgartner, 2015). However, in 2015, an evaluation of public participation processes concluded that the existing patient organizations should be enabled to play a stronger and more systematic role in decision-making bodies (FOPH, 2015g). Patient organizations can often only devote relatively scarce personnel and financial resources to the multitude of decision-making bodies and parallel legislative initiatives, and further professionalization would be necessary in order to cope with all the relevant participative processes.

2.9.6 Patients and cross-border health care

Switzerland adopted the European Commission Regulation EC883/2004 as part of its agreement with the EU on the free movement of people. Consequently, all MHI insured are entitled to receive services in EU Member States, as well as in Iceland, Liechtenstein and Norway. Swiss insured have a European Health

Insurance Card (EHIC) issued by their MHI company. They can use this card when on a temporary stay abroad, for example, as tourists. On producing the EHIC, Swiss insured are treated by providers abroad under the same conditions (including cost-sharing regulations) and equal tariffs as nationals of the Member State of treatment. In most cases, costs are covered directly by the statutory system of the country of treatment and subsequently reimbursed by the Common Institution under KVG/LAMal. In 2013, the Common Institution filed 120 179 cases and reimbursed total costs of Sw.fr.83.6 million (Common Institution, 2014).

Switzerland has not agreed to implementing the EU directive on patients' rights in cross-border health care 2011/24 and is not planning to do so in the near future (FOPH, 2014b). This means that patients can not claim reimbursement for planned treatment abroad if they have not obtained prior authorization from their MHI company. Authorizations are granted only in those (very rare) cases, where a service that is included in the MHI benefits basket can not be provided in Switzerland (Art. 36 KVV/OAMal) or can not be provided within a medically acceptable time period (FOPH, 2008b).

There are a few small-scale pilot projects aiming to improve cooperation in cross-border health care with full reimbursement for medical treatments abroad (Art. 36a KVV/OAMal). These projects have to be accredited by the FDHA every four years and are regularly evaluated during this time. As part of these projects, some health insurers offer to their insured a list of treatments and providers abroad, for which they are entitled to full reimbursement. The most advanced project is conducted by the cantons of Basel-city and Basel Landschaft with the German district ("*Landkreis*") of Lörrach. In 2011, 5–8% of eligible Swiss patients were treated in the district of Lörrach (Bayer-Oglesby & Roth, 2012). The FOPH is proposing an amendment to the current legislation with the aim of providing a legal framework for a permanent establishment of such cross-border projects.

In 2012, the share of foreign patients receiving medical treatment in Swiss hospitals was 2.8% of all treated cases (compared to 14.9% extracantonal patients in 2012) (FOPH, 2015f). The Common Institution is responsible for reimbursing health providers in Switzerland and subsequently bills the statutory system of the country of origin of each patient. In 2013, 169 077 cases were recorded and costs of Sw.fr.173.4 million were reimbursed to Swiss health care providers (Common Institution, 2014).

3. Financing

In 2013, total health expenditure in Switzerland as a share of GDP was 11.5%, one of the highest shares in Europe. Only the Netherlands and France spent an even larger proportion of GDP on health. When looking at per capita spending on health, Switzerland spent US\$ 6187 (when measured in PPP), and was outranked only by Luxembourg and Norway.

Financial flows are fragmented and split between different government levels and different social insurance schemes. Resources are collected mostly through taxes (32.4% of THE in 2012) and MHI premiums (30.0% of THE) but a considerable part of tax resources are subsequently allocated to the different social insurance schemes, in particular as subsidies to lower and lower-middle income households for the purchase of MHI. As a result of this reallocation, MHI companies are the most important purchasers and payers in the system, mostly negotiating collective contracts with providers, and financing 35.8% of THE. This is followed by OOP payments (26.0% of THE) and government spending (mostly from cantons) (20.3% of THE). In international comparison, the share of public spending is relatively low, while the share of OOP payments is exceptionally high.

MHI premiums are community-rated, i.e. they are the same for every person enrolled with a particular company within a region, independent of gender or health status. Different premiums apply to three different age classes: (1) from 0 to less than 19 years; (2) from 19 to less than 26 years; (3) 26 years and above. In 2012, 29% of the Swiss population had to pay only a reduced premium or no premium at all. In addition, there are about 108 000 people (1.3% of the population) who default on paying their premiums. MHI premiums are collected by MHI companies and are subsequently reallocated between MHI companies based on an increasingly refined risk-equalization mechanism. Complementary and supplementary VHI plays a rather small and declining role, financing about 7.2% of THE in 2012.

MHI companies offer different types of MHI policy, which vary with regard to the size of deductible, i.e. the amount insured have to cover OOP before MHI coverage kicks in, and concerning restrictions to the choice of provider. The minimum annual deductible is Sw.fr.300 for adults, while the maximum deductible is Sw.fr.2500. In addition, a 10% co-insurance rate applies to all services. However, total user charges (deductible plus co-insurance) are capped at Sw.fr.1000 or Sw.fr.3200, depending on the size of chosen deductible. Insurance plans with some restriction of choice of provider (e.g. managed care type insurance) have gradually become the dominant form of insurance in Switzerland, with more than 60% of insured opting for these plans in 2013, while this proportion was below 10% in 2003.

Fee-for-service (FFS) is the dominant method of provider payment in Switzerland. For ambulatory physicians and outpatient services provided by hospitals, a nationally uniform fee schedule called TARMED was introduced in 2004. For acute inpatient care, Swiss Diagnosis Related Group (SwissDRG)-based hospital payment has replaced per diems as the most important payment mechanism since 2012. For long-term care, MHI pays a contribution that depends on the care needs of the patient, the patient pays a capped contribution, and the canton is liable to cover the remaining costs.

3.1 Health expenditure

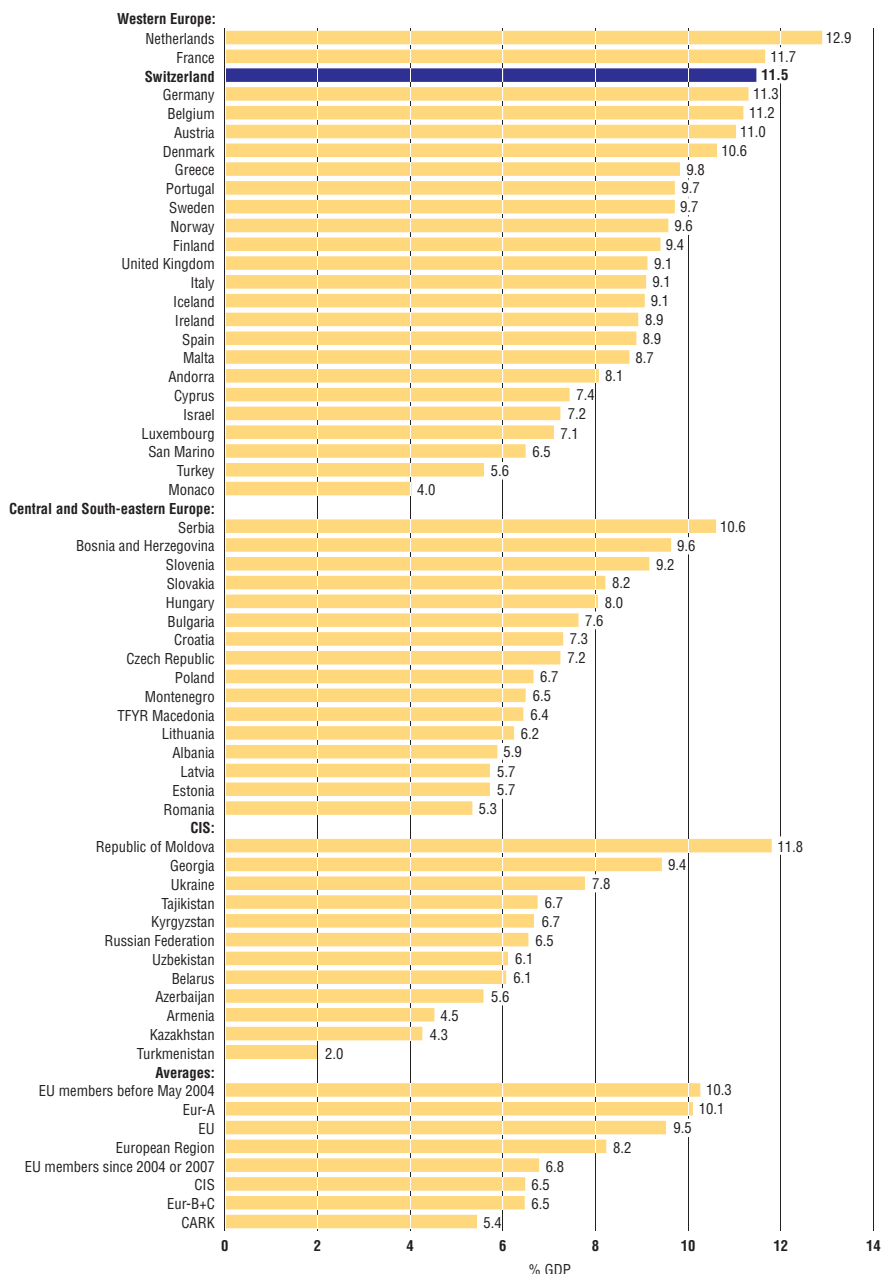
According to international databases (WHO Regional Office for Europe, 2015), Switzerland spent 11.5% of its GDP on health in 2013 (see Fig. 3.1), one of the highest shares in Europe. Other countries with ratios between 12.9% and 10.6% in 2013 were the Netherlands, France, Germany, Belgium, Austria and Denmark. All other western European countries spent less than 10% of GDP on health.

Fig. 3.2 shows trends in THE as a share of GDP between 1995 and 2013 for selected western European countries. Since 1995, Switzerland and its neighbouring countries, France, Germany and Austria, are in the top positions of the ranking. Only the Netherlands spends even more (above 12% of GDP since 2011). Relatively strong economic growth in Switzerland, in particular since 2004 (except in 2009, see Table 3.1) has meant that the proportion of GDP spent on health increased by “only” 2.0 percentage points between 1995 and 2013. During the same period, per capita spending on health in US\$ at PPP more than doubled from US\$ PPP 2566 in 1995 to US\$ PPP 6186 in 2013.

If per capita spending on health in US\$ PPP is compared across countries (see Fig. 3.3), Switzerland (US\$ PPP 6186) spends almost twice as much as the average in the EU (US\$ 3378), and is topped only by Luxembourg (US\$ 6518)

Fig. 3.1

Health expenditure as a share (%) of GDP in the WHO European Region, 2013,
WHO estimates



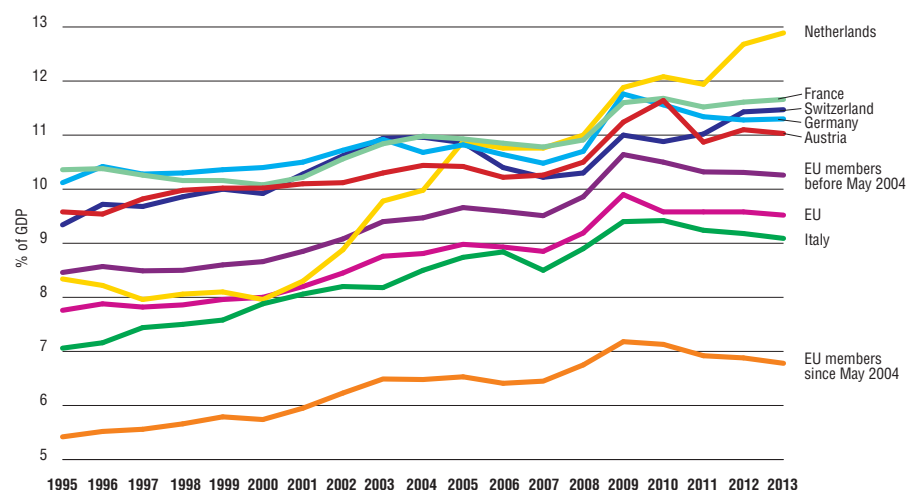
Source: WHO Regional Office for Europe, 2015.

Notes: EU: European Union; Euro-A: countries in the WHO European Region with very low child and adult mortality (Andorra, Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, the Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland, United Kingdom); Euro B+C: countries in the WHO European Region with higher levels of mortality; CIS: Commonwealth Independent States; CARK: Central Asian Republics and Kazakhstan; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

and Norway (US\$ 6307). Monaco follows with a similar amount of US\$ 6122. In those countries that spend a similar share of GDP on health as Switzerland, per capita expenditures in US\$ PPP is lower due to a lower GDP per capita.

Fig. 3.2

Trends in health expenditure (share of GDP in %): Switzerland and selected countries, 1995 to 2013, WHO estimates



Source: WHO Regional Office for Europe, 2015.

Table 3.1

Trends in health expenditure in Switzerland, selected years 1995 to 2012

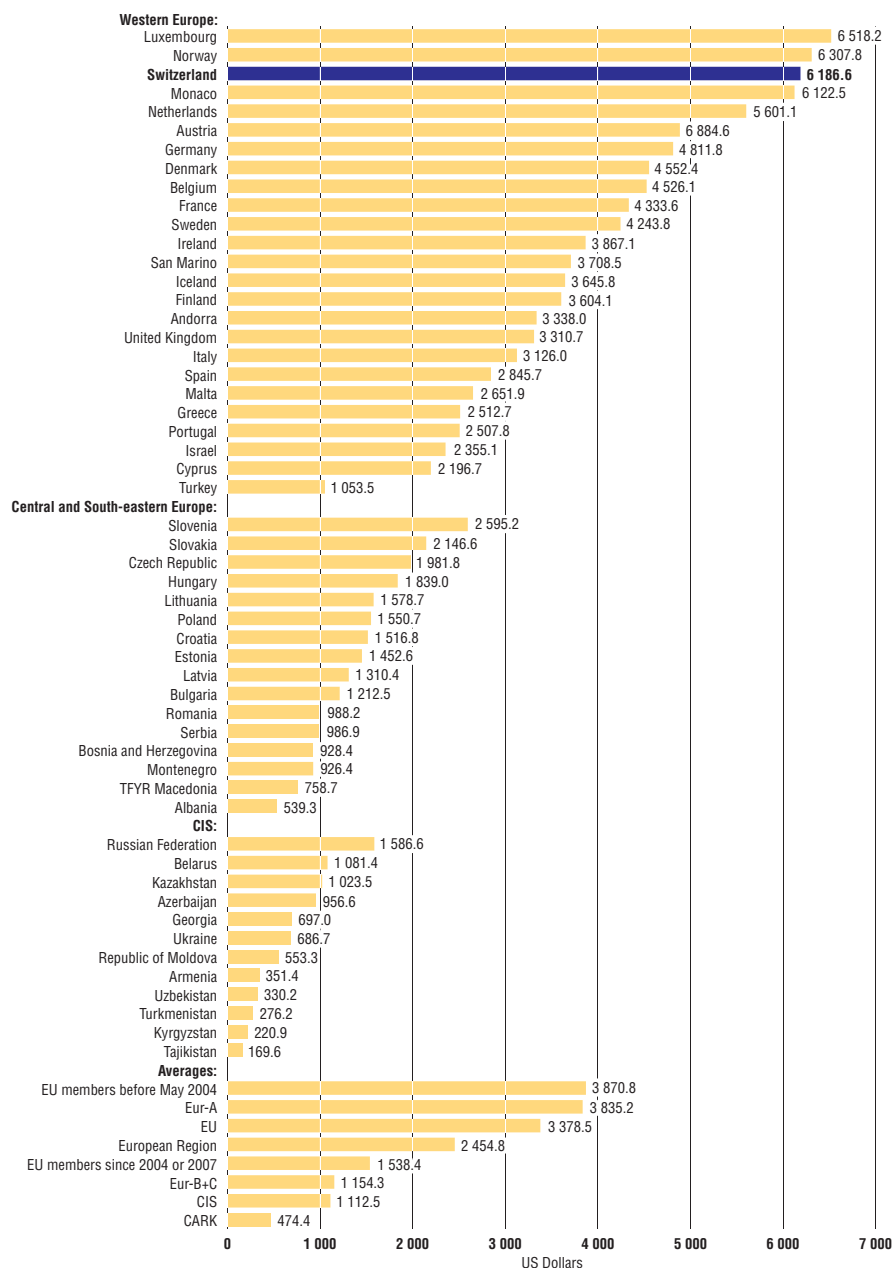
	1995	2000	2005	2008	2009	2010	2011	2012
THE in million Sw.fr (nominal)	35 759	42 843	52 043	58 426	60 981	62 495	64 566	67 982
THE as % of GDP	8.8	9.3	10.3	9.8	10.4	10.3	10.4	10.9
Mean annual real growth rate in THE	1.7	2.6	0.7	3.4	4.9	1.8	3.0	6.0
Mean annual real growth rate in GDP	4.8	3.7	2.4	1.8	-1.2	2.5	1.7	1.7
Government health expenditure as % of THE	16.0	15.1	16.7	18.6	19.4	19.0	19.5	20.3
Social health insurance expenditure as % of THE ²	—	—	—	46.5	46.2	46.3	46.0	46.5
Private expenditure on health as % of THE ²	—	—	—	34.8	34.5	34.8	34.5	33.2
Government health spending as % of total government spending	—	—	6.1	5.6	5.9	5.8	6.0	6.4
OOP payments as % of THE ^{1,2}	—	—	—	25.9	25.6	26.1	26.0	26.0
OOP payments as % of private expenditure on health ^{1,2}	—	—	—	74.2	74.4	75.1	75.2	78.5
Private insurance as % of THE	12.4	10.6	9.0	9.0	8.8	8.6	8.6	7.2
Private insurance as % of private expenditure on health ²	—	—	—	25.8	25.6	24.9	24.8	21.5

Source: FSO, 2014f.

Notes: ¹Includes other systems of social benefits (complementary payments (EL/PC) and others); ²New calculation model since 2008.

Fig. 3.3

Health expenditure in US\$ PPP per capita in the WHO European Region, 2013,
WHO estimates



Source: WHO Regional Office for Europe, 2015.

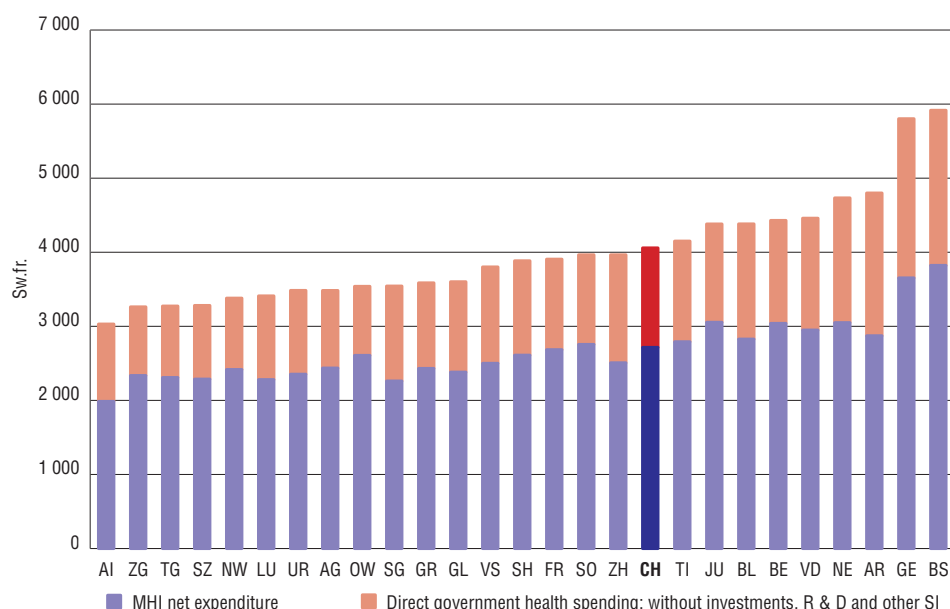
Notes: EU: European Union; Euro-A: countries in the WHO European Region with very low child and adult mortality (Andorra, Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, the Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland, United Kingdom); Euro B+C: countries in the WHO European Region with higher levels of mortality; CIS: Commonwealth Independent States; CARK: Central Asian Republics and Kazakhstan; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Regional variation

Health care expenditure varies considerably across the country (Fig. 3.4). In 2012, somewhat less than Sw.fr.4200 per capita (i.e. for the resident population of each canton) was spent on average in Switzerland by MHI companies (net expenditure, i.e. after deduction of user charges) and government (e.g. payments for inpatient care, when excluding investments in hospital structures, research and development, and the other social insurance funds to improve inter-cantonal comparability). However, per capita expenditure for the population living in the “most expensive canton”, Basel-Stadt (BS, Sw.fr.5900), was almost two times higher than the amount spent for the population in the “least expensive” canton, Appenzell Innerrhoden (AI, Sw.fr.3000). Besides Basel-Stadt, the second exclusively urban canton of Geneva (GE) stands out with costs of Sw.fr.5800, which is substantially more than the next most expensive cantons, Neuchâtel (NE, Sw.fr.4800), Vaud (VD, Sw.fr.4700) and Bern (BE, Sw.fr.4500).

Fig. 3.4

Public (MHI and government) expenditure on health in Switzerland by canton of residence, 2012



Sources: FSO, 2014h; FOPH, 2014k.

Note: The data included in the figure represent 73.5% of public health expenditures on average. Health-related expenditures for investments, research and development and the other social insurance funds (UV/AA, AHV-IV/AVS-AI, MV/AM and EL/PC – on average around Sw.fr.1500 per capita) are missing because cantonal data are sometimes unavailable.

According to a recent study, higher costs (because of higher utilization) are associated with higher levels of inpatient and outpatient hospital capacity (more beds, a larger share of hospital outpatient costs) and higher density of specialists in single practice, as well as with an older, more urban and more disadvantaged population (Camenzind, 2012a).

3.2 Sources of revenue and financial flows

The most important financial flows within the Swiss health care system are shown in Fig. 3.5.

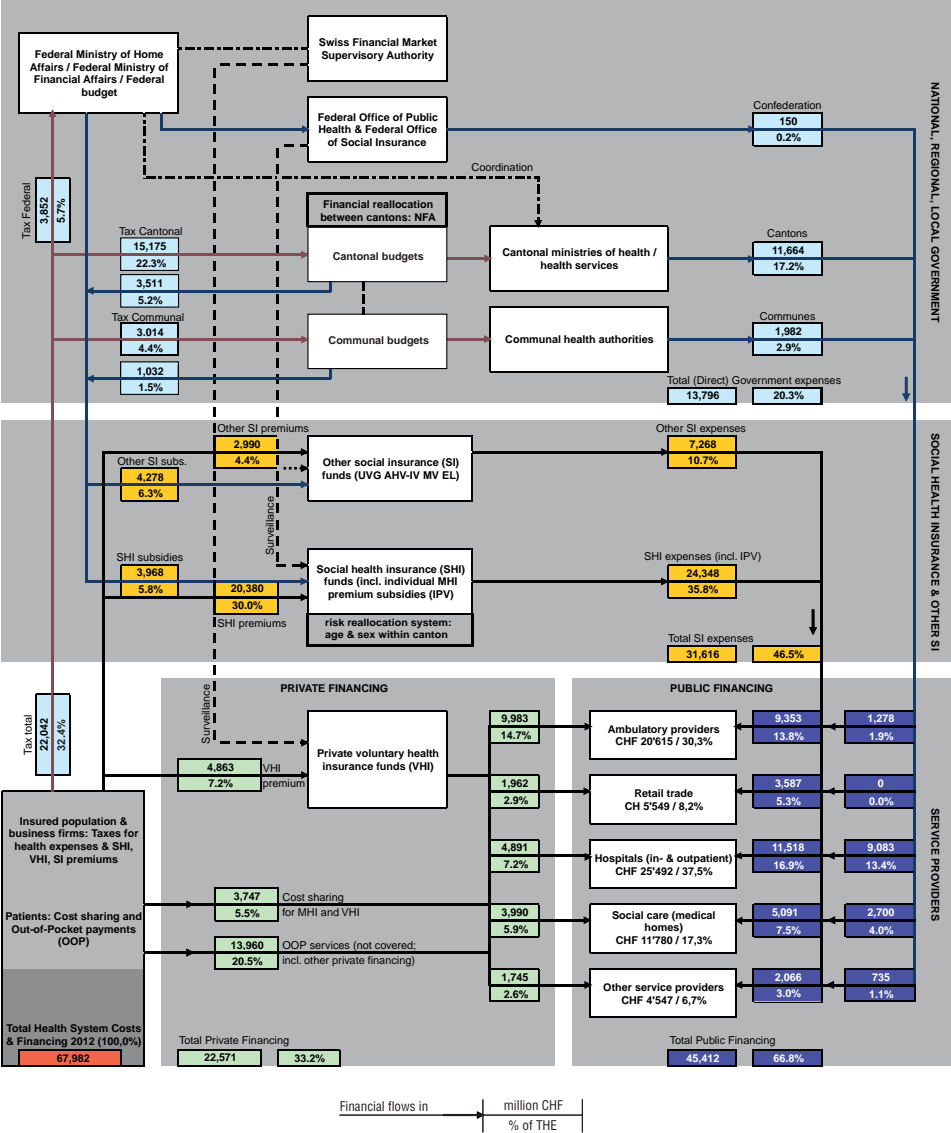
Public expenditure on health consists of three parts (Figs. 3.5 and 3.6):

- **MHI**, which was the largest purchaser in the health system in 2012, spending 35.8% of THE (right-hand side of Fig. 3.5). Revenues of MHI companies (left-hand side of Fig. 3.5) come from premiums paid by MHI policy-holders (30.0% of THE) and/or subsidies for premiums (5.8% of THE) paid out of budgets of the Confederation and cantons.
- **Other social insurance (SI)**, which accounted for 10.7% of THE. The SI consists of the health-related parts of the accident insurance (UV/AA), the old-age insurance (AHV/AVS), the disability insurance (IV/AI), the military insurance (MV/AM) and the complementary payments of AHV-IV/AVS-AI (EL/PC). Revenues of the different SI schemes again come from premiums paid by policy-holders (4.4%) and subsidies (6.3%) paid out of public budgets.
- **Direct spending by government**, which was the second most important source of spending, accounting for 20.3% of THE in 2012. Direct spending is financed from taxes collected by the Confederation, cantons and municipalities, and excludes the expenditure for premiums and other health-related subsidies. The largest part of these expenses were made by cantons (17.2%), followed by municipalities (2.9%) and by the Confederation (0.2%).

Private expenditure amounted to 33.2% of THE in 2012 and consisted of three expenditure categories:

- **Direct payments**, which were responsible for about two thirds of all private expenditure on health (or 20.5% of THE) in 2012. This also includes **other private funding** for health (mostly donations and bequests to non-governmental organizations; NGOs), which has always accounted for around 1.0% of THE since 1995.

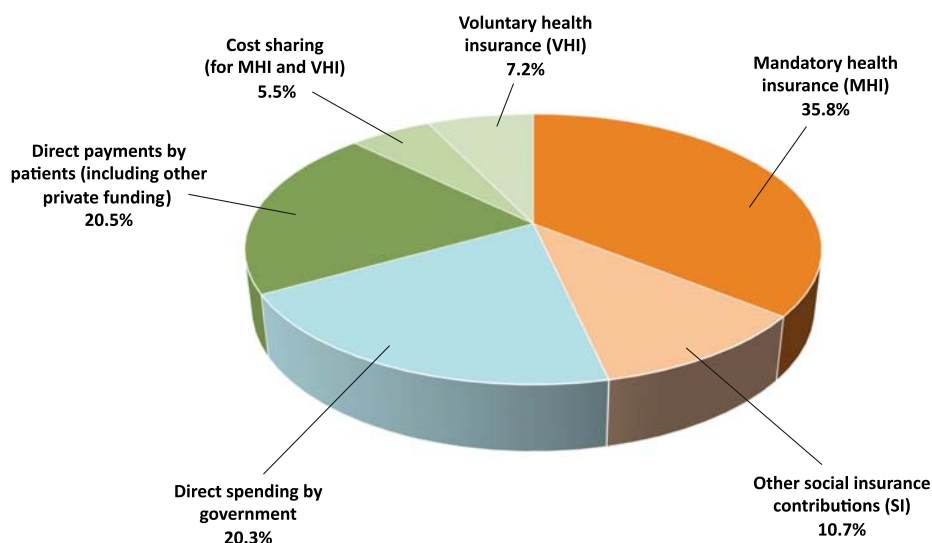
Fig. 3.5
 Financial flows in the Swiss health care system, 2012 (in million Sw.fr.)



Source: Authors' own compilation based on FSO, 2014e.

Fig. 3.6

Percentage of THE by source of spending, 2012



Source: Authors' own compilation, based on FSO, 2014e.

- **Cost sharing** for services covered by MHI (5.5%) and VHI (0.1%), together accounting for 5.5% of THE.
- **VHI**, which accounted for only 7.2% of THE in 2012, because of a continuous decline from 12.4% in 1995 and 9.0% in 2005.

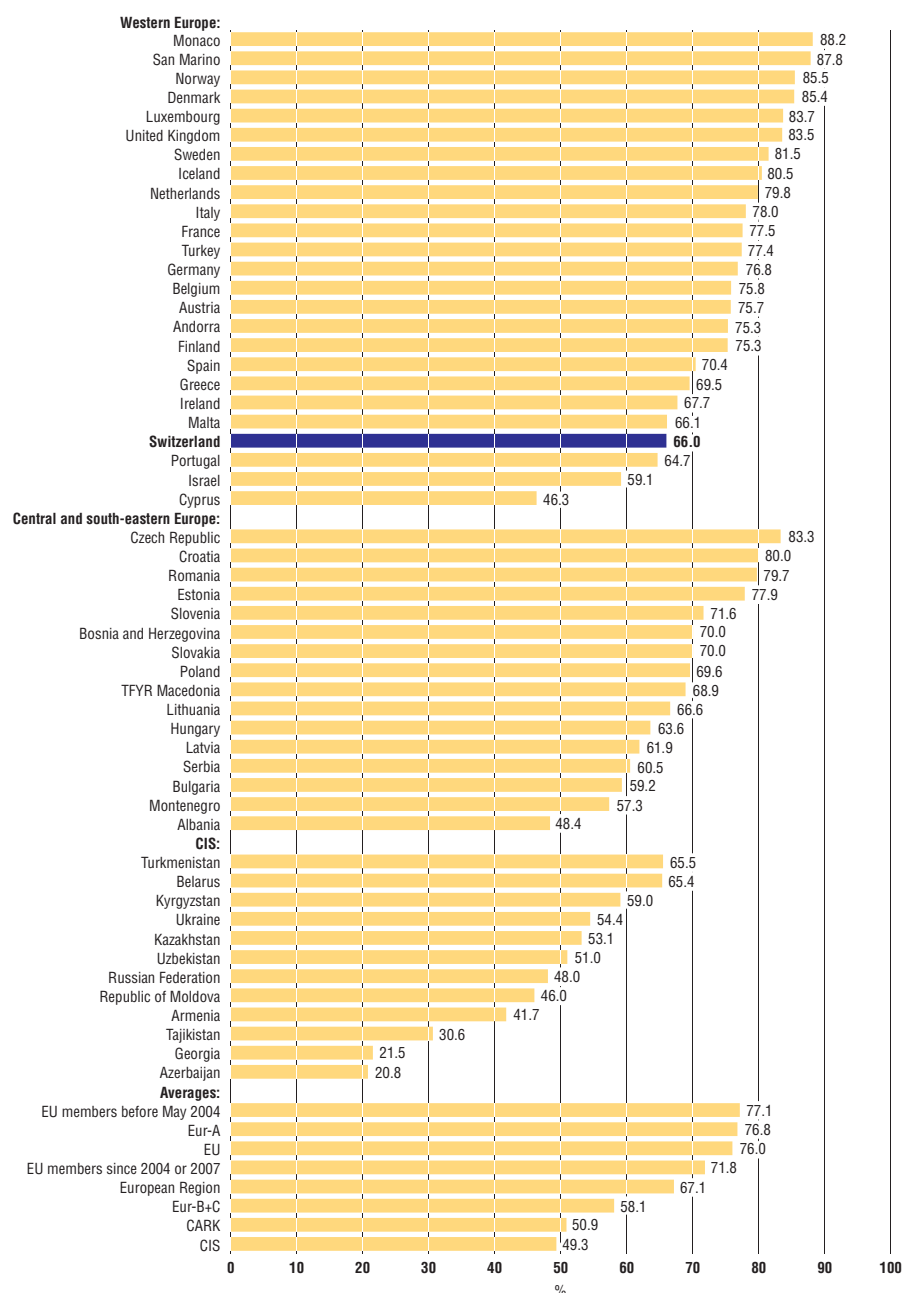
Comparing the share of public expenditure on health out of THE to other countries (Fig. 3.7) shows that Switzerland is one of the countries with the lowest share of public expenditure on health in the Western European Region: 66% of THE stems from public sources. The most important reason for this is that an exceptionally large proportion of health care is financed by OOP payments (25.9% of THE in 2013).

Linking the six different sources of revenue (see Fig. 3.6) with the most important health service provider groups reveals more particularities of the Swiss health care financing system (see Table 3.2).

The largest part of THE in Switzerland was spent on **hospital inpatient services** (32.9% of THE) in 2012. Somewhat less than half of all inpatient expenditures (15.3%) were paid for directly by governments (mostly from cantonal budgets), while UHI covered less than one third of total hospital inpatient expenditures (9.0% of THE).

Fig. 3.7

Public expenditure on health as a share of THE in the WHO European Region, 2013



Source: WHO Regional Office for Europe, 2015.

Notes: EU: European Union; Euro-A: countries in the WHO European Region with very low child and adult mortality (Andorra, Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, the Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland, United Kingdom); Euro B+C: countries in the WHO European Region with higher levels of mortality; CIS: Commonwealth Independent States; CARK: Central Asian Republics and Kazakhstan; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Table 3.2 Public and private expenditure on health (as % of THE) by source of spending and health provider group/health service group, 2012

	Ambulatory care ¹	Dental care	Hospital outpatient	Hospital inpatient	Long-term care institutions	Retail trade products	Other services (prevention and administration)	Total
Public expenditure²	13.1	0.4	6.4	27.3	8.1	7.4	4.1	66.8
Direct health spending by government	1.9	0.0	0.0	15.3	2.1	0.0	1.1	20.3
MHI contributions ³	10.0	0.1	5.9	9.0	2.3	6.7	1.8	35.8
Other social insurance ⁴	1.3	0.3	0.5	3.1	3.6	0.7	1.2	10.7
Private expenditure	8.9	5.3	2.2	5.6	5.2	3.6	2.4	33.2
Direct payments ^{5,6}	4.3	5.1	1.3	2.0	5.1	1.7	1.1	20.5
Cost sharing for MHI and VHI4	2.5	0.0	0.9	0.6	0.1	1.3	0.0	5.5
VHI	2.0	0.2	0.0	3.0	0.0	0.6	1.3	7.2
Total expenditure	22.0	5.7	8.6	32.9	13.3	11.0	6.5	100.0
Ratio: public/private	1.5	0.1	2.9	4.9	1.5	2.1	1.7	2.0

Source: FSO, 2014a.
Notes: ¹Without dental care and hospital outpatient care; ²Compared to WHO estimations (see Fig. 3.7), the share of public expenditure is higher due to the inclusion of other social benefits (EL/PC and others); ³Includes also tax-based premium subsidies; ⁴Includes also old-age and care support regulated by cantons; ⁵Estimated by Obsan; ⁶Includes other private funding as well.

Hospital outpatient care accounted for 8.6% of THE in 2012, and the bulk of these costs was financed by MHI (5.9% of THE). Unlike for inpatient care, cantons do not contribute to the financing of outpatient care.

Ambulatory health care services, excluding services provided at hospital outpatient departments and by dentists, were responsible for the second largest share of THE (22.0%) in 2012. These services were mainly financed by MHI (10.0%) and by patients' direct payments (4.3%).

Long-term care institutions received 13.3% of THE and there was no dominant source of financing. Only one sixth of expenditures came from MHI (2.3%) and another sixth from the government (2.1%), most importantly from municipalities. Other social insurances, in particular the old-age insurance (AHV/AVS) and its complementary payments (EL/PC), paid for about a quarter of expenditures (3.6%), while private households contributed the largest share (direct payments: 5.1%; cost-sharing: 0.1%).

Ambulatory dental care services accounted for 5.7% of THE, and were mainly financed from private sources, in particular by patients' OOP payments (5.1% of THE).

The category of **retail trade medical products** (11.0%) includes medicines and medical devices purchased by patients in the ambulatory sector. The bulk of these products are financed by MHI (6.7%) or by patients' direct payments (1.7%) and cost-sharing (1.3%).

Expenditure for **prevention and health promotion** by the state and for the **administration** (mostly of the mandatory and private health insurance companies) sum up to 6.5% of the Swiss THE in 2012. All six distinct sources of revenues contribute to the funding of prevention and health promotion (summing up to a total of 2.1% of THE) and health administration (4.3% of THE).

The last line in Table 3.2 shows the ratio between public and private expenditure for the different health care provider groups. The ratio for THE in Switzerland is 2.0, indicating that, overall, twice as much is spent from public sources as from private sources. However, private financing clearly dominates in dental care (0.1) and is also comparatively important in ambulatory care (1.5) and long-term institutional care (1.5). By contrast, public financing clearly dominates in hospital services, both for outpatient care (ratio: 2.9) and particularly for inpatient care (ratio: 4.9).

Table 3.3 shows the trends between 2008 and 2012 of public expenditure as a percentage of THE for different **service programmes**. Expenditure statistics in Switzerland allow the identification of (only) three distinct service programmes: expenditures on **health administration and insurance**; expenditures on **public health and prevention**; and expenditures on **medical services**. Public expenditure on education and training, on health research and development, as well as on mental health are included in the three other programmes.

Table 3.3

Public expenditure (as % of THE) by service programme, 2008 to 2012

	2008	2009	2010	2011	2012	Difference (percentage points) 2008 and 2012
Public expenditure on health	65.2	65.5	65.2	65.5	66.8	1.6
Health administration and insurance	3.0	2.9	3.0	3.0	2.8	-0.1
Public health and prevention	1.6	1.6	1.5	1.4	1.3	-0.3
Medical services:	60.6	61.0	60.7	61.1	62.7	2.1
– inpatient acute care	26.4	26.5	26.3	26.1	27.3	0.9
– inpatient long-term care	7.4	7.7	7.6	8.0	8.1	0.7
– ambulatory care ¹	16.5	16.4	16.6	16.9	17.4	0.9
– retail trade products ²	8.1	8.1	7.8	7.6	7.4	-0.7
– dental services	0.4	0.4	0.4	0.4	0.4	0.0
– care at home services (Spitex)	1.9	1.9	2.0	2.0	2.2	0.3

Source: FSO, 2014a.

Notes: ¹Including hospital outpatient care; without drugs delivered by physicians, dental care and Spitex; ²Includes drugs delivered by physicians.

In 2012, public expenditures accounted for about 66.8% of THE, and more than half of this amount was spent on **inpatient hospital** (27.3% of THE) and **inpatient long-term** (8.1% of THE) care, including also expenditures on acute and long-term care for patients with mental diseases. The shares of public funding on both inpatient care sectors grew slightly (+0.9 and +0.7 percentage points, respectively) since 2008.

One quarter of public expenditure (or 17.4% of THE in 2012) was spent on **ambulatory care**, i.e. ambulatory physician services in private practices or services in outpatient departments of hospitals. This figure contains also “physician-related” services like (physician-ordered) physiotherapy, psychotherapy or laboratory examinations, but dental care and Spitex or drugs delivered by physicians are excluded.

About one tenth of public expenditure on health (or 7.4% of THE) was used to fund **retail trade products** (drugs and medical devices). Again, this category includes medical services and medicines provided to somatic and to mentally ill persons as well. However, it excludes drugs and medical devices given to inpatients.

As **dental services** are excluded from public coverage, the share of public expenditure on dental care is rather insignificant (0.4%) and Table 3.2 shows that this has remained constant since 2008.

Finally, 2.2% of THE goes to **health care at home (Spitex)** services. Spitex shows a slightly growing tendency (+0.3 percentage points) since 2008.

Expenditures for the treatment of mental diseases were recently estimated in a study (Wieser, 2014) on the costs of several NCDs in Switzerland in 2011. Excluding costs of dementia (Sw.fr.1020 million), the study estimated expenditures on mental disorders to be Sw.fr.6349 million or 9.8% of THE in 2011. More than half of this sum was for acute psychiatric inpatient care (Sw.fr.3083 million; 4.8% of THE) and institutional psychiatric long-term care (Sw.fr.327 million; 0.5%). Besides, one Swiss franc out of seven (Sw.fr.1 billion) of the whole drug volume used in 2011 (7.3 billion) was spent on medicines that treat mental disorders. The rest of the Sw.fr.6349 million spent on mental health diseases was mainly expenditure for psychiatric outpatient care (Sw.fr.1558 million).

3.3 Overview of the statutory financing system

The MHI system as outlined by KVG/LAMal is – at least to a certain extent – based on the concept of regulated competition (Enthoven, 1988). MHI companies compete in a highly regulated market by offering different MHI policies for a standard benefits package (section 3.3.1), which all residents have to purchase. MHI companies are not allowed to turn down applications from persons who want to purchase insurance and they may not make profits (nor losses) from providing MHI. Excess earnings have to be reinvested in the company and must benefit the insured.

Resources are raised not only through MHI premiums but also through federal and cantonal taxes (see section 3.3.2). The Confederation plays a strong regulatory role (see section 2.8.1) in monitoring MHI activities and premium levels, in setting the framework for cantonal premium subsidies to low-income households (see section 3.3.3), and in determining the risk-adjustment

mechanism (see section 3.3.3). Interactions between purchasers and providers (see section 3.3.4) are shaped by the corporatist tradition of collective contracts, and all providers that have been authorized by cantons (see section 2.8.2) are allowed to provide services reimbursable by MHI.

3.3.1 Coverage: everybody is covered but there are limitations in scope and depth

Breadth: Who is covered?

All permanent residents are legally obliged to obtain coverage by purchasing an MHI policy. Cantons are responsible for the enforcement of the law and they have to subsidize insurance premiums for persons who would otherwise be unable to pay their premiums. Individuals who refuse to take out MHI are assigned to an MHI company by the cantonal authority.

Since 2012, if individuals fail to pay their premiums, MHI companies can request cantons to pay 85% of the unpaid premiums and other debts (as identified by MHI companies) on behalf of the insured. This change was introduced to ensure that all residents have valid insurance coverage and can receive care. However, cantons can make lists of individuals with arrears, which are sent to public (cantonal) providers, and MHI companies will reimburse only emergency care provided to blacklisted patients. According to data of the FOPH (2014k), more than 100 000 people had arrears on their premiums in 2013, a number that had increased by around 10% every year in the past. Once insured defaulters have repaid their debts, full coverage is provided again, and MHI companies have to reimburse 50% of the repaid debts to cantons.

New residents are obliged to obtain insurance within three months of their arrival in Switzerland, which is then applied retroactively to the date of arrival. Since only individuals with valid residence of more than three months can take out MHI policies, the problem of undocumented immigrants remains unresolved (see section 5.14). However, in general, non-Swiss citizens are always treated in an emergency; the issue of who pays for the service only arises afterwards. If a resident of an EU country needs medical care in Switzerland, care is reimbursed according to EU regulations and agreements (see section 2.9.6).

Scope: What is covered?

All members of MHI have access to a standard benefits package. The content of the package is broadly defined by the KVG/LAMal as those services that are necessary for the diagnosis or treatment of a disease and its consequences as well as maternity services, on condition that these services are effective, appropriate and cost-effective (Art. 32 KVG/LAMal). Accidents are also

covered under MHI except if individuals opt out because they are already covered under mandatory accident insurance (UV/AA) (see section 3.6). The exact content of the benefits package is specified by the federal government in several explicit positive and negative lists (see section 2.8.1).

In practice, MHI covers most GP, chiropractor, midwife and specialist services, as well as inpatient care and an extensive list of pharmaceuticals, medical devices for home use by patients, laboratory tests and physiotherapy, speech therapy, nutritional counselling, diabetes counselling, outpatient care by nurses and occupational therapy (if prescribed by a physician). A contribution for costs of transport or rescue is paid. Psychotherapy services of non-medical professionals (e.g. psychologists) are covered only if prescribed by a qualified specialist and provided to patients in the specialist's practice. Long-term care is covered only if it is "medically necessary". Dental care is covered only if it concerns a serious non-preventable illness of the masticatory system (e.g. maxillofacial cancers) or if it is related to care for other diseases (e.g. leukemia or AIDS). Some prevention and screening measures are covered on the basis of a positive list, which includes pap smears, HIV tests, colonoscopies, mammography screening, genetic counselling and selected vaccinations.

MHI coverage gives preference to services provided in the canton of residence. However, in case of medical need, MHI also covers outpatient and inpatient services provided in a canton other than that of residence. In 2012, the territorial clause for inpatient services (use hospitals inside the canton) for inpatient acute care services was abolished. Since then, patients are free to choose their preferred hospitals in other cantons as well, but may have to pay the difference between the costs in the canton of treatment and those that would have been reimbursed in their canton of residence (see sections 3.7 and 5.4.2). Therefore, residents continue to purchase VHI for nationwide coverage of inpatient care.

As mentioned above, all goods and services covered by MHI should be effective, appropriate and cost-effective. Pharmaceuticals, medical devices for home use by patients and laboratory investigations are covered only if they are included in one of four explicit "positive lists", which are determined by the Federal Department of Home Affairs or the FOPH after consultation with different advisory commissions responsible for the appraisal of new products (see sections 2.8.4 and 2.8.5). However, as positive lists cover only a minority of services, most covered services (i.e. those provided by physicians and chiropractors) are not formally assessed. Consequently, many services included in the benefit basket potentially have little scientifically proven value.

A particularity of the Swiss system is that, due to a popular referendum, since 2012 certain forms of **alternative and complementary medicine** have been included in the standard benefits package if they are offered by medical doctors. This includes anthroposophic medicine, homeopathy, phytotherapy and pharmacotherapy of traditional Chinese medicine, which are provisionally covered until the end of 2017, when an evaluation will have to determine whether these methods are effective, appropriate and cost-effective, and warrant permanent inclusion in the MHI benefits package (see section 5.13).

The KVG/LAMal also explicitly or implicitly excludes a number of services from the standard MHI benefits package, some of which are covered in other countries, such as Germany and France. The most important categories of excluded services are:

- routine dental care: dental check-ups (except those provided for children in schools), fillings and extraction, dentures not related to congenital malformation or special diseases;
- monetary sick leave benefits (sick pay), which is not included in the standard benefits package although all MHI companies are mandated to offer complementary insurance for sick pay;
- long-term care costs going beyond a list of defined services;
- psychotherapy provided by non-medically qualified practitioners;
- vision aids were excluded from the benefits package in January 2011 except for children and for adults with severe impairment of eyesight;
- in-vitro fertilization;
- plastic surgery not related to accidents, disease or congenital malformation.

In addition, some services and goods are only partially financed by MHI. These include:

- medical aids;
- transportation and emergency rescue services;
- therapies in thermal baths.

Complementary coverage for all excluded services can be purchased either from MHI companies or from other VHI companies (see section 3.5). However, a large part of the population pays for these services out-of-pocket.

Depth: How much of benefit cost is covered?

All health care services in Switzerland, such as GP visits, specialist visits, prescription drugs and stays in hospital, require cost sharing in the form of user charges (see section 3.4.1 for details). Most importantly, all MHI contracts require a minimum annual deductible of Sw.fr.300 (about €280) per adult (and insured may opt for higher deductibles in exchange for lower premiums). In addition, a 10% co-insurance rate applies to all health care services and patients have to pay Sw.fr.15 (about €14) per day during inpatient stays on top. However, exemptions for children exist and co-insurance is capped for adults at Sw.fr.700 (about €654).

3.3.2 Collection: taxes and premiums vary across cantons and MHI companies

Public expenditures on health stem from two main sources in Switzerland (see left-hand side of Fig. 3.5):

- 1) General taxes raised by federal, cantonal or municipal governments (32.4% of THE); and
- 2) Premiums paid either by MHI policy-holders (30.0% of THE) or by holders of other social health-related insurances (6.2% of THE, see section 3.6).

Federal, cantonal and municipal taxes

According to the Federal Constitution, each level of government, i.e. the Confederation, the canton and the municipality, is entitled to levy taxes on individuals and corporations living or operating in their territory. In addition, each level is free to set the rate of tax and to decide on its use, which implies that tax rates and spending differ considerably across Switzerland. For the federal level, VAT and the direct federal tax (a combination of income and corporate tax) are the two most important sources of revenue. For the cantons and municipalities, income tax and property tax on individuals and corporations make up the largest share of their revenues. The direct federal tax as well as income and property tax in most cantons are progressive, implying that a higher tax rate applies to individuals with higher income or more property. However, large differences exist concerning the level of progressivity in each canton.

MHI premiums

MHI companies collect the bulk of their resources through community-rated premiums from their insured individuals. Community rating implies that premiums have to be the same for each person taking out insurance with a

particular MHI company within a canton or subregion² of a canton independent of gender or health status of the insured person. Premiums are allowed to vary only by three age categories, with progressively higher premiums, for children (0–18 years), young adults (19–25) and adults (26 years and above). In addition, premiums are allowed to vary depending on the size of the deductible and for special managed care insurance models. Finally, individuals covered by mandatory accident insurance (see section 3.6) can receive a premium reduction. Premiums can be up to 50% lower in higher deductible plans, 50% being the legally defined upper limit for all deductible levels since 2010.

For 2015, the FOPH has estimated that the median monthly premium in Switzerland for adults with minimum deductible (Sw.fr.300), standard insurance model, and accident coverage, was Sw.fr.406, with 5% of adults paying more than Sw.fr.529 and 5% paying less than Sw.fr.328 per month (FOPH, 2014k). Premiums often vary significantly between different MHI companies within one premium region. Insured persons may change MHI companies and policies in order to pay lower premiums or to obtain better conditions (more choice, better coordination, lower deductibles, etc.).

MHI companies calculate their premiums based on estimates of effective (i.e. after correction of risk adjustment payments) average health care expenditure of people insured with a particular MHI policy in a particular canton or subregion of a canton. This means that cross-subsidization (or pooling) across cantons and across MHI policies is prevented. Premiums proposed by MHI companies are monitored by the FOPH and companies may have to change their premiums if they are found to be either too high or too low (see section 2.8.1).

3.3.3 Pooling of funds: the MHI market, premium subsidies and risk adjustment

MHI companies pool resources that they receive either from their insured (premiums) or from cantons on behalf of insured with low incomes (premium subsidies). As health care financing decisions are made by multiple different actors, i.e. the Confederation, cantons, municipalities, MHI companies and other social insurances, as well as by residents purchasing MHI and VHI or buying health goods and services, an overall budget for the health care system does not exist. Instead, the total national health care budget is the result of

² The federal authorities define within every canton a maximum of three different premium regions. However, 15 cantons have only one premium region (AG, AI, AR, BS, GE, GL, JU, NE, NW, OW, SO, SZ, TG, UR, ZG); six cantons have two premium regions (BL, FR, SH, TI, VD, VS); and five cantons have three premium regions (BE, GR, LU, SG, ZH).

individual decisions and not the result of national (e.g. federal government) planning priorities. The only budgets that exist are those set by cantons for direct subsidies to providers – but even these are indicative budgets rather than hard budgets. Consequently, overall budget control is relatively weak.

For the functioning of the MHI system, three characteristic features are particularly important: (1) the MHI market structure, which provides a high level of choice to residents; (2) the subsidization mechanism, which supports low-income households for the purchase of MHI; and (3) the risk-adjustment and redistribution system, which aims to reduce the incentive for MHI companies to select good risks (the healthy and the young).

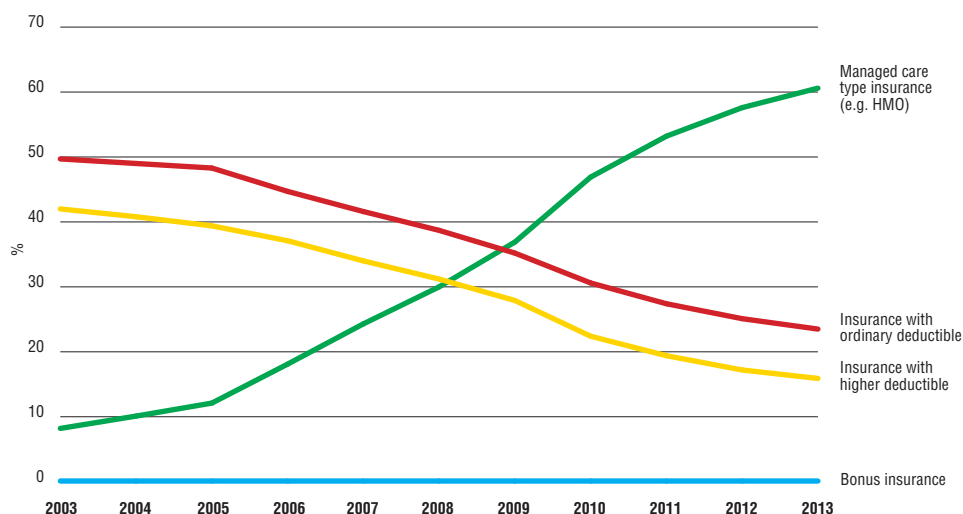
MHI market structure and developments

Swiss residents have a lot of choice of MHI companies and MHI plans despite a considerable reduction in the number of companies over the past few years. In 2013, there were 61 MHI companies operating in the country with each company offering several plans (FOPH, 2014k). Most MHI companies offer insurance with the statutory minimum (ordinary) deductible of Sw.fr.300 and insurance with a higher (optional) deductible of up to Sw.fr.2500 in exchange for lower premiums. Some MHI companies offer managed care type arrangements, where insured agree to use only designated providers. Finally, a small number of MHI companies offer bonus insurance, where individuals who do not make a claim in a particular year can obtain a premium reduction in the following year. As premiums differ across cantons, this variety led to a total of 287 000 different insurance premiums in Switzerland (FDHA, 2013).

Since 2003, the MHI market has undergone an impressive transformation, with an increasingly large proportion of insured opting for managed care type insurance (see Fig. 3.8). By 2013, more than 60% of insured had managed care type insurance, while this proportion was below 10% in 2003. However, managed care type insurance plans may in fact be combined with higher (optional) deductibles and 34.3% of insured with managed care type insurance plans had an optional deductible, which is not reflected in the figure.

Fig. 3.8

Trends in popularity of different insurance plans, 2003 to 2013



Source: FOPH, 2014k.

Insured are allowed to switch their MHI company and/or their plan either on 1 January or 1 July. After the annual publication of updated MHI premiums at the end of September, insured have to notify their company by 30 November in order to switch by 1 January (FOPH, 2014m). If insured want to switch the MHI company during the summer, they have to inform their MHI company by 31 March (i.e. with three months' advance notice). However, switching in summer is possible only for insured with ordinary deductible, but not for those with managed care type contracts.

Switching rates in Switzerland are estimated to be around 5–10% (FOPH, 2014k) per year which is comparable to (or slightly above) those in other countries with multiple insurance funds, e.g. the Netherlands and Czech Republic (Paris, Devaux & Wei, 2010).

A downside of the extensive choice of insurance is that the pooling of good and bad risks is relatively limited. With a high number of MHI companies in 26 cantons and even more (42) premium regions for 8.2 million people (2014), the insurance market remains fragmented into small risk pools. Pooling is limited to the cantonal level (or even to the subcantonal premium region) because MHI companies have to calculate premiums based on the insured living within a particular canton (or premium region).

Fragmented risk pools are problematic because they complicate cross-subsidization between the healthy and the sick. Most risk-adjustment systems (including the one in Switzerland, see below) can not at all achieve complete risk equalization across risk pools and, consequently, it remains profitable for MHI companies to select good risks. The persisting large variation in premium levels for similar MHI policies within the same canton is largely related to risk selection and insufficient pooling. In addition, the complexities of designing and offering thousands of different insurance policies within one canton increase administrative costs of the MHI system as well as the search costs for citizens.

Premium subsidies for low-income households

In 2012, a total amount of almost Sw.fr.4 billion was paid by cantons (with co-financing from the Confederation) for premium subsidies. The size of the federal contribution for premium subsidies is fixed at 7.5% of the estimated MHI (gross) costs in a given year, i.e. the sum of total MHI premiums and the cost-sharing payments of the insured. The federal contribution is distributed to individual cantons on the basis of population size. In order to receive federal subsidies, cantons must themselves pay a minimum amount. However, beyond this minimum amount, cantons are relatively free to choose the size of the cantonal budget available for premium subsidies. In 2012, premium subsidies amounted to SW.fr.3968 million (or 16.3% of total MHI revenues, see Table 3.4), which were co-financed by the Confederation's budget (54.2% of total subsidies) and by cantonal budgets (45.8%) but with large variation across cantons.

Table 3.4

Trend in Swiss MHI premium subsidies, 2000 to 2012

	2000	2005	2006	2007	2008	2009	2010	2011 ¹	2012
Subsidies for MHI premiums (Sw.fr. million)	2 545.3	3 201.8	3 308.7	3 420.5	3 398.3	3 542.4	3 979.8	4 070.3	3 967.7
Of which: share of cantonal subsidies (%)	32.5	35.6	35.4	35.1	47.6	48.8	50.4	48.0	45.8
Number of individual beneficiaries (millions)	2.338	2.262	2.178	2.272	2.249	2.255	2.315	2.274	2.308
Share of beneficiaries in insured residents (%)	32.2	30.4	29.1	30.1	29.5	29.3	29.8	28.9	29.0
Annual average subsidy per individual (Sw.fr.)	1 089	1 415	1 519	1 506	1 511	1 571	1 719	1 790	1 719
Number of households beneficiaries (millions)	1.242	1.216	1.183	1.225	1.212	1.229	1.271	1.274	1.318
Annual average subsidy per household (Sw.fr.)	2 048	2 633	2 798	2 791	2 805	2 881	3 132	3 194	3 011

Source: FOPH, 2014k.

Notes: ¹Since 2011 without payments for arrears on MHI premiums.

The number of individuals receiving premium subsidies and paying only a reduced premium or no premium at all has remained relatively stable at around 2.3 million, corresponding to 29.0% of the Swiss population in 2012 (see Table 3.4). About 0.5 to 0.6 million people are estimated to pay no premium at all, although the exact number of persons or households is unknown.

Since 2011, premium subsidies are paid by all cantons directly to MHI companies. Eligibility criteria for subsidies can differ substantially between cantons, contributing to horizontal inequities in financing (see section 7.2.2). Some cantons fix the maximum contribution for individuals as a percentage of taxable income (for example, 10%), while other cantons define income classes with different fixed amounts of subsidies. Still other cantons apply a mix of these models or something else (for an overview of the 2012 cantonal systems, see Bieri and Köchli (2013)). For people on very low incomes, the entire premium or a cantonal reference premium, whichever is smaller, is paid directly by the municipal or cantonal authorities.

Only for children (≤ 18) and young adults (≤ 25) in training, premium subsidies have been somewhat standardized: cantons are mandated by law to reduce premiums for both groups by 50% for lower- and middle-income households. However, cantons can still determine the thresholds used to define lower- and middle-income. According to an impact evaluation of the subsidy policy, the remaining premiums paid by eligible individuals in 2010 amounted to between 5% and 14% of their income, depending on the canton and its eligibility criteria (Kägi et al., 2012).

Risk adjustment between MHI companies

MHI premiums are community-rated within cantons. However, the old and sick have higher costs than the young and healthy. Therefore, risk adjustment is necessary in order to compensate MHI companies for differences in the costs they face from the varying risk profiles of their insured. In the absence of risk adjustment, strong incentives would exist for MHI companies to engage in risk selection, i.e. to select those individuals for whom costs can be expected to be lower than premiums.

In Switzerland, MHI companies with insured people that are relatively healthier and younger (good risks) must pay into a common pool managed by the Common Institution under the Federal Health Insurance Law. The Common Institution redistributes funds to MHI companies according to the risk structure of their insured.

Until the end of 2011, the risk-adjustment formula was based only on age and gender. The formula consisted of 30 age and gender categories (15 age groups and 2 gender categories), and financial flows from the Common Institution to MHI companies ensured that available resources per insured person within one of these categories were the same across MHI companies operating within the same canton. However, it was generally acknowledged that risk selection was widespread under this “old” risk equalization formula (van de Ven et al., 2013).

Since the beginning of 2012, a revised formula also takes into account prior hospitalization (more than three consecutive nights spent in an acute hospital or nursing home in the past year). Table 3.5 shows that this has considerably increased the (theoretical) gross redistribution amount. However, the net redistribution across MHI companies has not increased because redistribution takes place mostly within companies, since many companies have insurance plans with high risks and others with low risks. Nevertheless, because of the way in which premiums are calculated, the improved risk-adjustment formula will lead to lower premiums in insurance plans with higher-risk groups. Since 2014, the Federal Council has the right to further define risk-adjustment factors if necessary (see section 6.1.3). Starting in 2017, expenditures for pharmaceuticals exceeding Sw.fr.5000 in the previous year will be used as a fourth factor for risk adjustment.

Table 3.5

Trend in Swiss risk adjustment: theoretically and between MHI companies, 2000 to 2012

	2000	2005	2006	2007	2008	2009	2010	2011	2012
Gross redistribution (Sw.fr. million) ¹	4.645	6.094	6.275	6.614	6.999	7.299	7.480	7.602	12.652
Trend previous year (in %)	6.0	5.3	3.0	5.4	5.8	4.3	2.5	1.6	66.4
Of which: redistribution for gender (Sw.fr. million)	1.090	1.249	1.281	1.328	1.414	1.467	1.484	1.497	1.493
Of which: redistribution for age (Sw.fr. million)	3.554	4.845	4.995	5.286	5.585	5.833	5.996	6.105	6.081
Of which: redistribution for hospital stay in previous year (Sw.fr. million)	–	–	–	–	–	–	–	–	5.079
Redistribution net between MHI insurers (Sw.fr. million)	732	1.202	1.236	1.323	1.445	1.561	1.546	1.497	1.564
Trend previous year (in %)	11.0	8.9	2.9	7.0	9.2	8.1	1.0	–3.1	4.5

Source: FOPH, 2014k.

Note: ¹Theoretical figure.

3.3.4 Purchasing and purchaser–provider relations

MHI companies are by far the most important purchasers of health care services and goods. The second important group of actors on the purchaser side is the cantons, although their spending on health is – in particular since the transition to a DRG-based hospital payment system – mostly linked with MHI transactions. MHI companies and the cantons are rather passive purchasers, mostly reimbursing the bills of health care providers.

Regulatory framework

Collective contracts dominate the relationship between purchasers and providers. In fact, MHI companies are obliged to reimburse bills of all authorized providers (the so-called obligation to contract). Authorized providers are all those that fulfil the basic regulatory requirements for providing MHI-reimbursable services (see section 2.8.2). Consequently, direct competition between providers for contracts from MHI companies is limited. MHI companies can engage in selective contracting with physicians only in the case of managed care arrangements.

Conditions of reimbursement are specified by contracts negotiated between associations of insurers (*santésuisse*, *curafutura*, *RVK*) and providers (e.g. *FMH* for physicians), and tariffs have to be agreed upon by MHI companies and providers. Contracts become valid after approval by cantonal governments (in the case of cantonal contracts) or by the Federal Council (in the case of national contracts). If insurers and providers do not reach an agreement, tariffs can be fixed by the cantonal or federal authorities.

The tariffs for ambulatory care and, since 2012, also for acute inpatient care, are based on national frameworks (see section 3.7), developed jointly by associations of insurers and providers. For inpatient rehabilitation and inpatient psychiatry, work on developing national tariff frameworks is currently ongoing (Caminada et al., 2015). The actual level of reimbursement can differ between and within cantons, depending on cantonal or local negotiations. In theory, contracts should also include requirements for quality and efficiency in service provision as mandated by the *KVG/LAMal* (Art. 56 and 58). However, in practice, conditions for efficiency and quality are very rarely specified in detail and control mechanisms are almost non-existent.

A new provider intending to provide services reimbursable by MHI has to register with a subsidiary of santésuisse (SASIS AG), which is responsible for awarding new MHI billing numbers. When applying for such a number, SASIS checks whether new providers comply with the necessary conditions, i.e. if they are authorized by cantons for the provision of MHI-reimbursable services.

Ambulatory care

For **physicians**, the national fee schedule (TARMED) is developed by the corporatist institution TARMED Suisse (see section 2.3.6). TARMED determines not only the tariff structure but also defines training requirements (specialization, subspecialization, additional training certificates) that physicians have to fulfil in order to be allowed to bill for a particular service.

All physicians who want to provide MHI-reimbursable services have to join the national TARMED framework contract negotiated between FMH and santésuisse. This contract was originally concluded in 2003 and conditions for quality and efficiency were intended to be specified in an annex to the contract. However, by early 2015, an agreement had not yet been reached between insurers and physicians about how efficiency in service provision should be assessed.

The monetary value of a TARMED point is fixed in negotiations between, on the one side, the cantonal association of physicians for ambulatory practices or the association of hospitals (H+) for hospital outpatient consultations, and on the other side MHI companies, i.e. tarifsuisse SA (negotiating for the majority of MHI companies) or curafutura. There are separate monetary values of TARMED points for medical practices and for hospitals in every canton. If the negotiating parties do not reach an agreement, the cantonal government can define the point value or base rate.

Cantons have the option to limit the number of new ambulatory providers (including independent practices, hospital outpatient departments and pharmacists) on the basis of a so-called necessity clause (see section 2.8.2). Current reform proposals aim to provide cantons with regulatory mechanisms for better management and planning of ambulatory service provision (see section 6.2.2).

Individual insurers may conclude **selective contracts** with physician networks or HMOs, which may specify conditions (e.g. quality management, bonuses, shared savings, etc.) that go beyond or are different from those of the collective contract. Nevertheless, if selectively contracted physicians bill fee-for-service, they have to follow the national TARMED fee schedule.

Services from non-medics, e.g. physiotherapists, Spitex services, laboratory services, other paramedical and ambulatory services, are always reimbursed by MHI if prescribed by medical doctors. Again, collective contracts exist between insurers and providers, and point values for the applicable fee schedules are negotiated at the cantonal level or national level (e.g. chiropractors and ergotherapists) between professional associations and the associations of MHI companies. These contracts become valid after approval by cantonal governments (in the case of cantonal contracts) or by the Federal Council (in the case of national contracts). Payments for services not reimbursed by MHI companies are based on market prices.

Inpatient care

For acute inpatient care, which is jointly funded by cantons and MHI companies (see the actual shares of funding in GDK/CDS, 2014b), the national tariff framework (i.e. the DRG system) is developed by the corporatist institution SwissDRG SA (see section 2.3.6). Cantons are important actors for the purchasing of inpatient care as they determine through their hospital planning decisions (see section 2.5.2) which hospitals are allowed to provide which MHI-reimbursable services. Population needs and quality considerations are taken into account during the cantonal planning process. Hospitals have to apply in order to be included in the cantonal hospital lists, and cantons may decide not to include a hospital or to include it only for certain services.

DRG base rates are negotiated between individual hospitals or groups of hospitals and the associations of MHI companies. Subsequently, base rates have to be approved by the cantonal authorities, which can fix the value of the base rate if negotiating parties do not reach an agreement. Furthermore, the national Price Supervisor provides recommendations on appropriate base rates to be used in different cantons. If cantons approve base rates that are higher than those suggested by the Price Supervisor, they will be obliged to make their reasons known.

Efficiency and cost control

Currently, global budgets or volume limits exist neither for ambulatory care nor for inpatient care, although cantons have the legal option to define a global budget for expenditure control (Art. 51 KVG/LAMa). MHI companies have the right (Art. 59 KVG/LAMa) to sanction providers who do not comply with the requirements for cost efficiency and appropriateness of care. Since 2004, santésuisse has used a method based on an analysis of variance (ANOVA) of practice costs in order to identify outliers. Practices exceeding average costs by more than 20% or 30% (after controlling for location, specialty, and age and

gender of patients) are asked to provide additional information explaining their higher expenditures. In very few cases (less than a dozen cases a year), excess earnings have to be paid back and practices can in theory be excluded from future contracts. Because the method was highly controversial, an amendment to the KVG/LAMal in 2011 mandated *santésuisse* and providers to agree on a common methodology for cost-efficiency and appropriateness analyses. While *santésuisse* and FMH agreed in 2013 that these analyses should be based on ANOVA, a final decision has not yet been reached on the exact variables to be included.

Also for the inpatient sector, cost and efficiency control mechanisms are weak. Inpatient activity is not systematically monitored by MHI companies or cantons, e.g. to detect unwarranted increases in the number of treated cases. However, upcoding is controlled through a review mechanism, where independent reviewers review the coding of a random sample of patient files at hospitals (SwissDRG, 2009).

3.4 Out-of-pocket payments

Out-of-pocket payments were responsible for about three quarters of private expenditures in 2012. The most important category of OOP payments are direct payments on services *excluded* from MHI or VHI coverage, which reached almost Sw.fr.14 billion (or 20.5% of THE) in 2012. One quarter of private expenditure was cost sharing for services covered by MHI (Sw.fr.3.7 billion), while cost sharing for services covered by VHI accounted for Sw.fr.0.05 billion, summing up to a total of Sw.fr.3.75 billion (or 5.5% of THE, see Table 3.2). VHI cost sharing is not further discussed.

3.4.1 Cost sharing (user charges)

Table 3.6 summarizes the system of user charges for different categories of MHI-covered services. The level of user charges is determined by the Department of Home Affairs in the Regulation on Health Insurance (KVV/OAMal).

Table 3.6

User charges for health services covered by MHI, 2012

Health service	Type of user charge	Exemptions and/or reduced rates	Cap on user charges
GP visits/primary care visits	–	– Screening and immunization programmes	
Outpatient specialist visits	–	–	– Adults: between Sw.fr.1000/year (deductible Sw.fr.300) and Sw.fr.3200 (deductible 2500)
Outpatient prescription drugs	Co-insurance is 20% if generic is not used	–	– Children: between Sw.fr.350/year (deductible Sw.fr.0) and Sw.fr.950 (deductible 600)
Medical devices	Covered only if prescribed by medical doctors	–	
Inpatient stay	+ Co-payment: Sw.fr.15/day	– Children (<19 yr): no deductible (or voluntary between Sw.fr.100 and Sw.fr.600) – Maternal care no deductible nor co-insurance	– Adults: between Sw.fr.1000/year (deductible Sw.fr.300) and Sw.fr.3200 (deductible 2500) – Children: between Sw.fr.350/year (deductible Sw.fr.0) and Sw.fr.950 (deductible 600)
	– Deductible (Sw.fr.300 to Sw.fr.2500) – Co-insurance (10% of costs above deductible)	– Children (<19 yr): no deductible (or voluntary between Sw.fr.100 and Sw.fr.600) – Maternal care no deductible nor co-insurance	Cap does not apply to co-payment of Sw.fr.15/day
Long-term care	– MHI pays a fixed contribution (depending on level of dependency); the patient's contribution is not more than 20% of the MHI's contribution; the rest is covered by the canton. – if covered by MHI: deductible (Sw.fr.300 to Sw.fr.2500) and 10% co-insurance	If covered by MHI: – Children (<19 yr) no deductible (or voluntary between Sw.fr.100 and Sw.fr.600)	If covered by MHI: – Adults: between Sw.fr.1000/year (deductible Sw.fr.300) and Sw.fr.3200 (deductible 2500) – Children: between Sw.fr.350/year (deductible Sw.fr.0) and Sw.fr.950 (deductible 600) – Otherwise: patient contribution capped at 20% of MHI contribution (i.e. Sw.fr.7884 for institutional and Sw.fr.5822 for home care)
Dental care	– Patients pay full costs (>90% of expenditure for dental care)	– Serious disease or injury of the mastication (chewing) system not covered by accident insurance	– None

Source: Authors' own compilation

All MHI policies (except for children) require a **deductible**, i.e. the insured have to cover a fixed amount before MHI companies begin to reimburse them for the services received. Since 2005, the minimum (standard) annual deductible for adults is Sw.fr.300 (none for children) and the maximum

deductible is Sw.fr.2500 for adults (Sw.fr.600 for children, see Table 3.6). There is no deductible for medical services provided to women during maternity (pregnancy and childbirth) and for a few preventive services.

After the deductible, patients have to pay **10% co-insurance** on the price of all MHI-covered services they receive. This amount has to be paid directly OOP because complementary VHI coverage for user charges is prohibited. Furthermore, to incentivize the use of cheaper generics, there is a 20% co-insurance rate on brand drugs, for which a generic equivalent exists. The total annual amount that patients have to pay on co-insurance is capped at Sw.fr.700 for adults and Sw.fr.350 for children (2012).

For acute care hospital inpatient stays a **co-payment of Sw.fr.15 per day** is charged for adult patients. Young persons under 26 years are exempted as well as women in hospital for childbirth. However, the exemption does not apply to complications of pregnancy. There is no cap on the total annual amount for the inpatient co-payment.

3.4.2 Direct payments of private households

Services that are excluded from MHI coverage (and are not covered by VHI) must be paid for directly by patients or by other private funding for health. In 2012, Sw.fr.13.3 billion or 19.6% of THE were paid directly by patients and Sw.fr.662 million or 1.0% of THE by other private funding for health.³

One example of services that are not included in the MHI package (see section 3.3.1) is **routine dental care**. Dental care accounts for about a quarter of all direct payments in Switzerland (see Table 3.2), and 90% of dental care costs were funded by direct payments and other private expenditure on health. A fifth of all direct payments is spent on **outpatient services** not covered by MHI or VHI. These include services provided by independent psychotherapists (i.e. psychotherapists who do not practise within the premises of a physician's office, see section 5.11.2), some services provided by physicians, and all services (if provided without prescription from physicians) by physiotherapists, home care providers (Spitex), medical laboratories, radiation units and ambulance services.

Inpatient long-term care (i.e. nursing homes) accounts for a quarter of direct payments in Switzerland. A share of 39.2% of the total expenditure for inpatient long-term care institutions in 2012 is directly paid by households,

³ Other private funding is related mostly to donations and bequests to non-profit institutions, such as nursing homes, institutions for handicapped people and care at home institutions.

mainly for housing and assistance. MHI only covers “medically necessary” services for long-term care. Since January 2011, MHI pays a fixed contribution to cover long-term care, the individual patient pays at most 20% of the MHI’s contribution, and the remaining costs are financed by the canton or locality.

Patients also make direct payments for **medicines and pharmaceutical products** not included in the positive lists (see section 2.8.4). An estimated share of 26.2% of costs of retail trade products is paid by private households.

Direct private household payments in **outpatient and inpatient hospital services** are for supplementary services, such as single or double rooms, or for non-essential interventions, such as plastic surgery (unless medically indicated) and in vitro fertilization. Such direct payments amounted in 2012 to about 9.9% of all hospital acute care expenditure.

3.5 Voluntary health insurance

3.5.1 Market role and size

VHI can be offered by private for-profit insurance companies and by MHI companies, which are allowed to have a VHI branch in addition to their non-profit MHI branch. VHI provides coverage for both complementary services (those not covered by MHI) and supplementary services (free choice of doctor and superior inpatient services such as a single room). Since 2001, VHI companies have been prohibited from offering complementary coverage for user charges imposed under MHI. VHI plays a declining role in financing health care expenditure. In 2012, VHI accounted for 7.2% of THE in Switzerland, which is 3 percentage points less than in the year 2000 and 5 percentage points less than in 1995 (see Table 3.1).

The proportion of the population with VHI coverage is thought to have declined since 1995. However, comprehensive information on the total number of VHI contracts or persons covered is unavailable in Switzerland. Table 3.7 presents only the number of VHI contracts sold by MHI companies. The number of VHI contracts sold by other insurance companies is unknown. Table 3.7 shows a rather stable trend for supplementary VHI contracts for hospital treatment since 2006 and a clear rising trend for other complementary services covered by VHI.

Table 3.7
Trends in Swiss VHI¹, 2006 to 2012

	2006	2007	2008	2009	2010	2011	2012
Total number of VHI contracts	3 890 675	4 022 561	3 782 423	3 902 072	4 010 896	4 075 358	4 250 041
Of which: hospital treatments outside own canton of residence	2 857 111	2 879 373	2 727 116	2 791 658	2 825 580	2 779 117	2 889 168
Of which: hospital inpatient “semi-private” insurance	660 605	660 849	616 923	623 110	625 277	655 740	685 315
Of which: hospital inpatient “private” insurance	283 343	292 019	279 100	278 729	269 930	287 310	291 325
Of which: other complementary services ²	89 616	190 320	159 284	208 575	290 110	353 191	384 232

Source: FOPH, 2014k.

Notes: ¹Only VHI contracts of MHI companies; ²For example, daily cash benefits insurance, where insured receive a fixed amount per day spent in hospital.

3.5.2 Market structure

In 2013, 40 private for-profit insurance companies and 14 MHI companies, which had – beside their non-profit (MHI) branch – also a for-profit business, offered VHI policies (Indra, Januth & Cueni, 2015). This is a considerable reduction in numbers compared with 2009, when a total of 71 companies offered VHI. In 2012, VHI spent Sw.fr.4.9 billion on health care (FSO, 2014f). Private-for-profit companies held almost three quarters (73%) of the VHI market (in terms of expenditures), while MHI companies accounted for around one quarter (27%).

The VHI (financial) market volume, when looking at collected premiums in 2013, is distributed in almost equal shares across three main types of insurance policy (Indra, Januth & Cueni, 2015). First, **supplementary VHI** policies exist for **inpatient care**. These cover, on the one hand, **basic care outside the canton of residence** including coverage for the difference in costs of potentially more expensive care provided in hospitals of other cantons, which would otherwise have to be paid by patients OOP (see section 5.4.2). On the other hand, it includes policies offering “**private**” and “**semi-private**” hospital care, which means that patients can choose the physician treating them in hospital and they are entitled to an individual room (private) or double room (semi-private). Together, inpatient VHI policies accounted for about Sw.fr.3.7 billion or 38% of the financial VHI market volume in 2013 (Indra, Januth & Cueni, 2015). The

age distribution of people with inpatient VHI policies is similar to the general population (see Table 1.1), with about 63% of policy-holders aged 19–65 and 18% above 65.

Second, **complementary VHI policies** exist for **ambulatory care** and **dental care** services. These provide coverage, for example, for pharmaceuticals not included in the positive list, psychotherapy performed by non-physicians, dental care and spas. Ambulatory VHI policies accounted for about Sw.fr.2.8 billion or 29% of the VHI market volume in 2013.

Third, **complementary VHI policies** exist for **lost earnings in case of illness (daily cash-benefit insurance)**. Insurers may offer daily cash-benefit insurance under the legal regimes of the KVG/LAMal or the Insurance Contract Law (VVG/LCA), but 90% of contracts are offered under the VVG/LCA. Employers often take out cash-benefit insurance on behalf of their employees to assist with their obligation to pay wages in the event of illness or hospitalization. The market volume of daily cash-benefit insurance under VVG/LCA in 2013 was around Sw.fr.3.2 billion or 33% of the total VHI volume.

3.5.3 Market conduct

Health insurers offering voluntary coverage are free to define their benefit packages and premiums, and they can refuse enrolment to applicants based on medical history. VHI premiums are always risk-rated and preexisting diseases are often excluded from coverage.

There is usually a cap on total expenses per insured per year and patients may be required to pay user charges for complementary services covered by VHI. Services are provided mostly by physicians and hospitals that also provide MHI-covered services. The VHI companies normally engage in selective contracting with individual providers and specify the details of payments and levels of provider remuneration. In 2012, the administrative costs in VHI were at around 18.0% (Sw.fr.0.9 billion) of the total VHI volume of Sw.fr.4.9 billion (FSO, 2014e). This is a lot more than for MHI, where around 4.9% (Sw.fr.1.2 billion) of the total MHI volume of Sw.fr.24.3 billion was used for administration.

3.5.4 Public policy

Private health insurance activity is regulated by the Swiss Financial Market Supervisory Authority (FINMA). The Insurance Contract Law (VVG/LCA) is the most important legal document regulating VHI. There are tax subsidies for individuals purchasing supplementary or complementary VHI policies, as expenditures on VHI premiums can be deducted from taxable income.

MHI companies offering VHI must use their VHI profits for internal purposes, i.e. they must reinvest the money in the company, unless they have legally split their VHI activities from their MHI activities. It is illegal for MHI companies to base decisions about VHI enrolment on health information obtained via basic health coverage, but this is not easily enforced. MHI companies use the same infrastructures (offices, personnel) for their VHI activities, which raises issues in terms of confidentiality – for example, information on health status obtained through supplementary health insurance contracts (questionnaires, examinations) can be used to manage social health insurance contracts and to select risks and vice versa. The new KVAG/LSAMal aims at improving enforcement of the separation between MHI and VHI activities.

3.6 Other sources of financing

The MHI system operates alongside other social insurance schemes that contribute considerably (10.1% of THE) to the financing of health care. This includes health-related parts of accident insurance (UV/AA), of old-age insurance (AHV/AVS), of disability insurance (IV/AI), and of military insurance (MV/AM). In 2012, UV/AA and MV/AM contributed about 2.0 billion or 3.0% of THE. Together AHV-IV/AVS-AI accounted for Sw.fr.2.2 billion or 3.2% of THE; and the health-related EL/PC payments for AHV-IV/AVS-AI amounted to Sw.fr.2.6 billion or 3.9% of THE. The existence of these other social insurance schemes increases financial protection for residents but also contributes to the fragmentation of health care financing – with potentially negative consequences for the overall efficiency of the system (Oggier, 2015).

3.6.1 Accident insurance

Accident insurance is regulated by the Federal Law on Accident Insurance (UVG/LAA). Accident insurance is mandatory for all employees and also for the unemployed since 1984. Self-employed and employers often choose to purchase voluntary accident insurance. About 50% of the population are covered

by UV/AA (Weber, 2015). All others (e.g. housewives, children, schoolchildren, students and retirees) are either covered for accidents under their normal MHI policy, which pays for costs related to the treatment of accidents just as for any other medical treatment. Or, alternatively, people can purchase voluntary accident insurance. In summary, almost the entire population is covered by accident insurance and individuals who hold accident insurance can demand a reduction on their ordinary MHI premium (up to 10% depending on the MHI company).

Mandatory accident insurance covers occupational accidents, non-accidental bodily harm, occupational diseases and – for employees working at least 8 hours a week – also non-occupational accidents (including at home and during holidays abroad). The health-related part of the mandatory accident insurance consists of wage-replacing daily cash benefits and benefits in kind, i.e. outpatient and inpatient treatment of accident-related injuries and professional illnesses. In contrast to MHI, there is no cost sharing for patients covered by UV/AA.

Employers have to purchase accident insurance for their employees. Premiums are set as a proportion of salary and depend on occupation. Employers have to pay the premiums but premiums for non-occupational accidents can be deducted from the salaries of employees.

The Swiss National Accident Insurer (SUVA) is the largest accident insurer and covers about 2.1 million people (53% of all people covered by UV/AA), who are employed primarily in industry, artisans, industrial commerce, etc. and all unemployed (Weber, 2015). In addition, there are 38 insurance companies – private insurance organizations, recognized MHI companies and accident insurance funds – that provide accident insurance under the UVG/LAA. Unlike most MHI companies, the SUVA adopts case management, with staff actively engaged in coordinating an individual's care needs in order to help them return to the workforce (Teisberg, 2008).

In addition to regulating accident insurance, UVG/LAA also regulates the obligations of employers and employees for the prevention of accidents and occupational diseases. Voluntary accident insurance does not fall under the UVG/LAA and is offered by private for-profit companies.

3.6.2 Old-age and disability insurance

Old-age and disability insurance are provided under the legal frameworks of the Law on Old-Age and Survivor's Insurance (AHV/AVS) and the Law on Disability Insurance (IV/AI). Contributions are set as a proportion of salary (8.4% for AHV/AVS and 1.4% for IV/AI) and are shared between employers and employees. Offices in each canton jointly administer benefits of old-age and disability insurance (AHV-IV/AVS-AI). The invalidity insurance covers certain costs for rehabilitation to prevent invalidity, including the costs of medical, nursing and other rehabilitation services.

As part of the old-age and invalidity insurance, a constitutional right exists for people whose income (from AHV-IV/AVS-AI) is too small to cover their costs of living to receive **complementary payments (EL/PC)**. The corresponding EL/PC funds are financed from taxes, unlike the general contributions to the AHV/AVS and IV/AI that are collected by contributions from employers and employees. Particularly in long-term care institutions these complementary payments cover an important part of patients' costs (assistance and housing). In addition, persons who are eligible for EL/PC payments can also receive reimbursement of certain acute care costs, including for their cost-sharing part under MHI-covered services, dental care and care at home services (Spitex).

3.6.3 Military insurance

Military insurance (MV/AM) was established in 1852 and is mandatory for persons employed by or serving in the Swiss Armed Forces or serving in the alternative civil service. MV/AM provides coverage for accidents or illnesses in the form of daily cash benefits, inpatient hospital stays and outpatient health care services by physicians, dentists, physiotherapists, etc. The MV/AM is fully financed out of the federal budget. In 2005, the federal parliament passed a law, which transferred administration of MV/AM from the Federal Office of Military Insurance to SUVA. The aim was to save administrative costs, which were effectively reduced by about 25% by closing down the Federal Office of Military Insurance and transferring part of the staff to SUVA (Dettwiler, 2015).

3.7 Payment mechanisms

3.7.1 Paying for health services

The main provider groups and corresponding payment methods are shown in Table 3.8. Fee-for-service is the dominant method of provider payment in Switzerland. For inpatient care, DRGs have replaced per diems as the most important payment mechanism; for long-term care a system of care-level adjusted per diem payments exists. Public health activities are mostly paid for on the basis of lump sum contracts or FFS.

Table 3.8

Provider payment mechanisms

Payers	Ministry/ FOPH	Cantonal ministries of health	Municipal health authorities	MHI	Other SI (UV/AA, AHV/AVS, IV/ AI, MV/AM, ELGK/CFPP)	VHI	Direct payments of households
Providers							
GPs	–	–	–	FFS (90%) CAP (10%)	FFS	FFS	FFS
Ambulatory medical specialists	–	–	–	FFS (91%) CAP (9%)	FFS	FFS	FFS
Other ambulatory (non-physician) providers ¹	–	FFS	FFS	FFS	FFS	FFS	FFS
Acute care hospital inpatient providers	–	DRG	DRG	DRG	DRG	DRG FFS	DRG FFS
Psychiatric and Rehabilitation hospitals		PDM	PDM	PDM	PDM	PDM	PDM
Hospital outpatient	–	–	–	FFS	FFS	–	FFS
Dentists	–	–	–	FFS	FFS	FFS	FFS
Pharmacies	–	–	–	FFS	FFS	FFS	FFS
Public health services (prevention)	Lump sums	Lump sums	Lump sums	FFS	FFS	–	FFS
Long-term care (nursing homes)	–	PDM/ other	PDM/ other	Care-level adjusted PDM	Other	–	Care-level adjusted PDM

Source: Authors' own compilation.

Notes: CAP: capitation; DRG: case payment; FFS: fee-for-service; Lump sum: a fixed amount for an agreed contract; Other: e.g. subsidies, deficit guarantees, etc.; PDM: per diem; SAL: salary. ¹Physiotherapy, psychotherapy provided by psychologists in physicians' practices, Spitex, laboratories, other paramedical services, other ambulatory services.

Ambulatory care

Fee-for-service is the dominant payment mechanism in the ambulatory sector. Volume limits on the number of billable services do not exist.

All **medical doctors** (GPs and specialists) with a practice authorization are reimbursed for MHI-covered services (and also for services reimbursed by other social insurers or households) on the basis of the nationally uniform FFS system **TARMED** (derived from *tarif médical*). TARMED is a relative value scale, and weights for each service item (locally referred to as “tax points”) consist of two parts: (1) the medical part for physicians; and (2) the technical part for technical and nursing staff, equipment and overheads. The medical part was calculated based on estimates of experts (representatives of specialist associations) about the necessary physician time for providing the services and an annual reference income of Sw.fr.207 000 (with adjustments for specialty and additional qualifications). TARMED tax points are converted into monetary values by multiplication with the negotiated cantonal point value. This value varied in 2014 between Sw.fr.0.82 in the cantons of Lucerne, Schwyz, Valais and Zug, and Sw.fr.0.97 in Jura. For more information about negotiations about point values, see section 3.3.4.

TARMED was introduced in 2004 as the basis of reimbursement for MHI-covered services after it had already been used by other social insurers since mid-2003. The aim of TARMED was to harmonize reimbursement of providers working in different cantons and different settings in order to remove some of the perverse incentives, which distorted the choice of care setting, i.e. shifting ambulatory patients between hospital outpatient departments and physicians’ practices. In addition, the introduction of TARMED aimed to improve reimbursement for GP services by giving greater weight to non-technical services than to technical services, and incentivizing less resource-intensive forms of care. Nevertheless, the problem of comparatively low reimbursement for GPs has remained on the political agenda. TARMED is regularly updated by the corporatist institution TARMED Suisse (see section 2.3.6). However, in June 2014, when payers and providers represented within TARMED failed to agree on a revision of the fee schedule, the Federal Council mandated a change to TARMED, resulting in increased reimbursement for primary care physicians (FOPH, 2014). This was the first intervention of the Confederation on the basis of a new subsidiary competence (Art. 43, 5bis KVG/LAMal) received as a result of a reform in January 2013 (see section 7.5.1).

Although FFS is the dominant payment mechanism, **capitation payments** are gaining increasing importance. In 2012, about 10% of the MHI costs of GPs and 9% of specialists were reimbursed in the form of “capitation-type” payments (SASIS, 2014). These were made to HMOs or networks of physicians providing services in the context of **managed care type insurance contracts**.

Under these contracts, a global budget based on risk-adjusted capitations (with adjustments for age, sex and other characteristics of the insured population) is usually agreed between an MHI company and providers carry at least partial budget responsibility for their subscribed patients.

Hospital outpatient acute care is also paid FFS on the basis of TARMED points and the negotiated cantonal point values. Point values are different than for physicians in ambulatory practice.

Other MHI-covered **ambulatory services** provided by **non-medics**, such as physiotherapists, (psychological) psychotherapists working in physicians' practices, laboratory and other paramedical personnel, are also paid for on a FFS basis. All professions in the ambulatory care sector have a nationally agreed fee schedule, which is negotiated between the relevant professional association and the association of MHI companies (or other social insurers such as UV/AA, MV/AM, AHV/AVS and IV/AI).

Home care (Spitex) services are reimbursed by MHI with Sw.fr.54.60 per hour for basic care services; Sw.fr.65.40 per hour for assessment and treatment; and Sw.fr.79.80 per hour for health checks, counselling and coordination. The maximum MHI contribution per patient is Sw.fr.79.80 per day, and patients have to cover up to Sw.fr.15.95 per day, with any remaining costs covered by the cantons or municipalities.

Services not covered by MHI are financed by VHI or by direct payments of patients on a FFS basis. Actors are – in principle – free to negotiate fees for services. For example, providers can add a certain percentage increase to the normal TARMED fee schedule. For services that are not specified by TARMED (e.g. alternative medicine), fee levels are determined freely by providers.

Dentists providing outpatient dental care services in Switzerland are financed almost 90% from OOP payments from patients, with the rest coming from private insurances (VHI) and from social insurances (MHI, UV/AA, IV/AI, MVAM). If paid by social insurances, the invoices are calculated based on a national dental FFS system (called dentist tariff SSO), which is also a relative value scale specifying a certain weight (points) for 500 service items. The point value paid by social insurers is the same for all dentists in Switzerland, i.e. Sw.fr.3.10 in 2015. If patients or VHI cover the costs, dentists can increase (or decrease) the point value up to Sw.fr.5.80 (and there is no bottom limit).

Hospital inpatient care

Since January 2012, **acute care hospitals** are paid on the basis of the national **SwissDRG system**. Cantons bear between 51% and 55% of the costs of each inpatient admission in 2015, and their share will increase to at least 55% in all cantons by 2017. MHI companies pay for the rest. Actual hospital payment still varies considerably across cantons and may also vary across hospitals within cantons (e.g. university versus other hospitals), depending on the individual hospital base rates (for an overview of base rates, see GDK/CDS, 2015b). If patients choose to be treated in a hospital in another canton with a base rate that is higher than the base rate that would have been paid in the canton of residence for the same service (the reference rate), the difference may have to be covered by patients OOP or by VHI (see section 5.4).

DRG-based hospital payment was introduced in Switzerland as a result of a revision of the Federal Health Insurance Law (KVG/LAMal) adopted by Parliament in 2007 (see section 6.1.2). The aim was to harmonize hospital payment across cantons (as well as for public and private hospitals) and to improve transparency and efficiency. Previously, large differences had existed in hospital payments for similar services across cantons, with hospitals in some cantons being paid on the basis of per diems and in others on the basis of DRGs, and with public (or subsidized hospitals) receiving direct cantonal funding for investments, education (and possibly deficits). Harmonizing hospital payments across cantons was an important step towards improving choice of hospital for patients seeking care in a canton other than their canton of residence.

The SwissDRG system has been developed by SwissDRG SA (see section 2.3.6) on the basis of the German DRG (G-DRG) system and data collected from an increasingly large sample of Swiss hospitals: 39 hospitals contributed data in 2007 (accounting for about 60% of hospital activity) and this number increased to 112 hospitals in 2014. The G-DRG system was adjusted to the Swiss context (amongst others to the Swiss Procedure Classification System, CHOP). National DRG weights, which are an indicator of the relative costs of treating patients in one DRG when compared to the average costs of treatment of all patients, are calculated based on Swiss cost data. Investment costs are included in DRG-based payments since 2012 (by adjusting the base rate), and DRG weights include investment costs since 2015 (see section 4.1.1). Costs for research, university-level education and the costs of ensuring geographic availability of hospital capacity are excluded (Fischer, 2014).

Mental health (psychiatric) and rehabilitation hospitals are not yet paid on the basis of casemix systems (similar to DRGs). They continue to operate under a per-diem system. Originally, it was intended that psychiatric and rehabilitation hospitals would also transfer to a casemix-based payment system by January 2012 (as prescribed by the law). However, because these systems had to be developed from scratch (as international systems were unavailable), the new payment systems are still in the pilot stages (Caminada et al., 2015). It is currently envisaged that both psychiatry and rehabilitation will transfer to a new payment system in 2018 for the entire country.

Pharmacies (outside hospitals)

In 2001, the remuneration of pharmacies was changed from a simple proportional mark-up scheme to a mixed payment system consisting of a regressive mark-up included in the retail price of pharmaceuticals, which is specified in the positive list (see section 2.8.4), and a small number of fees for certain services. Most importantly, there is a basic fee of Sw.fr.3.25 (in 2015) per patient contact and a fee per dispensed prescription of Sw.fr.4.30. In addition, fees exist for specialized services, e.g. for a polymedication check (for patients taking more than four medications at the same time); for monitored medication intake; for methadone replacement therapy; and for substituting an original brand drug with a cheaper generic. The latter is reimbursed with an amount that depends on the price difference between the branded drug and the generic (capped at a maximum of Sw.fr.21.50).

The aim of this new reimbursement was to improve cost-effectiveness in the use of medicines and to overcome unintended consequences of a link between the payment of pharmacists and the financial volume of dispensed medicines (Vaucher & Rohrer, 2015). In 2010, the system was slightly updated.

Public health services

Public health services (prevention measures against alcohol, tobacco and drug abuse, infectious disease control and accident prevention, as well as food quality control and school health programmes, etc.) are often contracted out by cantons or municipalities to non-profit organizations (NPOs), which receive a lump sum for a set of prevention measures specified in a contract. Payment of MHI companies (e.g. for vaccinations) and direct payments by private households are mainly FFS. Donations and bequests to NPOs may be linked with specific requests of the funding organization.

Institutional long-term care

Since January 2011 (see section 6.1.4), medically indicated care provided at nursing homes is paid by MHI in the form of a flat rate of Sw.fr.9.00 per day and per care level, which is determined by the degree of dependency (see section 5.8). The maximum daily MHI contribution (for care level 12) is Sw.fr.108 and is fixed by the federal government (Federal Council). If the amount reimbursed by MHI does not cover the total medical costs, patients pay up to 20% of the maximum MHI contribution, i.e. a maximum patient contribution of Sw.fr.21.60 per day or Sw.fr.7884 per year, for institutional long-term care. These patient payments are usually made in the form of flat rates per day, depending on the degree of dependency. Any remaining costs are financed by the canton or municipality (see section 5.8.2 for the distribution of costs across payers).

For nursing homes that are publicly co-financed or subsidized, the public (cantonal or municipal) contribution is usually linked with a contract that specifies certain requirements (e.g. the provision of high-quality care). However, the details of these contracts can be manifold (deficit guarantees, infrastructure investments, etc.) and requirements are often relatively unspecific. Patient contributions for assistance and housing are usually lower in publicly co-financed or subsidized institutions compared with private institutions.

3.7.2 Paying health workers

Physicians

The income of doctors in **independent practice** is directly determined by the payment system as described in section 3.7.1. In some cantons, these doctors are allowed to run a practice pharmacy, which can generate an important share of the total income (see section 5.6.2). The annual median income of physicians in independent practice was around Sw.fr.190 500 in 2009, with considerable variation across regions (Sw.fr.181 100 in Zurich and Sw.fr.244 050 in Central Switzerland) and specialties (Sw.fr.107 400 for child and adolescent psychiatrists and Sw.fr.374 400 for gastroenterologists) (Kraft & Laffranchi, 2012). For comparison, the annual median income across all sectors of the economy was Sw.fr.77 268 in 2012 (FSO, 2015b).

In **insurance-owned HMOs** (see section 5.3), doctors are employed and receive a salary. In doctor-owned HMOs, doctors normally receive performance-related payments as well as a guaranteed minimum income.

Most physicians working in **hospitals** are employed and receive a salary, independently of whether they work in inpatient or outpatient departments. The average annual salary of assistant doctors (in specialization training) was

estimated to be around Sw.fr.101 000 in 2010, while that of specialist doctors was Sw.fr.163 000 (Künzi, Strub & Stocker, 2011). Salaries of managing doctors were at Sw.fr.293 000 and chief physicians earned Sw.fr.419 000, with considerable parts of their salaries (about 42% of the salary of chief physicians) determined by bonuses. Bonuses are generated mostly through the provision of services to inpatients with VHI, and they are increasingly redistributed by hospitals across employed physicians.

Other professionals in ambulatory settings

Most professionals in an ambulatory setting – pharmacists, chiropractors, physiotherapists, ergotherapists, dentists, nurses, midwives, speech therapists and nutrition advisers – are either in independent practice or members of the staff in independent practices. Therefore, their income is directly determined by the payment system as described in section 3.7.1.

Nurses and midwives in hospitals or nursing homes

Nurses, midwives and assistant nurses working in hospitals and nursing homes are almost always employed and receive a salary. There is relatively little information available on salary levels of nurses. According to pflege-berufe.ch, the average salary of nurses in the Canton of Zurich was between Sw.fr.62 600 and Sw.fr.74 400, depending on the type of education (University of Applied Sciences or College of Professional Education and Training).

4. Physical and human resources

There are 293 hospitals in Switzerland, which can vary greatly in size from those with 2–3 beds to more than 2000 beds. On average, hospitals are rather small when compared with other countries, but the number of hospitals per population is comparatively high. About 21% of hospitals are publicly owned and managed, either as part of the administration or as public companies; 25% are run by a NPO, which can be a foundation, an association or a cooperative; and more than half of all hospitals are privately owned (including stock companies, limited liability companies and individuals). Nevertheless, almost two thirds (about 65%) of all beds are in public or non-profit hospitals.

The number of acute care hospitals decreased by about 50% between 2000 and 2013, and the number of beds in acute care hospitals was reduced by about 20% over the same period of time. There were 2.9 beds in acute care hospitals per 1000 population in Switzerland in 2013, which was below the EU average. Average length of stay (ALOS) in acute care hospitals has reduced by 37% since 2000 and was at 5.9 days in 2013, which was also below the average in EU countries.

Owners of health care institutions are responsible for managing capital investments and, since the introduction of SwissDRG-based payment, hospital investments also have to be – at least in theory – financed from revenues received for provided services. However, cantons sometimes still have dedicated budgets for investments as was also the case prior to the introduction of DRGs. While Switzerland has one of the highest densities of medical imaging technologies in Europe, this varies considerably across cantons.

The number of physicians and nurses has increased relatively strongly over the past two decades, while the number of dentists, pharmacists and midwives has remained more or less stable. With 4.1 physicians and 17.7 nurses (including midwives) per 1000 inhabitants in 2013, Switzerland had the highest number of

nurses and the second highest combined number of physicians and nurses after Monaco in the entire European Region. The number of dentists, pharmacists and midwives per 1000 population is comparatively low. The physician workforce is undergoing an important demographic shift of older, male physicians being increasingly replaced by younger, female physicians. There is a high reliance on foreign-trained health workers and in 2013 almost 30% of all active physicians in Switzerland held a diploma from a foreign medical university.

4.1 Physical resources

4.1.1 Capital stock and investments

Current capital stock

Switzerland has a highly developed inpatient sector with relatively large capacity. Table 4.1 provides an overview of different types of hospitals and their distribution according to ownership. About 21% of hospitals are publicly owned and managed either as part of the administration or as public companies; 25% are run by a NPO, which can be a foundation, an association or a cooperative; and more than half of all hospitals are privately owned (including stock companies, limited liability companies and individuals). Nevertheless, almost two thirds (about 65%) of all beds are in public or non-profit hospitals, which are on average larger than private for-profit hospitals (see section 4.1.2).

Statistics distinguish between general hospitals, which have several departments, and specialized hospitals, which are facilities with no more than two departments, mostly specializing in psychiatric or rehabilitation care. In 2013, there were five university hospitals, located in the largest Swiss cities of Zurich, Geneva, Basel, Bern and Lausanne. They provided the highest level of care (level 1). Thirty-four large cantonal general hospitals that also provide supra-regional high-level care were classified into the next level (level 2), while 74 regional and other small hospitals providing basic care were classified into levels 3 to 5, according to the number of cases treated and the number of specialized units (FSO, 2006).

Slightly more than half of all general hospitals are public or non-profit, while about 60% of specialized hospitals are private (see Table 4.1). Two thirds of all hospital beds in 2012 were provided by general hospitals and one third by specialized hospitals. The 10 biggest hospitals provided 25% of all hospital beds (FSO, 2014s). There is a trend for consolidation of single hospitals into larger corporations (Berger et al., 2015), and increasingly also for specialization of

Table 4.1

Categories of public and private hospitals in Switzerland, 2013

	Public	Private non-profit	Private for profit	Total
<i>General hospitals</i>	34	27	52	113
– University hospitals (Central hospital, level 1)	4	1	0	5
– High-level care general hospitals (Central hospital, level 2)	15	4	15	34
– “Large” basic general hospitals (level 3)	6	4	8	18
– “Middle-sized” basic general hospitals (level 4)	5	6	18	29
– “Small” general hospitals (level 5)	4	12	11	27
<i>Specialized hospitals</i>	27	45	108	180
– Psychiatric clinics (level 1)	15	0	6	21
– Psychiatric clinics (level 2)	3	15	13	31
– Rehabilitation clinics	5	10	28	43
– Surgical clinics	0	3	31	34
– Gynaecology/neonatology clinics	0	2	18	20
– Paediatric clinics	1	2	0	3
– Geriatric clinics	3	2	1	6
– Other specializations	0	11	11	22
Total	61	72	160	293

Source: FOPH, 2015f.

hospitals in certain areas of care (Christen et al., 2013). A large proportion of Swiss hospitals was built in the 1970s during the time of health system expansion and, according to a survey of hospitals in 2012, there is considerable need for investment (PwC, 2013).

Investment funding

Most investments in health care infrastructure depend on decisions of providers. Cantons play a declining role in hospital investment because the transition to DRG-based payment since 2012 (see section 3.7.1) has – at least in theory – meant an end to direct subsidies for investments from the cantons. However, in practice, cantons as owners of most hospitals continue to play an important role in shaping investment decisions, and they sometimes continue to have dedicated budgets for investments (Christen et al., 2013). In addition, because cantons plan hospital capacity (see section 2.5), cantonal decisions influence investment decisions of hospitals. Finally, the inter-cantonal planning of highly specialized medical care (IVHSM, see section 2.5.2) plays a role in shaping investment decisions: hospitals (or cantons as owners of hospitals) might invest in infrastructure with the aim of being designated a centre of reference (for a

certain highly specialized area of care) or to keep the status of a reference centre, although the scientific committee of IVHSM highly discourages new investments if national needs are met by existing infrastructure.

DRG-based payments in Switzerland cover full costs of service provision. However, upon introduction of the system in 2012, calculated DRG weights (based on running costs) were simply increased by 10% for investment costs because data on investment costs were unavailable. However, data collection about investment costs was started, and DRG weights of the 2015 version of SwissDRGs include investment costs, enabling a more precise allocation of resources.

In 2013, reports indicated a strong growth of investment activity in many hospitals, particularly in large public hospitals (PwC, 2013). Possible explanations for this growth include that hospitals have to adjust to the new financing system, characterized by DRG-based reimbursement and greater choice, meaning that hospitals may attempt to achieve a better position in the market. Another explanation could be that the investment cycle for hospital buildings from the 1970s came to an end.

Investment in ambulatory care outside hospitals depends exclusively on investment decisions of physicians or other providers, who are free to set up their practices where they like or to make investments in new equipment (see section 4.1.3). Investment costs are subsequently covered through reimbursements for services. Investments in the hospital outpatient infrastructure follow similar rules as investments in the inpatient infrastructure, and it is often difficult to distinguish between inpatient and outpatient investments (e.g. in radiology).

4.1.2 Infrastructure

The number of hospitals per population in Switzerland is relatively high by international standards, while the size of hospitals is relatively small. Table 4.2 shows that in 2013 the average hospital had 129 beds, with public and non-profit hospitals being larger (191 beds) and private for-profit hospitals smaller (79 beds). General hospitals tend to be larger (222 beds) and specialized hospitals are generally smaller (71 beds) (not shown in the table). Hospital size and bed density vary considerably across cantons and regions (Table 4.2). Bed density is highest in Northwestern Switzerland (5.7 beds per 1000 population) and lowest in Central Switzerland (3.2 beds per 1000 population). Hospitals tend to be larger in the Lake Geneva region and smaller in Eastern Switzerland.

Table 4.2

Distribution of public and private hospitals and beds across cantons, 2013

	Hospitals			Beds per hospital (average)			Beds per 1 000 population
	Public/ non-profit	Private/ for-profit	Total	Public/ non-profit	Private/ for-profit	Total	
Lake Geneva region	22	27	49	276	52	153	4.8
Vaud (VD)	14	17	31	195	47	114	4.7
Valais (VS)	4	2	6	307	43	219	4.0
Geneva (GE)	4	8	12	529	64	219	5.6
Espace Midland	20	33	53	180	104	139	4.1
Bern (BE)	12	23	35	170	112	132	4.6
Fribourg (FR)	4	2	6	146	22	158	3.2
Solothurn (SO)	0	3	3	0	257	257	2.9
Neuchâtel (NE)	2	4	6	313	7	109	3.7
Jura (JU)	2	1	3	178	27	119	5.0
Northwestern Switzerland	19	30	49	170	103	129	5.7
Basel-Stadt (BS)	8	6	14	114	54	88	6.5
Basel-Landschaft (BL)	5	8	13	334	64	168	7.8
Aargau (AG)	6	16	22	109	140	132	4.5
Zurich (ZH)	27	19	46	186	68	137	4.4
Eastern Switzerland	28	32	60	132	66	97	5.1
Glarus (GL)	0	3	3	49		49	3.7
Schaffhausen (SH)	1	1	2	266	28	147	3.7
Appenzell Außerrhoden (AR)	2	5	7	107	57	71	9.3
Appenzell Innerrhoden (AI)	1	1	2	27	18	14	1.7
St. Gallen (SG)	11	4	15	186	24	142	4.3
Graubünden (GR)	13	6	19	89	23	68	6.6
Thurgau (TG)	0	12	12	0	118	118	5.4
Central Switzerland	7	11	18	238	73	145	3.2
Lucerne (LU)	4	5	9	286	68	165	3.8
Uri (UR)	1	0	1	73	0	73	2.0
Schwyz (SZ)	3	1	4	58	82	64	1.7
Obwalden (OW)	1	0	1	76	0	76	2.1
Nidwalden (NW)	1	1	2	74	3	39	1.8
Zug (ZG)	1	4	5	124	94	100	4.2
Ticino (TI)	6	8	14	217	71	134	5.4
Total	133	160	293	191	79	129	4.6

Source: FOPH, 2015f.

Note: Beds per 1000 population calculated based on end-of year population by canton (FSO, 2014j).

Table 4.3 illustrates the development of hospitals and hospital beds between 1990 and 2013. Since 1990 there has been a 30% decrease in the number of hospitals from 425 in 1990 to 293 in 2013. The number of acute care hospitals has declined even more strongly, dropping by more than half from 236 in 1990 to 113 in 2013. Nevertheless, there were 3.63 hospitals per 100 000 population in Switzerland in 2013, considerably more than in Austria (3.28 in 2013), and far above numbers in Italy (1.94 in 2012), the Netherlands (1.6), or on average in the EU15 countries (3.1), although fewer than in France (5.3) or Germany (3.95). The number of acute care hospitals reported to international databases has to be interpreted with caution because it includes only general hospitals (compare Table 4.3 with Table 4.1), and excludes 85 specialized (surgical, gynaecological and paediatric) hospitals providing acute inpatient care (FOPH, 2015f). Surprisingly, acute care beds available in these specialized hospitals seem to be included in international databases.

Table 4.3

Number and density of hospitals and hospital beds in Switzerland, selected years 1990 to 2013

	1990	1995	2000	2005	2010	2011	2012	2013
Number of all hospitals	425	441	376	337	300	300	298	293
– per 100 000 population	6.33	6.26	5.23	4.53	3.83	3.90	3.86	3.63
Number of acute care hospitals	236	253	230	192	121	120	116	113
– per 100 000 population	3.52	3.59	3.20	2.58	1.55	1.56	1.50	1.40
Number of hospital beds	n/a	n/a	45 170	41 196	38 852	38 533	38 402	37 836
– per 1 000 population	n/a	n/a	6.29	5.54	4.97	5.01	4.96	4.68
Number of acute care hospital beds	n/a	n/a	29 540	27 132	24 489	23 964	23 935	23 543
– per 1 000 population	n/a	n/a	4.11	3.65	3.13	3.11	3.09	2.91

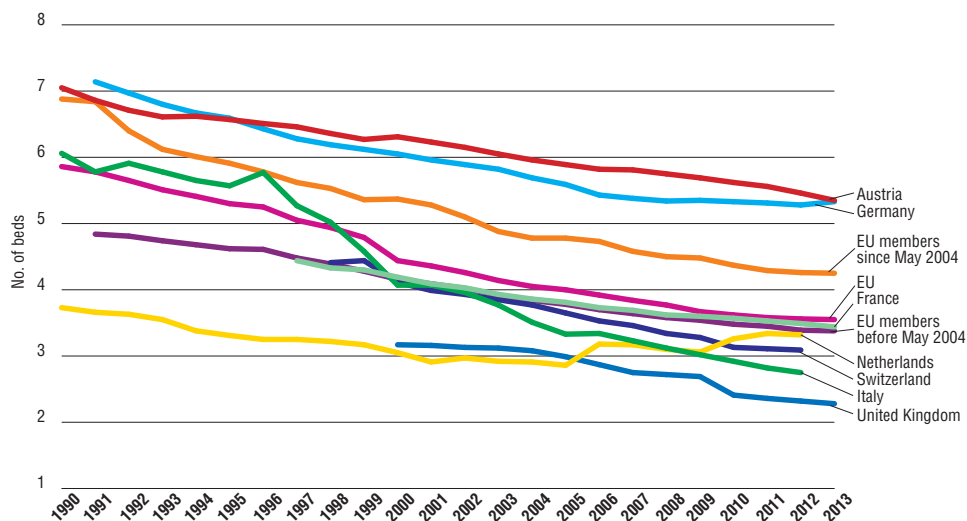
Source: WHO Regional Office for Europe, 2014.

Note: n/a = not available in WHO Regional Office for Europe – national data do not correspond for previous years.

The number of hospital beds reduced by about 15% from the year 2000 to about 38 000 beds or 4.7 beds per 1000 population in 2013. The number of acute care hospital beds reduced even more, by about 20% from the year 2000. In 2013, there were 2.91 beds per 1000 population in acute care hospitals. This is below the EU28 average of 3.6 beds per 1000 population and considerably below the corresponding numbers in Austria (5.4) and Germany (5.3), although slightly higher than in Italy (2.8 in 2012) (see Fig. 4.1).

Fig. 4.1

Beds in acute hospitals per 1000 population in Switzerland and selected countries, 1990 to 2013



Source: WHO Regional Office for Europe, 2015.

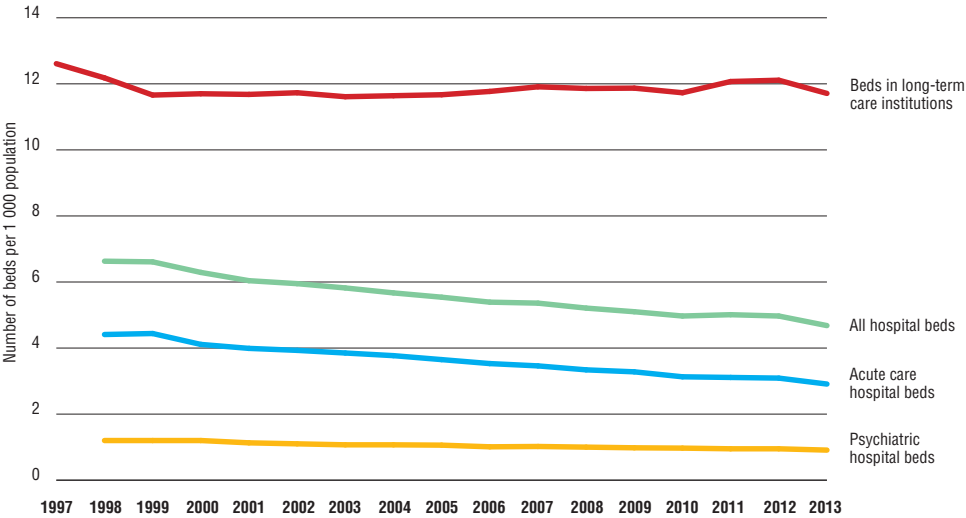
In contrast to the decline of acute care beds in Switzerland, the number of long-term care beds per 1000 population has remained relatively stable since the year 2000 and has slightly increased in recent years (see Fig. 4.2). In fact, there are 2.5 times as many beds in long-term care institutions (11.7 per 1000 population) than in hospitals (4.7 per 1000 population), including acute and non-acute (e.g. psychiatric and rehabilitation) hospitals.

The ALOS of acute care hospital cases declined by more than 55% since the early 1990s, from 13.4 days in 1990 to 5.9 days in 2013 (see Fig. 4.3). ALOS in 1990 was long by international standards, but the strong decline has brought Switzerland below the average of EU15 countries. The Swiss ALOS is similar to the United Kingdom (5.9 days) but higher than in France (5.1 days in 2010).

Bed occupancy rates in Switzerland in 2013 (83.6%) were higher than the EU15 (77.1%) and EU28 (76.6%) averages (see Fig. 4.4). The data show a strong decline in occupancy rates in 2012, the first year under DRG-based payment, but a slightly upward trend in 2013.

Fig. 4.2

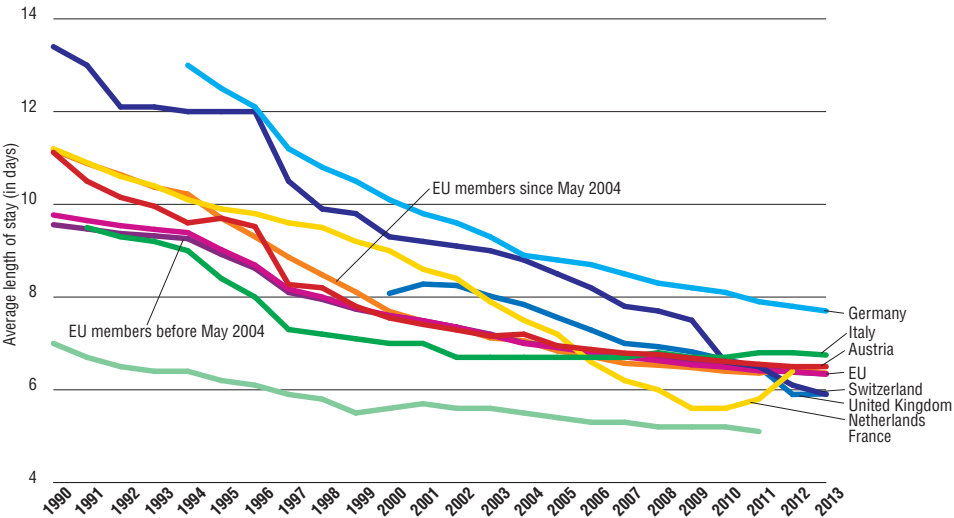
Mix of beds in acute care hospitals, psychiatric hospitals and long-term care institutions in Switzerland per 1000 population, 1998 to 2013



Source: WHO Regional Office for Europe, 2014.

Fig. 4.3

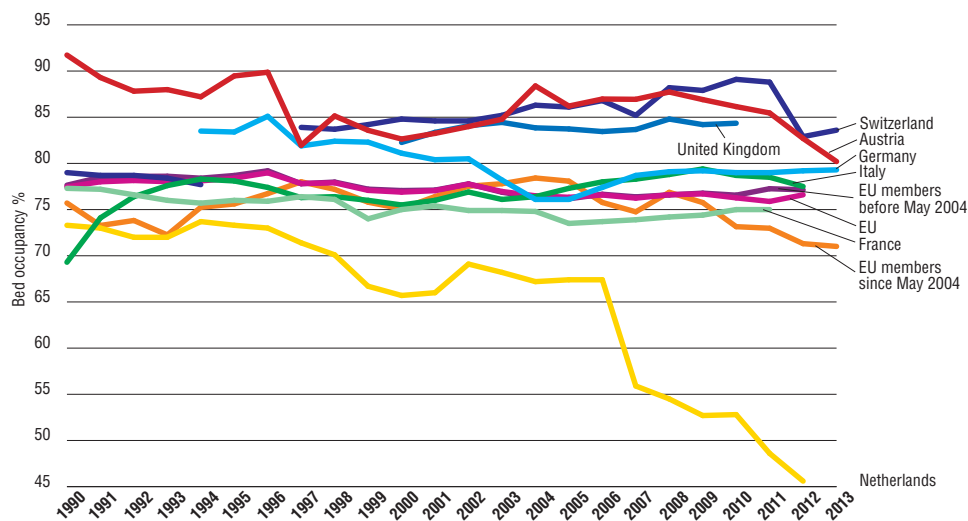
ALOS, acute care hospitals in Switzerland and selected countries, 1990 to 2013 (or latest available year)



Source: WHO Regional Office for Europe, 2015.

Fig. 4.4

Bed occupancy rates in acute care hospitals (%) in Switzerland and selected countries, 1990 to 2013 (or latest available year)



Source: WHO Regional Office for Europe, 2015.

4.1.3 Medical equipment

For hospital care, medical equipment is financed just as other hospital infrastructure (see section 4.1.1). In ambulatory settings outside hospitals (mostly individual practices), investment in medical equipment largely depends on profitability considerations of physicians, and data are not readily available. However, in 2009, about 4200 individual or group practices had in-practice X-ray machines, corresponding to about a quarter of the number of all physicians in ambulatory practice (Kocher, 2010).

Concerning large-scale diagnostic technologies, Switzerland is very well equipped in comparison to other countries (see Table 4.4). In fact, the country has one of the highest densities of diagnostic imaging technologies in Europe. For positron emission tomography (PET) scanners, the population density in Switzerland is more than 10 times the density in Austria, France and Italy, and more than six times the density in the Netherlands.

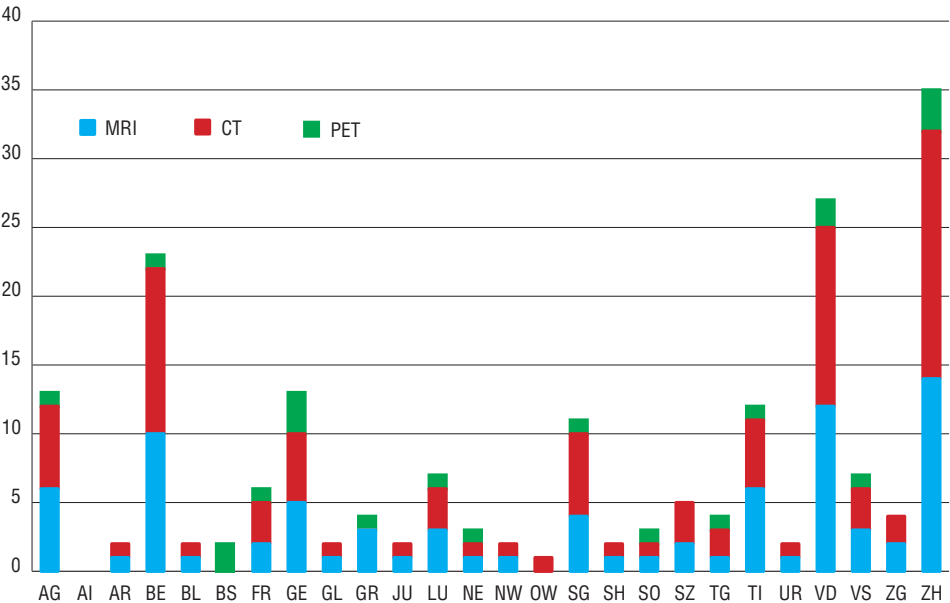
Table 4.4
Diagnostic imaging technologies in hospitals and ambulatory sector per 100 000 population in Switzerland and selected countries, 2012

	MRI units	CT scanners	PET scanners	Mammographs	Gamma cameras	DSA units
Switzerland	2.08	3.46	3.25	3.29	9.13	2.76
Austria	1.91	2.98	0.20	2.24	1.21	–
France	0.87	1.35	0.14	–	0.58	–
Italy	2.46	3.33	0.27	3.34	1.07	1.34
Netherlands	1.18	1.09	0.49	–	1.04	–

Source: Eurostat, 2014b.

The number of specific imaging machines differs enormously across cantons with hospitals in Zurich and Vaud having the highest number of items (see Fig. 4.5), while some cantons have very low numbers of equipment. Nevertheless, access to diagnostic equipment is generally considered to be very good across all of Switzerland, and overutilization of certain technologies (“supplier-induced demand”) is considered to be a problem (see section 7.5.1).

Fig. 4.5
Cantonal distribution of diagnostic imaging technology items in Swiss hospitals, 2012



Source: FOPH, 2015f.

4.1.4 Information technology

In 2013, 89% of the Swiss population had broadband internet access from home, compared with 53% in 2005 (see Fig. 4.6). The share of broadband connections in Switzerland is high when compared to neighbouring countries and above the EU15 average of 75%.

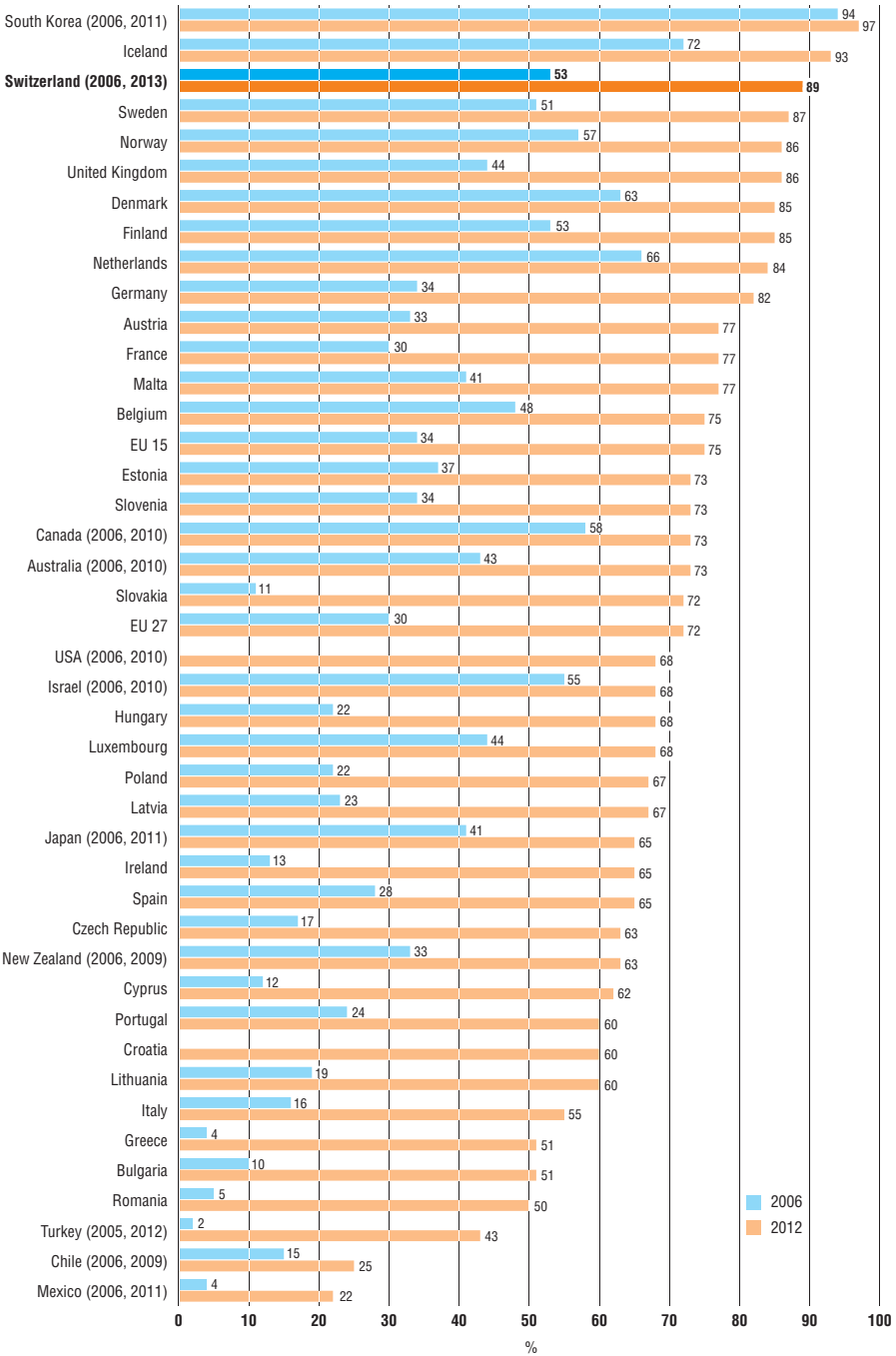
In 2010, the last year for which data are available, 55% of all Swiss internet users searched the web for health-related content (20% in 2004) (FSO, 2012). More women (62%) than men were looking for health topics online. However, there were no significant differences in usage by level of education or standard of living, in contrast to most other internet activities.

The federal government's Health2020 strategy paper (FDHA, 2013) (see section 2.5) includes "make greater use of e-Health" as one objective. The scale-up of e-Health is expected to contribute to efficiency gains, improved coordination and better quality. An e-Health strategy developed by the FDHA and the GDK/CDS was approved by the Federal Council as early as 2007 (FOPH, 2007b). In 2011, a coordination body called eHealth Suisse was set up based on a framework agreement between the FDHA and the GDK/CDS. eHealth Suisse coordinates the implementation of the e-Health strategy. It originally aimed to introduce electronic health records by 2015 but there have been substantial delays. A proposed Federal Law on Electronic Health Records (EPDG/LDEIP) was adopted by Parliament on 15 June 2015 (see section 6.2).

Electronic identification cards for MHI members that aimed to enable the reliable recording of key medical and personal data were introduced in 2010 (Camenzind, 2012b), however, the introduction of an interoperable national patient dossier (electronic health record) is complicated by the principles of decentralization, privacy and data protection, which are regarded as very important in Swiss health care (Camenzind, 2012b).

Despite the high computer literacy and prioritization of e-health at the federal level, usage of electronic medical records in primary care is less common than in other countries (Schoen et al., 2012) and there are efforts to overcome physicians' reluctance to use IT for patient data management (Camenzind, 2012b). Hospital use of e-Health tools is generally thought to be more advanced than in the GP setting and electronic medical records are not uncommon. However, there is considerable variation in use between hospitals and cantons.

Fig. 4.6
Percentage of households with broadband internet access from home, 2006 and 2012
or closest year



Sources: Eurostat, 2014a; non-EU countries based on OECD, 2014c; for Switzerland: FSO, 2014d.

4.2 Human resources

4.2.1 Health workforce trends

The number of health workers in Switzerland has seen a strong increasing tendency over the past two decades, in particular, for physicians and nurses, while it has remained more or less stable for dentists, pharmacists and midwives (see Table 4.5). The number of practising physicians increased by almost 40% between 1990 and 2013, i.e. from about 3 per 1000 population to about 4 per 1000 population. The proportion of physicians practising in hospitals remained more or less stable and was at about 45% in 2012. There are a number of data problems, which complicate comparisons over time (see note to Table 4.5). However, it is clear that the specialties of paediatrics, and psychiatry and psychology saw the strongest increases. The number of nurses increased by almost 35% between 2000 and 2013. Yet, it should be kept in mind that these numbers reflect physical persons (PP) and do not take into account shifts in part-time employment. The development of full-time equivalents (FTE) may have been different as there has been a trend towards more part-time work.

In 2013, the number of physicians and nurses per 1000 population was amongst the highest in Europe (see Fig. 4.7). With 4.1 physicians and 17.7 nurses (including midwives) per 1000 inhabitants, Switzerland had the second highest combined number of physicians and nurses after Monaco in the entire European Region (see Fig. 4.7). In fact, the number of nurses was the highest amongst all countries in the European Region, although there might be some inconsistencies concerning the classification of nurses and nursing assistants in international databases. The number of physicians is likely to be even higher than shown in the figure because data on physicians working and specializing in hospitals is thought to be incomplete.

Table 4.5

Health workers in Switzerland per 1000 population, 1990 to 2013 (or latest available year)

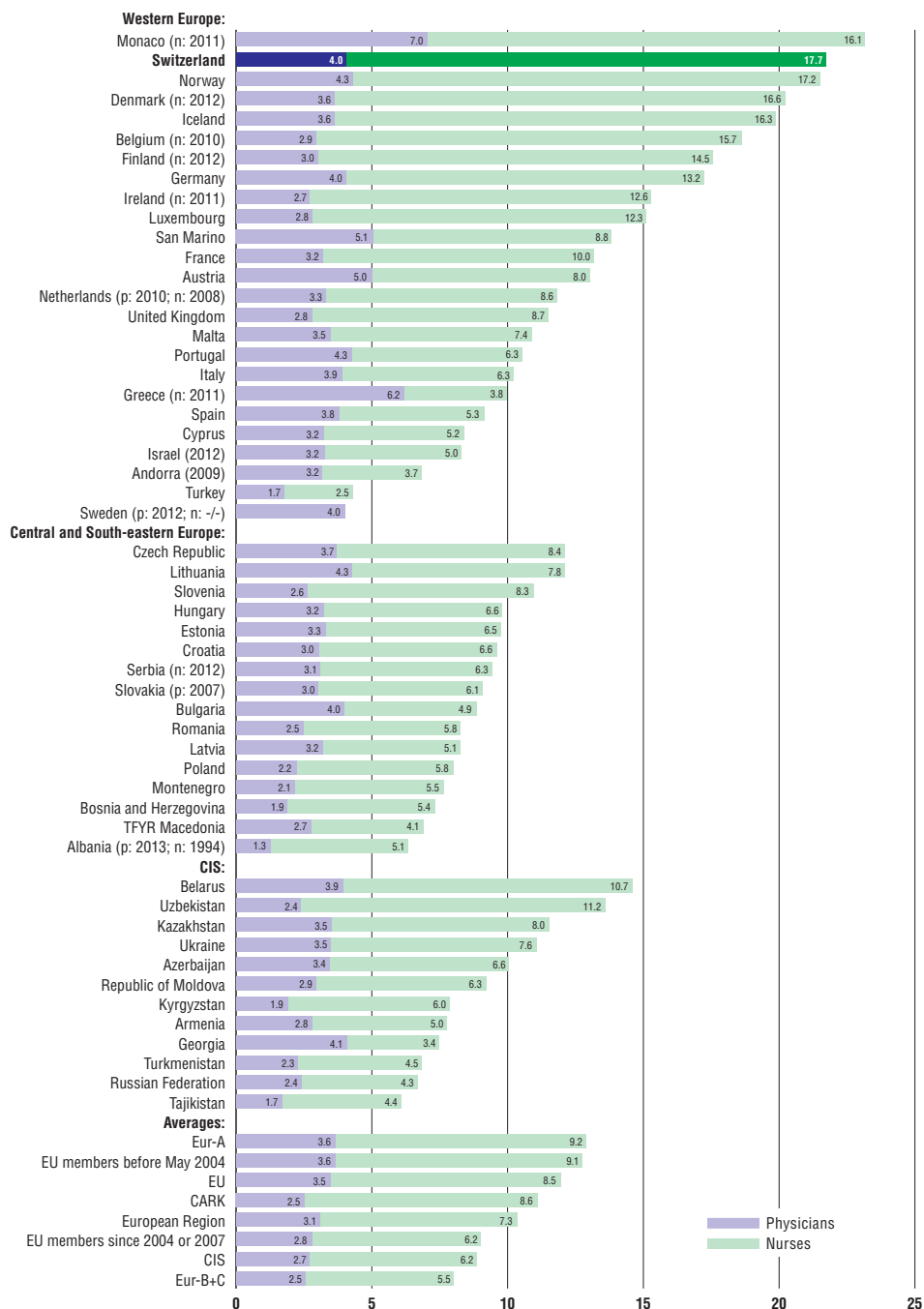
	1990	1995	2000	2005 ***	2010	2011	2012	2013	Change (%) 1990 to latest available year
Practising physicians	2.95	3.14	3.50	3.76	3.85	3.88	3.97	4.052	38.4
% of physicians working in hospitals*	43.0	38.4	44.7	45.8	45.3	45.7	45.7	45.5	5.8
GPs**	0.63	0.90	0.96	1.17	0.90	0.94	0.95	0.97	53.1
General surgeons	0.13	0.13	0.13	0.14	0.15	0.15	0.15	0.16	21.8
Physicians, obstetric and gynaecological group	0.11	0.12	0.13	0.15	0.17	0.17	0.18	0.19	78.5
Paediatrics	0.10	0.11	0.12	0.15	0.18	0.18	0.19	0.20	110.5
Dentists ¹	0.48	0.49	0.48	0.50	0.52	0.52	0.52	0.52	6.8
Pharmacists ²	0.53	0.59	0.62	0.60	0.54	0.55	0.56	-0.54	-1.9
Psychiatrists and psychologists	0.16	0.20	0.23	0.31	0.37	0.38	0.40	0.418	158.2
Nurses ²	-	-	13.15	14.32	16.31	17.38	17.88	17.69	34.5
% of nurses working in hospitals ²	-	-	-	52.2	47.6	-	-	-	-
Midwives ²	0.27	-	0.28	0.24	0.29	0.30	0.32	0.31	14.8

Sources: FMH, 2014b unless indicated otherwise; IFSO, 2014a; WHO Regional Office for Europe, 2015.

Notes: *break in series since 2010; **break in series since 2011, when the degree of General Internal Medicine replaced the previously existing degrees of General Medicine and Internal Medicine; ***break in series since 2010 for all FMH data; physicians with multiple specialist degrees are no longer counted several times.

Fig. 4.7

Number of physicians and nurses per 1000 population in the WHO European Region, 2013 (or latest available year)



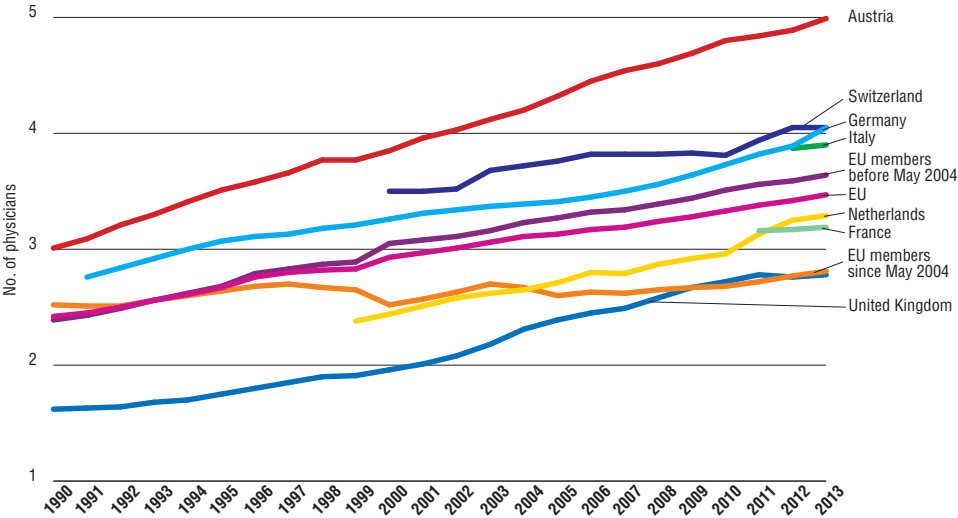
Source: WHO Regional Office for Europe, 2015.

Physician workforce

Fig. 4.7 shows that Monaco, Norway, Greece, San Marino, Austria and Portugal are the only countries in Western Europe that have higher numbers of physicians for their populations. The number of practising physicians increased by 26.3% between 2000 and 2012 (from 25 216 to 31 858), corresponding to an increase of 13.5% per 1000 population (from 3.50 to 3.97) (FMH, 2014). This increase can be compared to international figures, where the number of physicians (measured in physical persons, PP, and not in FTE) has also increased in most countries (see Fig. 4.8).

Fig. 4.8

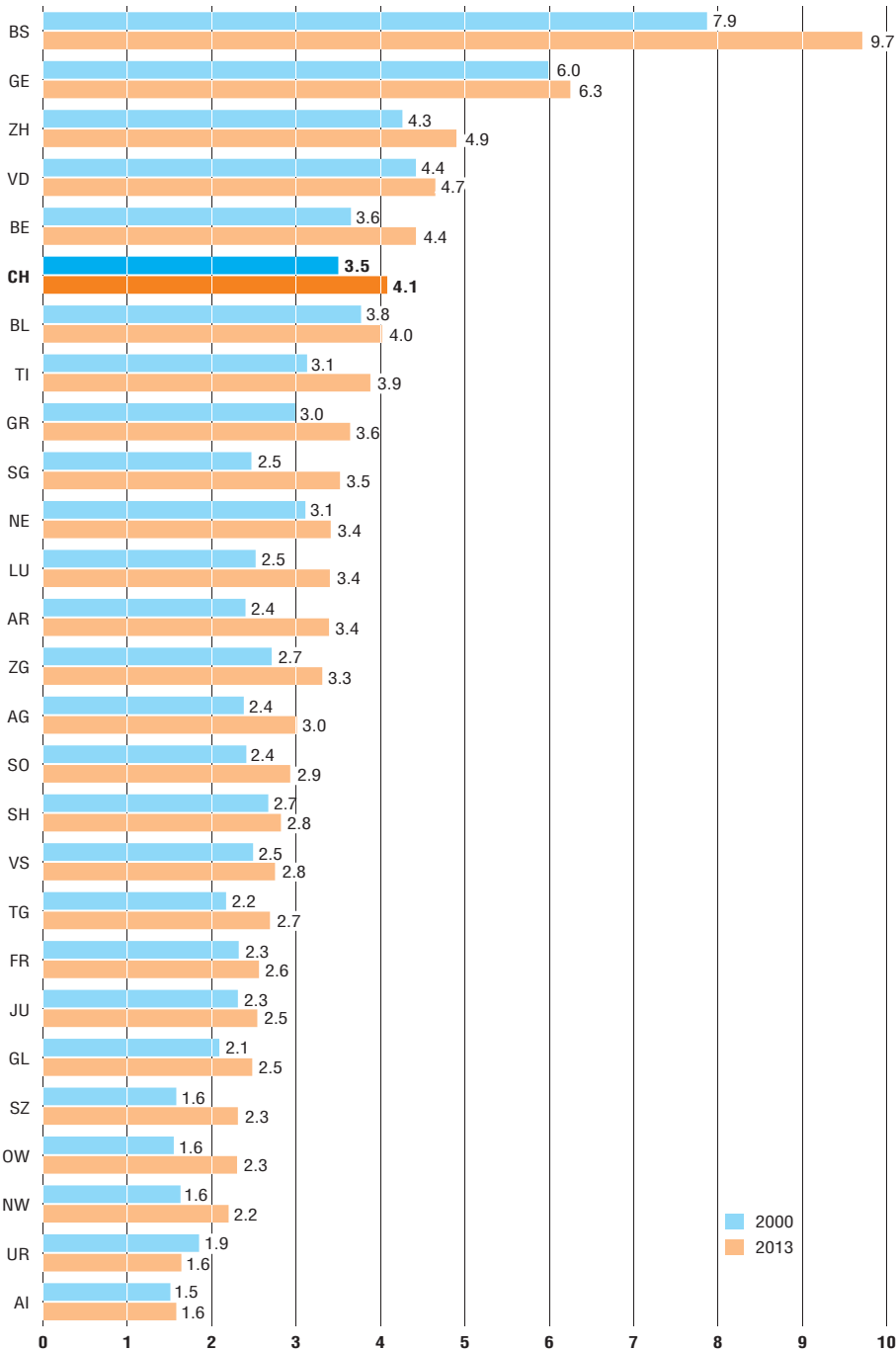
Number of physicians (PP) in Switzerland and selected countries per 1000 population, 1990 to 2013 (or latest available year)



Sources: Switzerland based on FMH, 2014b; all other countries based on WHO Regional Office for Europe, 2014.
Notes: International databases have data on physicians in Switzerland only since 2008; PP = physical person.

According to FMH statistics for 2013, the distribution of physicians across cantons shows huge variations, with cantonal density ranging from 1.58 per 1000 population in Appenzell Innerhoden (AI) to 9.71 in Basel-Stadt (BS) (see Fig. 4.9). There has been an increase in the number of physicians in almost all cantons since the year 2000. However, the strongest increase has taken place in Basel-Stadt, where the number of physicians was already highest in 2000. The distribution of GPs across cantons is much more equal, although density still ranges from 0.48 per 1000 population in Fribourg to 1.12 in Basel-Stadt (see section 5.3).

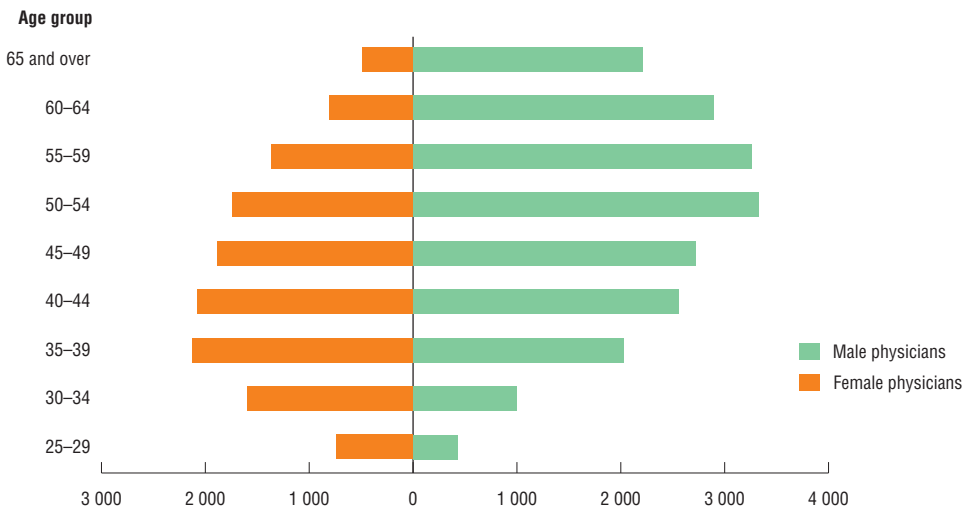
Fig. 4.9
Cantonal numbers of practising physicians (PP) per 1000 population in Switzerland, 2013



Source: FMH, 2014b.

Looking at the physician workforce in more detail shows that it is undergoing an important transformation from a male-dominated towards a female-dominated profession. Growth in the physician workforce is occurring more rapidly among female physicians (+7.1% when compared with 2012) than male physicians (+2.7%) (Hostettler & Kraft, 2014). In 2013, more than 60% of total physicians (at all ages) were male but more than 60% of physicians under 35 were female (see Fig. 4.10). Interestingly, a considerable number of active physicians are above age 65, indicating that physicians remain professionally active even beyond retirement age. In general, slightly more than half (52.8%) of all physicians work predominantly in ambulatory care, while slightly less than half (45.5%) work in hospitals (Hostettler & Kraft, 2014).

Fig. 4.10
Gender-specific age structure of Swiss physicians, 2013



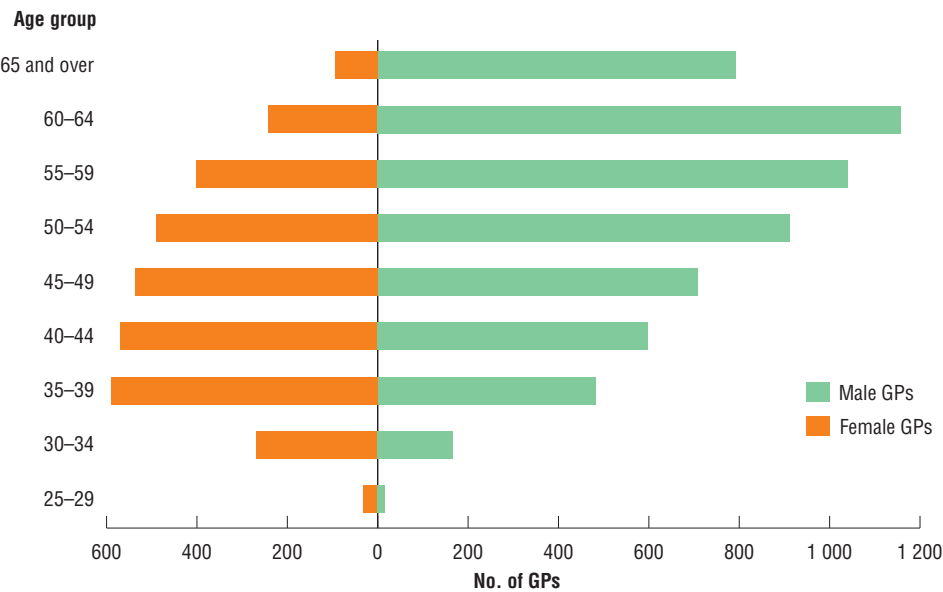
Source: FMH, 2014b.

In 2011, the Federal Council published a strategy against physician shortage and for the promotion of family medicine (Federal Council, 2011). Based on a review of Obsan projections concerning the availability of primary care services in 2030 (Jaccard Ruedin et al., 2009) and considering some other studies, it was concluded that there was currently no shortage of physicians in general. However, Switzerland was able to ensure availability of physicians only by attracting a high number of foreign-trained physicians. In fact, the proportion of foreign-trained physicians has continued to increase (see section 4.2.2). In addition, the number of primary care physicians was declining in some areas

and available physicians were responding to this by increasing their activity levels. The most important recommendation of the strategy was to increase the number of medical training places in Switzerland in order to overcome the heavy reliance on foreign-trained physicians.

In political discussions around a popular initiative to promote primary care (see section 5.3.1), the unfavourable demography of GPs was seen as a reason for concern. Almost half of practising GPs in 2013 were above age 55 and therefore likely to retire within one or two decades (see Fig. 4.11). However, the number of specialization diplomas awarded in the area of primary care (general internal medicine or practical physician) has increased considerably in recent years, i.e. from 359 in 2006 to 755 in 2012 (Obsan, 2013), reversing a prior trend towards lower numbers of trained primary care physicians.

Fig. 4.11
Gender-specific age structure of primary care physicians, 2013



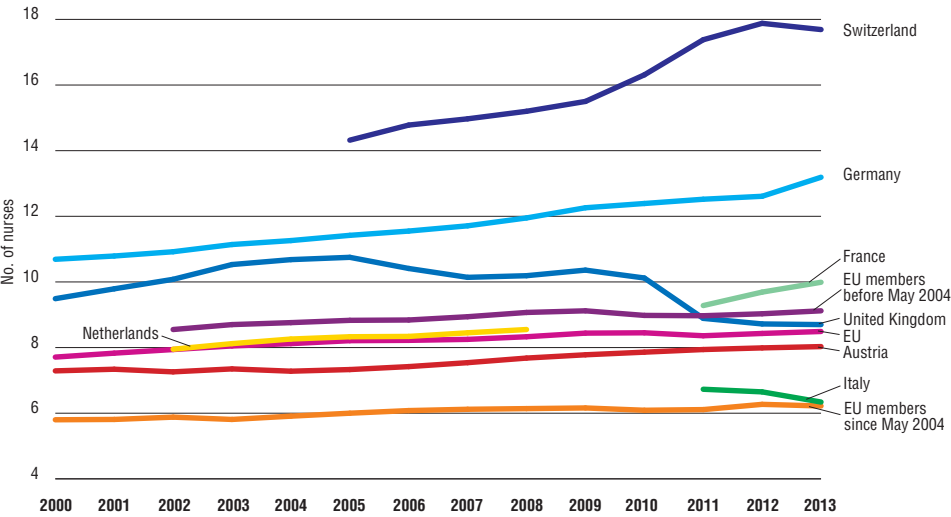
Source: FMH, 2014b.
Note: Numbers include physicians with the specialization titles general internal medicine or practical physician.

Nurse workforce

Nurse density in Switzerland in 2013 (17.7 per 1000 population) was the highest within the WHO European Region and almost twice as high as the average of the region, followed closely by Norway (17.2) and Denmark (16.6, dates from 2012) (see Figs. 4.7 and 4.12). Despite its high level, nurse density continues to

increase. In contrast to the high level of nurses, Switzerland has a relatively low ratio of 0.31 midwives per 1000 population, which is similar to the average of the EU15 (0.30) but far below the average of the United Kingdom (0.49).

Fig. 4.12
Number of nurses (PP) in Switzerland and selected countries per 1000 population, 2000 to 2013 (or latest available year)



Source: WHO Regional Office for Europe, 2015.

Table 4.6 shows the distribution of nurses across different care settings in Switzerland. Across all settings, nurses are the largest group of care professionals, accounting for about 55% of FTE, and hospitals employ about half of all care professionals. About 64% of all nurses work (and almost 70% of FTE are delivered) in hospitals, and nurses constitute the vast majority (about 72%) of all care personnel in hospitals. By contrast, just about half of all nursing assistants work in long-term care institutions, where they constitute the largest group of care professionals.

Table 4.6
Distribution of nurses and nursing assistants by setting, 2012

	Hospitals			Long-term care institutions			Spitex			Total		
	Persons	FTE	% of FTE	Persons	FTE	% of FTE	Persons	FTE	% of FTE	Persons	FTE	% of FTE
Nurses	57 312	43 644	72	19 030	14 084	33	12 716	5 876	45%	89 058	63 605	55%
in % of all settings	64%	69%	—	21%	22%	—	14%	9%	—	100%	100%	—
Nursing Assistants	14 542	11 658	19%	21 833	16 124	38%	8 176	3 822	29%	44 551	31 604	27%
in % of all settings	33%	37%	—	49%	51%	—	18%	12%	—	100%	100%	—
Care assistants	7 932	5 162	9%	18 072	12 069	29%	9 055	3 501	27%	35 059	20 733	18%
in % of all settings	23%	25%	—	52%	58%	—	26%	17%	—	100%	100%	—
Total	79 786	60 464	100%	58 935	42 277	100%	29 947	13 200	100%	168 668	115 941	100%
in % of all settings	47%	52%	—	35%	36%	—	18%	11%	—	100%	100%	—

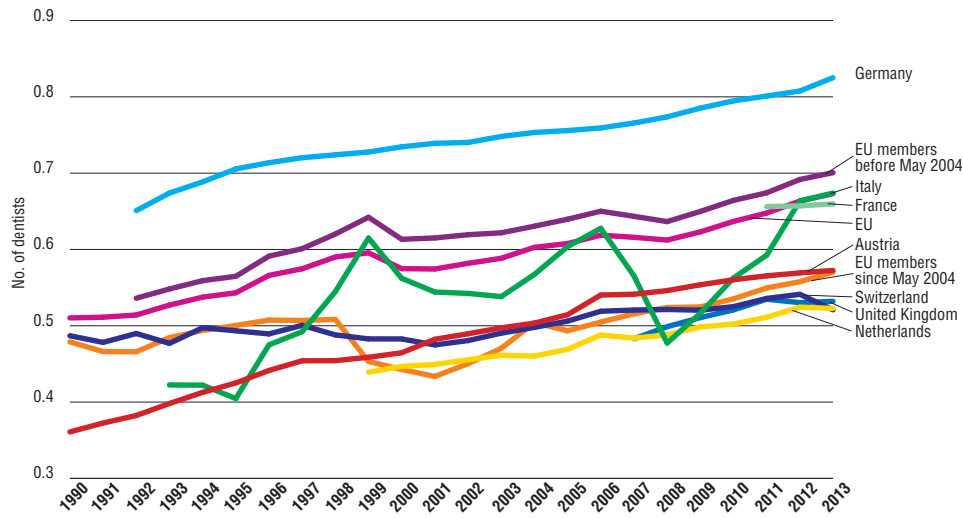
Source: Burla, Vipert & Widmer, 2014.

Despite the – by international standards – very high number of nurses, it was estimated in 2009 that Switzerland needs an additional 4500 nurses and nursing assistants trained annually in order to meet its demand (GDK/CDS, 2009b). Therefore, as part of a “Masterplan” for the training of care professionals (SERI, 2010), training capacities for nurses and nursing assistants are being expanded (see section 4.2.3).

Dentist workforce

In 2011, there were a total of 4123 ambulatory dentists or 0.54 dentists per 1000 inhabitants (FSO, 2013a). This is an increase in ambulatory dentists of about 10% since 2005 (FSO, 2013a). Fig. 4.13 shows that the density of dentists is low in Switzerland compared to the EU average (67 per 100 000 population in 2011). As for most other health professionals, geographical distribution differs considerably between rural and urban areas.

Fig. 4.13
Number of dentists (PP) per 1000 population in Switzerland and selected countries, 1990 to 2013 (or latest available year)



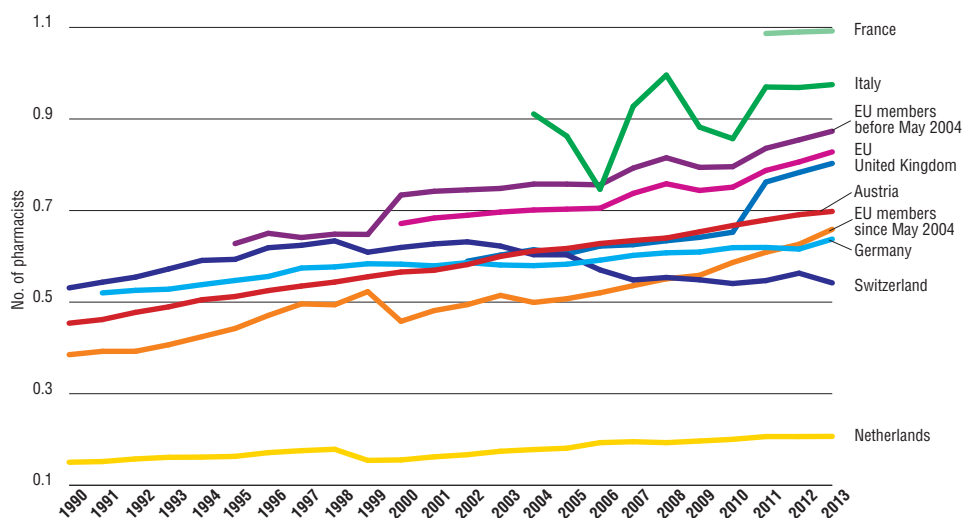
Source: WHO Regional Office for Europe, 2015.

Pharmacist workforce

Switzerland has a relatively low number of 0.54 pharmacists per 1000 population (see Fig. 4.14), considerably below neighbouring countries and the EU average (0.82 per 1000). However, this does not take into account self-dispensing doctors and is thus only an imprecise indicator of access to pharmaceuticals in the Swiss context (see section 5.6.2).

Fig. 4.14

Number of pharmacists (PP) per 1000 population in Switzerland and selected countries, 1990 to 2013



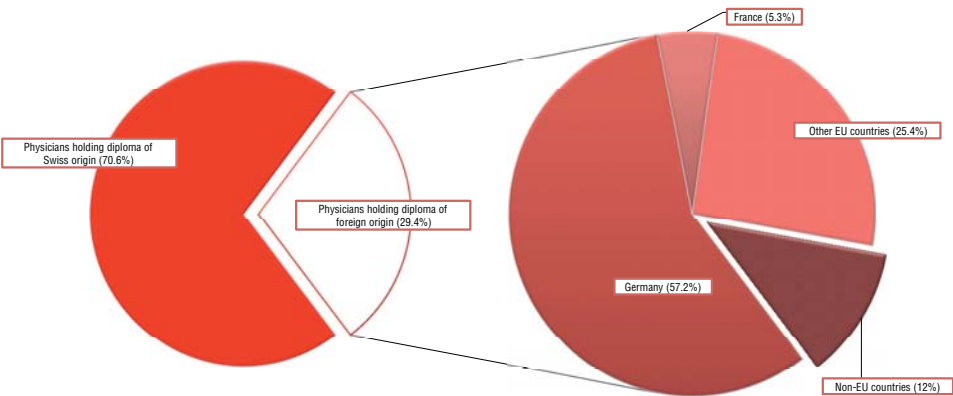
Source: WHO Regional Office For Europe, 2015.

4.2.2 Professional mobility of health workers

Switzerland relies heavily on foreign-trained health professionals (Jaccard Ruedin & Widmer, 2010). In 2013, 29.4% of all active physicians in Switzerland held a diploma from a foreign medical university (Hostettler & Kraft, 2014) and 37% of all specialization diplomas were awarded to foreign-trained physicians. In ambulatory care, the proportion of foreign-trained physicians is smaller than in hospitals: in 2013, 36.3% of physicians working in hospitals had a foreign diploma, while this proportion was 23.1% in the ambulatory sector (FMH, 2014). Every year since 2008, net migration to Switzerland exceeded 1000 physicians (immigration minus emigration of foreign physicians) per year (Obsan, 2012), which is more than the annual number of physicians trained in Switzerland (see section 4.2.3).

The most important country from which physicians migrate to Switzerland is Germany. Physicians trained in Germany account for 57% of foreign physicians practising in Switzerland (see Fig. 4.15). Physicians trained in France account for about 5% of foreign-trained physicians (FMH, 2014). When looking at the origin of migrating physicians whose diplomas were accredited in Switzerland in 2013, about 42% came from Germany, 18% from Italy, 16% from France and 5% from Austria (FOPH, 2014j). Immigration from Germany, Austria, France and Italy is facilitated by common languages.

Fig. 4.15
Practising physicians in Switzerland by origin of diploma, 2013



Source: FMH, 2014b.

Emigration of physicians trained in Switzerland is much less common and reliable data are unavailable. However, the FOPH estimated in 2011 – based on requests for English translations of Swiss diplomas and issued Certificates of Conformity with EU regulations – that every year between 200 and 250 physicians trained by Swiss medical schools might leave the country (at least temporarily) (Federal Council, 2011). Despite the relatively small number, this constitutes almost a third of annually trained physicians in Switzerland.

Immigration of other health professionals is also considerable. Between 2007 and 2012, net migration of nurses was always above 1400 but showed considerable upward variation, exceeding 3000 persons in 2008 (after full free movement of persons was granted to EU15 countries plus Malta and Cyprus in June 2007) (Burla, Vilpert & Widmer, 2014). These numbers are very high when compared to the number of annually trained nurses (see section 4.2.3). Immigrating nurses work mostly in hospitals or long-term care institutions and

only rarely in ambulatory care. In addition, a considerable number of migrant workers from EU countries are assumed to provide informal home care to Swiss elderly, but reliable data on this are unavailable (van Holten, Jähne & Bischofberger, 2013).

The heavy reliance on foreign health professionals is due to a mix of factors, including the inadequate supply of national training places, a comparatively old workforce (see section 4.2.1), and increasing demand for health care services. However, high immigration rates of highly trained professionals are characteristic also for other sectors of the Swiss economy and migrating health professionals constitute only a small part of the overall migration flow to Switzerland (Jaccard Ruedin & Widmer, 2010).

4.2.3 Training of health workers

Increasing national capacity for the training of health workers is a high priority in Switzerland, as documented by the inclusion of the objective “more and well qualified healthcare workers” in the Health2020 strategy (FDHA, 2013). In 2010, a Masterplan for training of health care professionals, focusing on non-university based health professionals, was agreed upon by – among others – the FOPH, GDK/CDS and OdASanté (SERI, 2010). The aim of the plan is to increase training capacity for nurses and other care professionals in order to overcome the estimated lack of about 4500 nationally trained professionals and to reduce dependency on migrants. In addition, in 2011, the government passed a strategy against physician shortage, calling for the number of physicians trained each year to be increased from 800 to around 1300 (Federal Council, 2011). More recently, the aim has been set to at least 1100 by 2016/2017 (FOPH, 2014f).

Training of physicians

There are five medical faculties in Switzerland, located in Zurich, Basel, Bern, Geneva and Lausanne. In addition, students can study for at least parts of their Bachelor of Medicine in Fribourg (all three years) and Neuchâtel (the first year only). Basic training as a physician lasts at least six years. After successful completion of three years of studies, students are granted a Bachelor of Medicine. After three further years (two at university and one in practical training), they obtain a Master of Medicine. Master graduates can then take a final state exam after which they are awarded the Swiss confederate medical diploma. Graduates who hold this diploma are qualified to work under supervision in a hospital or ambulatory care setting.

The Joint Commission of the Swiss Medical Schools (SMIFK/CIMS) defines learning objectives for medical training at universities. Regulations for state exams of physicians and dentists are issued at the federal level with the inclusion of different stakeholders such as medical faculties, the Commission for Medicinal Professions and the SERI (see section 2.8.3 and FOPH, 2013f).

In order to be allowed to work independently, physicians have to undertake further training. Training as a “practical physician” takes at least three years after completion of medical studies and is the minimum requirement in order to be allowed to work independently in primary care. Practical physicians have the option to continue their training and to specialize in general internal medicine after another two years of training, with the alternative options of qualifying either as a GP or as a hospital generalist.

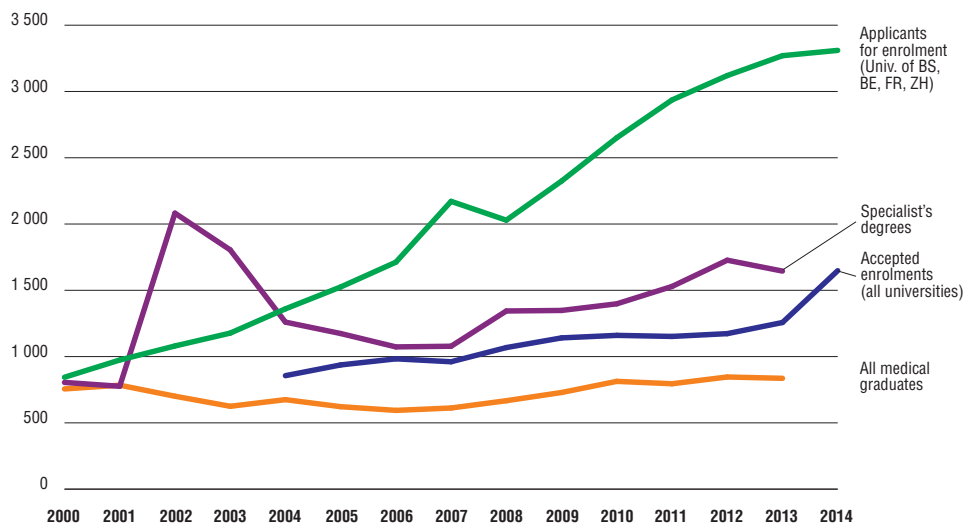
Other specialist training programmes usually take between six and seven years of practice in different hospital departments related to the field of study (Obsan, 2013). Subsequently, doctors are allowed to work independently in hospitals or ambulatory care. There are currently 44 official specializations in Switzerland (Obsan, 2013). After successful specialization, doctors are legally bound to participate in continuous professional education according to a point system (Hänggeli & Bauer, 2010).

All specialization programmes have to be accredited by the Swiss Institute for Postgraduate and Continuing Medical Education (SIWF/ISFM) (see also section 2.8.3). Certain requirements exist for each specialization (e.g. length of training, rotations, number of procedures performed, etc.) but there is no structured progression as such.

Fig. 4.16 provides an overview of the development of medical training capacities between 2000 and 2013. It shows that the number of new medical students accepted at universities has increased considerably since 2004 and reached almost 1650 in 2014. The number of applicants for studies has seen a similarly strong increase over the past decade and remains about twice as high as the number of accepted students. The number of specialization certificates awarded (1645 in 2013) is much higher than the number of medical university graduates (836 in 2013). This is mostly because a large number of physicians move to Switzerland after having completed their basic medical education (see section 4.2.2). In addition, physicians can obtain more than one specialist degree, which means that physicians can be counted twice.

Fig. 4.16

Trends in education of physicians in Switzerland: number of university applicants, accepted enrolments, passed exams and awarded medical degrees, 2000 to 2014



Sources: Applicants and enrolments: (ZTD, 2000, 2001, 2014); medical graduates: FSO/SHIS, 2014; specialist degrees: FMH, 2014b.

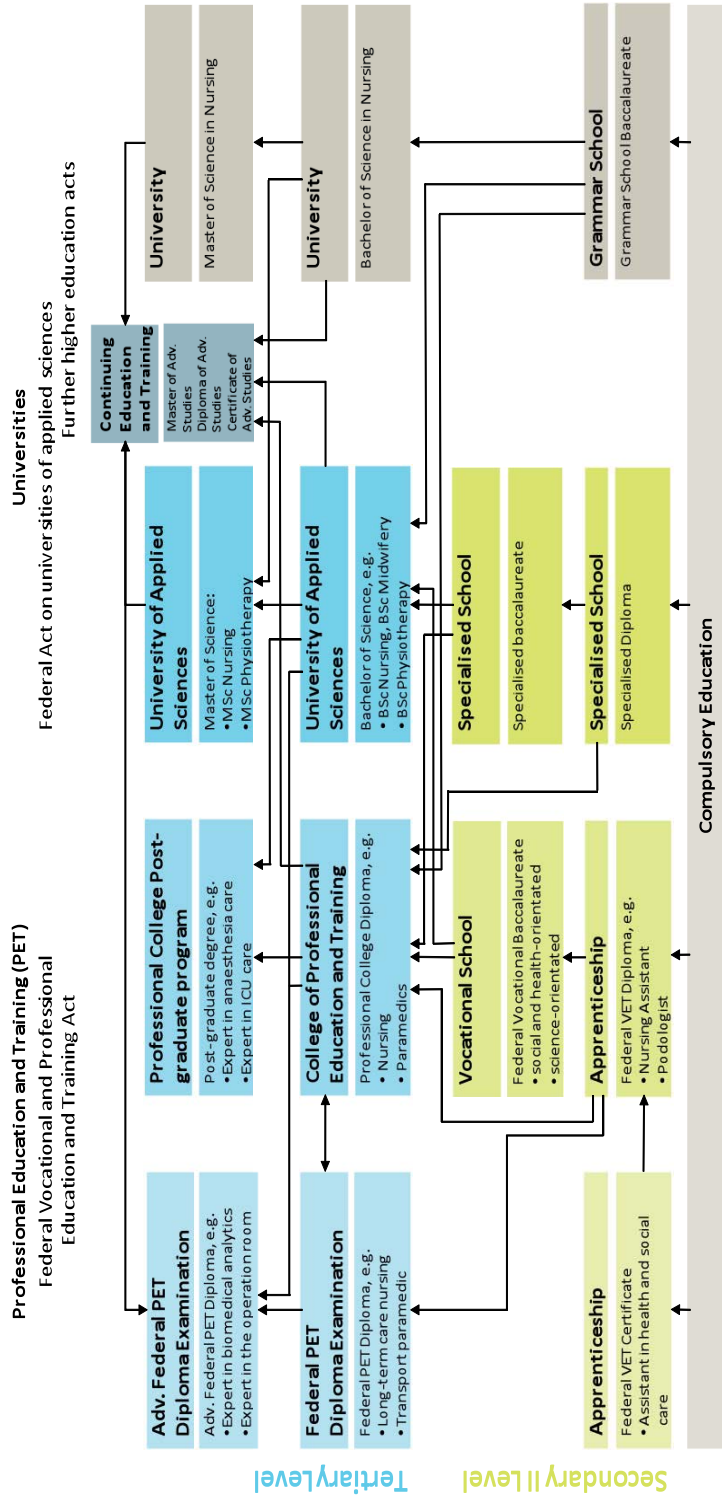
Note: Applicants for enrolment are shown only for BS, BE, FR and ZH because Geneva, Lausanne and Neuchâtel accept all applicants but less than 50% are accepted for the second year. The surge in awarded specialist degrees in 2002/2003 was due to the newly introduced requirement for physicians in independent practice to have a specialist degree and physicians already working in independent practice had the possibility of obtaining a degree through a simplified procedure.

Training of nurses, midwives and other “non-university based health professionals”

Training paths and qualifications for nursing and other health care professions have been substantially restructured since the early 2000s (Schäfer, Scherrer & Burla, 2013). Today, a wide range of different paths exist for obtaining different nursing degrees and other health care-related qualifications (see Fig. 4.17 and Obsan, 2013). Depending on their secondary education, candidates may choose vocational (professional) education and training or education at a university or a University of Applied Sciences, leading to different degrees in nursing or care assistance. The Swiss education system distinguishes between different qualifications obtainable at the secondary II level and those obtainable at the tertiary level (see Fig. 4.17). Since 2008, PhD programmes in nursing exist at the University of Basel and the University of Lausanne.

Fig. 4.17

Different paths for obtaining nursing and other health care professional degrees



Source: OdAsanté, 2014, with modifications.
Notes: PET = professional education and training; VET = vocational education and training.

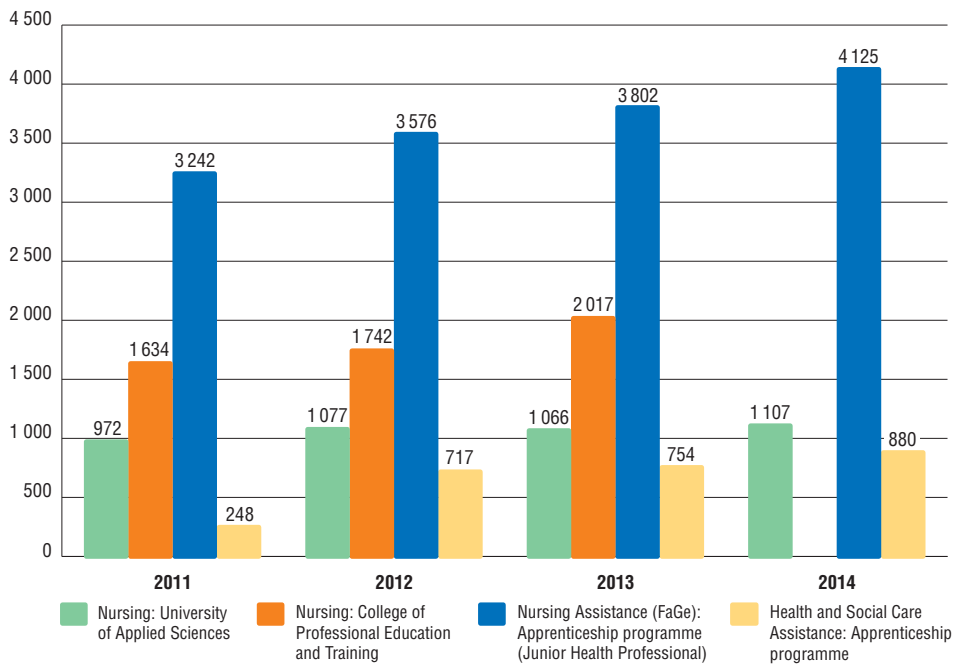
Responsibility for the regulation of non-university based education of health professionals is with SERI (see section 2.8.3). A “Masterplan” for the training of care professionals (SERI, 2010) was developed jointly by SERI, FOPH, GDK/CDS, OdASanté and others in 2010, with the aim of increasing the number of trained nursing professionals in the country. As part of this plan, the number of training places is being increased, nursing qualifications are being integrated into the general system of secondary and tertiary education, and recognition of foreign qualified nurses is being improved (SERI, 2014b).

In the French parts of Switzerland, nurses train at Universities of Applied Sciences and qualify after three years of study with a bachelor’s degree in nursing. Subsequently, they can continue training for 18 months and obtain a Master in Nursing. In the German-speaking part of Switzerland, most nurses train at Colleges of Professional Education and Training (*Höhere Fachschule/École Supérieure*). Training also takes three years and graduates obtain a professional diploma in nursing. However, training at Universities of Applied Sciences is also becoming more important in the German-speaking parts. In Italian-speaking parts, about 50% graduate from Universities of Applied Sciences and 50% from Colleges of Professional Education and Training.

Nursing assistants (*Fachmann Gesundheit/assistant en soins et santé communautaire*) are trained during an apprenticeship of three years and obtain a federal Vocational Education and Training (VET) diploma. They carry out practical nursing tasks in hospitals, long-term care institutions or ambulatory settings. As shown in Fig. 4.17, they may obtain further training to become fully qualified nurses. In addition, a category of health and social care assistants exists who have to complete a two-year apprenticeship before obtaining a VET certificate (see Fig. 4.17).

Fig. 4.18 shows that the number of new entrants to the different nursing and nursing assistance programmes of the various institutions increased considerably between 2011 and 2014 for all categories of nursing professionals. In 2013, almost 3100 students started nursing studies, with about two thirds enrolling at a College of Professional Education and Training and the remainder enrolling at a University of Applied Sciences. Long-term trends are difficult to evaluate because of the restructuring of training programmes since the early 2000s. However, the number of nurses trained at Universities of Applied Sciences has seen a strong increasing trend since 2006.

Fig. 4.18
Trend in new entrants of nurses and nursing assistants trained at different educational institutions, 2011 to 2014



Source: Burla, Vilpert & Widmer, 2014, with updates for 2013 and 2014.

The number of nursing assistants enrolled in apprenticeship programmes increased considerably between 2011 and 2014. The number of nursing assistants newly enrolled in 2014 was above 4100 and that of health and social care assistants was at 880.

Midwives in Switzerland qualify with a 3-year Bachelor in Midwifery at Universities of Applied Sciences (Schäfer, Scherrer & Burla, 2013).

Pharmacists and pharmaceutical assistants

Pharmaceutical studies last for five years including an internship year. Successful completion of both Bachelor (three years) and Master (18 months to two years) qualifies graduates to work in a pharmacy. Pharmacists may decide to train for a specialization in one of three programmes. Both non-specialized and specialized pharmacists are obliged to take part in continuous professional education. Pharmaceutical assistants undergo vocational training for three years (pharmaSuisse, 2013).

Dentists and dental assistants

Dentists study for five years at university and may further specialize afterwards. After having passed the Swiss confederate exam, dentists can choose from four specialization programmes before eventually continuing with one of four further subspecializations. A variety of assistant professions exist, which are trained for mainly in vocational settings. Examples of such job roles are dental hygienists or prophylaxis assistants (SSO, 2015).

Chiropractors

For chiropractors, a six-year training programme has been offered at the University of Zurich since 2008 (FOPH, 2014i). After completion of studies, chiropractors have to specialize for 2.5 years before being allowed to work independently.

Training in complementary and alternative medicine (CAM)

For physicians, training programmes recognized by the SIWF/ISFM exist for five different CAM methods: anthroposophical medicine, homeopathy, neural therapy, phytotherapy and traditional Chinese medicine (SIWF/ISFM, 2014). Holding one of these certificates is a requirement in order for these methods to be reimbursed by MHI (see section 5.13).

For other health care professionals or non-medical personnel, there are plans to introduce confederate diplomas for CAM methods at the level of Colleges of Vocational Education and Training (Ausbildung-Weiterbildung.ch, 2014; FOPH, 2013d). Currently, there is a large number of institutions offering certain qualifications. The online portal ausbildung-weiterbildung.ch counts 256 institutions offering courses in CAM (Ausbildung-Weiterbildung.ch, 2014).

4.2.4 Career paths

Doctors' career paths

After graduation from medical studies, doctors in Switzerland usually start working in a hospital as an assistant doctor (*Assistenzarzt*), while training for their chosen specialization. After having been awarded a specialty degree, doctors can either pursue a hospital career or work in an ambulatory setting.

In hospitals, most specialist doctors work as *Oberarzt/chef de clinique*, which means that they are responsible for supervising assistant doctors. In addition, specialist doctors can be promoted to become consultants or lead physicians (*Leitender Arzt/médecin dirigeant*), which means that they will have to coordinate the activities of several wards or services. Finally, the chief physician (*Chefarzt/médecin chef*) is the head of the medical hierarchy in a

hospital and is responsible for the education path of the assistant doctors. In university hospitals, doctors may combine clinical duties with research activities and chief physicians are often also university professors. In addition, doctors can progress to assistant medical director and medical director of a hospital. Promotions and career progressions are dependent either on superiors or on the institutional board. Medical directors of public and university hospitals are appointed by the respective governing boards, usually based on a proposition by peers, i.e. the chief physicians of the hospital.

In ambulatory care, doctors can found a practice alone (single practice) or with partners (group practice) or can choose to be employed in an HMO or group practice. Physicians working in practices are often affiliated with a hospital, where they may perform surgeries a few days per week and may attend to their patients during inpatient stays.

Other health workers' career paths

Possibilities within the different health care professions are manifold and vary considerably. In general, career progression in all fields very much depends on personal capabilities, choices and desires. For example, pharmacists may decide to pursue a career in a competitive industry environment or choose to run a private pharmacy. Nurses can work in a hospital and progress to different levels of responsibility for patients as well as for staff, or they may decide to pursue an academic career in nursing sciences. For many health care professions, a career in public health or in public administration can also be an option, again depending on personal goals and ambitions.

5. Provision of services

Responsibilities for legislation, implementation and supervision of public health services are split between the Confederation and the cantons. Consequently, public health activities are not well coordinated and provided services vary greatly across cantons. Expenditure on public health is relatively low (2.1% of THE in 2012). The new Epidemics Law (EpG/LEp), which will come into force in 2016, aims to better define responsibilities of the Confederation and the cantons, and to better coordinate activities of the different levels. A proposed Federal Prevention Law was rejected by Parliament in 2012.

Ambulatory care is provided mostly by self-employed physicians working in independent single practices offering both primary care and specialized care. In general, patients have a very large degree of freedom concerning choice of physician and hospital. Easy access to all levels of care, including inpatient care, without need for a referral has been a key characteristic of the Swiss health care system. However, over the past decade, an increasingly large proportion of physicians have joined physician networks or HMOs, which contract with insurers for the provision of care for their insured. In 2012, about 20.8% of all insured were estimated to be insured by either an HMO plan or a physician network plan (excluding simple list models), where patients benefit from more actively managed care.

Acute care hospitals provide inpatient care and play an increasingly important role in the provision of ambulatory and day care services. Public and private hospitals that are included on cantonal hospital lists can provide services reimbursable by MHI. Traditionally, choice of hospital was somewhat restricted by cantonal borders. However, since the implementation of a hospital financing reform in 2012, patients can choose any hospital located outside their canton of residence as long as the hospital is included on the hospital list of the canton

of treatment. Nevertheless, reimbursement follows the rules of the canton of residence, which means that it is limited to the level of costs that would have had to be paid if the patient had been treated in his canton of residence.

Cantons are responsible for the organization of long-term care, rehabilitation care, palliative care and psychiatric care but may delegate responsibility to municipalities. Institutional (residential) long-term care is provided by medical nursing homes or nursing departments of old-age or disability homes, while home care nursing services are provided by so-called Spitex services. In addition, informal carers play an important role, carrying a considerable part of the total care burden. Better integration of care across different institutions and providers has been under discussion for some years, especially for mental health care activities but progress in this direction remains limited.

Expenditures on pharmaceuticals in Switzerland in 2012 were US\$ PPP 562 per capita, which was below the amounts spent in Germany or France. Considerable efforts have been made in recent years to reduce the relatively high retail prices in Switzerland and to increase the use of generics. The market share of generics as a proportion of all reimbursed pharmaceuticals in terms of volume rose from 6.1% in the year 2000 to 23.9% in 2013 but remains far below the share of generics in other countries, such as Germany (78.2% in 2012) or Austria (48.5% in 2012). A particularity is that pharmaceuticals are not only distributed by pharmacies but – in some cantons – also by so-called self-dispensing doctors, which sell about 24% of all sold pharmaceuticals in Switzerland (in terms of value) in their in-practice pharmacies.

5.1 Public health

Public health in Switzerland continues to be characterized by a fragmentation of responsibility for legislation, implementation and supervision of activities. The main national institution responsible for public health is the FOPH. However, according to the constitutional division of powers, the federal level is responsible only for framework legislation in the areas of hygiene and health protection, including food safety, infectious disease and malignancy prevention, drug control and radiation protection. There is no legal basis for the federal level to become active in other areas, such as psychiatric, metabolic, cardiovascular or respiratory diseases. Environmental health falls under the remit of the Federal Office of the Environment and the Federal Office for Spatial Development (Perritaz, 2010).

Expenditure on public health in Switzerland is relatively low (2.1% of THE in 2012 according to OECD Health (2014) and 1.3% of THE according to national statistics, see section 3.2) and the proportion of THE spent on public health has declined over recent years. The main activities of the FOPH are concentrated on programmes to combat HIV/AIDS, to reduce alcohol, tobacco and drug consumption, and to promote healthy nutrition and physical activity (OECD/WHO, 2011) (see Table 5.1).

Table 5.1
Major health promotion topics and funding by FOPH, 2011

Topic	Level of funding as share of total funding
HIV/AIDS	34%
Drug abuse	25%
Nutrition and physical activity	14%
Alcohol abuse	10%
Tobacco consumption	7%
Others	10%

Source: OECD/WHO, 2011.

The cantons are responsible for implementation of public health strategies, and they usually run their own public health services and have public health offices run by the Chief Medical Officer of the Canton, the so-called cantonal physicians (*Kantonsärzte*). Consequently, the implementation of public health programmes as well as the specific public health services available at the cantonal level, differ greatly across cantons (FOPH, 2007a). The cantonal physicians, pharmacists and chemists take up leading roles in public health within the cantons and they all have their own associations. The cantonal doctors (also called cantonal officers of health) take part in infectious disease control, the issuing of professional licences, regulation of emergency and rescue services and several other tasks (VKS, 2013). The Association of Cantonal Officers of Health (VKS/AMCS) aims to coordinate activities of cantonal doctors across Switzerland, e.g. in infectious disease control and reporting. Cantonal pharmacists oversee the adherence to pharmaceutical regulations, while cantonal chemists are responsible for food safety and consumer protection (KAV, 2013; VKCS, 2013).

In 2009, a new law on prevention was drafted to create a legal basis for better coordination of disease prevention and health promotion activities but it was ultimately rejected by Parliament in 2012 (see section 6.1.4). Nevertheless,

coordination of prevention activities is starting to improve as a result of intensified collaboration under the umbrella of the National Dialogue on Health Policy (see section 2.3).

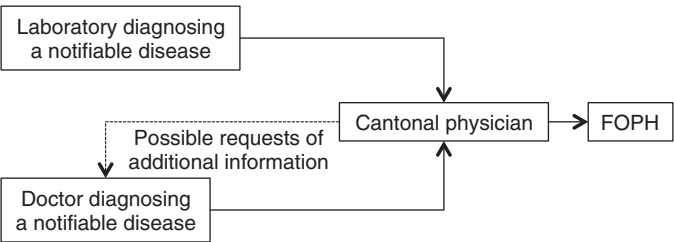
One important platform aimed at coordinating efforts in disease prevention and health promotion is the Swiss Association of Cantonal Chiefs for Health Promotion (VBGF/ARPS) (OECD/WHO, 2011), which is part of the GDK/CDS (see section 2.3) and includes as so-called permanent guests the FOPH, the GDK/CDS, the Swiss Foundation for Health Promotion, Public Health Switzerland (a research focused public health network), RADIX Swiss Health Foundation (a foundation financed mainly by cantons aiming to promote health at the municipal level) and the Network Mental Health Switzerland.

5.1.1 Infectious disease control and reporting of diseases

The control of communicable diseases is currently regulated by the 1970 Federal Epidemics Law, which is still valid until the new Federal Epidemics Law (EpG/LEp) comes into force, probably in 2016 (see section 6.1.4). The federal government is mainly responsible for the national mandatory reporting and information system, as well as for supervision and coordination of activities. Cantons are responsible for the implementation of communicable disease control measures and activities are overseen by the cantonal physicians.

Article 27 of the Epidemics Law (Swiss Confederation, 1970) specifies an obligation to report certain communicable diseases. The FOPH publishes a list of relevant diseases and regularly updates this list in collaboration with cantonal doctors and medical associations (Minder, Schoenholzer & Amiet, 2000). The obligation to report applies to both doctors and laboratories, which have to report to their cantonal physicians (see Fig. 5.1). The cantonal physicians then forward the information to the FOPH, which publishes case numbers for each disease on a weekly basis (FOPH, 2013g).

Fig. 5.1
Pathway for reporting of notifiable diseases



Source: Authors' own compilation, based on FOPH, 2013g, with modifications.

In addition to the compulsory reporting system, a voluntary sentinel network – “Sentinella” – exists. This serves to monitor, in particular, those diseases that could be prevented by immunization, with the aim of supporting research. Around 3% of GPs and paediatricians participate voluntarily in the data collection. Programme details are revised annually by an expert commission.

5.1.2 Occupational health

The legal framework for occupational health services is the Ordinance on Prevention of Accidents and Occupational Diseases of 1983 (VUV/OPA). Surveillance of compliance with the regulation is ensured by SUVA, and cantonal and confederate inspectorates, which are financed by accident insurance contributions (FOPH, 2013k). Responsibility for implementation and financing of occupational health services lies with employers (Schwaninger, Krieger & Graf, 2010).

The RADIX Swiss Health Foundation and SUVA offer courses for occupational health specialists within companies (Ruckstuhl, 2010). The SUVA also initiated the project Progrès to counteract a rising number of diseases associated with professional roles. Elements of the project are, amongst others, stress reduction strategies and the promotion of physical activity in the workplace (SUVA, 2013). Providers of occupational health promotion services and some companies are part of the Swiss Association of Occupational Health Promotion (SVBGF, also known as BGM Netzwerk).

Promotion of occupational health is also one of the main concerns of the Swiss Foundation for Health Promotion. The foundation develops standards and certificates for occupational health, promotes guidelines and carries out research on economic implications of occupational health (Gesundheitsförderung Schweiz, 2015). There is also an agency within the State Secretariat for Economic Affairs promoting occupational health (Ruckstuhl, 2010).

5.1.3 Health promotion

A wide variety of state and non-state institutions and organizations are active in health, including the federal government, cantons, health insurers, SUVA and foundations. One of the main actors in health promotion is the Swiss Foundation for Health Promotion, which is financed through compulsory contributions by the insured. Besides occupational health, the foundation focuses on promoting healthy body weight and promoting health promotion, e.g. development of standards, participation in national and international networks.

Tobacco control policies are relatively weak in Switzerland, when compared with other European countries: tobacco taxes are relatively low, there are cantonal variations in the protection of people against passive smoking, and regulations controlling tobacco advertising are insufficient (Joossens & Raw, 2014; FOPH, 2012e). Switzerland has still not ratified WHO's Framework Convention on Tobacco Control (WHO, 2014). Tobacco consumption remains relatively high in Switzerland, when compared to several other European countries, for which data are available (OECD Health, 2014).

5.1.4 Prevention (vaccination and screening)

There is no national immunization programme, and cantonal programmes may differ considerably, for example concerning the availability of school immunization programmes. In most cantons, paediatricians are responsible for immunization of children. The FOPH publishes domestic vaccination guidelines as well as vaccination recommendations for international travel. Recommended child immunizations are fully covered by MHI. For certain recommended adult vaccinations, co-payments may also be waived, for example, in 2013, for vaccination against measles or human papilloma virus (FOPH, 2013e).

Vaccination rates of children aged 1 year old are slightly below EU28 averages for measles (92% in Switzerland versus 94% in the EU28) and for diphtheria, tetanus and pertussis (95% in Switzerland versus 96% in the EU28) (OECD, 2014a). Between November 2006 and September 2009, three outbreak waves and 4415 cases of measles were confirmed in Switzerland, and measles outbreaks in Austria, Germany and the United States in 2008 could be linked to measles strains originating from Switzerland (Lang et al., 2011).

Antenatal services in Switzerland are mainly offered by gynaecologists in individual practices and by midwives. The standard benefits package of MHI (see section 2.8.1) includes a broad range of antenatal check-ups as well as birth preparation and breastfeeding courses. Most antenatal services do not require cost sharing by the mother (see section 3.4.1).

Screening programmes exist for metabolic diseases for newborns, for cervical cancer, breast cancer and colon cancer. While screening rates for cervical cancer in 2012 were around 75%, which was comparable to neighbouring European countries (OECD, 2014a), those for breast cancer were much lower, i.e. around 45% in Switzerland compared to above 80% in Finland, Denmark, Austria and the Netherlands (OECD, 2014a). Responsibility for the

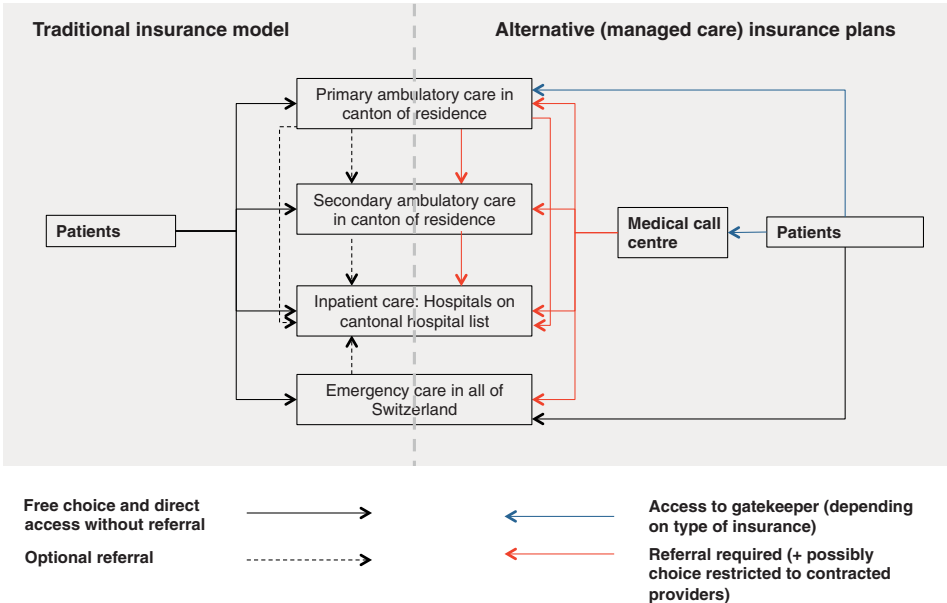
design and implementation of screening programmes lies with the cantons. Only two cantons have a colon cancer screening programme and several cantons do not have structured screening programmes for breast cancer.

5.2 Patient pathways

5.2.1 Pathways in traditional insurance schemes

Traditionally, freedom of choice of providers and direct access to all levels of care, including inpatient care, without need for a referral is a key characteristic of the Swiss health care system (see left-hand side of Fig. 5.2). Patients may freely choose ambulatory and inpatient providers in the entire country but reimbursement by MHI for care provided outside the canton of residence is usually limited to the maximum reimbursement in the home canton (see section 5.4.2). A pathway for a patient in need of hip replacement is described in Box 5.1.

Fig. 5.2
Patient flow in Switzerland according to insurance model



Source: Authors' own compilation.

Box 5.1**Traditional patient pathway: hip replacement**

A man in need of a hip replacement because of arthritis would take the following steps if insured in a traditional MHI plan:

- The patient will usually visit his GP (working in a single practice) because of pain in the hip, but he could also go directly to an orthopaedic specialist. The GP may make an X-ray of the hip and may recommend an ambulatory orthopaedic specialist in order to verify the need for hip replacement.
- The patient is free to choose any specialist of his choice. Waiting times to see a specialist may depend on the popularity of the specialist but with a certain degree of flexibility a patient will not have to wait more than 2 or 3 weeks for an appointment.
- The specialist will verify the need for hip replacement. This usually includes diagnostic imaging (CT scan), which is performed by a radiology specialist. Again, the orthopaedic specialist might recommend a specialist but the patient can freely choose his preferred provider.
- After confirmation of the need for a hip replacement, the orthopaedic specialist may either refer the patient to a hospital or offer personally to carry out the procedure in a local hospital, if he/she has an affiliation to the hospital as an attending surgeon. The patient can freely choose his preferred hospital for the surgery, which could also be located outside his canton of residence.
- The referring physician will usually arrange a suitable date for surgery with the orthopaedics department in the chosen hospital, and may send results of prior examinations (e.g. X-ray, CT). Alternatively, the patient can arrange the admission himself. Waiting times are very short.
- Unless the patient chooses to be operated on by his ambulatory orthopaedic specialist, the first contact with the surgeon is often on the day of admission. However, hospitals are increasingly seeing patients first in the outpatient department, before admitting them for an inpatient stay to verify the indication for surgery and to provide presurgical information (e.g. about medication that should be discontinued prior to surgery) or to carry out additional presurgical diagnostic tests (e.g. lab tests and tests to evaluate fitness for surgery).
- Following surgery and primary rehabilitation at the hospital, the patient usually goes home, where he might need home care and may receive ambulatory rehabilitation. However, depending on the condition of the patient, he may also be referred to an inpatient rehabilitation provider.
- After discharge, the GP will be responsible for general follow-up and the ambulatory orthopaedic specialist will follow-up on the implanted hip.
- **Costs** of all services will be **covered by MHI** but cost sharing is required at all stages of this pathway, which may differ depending on the specific MHI plan of the patient. In addition, patients may have to cover a higher proportion of costs OOP if they choose to be treated by a physician or hospital outside their canton of residence.

5.2.2 Pathways in managed care type insurance plans

Switzerland has a relatively long tradition of managed care, when compared to other European countries. Almost 60% of Swiss residents in 2014 were insured by so-called alternative insurance plans, where they agreed to some kind of

restriction of choice and to complying with gatekeeping rules in exchange for lower premiums (FOPH, 2014k). Despite the rejection of a proposed managed care reform by a public referendum in 2012 (see section 6.1), the number of insured opting for these plans has increased considerably (see section 3.3.3). There are important regional differences as regards the availability and popularity of alternative insurance plans (Reich, Rapold & Flatscher-Thöni, 2012a; FMC, 2014a; Meyer, 2009), with a much higher proportion of insured opting for these models in the German-speaking northern and eastern regions than in other parts of the country.

Different types of managed care plans

Different provision models are offered as part of the alternative insurance plans, which are often described as independent practice associations (IPAs), preferred provider organizations (PPOs) or HMOs. However, this terminology adopted from the US-dominated international literature is often misleading when describing the Swiss provision context. In Switzerland, depending on the plan, patients either have to register with a GP, who will then act as the referral point for secondary care, or to consult with a medical call centre prior to seeking care. The degree to which plans actually coordinate and manage patient care differs considerably. Sometimes, restrictions are also imposed on the choice of secondary (referral) providers. Patient flow in alternative insurance plans is shown in the right-hand side of Fig. 5.2.

In **family doctor plans**, care is usually provided by **physician networks** consisting mostly of primary care physicians, but they may also include ambulatory specialists and hospitals that contractually agree to cooperate in the provision of care. They may found joint stock companies or associations and usually commit to certain quality management processes, such as quality circles or the use of guidelines (Berchtold & Peytremann-Bridevaux, 2011). Networks can take different forms, ranging from rather loose networks of independent practices (similar to IPAs) that do not carry joint financial responsibility, to more integrated physician groups with a high degree of joint financial responsibility up to the point where they operate under capitation. The networks contract with insurers for the provision of care, usually agreeing on an objective for health care costs for a group of patients, and sharing gains and losses when actual costs are below or above the agreed objective (OECD/WHO, 2011).

The term **HMO** is mostly used in Switzerland to refer to group practices or small networks of physicians owned by insurers, where physicians are generally employed and paid a salary (FMC, 2014b). However, there are also networks of physicians operating as HMOs, which accept complete financial responsibility for their patients, including for care provided by specialists and hospitals.

Another insurance model, where patient choice is limited to only those GPs and (sometimes) specialists listed by the insurer is internationally often referred to as a PPO. In Switzerland, these models are usually called **list models** but are also subsumed under the term **family doctor model**. However, listed physicians usually do not have contracts with insurers and they do not take on financial responsibility for managing the care of their patients. Finally, **call-centre models** (known as Telmed in Switzerland) exist, where the insured agree to contact a call centre before consulting other health care providers (see Fig. 5.2 patient flows). Both models introduce gatekeeping and may limit choice but do not necessarily have much influence on how care processes are managed (Baur, 2005).

In 2013, according to national insurance statistics (FOPH, 2014k), 34.7% of insured had a family doctor plan (including both physician networks and list models) and 7.6% of insured had an HMO plan, while about 18% were insured by other alternative insurance plans (mostly call-centre models). According to other statistics (FMC, 2014a), 20.8% of all insured had either an HMO plan or a physician network plan (excluding simple list models), where they benefited from more actively managed care.

5.3 Ambulatory care

Ambulatory care has traditionally been characterized by independent single practices offering both primary and specialized care (OECD/WHO, 2011). Physicians are mostly self-employed and reimbursed on a FFS basis (see section 3.7). Patients can freely choose their preferred provider and costs of care are reimbursed by MHI once patients have exhausted their annual deductible (see section 3.4.1). Reimbursement follows the tariffs and rules of the patient's canton of residence. This means that patients who choose to be treated by a physician practising in a canton with a higher tariff may have to cover out of pocket the difference from the tariff in their home canton.

Since the beginning of the 1990s and related to the emergence of managed care plans, an increasing proportion of physicians have joined physician networks. Also, the number of physicians working in group practices or HMO-owned health centres has increased considerably. In addition, polyclinics of some private and public hospitals offer specialized ambulatory services (OECD/WHO, 2011). Based on a survey completed by about 40% of all practising ambulatory physicians, more than 60% were working in independent single practices (Kraft & Hostettler, 2013), with the remainder in double or group practices. Almost half (48.9%) of all ambulatory care physicians were part of a physician network.

Table 5.2 shows that 17 804 doctors worked primarily in an ambulatory setting in 2014 (slightly more than half of all practising physicians in the country), and about 38% of these were registered as GPs (general internal

Table 5.2

Number and density of physicians working in an ambulatory setting¹ by canton, 2014

	Total ambulatory sector			Total Number	GPs ²		As % of all ambulatory care physicians
	Number	Per 100 000	Index (per 100 000, Switzerland = 1)		Per 100 000	Index (per 100 000, Switzerland = 1)	
Switzerland	17 804	216	1.00	6 847	83	1.00	38
Lake Geneva Region	4 148	264	1.22	1,370	87	1.05	33
Vaud	1 854	244	0.92	622	82	0.94	34
Valais	523	158	0.65	245	74	0.90	47
Geneva	1 771	371	2.35	503	105	1.43	28
Espace Midland	3 502	192	0.52	1 482	81	0.77	42
Bern	2 192	217	1.13	888	88	1.08	41
Fribourg	397	131	0.60	164	54	0.61	41
Solothurn	445	169	1.29	223	85	1.56	50
Neuchâtel	364	205	1.22	158	89	1.05	43
Jura	104	144	0.70	49	68	0.76	47
Northwestern Switzerland	2 511	225	1.56	901	81	1.19	36
Basel-Stadt	809	425	1.89	233	122	1.52	30
Basel-Landschaft	661	235	0.55	255	91	0.74	39
Aargau	1 041	161	0.69	413	64	0.71	40
Zurich	3 669	254	1.57	1 274	88	1.38	35
Eastern Switzerland	2 100	183	0.72	936	82	0.93	45
Glarus	61	153	0.84	33	83	1.01	54
Schaffhausen	151	190	1.24	72	91	1.09	48
Appenzell Außerrhoden	86	159	0.84	46	85	0.94	53
Appenzell Innerrhoden	19	120	0.75	11	69	0.82	58
St. Gallen	922	186	1.55	393	79	1.14	43
Graubünden	345	176	0.95	186	95	1.20	54
Thurgau	417	158	0.90	195	74	0.78	47
Central Switzerland	1 223	156	0.99	576	74	1.00	47
Lucerne	641	162	1.04	300	76	1.03	47
Uri	33	92	0.56	21	58	0.77	64
Schwyz	212	139	1.51	103	67	1.16	49
Obwalden	40	109	0.78	27	73	1.09	68
Nidwalden	52	124	1.14	25	59	0.81	48
Zug	245	204	1.65	100	83	1.40	41
Ticino	750	214	1.05	308	88	1.06	41

Source: (FMH, 2015).

Notes: ¹Physicians primarily active in ambulatory care; ²Physicians with specialization title general internal medicine or practical physician.

medicine or practical physicians). However, there were large differences across cantons, with about three times as many physicians per 100 000 population in Geneva or Basel-Stadt as in Appenzell Innerrhoden, Uri or Obwalden. In general, cantons with lower numbers of GPs per population have a higher proportion of GPs (see last column in Table 5.2).

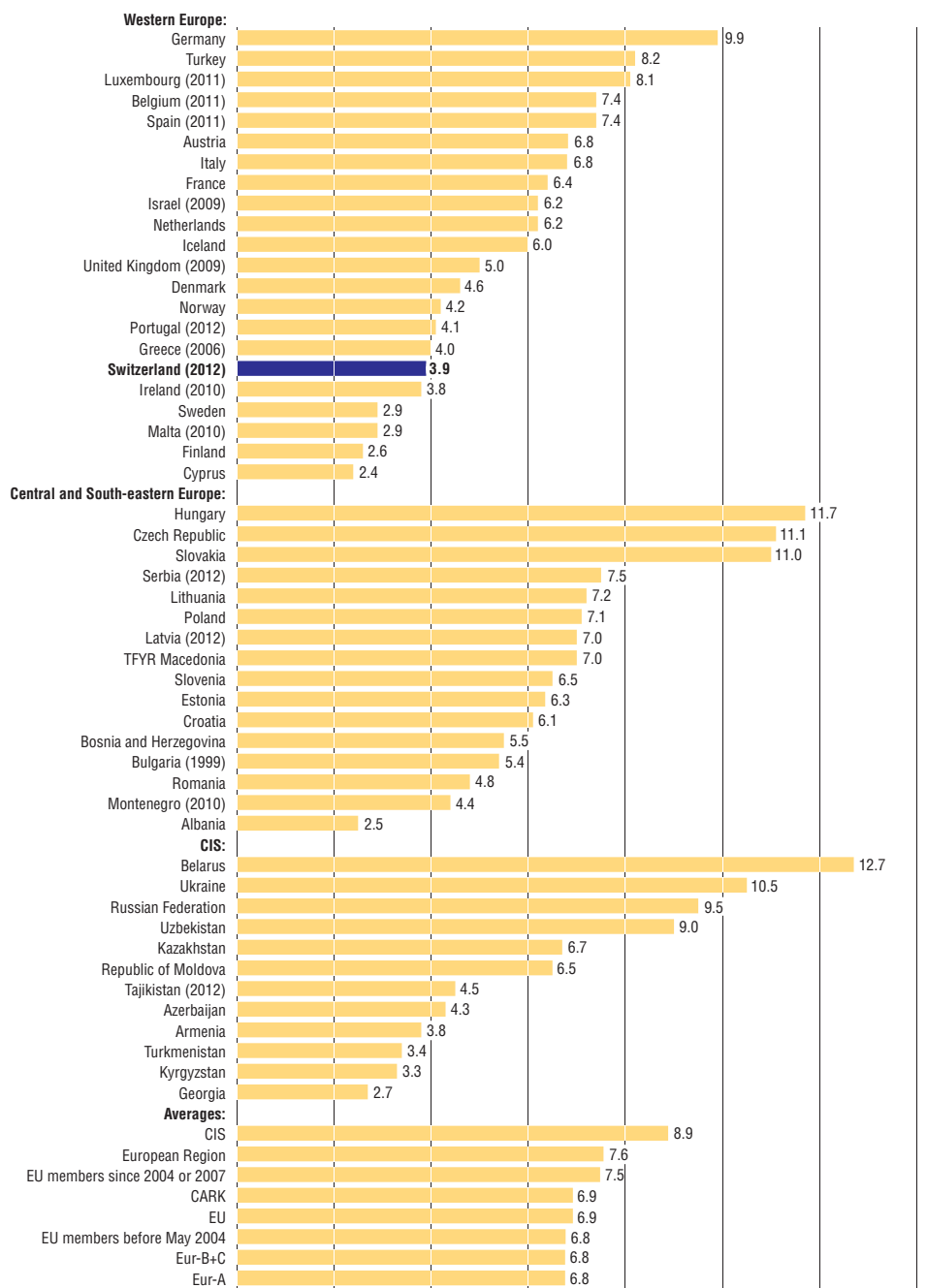
The number and density of physicians working in ambulatory care has increased considerably in recent years. For many years, the number of specialists grew more strongly than the number of GPs, but this trend now seems to have been reversed (FMH, 2015). Cantons and insurers have only weak instruments for planning ambulatory care provision (see section 2.5.3), but a current reform proposal aims to improve the planning of ambulatory care (see section 6.2).

The range of services offered in an ambulatory setting includes: general and specialist medical diagnosis and treatment; family planning services; paediatric care; surgical disciplines as well as rehabilitation; home care; and dental services (although MHI coverage of dental care is rather limited) (see section 3.3.1). In some cantons, physicians are allowed to sell medications directly in their practice and this can be an important source of income for physicians in these cantons (see section 5.6). A high proportion of ambulatory care physicians also operate in-practice diagnostic laboratories. This requires a special licence from the Swiss Medical Association. In 2014, about 7770 ambulatory physicians (or 44% of all registered ambulatory physicians) had such a licence (FMH, 2015).

Fig. 5.3 shows that the number of ambulatory physician contacts in Switzerland is comparatively low. In 2013, Swiss patients had about 3.9 ambulatory physician contacts per year, i.e. considerably fewer visits than patients in Germany (9.7) or Austria (6.9) and this number has remained relatively stable since 2007. National data are consistent with these numbers. They show that there were considerable differences in the number of visits between men (3.3 contacts) and women (4.4 contacts) (FSO, 2013d), and that about one third of all visits in 2012 were to specialists. There were no significant differences across language regions. Improving routine data collection of ambulatory care provision in hospitals and independent practices is one of the current priorities of the FSO (FSO, 2013f).

Fig. 5.3

Ambulatory contacts per person in the WHO European Region, 2013



Source: WHO Regional Office for Europe, 2015.

5.3.1 Primary care

In 2014, there were about 6800 GPs in the country, representing about 38% of all ambulatory care physicians (see Table 5.2). So-called “practical physicians” as well as physicians with a specialization in general internal medicine are considered primary care physicians (see section 4.2.3 for different training requirements). There are considerable differences in the density of primary care physicians between regions and cantons (see Table 5.2). However, access to primary care facilities is generally regarded as good, including in rural regions (OECD/WHO, 2011), although recent surveys show that a considerable proportion of the population is concerned about a potential lack of GPs in rural areas (Longchamp et al., 2013). It is difficult to assess the change in the proportion of GPs out of all physicians in ambulatory care since the year 2000, as there have been several changes to the classification of specialization titles relating to general practice.

Most patients have a regular GP, independent of whether or not they are insured with traditional or alternative insurance plans. However, in alternative insurance plans (HMOs, family doctor models), GPs play a more important role as gatekeepers and also often as coordinators of care. Patients insured by HMOs or family doctor models always require a referral from their GP before accessing specialists. In 2012, more than 60% of all primary care physicians (including both paediatricians and specialists in general internal medicine) were part of physician networks (HMOs, family doctor models), i.e. 4700 out of about 7500 (Berchtold & Peier, 2012; FMH, 2015).

The age distribution of primary care physicians is relatively unfavourable (see section 4.2.1), with a large proportion of the GP population due to reach retirement age within the next decade. This has led to concerns that a declining number of GPs will have difficulty in responding to the projected increasing health needs of an ageing population. Partially in response to these concerns, the federal association of primary care physicians (MFE) launched a popular initiative in 2009, with the aim of adding an article to the Federal Constitution that would enable the Confederation to pass regulations favouring primary care.

Also, the federal government has been very active in the area of primary care in recent years. In June 2012, a Masterplan for “family medicine and primary health care” (*Masterplan Hausarztmedizin und medizinische Grundversorgung*) was passed, which sought to make primary care a more appealing path by improving recognition through education and training, and offering better remuneration (FOPH, 2012c). In May 2014, a change to the constitution proposed by the Confederation and the GDK/CDS was adopted

by popular referendum (instead of the proposal of the primary care initiative, which had been withdrawn before the referendum). This gives the Confederation the right to pass regulations with the aim of ensuring access to primary care, including in the area of education and remuneration of primary care physicians. Subsequently, in June 2014, the government made use of its subsidiary right to intervene in price setting for ambulatory care physicians and implemented a change to TARMED, which is expected to result in an increase in primary care physicians' collective remuneration of about Sw.fr.200 million per year (FOPH, 2014l). Further changes are planned to the MedBG/LPMéd in order to reform the education and training of primary care physicians.

A wide range of voluntary accreditation systems exist for assuring quality in primary care. Since 2012, the Swiss Academy for Quality in Medicine (SAQM), which is part of the FMH, aims to coordinate different quality initiatives. Many practices and networks have been accredited according to ISO SO 9001:2008 quality standards. The EQUAM (External Quality Assurance in Medicine) foundation certifies quality in primary care practices based on indicators of the European Practice Assessment (EPA), with a focus on HMOs and physician networks. Several HMOs and physician networks have developed guidelines and almost all have regular quality circles (Berchtold, Schmitz & Maier, 2012).

5.3.2 Secondary care

In principle, specialist ambulatory care is organized similarly to primary care, and most specialists practice in independent single practice. However, just as for primary care physicians, there is a trend towards increasing numbers of physicians practising in double or group practices. Furthermore, secondary ambulatory care is increasingly being provided by hospitals, most importantly in fields such as oncology or small surgery, but also observable in psychiatry (Berger et al., 2015).

Reliable data on the distribution of secondary ambulatory care provision across different settings are unavailable (FSO, 2013f). However, cost data show the increasing importance of hospitals: in the year 2000, ambulatory care costs of hospitals were about one third of costs at independent practices (Sw.fr.2.2 billion for hospitals compared to Sw.fr.6.2 billion for practices). By the year 2012, costs of hospitals for ambulatory care had increased to almost two thirds (Sw.fr.5.9 billion for hospitals compared to Sw.fr.9.6 billion for practices) (FSO, 2014e). At the same time, ambulatory care is becoming an increasingly important activity of hospitals, where ambulatory care accounted for almost 40% of total costs in 2011 (FSO, 2013e).

Secondary ambulatory providers are increasingly linked to networks of primary care physicians (Berchtold & Peier, 2012), thus contributing to better coordination between primary and secondary care. In 2012, 692 ambulatory specialists were directly involved in networks of physicians and more than 40% of networks had contractual cooperation agreements with hospitals (Berchtold & Peier, 2012).

For patients with traditional insurance, there are no restrictions on access to specialist physicians registered within their own canton. Patients equally have direct access to outpatient clinics of hospitals. Referrals are not necessary for either. However, for patients with alternative insurance plans, referrals are almost always required if patients want to be reimbursed for the care they receive.

5.4 Hospital (acute) inpatient care

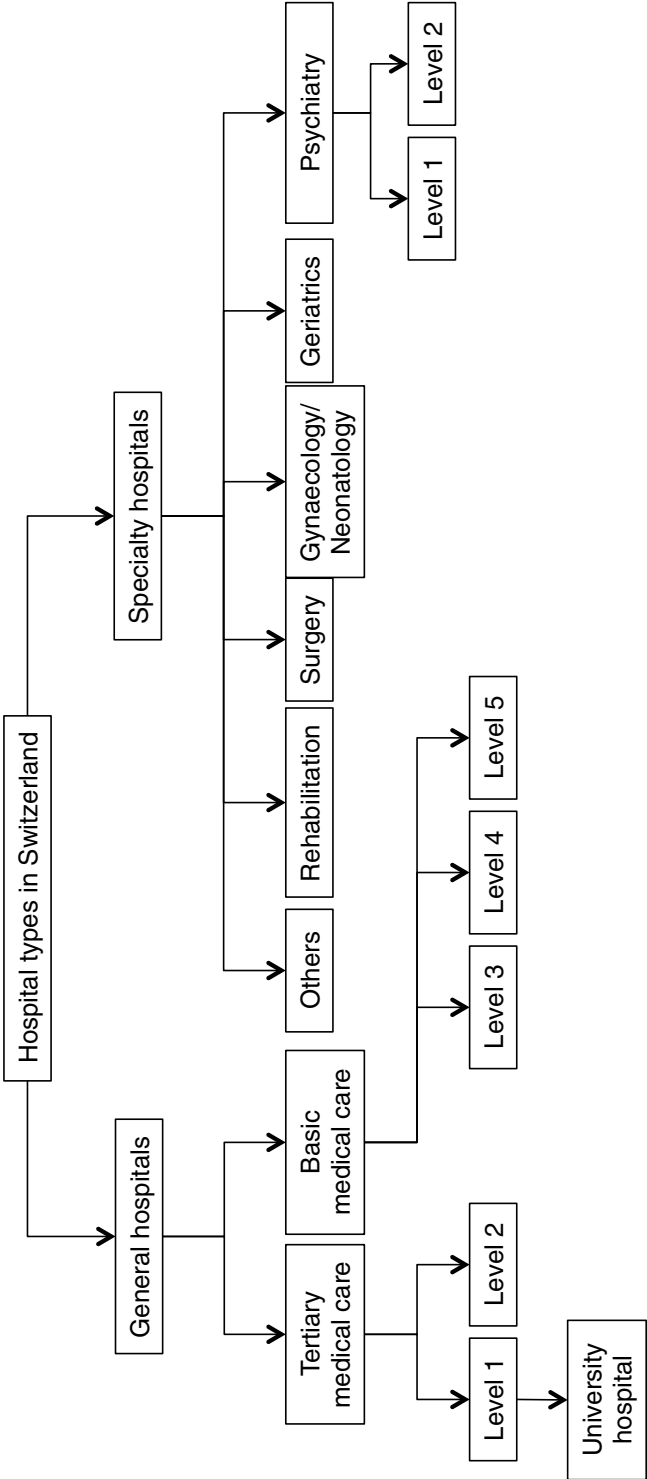
5.4.1 Hospital landscape: hospital typology, ownership and capacity

The main categories of Swiss hospitals are outlined in Fig. 5.4. Acute inpatient care is provided in general hospitals as well as in surgical, gynaecology/neonatology and paediatric specialty hospitals. Specialty hospitals also exist for psychiatric (see section 5.11) and rehabilitation (see section 5.6) care, as well as for geriatrics. Tertiary care is provided in university hospitals (level 1) and other large hospitals (level 2). Levels 3, 4 and 5 distinguish hospitals with lower case-loads.

Almost 70% of general acute inpatient hospitals in Switzerland are publicly owned or subsidized, with the remainder being privately owned (see section 4.1). Specialized hospitals, e.g. for surgical, gynaecological or paediatric care, are mostly privately owned. Private non-profit hospitals may fall into both categories, i.e. subsidized or privately owned, depending on whether their activity is recognized as being of public interest qualifying them for subsidies (relating to these public interest functions) or not. Most emergency services are provided by public or subsidized non-profit hospitals. Private hospitals provide mostly standard surgical treatment and other elective care. While the majority of general hospitals is at least partly publicly owned, the majority of specialist hospitals is privately owned.

Fig. 5.4

Hospital typology in Switzerland



Source: Authors' own compilation based on FOPH, 2012b.

Public hospitals are principally owned by the cantons although cantons may delegate responsibilities to municipalities (FSO, 2010). In fact, public hospitals are increasingly operated under the legal form of independent institutions (about 34% of all public hospitals in 2013) or joint stock companies (about 31%) (Berger et al., 2015). In public hospitals, there are three types of senior hospital management: there can be a joint committee consisting of a medical, a nursing and an administrative director; dual leadership by a medical and an administrative director; or a single chief executive officer (Berger et al., 2015).

For private hospitals, it is possible to distinguish between hospitals run by a chief physician (*Chefarztspital*) and hospitals that cooperate with affiliated ambulatory attending physicians (*Belegarztspital*). Attending physicians usually work in ambulatory practices but have a cooperation agreement with a local hospital, where they may perform surgeries or attend to their medical patients during inpatient treatment. According to Swiss hospital statistics, there were 8250 ambulatory physicians with an affiliation as attending physicians in hospitals in 2012, which corresponds to about 42% of the 19 854 employed physicians working in hospitals (FOPH, 2015f). Comparing this number with FMH statistics for the same year shows that this corresponds to about 50% of all ambulatory physicians (16 910 in 2012).

Geographical distribution of inpatient services varies between regions and cantons but, in general, accessibility to hospital care is thought to be very good, in part due to the well-developed transportation system (OECD/WHO, 2011). In fact, oversupply and redundancies in hospital service provision due to cantonal hospital planning are considered a bigger problem than under-provision, even in more remote areas. In both public and private hospitals, there is a tendency to form larger hospital organizations with several sites in order to increase efficiency in management and purchasing.

The number of beds per 100 000 inhabitants varies between as much as 15.0 in Appenzell Ausserrhoden and 2.1 in the canton of Fribourg (FSO, 2013b). Details of hospital infrastructure are outlined in section 4.1.2. Especially smaller cantons sometimes share the responsibility for certain services, thus beds (in particular for specialty care) are more concentrated in some cantons than in others (Obsan, 2009): Appenzell, for example, has many rehabilitation facilities and Basel-City a high density of psychiatric beds (Obsan, 2009).

There are five university hospitals (in Zurich, Basel, Bern, Geneva and Lausanne) offering highly specialized medical services. Considering the size of the country, this is a relatively high number (OECD/WHO, 2011). Just over half of all Swiss hospital beds are in cantons with university hospitals, which reflects their share of the Swiss population relatively well (Berger et al., 2015).

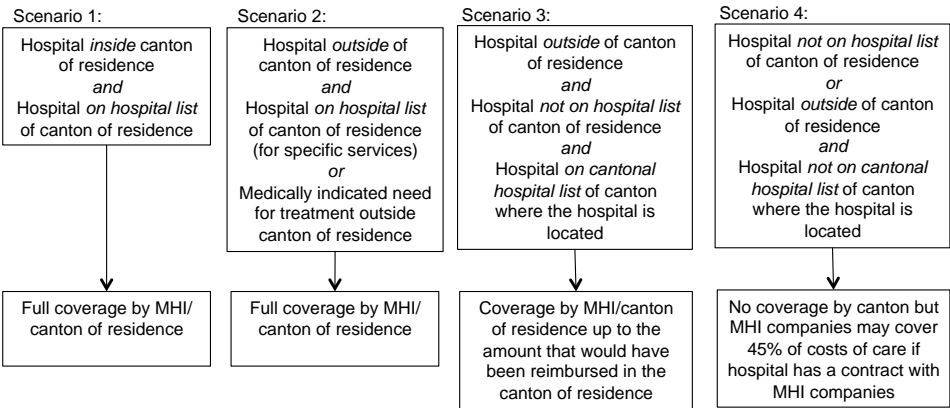
5.4.2 Organization and coverage of inpatient care

Cantons are responsible for ensuring the availability of sufficient inpatient capacity (see sections 2.8.2 and 2.5). They issue so-called cantonal hospital lists, and care provided by these hospitals is reimbursed jointly by MHI companies and cantons (see section 3.7.1). Cantonal hospital lists usually include most hospitals in the canton but they specify that certain hospitals are only allowed to provide certain basic services, while other hospitals might be allowed to provide the full range of services or certain specialist services only. In addition, lists often also include hospitals located in other cantons for certain services in order to ensure availability of services that are not available from the canton's own hospitals.

Patients can freely choose any hospital on the list of their canton of residence that is allowed to provide the specific service and (unless insured by a managed care plan) they do not need a referral. Patients can also claim reimbursement for costs of all services provided by hospitals in other cantons as long as these hospitals are included in the lists of the cantons where the hospitals are located (cantons of treatment). However, if the tariff of a hospital in another canton is higher than it would be in the patient's canton of residence, coverage is restricted to the tariff of the canton of residence and patients may have to pay the difference.

The different coverage scenarios in relation to the location of hospitals and their inclusion in cantonal hospital lists are summarized in Fig. 5.5. Medically indicated care outside the canton of residence (e.g. if services are unavailable in the home canton) is fully covered, but prior authorization may be required (scenario 2). MHI companies may cover their share of costs if they have a contract with a hospital even if it is not included on the cantonal hospital list (scenario 4). In the case of emergency care, patients can, of course, obtain treatment from any hospital in Switzerland and are eligible for reimbursement.

Fig. 5.5
Regulations for insurance coverage of hospital inpatient care, depending on location of hospital and inclusion in cantonal hospital lists



Source: Authors' own compilation.

Regulations for the reimbursement of services provided by hospitals outside the canton of residence changed as a result of the hospital financing reform implemented in 2012 (see section 6.1.2). Prior to this reform, reimbursement of care was generally available only for services provided by hospitals within the canton of residence and patients often had to use VHI to pay for services provided by hospitals in other cantons. The aim of the reform was to increase choice and hospital competition beyond cantonal borders.

In 2012 (the first year after the reform), on average 19.4% of all hospital cases were treated in hospitals outside the patient's canton of residence but with large variation across cantons (Berger et al., 2015): in Neuchâtel only 4.2% of hospital patients came from outside the canton, whereas this number was above 60% in Appenzell Ausserrhoden and above 40% in Basel Stadt and Appenzell Innerrhoden. This constitutes a fairly small increase, when compared to the time before the hospital financing reform, when about 84% of patients were treated in their home canton (Berger, Bienlein & Wegmüller, 2010).

Besides MHI, accident insurance, military insurance and old-age and disability insurance may also cover hospital care (see section 3.6.3), and patients accessing care through these are not bounded to their canton of residence and do not have to pay user charges. Patients with supplementary VHI benefit from improved "hotel" services (e.g. single rooms) and they can usually choose the physician.

5.4.3 Provision patterns and quality

The number of inpatient cases per 1000 population reduced from almost 183 in 2003 to about 165 in 2012. The most frequent diagnoses in Swiss hospitals in 2012 were from ICD-10 Chapter XIII (Diseases of the musculoskeletal system and connective tissue), closely followed by Chapter XIX (Injury, poisoning and certain other consequences of external causes). The largest reductions of cases took place in Chapter XXI (Factors influencing health status) and chapter VII (Diseases of the eye) (see Table 5.3).

Table 5.3

Main diagnoses (ICD-10) of patients discharged from Swiss hospitals in 2003 and 2012

ICD-10 Chapter		Cases per 1 000 inhabitants		% of total inpatient cases	
		2003	2012	2003	2012
XIII	Diseases of the musculoskeletal system and connective tissue	20.2	21.8	11.0	13.2
XIX	Injury, poisoning and certain other consequences of external causes	20.0	21.4	11.0	13.0
IX	Diseases of the circulatory system	18.0	18.1	9.9	11.0
XI	Diseases of the digestive system	14.0	13.7	7.7	8.3
II	Neoplasms	12.9	13.5	7.1	8.2
XV	Pregnancy, childbirth and the puerperium	12.3	12.2	6.8	7.4
V	Mental and behavioural disorders	10.3	11.3	5.6	6.8
XIV	Diseases of the genitourinary system	11.2	9.0	6.1	5.5
X	Diseases of the respiratory system	9.3	9.1	5.1	5.5
XXI	Factors influencing health status and contact with health services	23.3	8.9	12.8	5.4
XVIII	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	5.7	5.6	3.1	3.4
I	Certain infectious and parasitic diseases	3.0	4.5	1.7	2.7
VI	Diseases of the nervous system	5.1	4.3	2.8	2.6
XVI	Certain conditions originating in the perinatal period	2.3	3.1	1.3	1.9
IV	Endocrine, nutritional and metabolic diseases	2.1	2.4	1.2	1.5
XII	Diseases of the skin and subcutaneous tissue	2.6	1.9	1.4	1.2
VII	Diseases of the eye and adnexa	6.8	1.5	3.7	0.9
XVII	Congenital malformations, deformations and chromosomal abnormalities	1.6	1.2	0.9	0.7
III	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	0.9	0.9	0.5	0.5
VIII	Diseases of the ear and mastoid process	1.0	0.8	0.6	0.5
XX	External causes of morbidity and mortality	–	0.0	–	0.0
Total		182.6	165.2	100	100

Source: FSO, 2014p.

An evaluation of the introduction of DRG-based payment commissioned by FMH recently came to the conclusion that the change in financing has led to a shift of service provision away from inpatient care and towards increased use of ambulatory care (Lobsiger et al., 2014). In particular, ambulatory pre- and post-admission specialist visits were found to have increased, and some inpatient stays had been replaced by ambulatory provision.

The introduction of DRG-based hospital payment was accompanied by two important initiatives aimed at improving or ensuring the quality of care. Within the framework of a national quality contract signed in 2011 (see section 2.8.2), the National Association for Quality Improvement in Hospitals and Clinics (ANQ) runs a national quality measurement system (ANQ, 2011). The system is mandatory for all hospitals who signed the quality contract. Quality indicators include: the risk-adjusted hospital readmission and reoperation rates (based on the SQLape classification system); postoperative wound infections; patient satisfaction; prevalence of decubitus and falls; and revision rates for hip and knee replacement. The ANQ subcontracts the measurement tasks for individual indicators to institutions that had already been operating quality measurement initiatives on a smaller scale before 2011. Results for some of the indicators are published at the level of individual hospitals (e.g. patient satisfaction), while results for other indicators are reported only in aggregate format.

In 2012, Swiss Inpatient Quality Indicators (CH-IQI) were introduced to monitor and evaluate the quality of acute care hospitals (FOPH, 2014h). The system is mandatory for accredited hospitals and uses routine discharge data. Data have been published for the years since 2008 on the website of the FOPH (<http://www.bag.admin.ch/qiss>), publicly reporting results for individual hospitals. Indicators include case numbers, mortality and shares of specific therapeutic measures for 40 sets of diagnoses. Raw mortality is reported as well as standardized mortality ratios taking into account age and gender. In the CH-IQI of 2012, 44% of all inpatient cases were included in the evaluation (FOPH, 2014h). If indicators deviate considerably from the mean, a standardized peer review process is recommended to identify possible reasons (Langenegger & Schneider, 2009).

One potential challenge for quality improvement in hospitals is that the cantons are both owners and quality assurers and may, consequently, face mixed incentives to identify quality shortfalls in their own hospitals, in particular, if there is no easy remedy for these problems (OECD/WHO, 2011).

5.4.4 Day care

There is no national definition of day care activity in Switzerland and, since 2009, day care activity is no longer reported to international databases (OECD, 2014d). In general, inpatient cases are defined as cases that either stay more than 24 hours in hospital or occupy a bed during an overnight stay (FSO, 2013b). A day case could therefore be defined as a hospital stay of less than 24 hours that does not include the night. However, in fact, day care is not distinguished from other ambulatory care provided by hospitals (H+, 2014). Consequently, day care is reimbursed by MHI companies in the same way as other ambulatory care, which means that cantons do not contribute financially to the costs of day care provision. Hospitals usually have a certain number of beds that are designated to day cases or they have dedicated day care wards for specified services such as chemotherapy.

A comparison of selected surgical procedures performed as day cases in Switzerland and seven other European countries shows that the proportion of day cases is generally lower than in the Netherlands or in Scandinavian countries, but higher than or similar to in Austria and Germany (see Table 5.4) (Lafortune, Balestat & Duran, 2012). The proportion of day cases out of all admissions increased slightly between 2002 and 2008 (the only years for which data are available). The Swiss hospitals (H+, 2014) claim that reimbursement for ambulatory (day care) activity is insufficient. MHI companies do not have an incentive to promote day care activity as they have to bear the full costs of day care provision, while cantons assume half the costs of inpatient care. However, MHI companies also have relatively little influence on the choice of care setting.

Table 5.4

Selected surgical procedures, total and day cases per 100 000, 2010 (or latest available year)

Country	Cataract surgery			Tonsillectomy			Cholecystectomy (laparoscopic and non-laparoscopic)			of which laparoscopic cholecystectomy			Inguinal and femoral hernia		
	total	day cases	% day cases	total	day cases	% day cases	total	day cases	% day cases	total	cases	% day cases	total	cases	% day cases
Austria	1001.9	328.9	32.8	122.6	0.2	0.2	225.1	0.1	0.0	190.5	0.0	0.0	179.2	5.4	3.0
Denmark	906.4	890.1	98.2	116.6	31.0	26.6	138.8	60.5	43.6	125.3	59.6	47.6	201.1	145.4	72.3
France	1037.8	831.4	80.1	105.1	21.0	20.0	188.9	2.9	1.6	164.3	2.9	1.8	–	–	–
Germany	188.1	9.8	5.2	156.7	0.2	0.1	235.8	0.1	0.0	188.1	0.0	0.0	223.7	0.7	0.3
Italy	305.8	261.1	85.4	69.9	17.0	24.3	173.8	2.2	1.3	152.0	2.2	1.4	271.3	123.7	45.6
Netherlands	879.6	867.7	98.7	240.7	163.7	68.0	150.1	7.0	4.6	132.8	7.0	5.2	184.7	125.8	68.1
Norway	461.8	447.1	96.8	192.0	101.7	53.0	90.7	23.9	26.4	83.1	23.6	28.4	142.4	99.2	69.6
Sweden	621.3	605.0	97.4	83.3	34.8	41.8	137.6	23.4	17.0	110.2	22.6	20.5	168.5	121.9	72.4
Switzerland	421.4	335.2	79.6	120.1	12.0	10.0	161.9	1.1	0.7	148.3	1.1	0.7	243.8	19.5	8.0

Source: Laforlune, Balestat & Duran, 2012.

5.5 Emergency care

There are different definitions for emergency care in Switzerland, depending on the setting, i.e. hospital or ambulatory care (Fischer, 2009). For hospital care, an emergency is defined as a case requiring attention within 12 hours. For ambulatory care (according to TARMED), it is defined as medically necessary care requiring immediate attention. According to a decision of the cantonal administrative court in Zurich, an emergency case is defined as an acute life-threatening condition or other situations in which severe symptoms require immediate treatment (KHZ, 2003).

Responsibilities for emergency care are split between the cantons (organization and provision), the Confederation (education, reimbursement, coordination) and self-governing bodies (Imbach, 2008). As part of an attempt to better coordinate cantonal activities, the Association for Rescue and Emergency Care (IVR) – the umbrella organization of cantonal emergency organizations – sets quality standards for rescue services and emergency call centres. The Swiss Society for Emergency Medicine (Schweizerische Gesellschaft für Notfall- und Rettungsmedizin, SGNOR) is responsible for setting standards for medical and paramedical training.

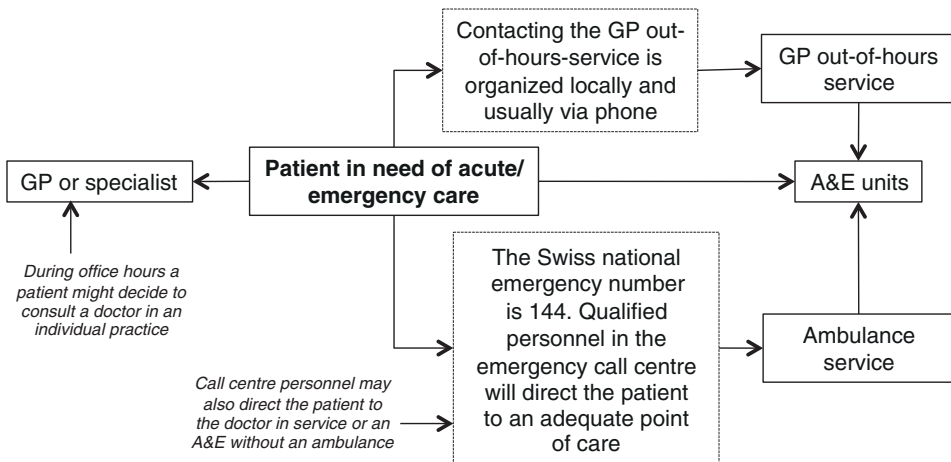
The local set-up of emergency care differs considerably across cantons. In 2008, there were 24 local emergency call centres (reachable in all cantons under the number 144 and known as SNZs) coordinating the activities of 120 emergency teams, covering the entire territory (Imbach, 2008). Depending on the canton, call centres and teams were either based within the cantonal administration (only a few), at hospitals (about 40%), or at subcontracted private entities. According to guidelines on the recognition of emergency teams published by the IVR, teams should reach urban emergency locations within 10 minutes and rural locations within 15 minutes for 90% of calls necessitating an urgent response (IVR, 2004). Data about the proportion of calls responded to within the specified time limits are not publicly available.

In addition, cantonal physician associations are responsible for the organization and provision of ambulatory after-hours (emergency) care in their area (FMH, 2013b). As this is organized at the cantonal level without supra-regional coordination, the system differs considerably across cantons and there are different phone numbers depending on the canton. If necessary, the physician in charge may redirect the patient or call for assistance from the emergency teams (Marty, 2004).

Finally, accident and emergency units of hospitals are open for patients 24 hours a day. Therefore, depending on the urgency of the situation, a Swiss patient feeling in need of immediate medical attention has three options: (1) call the emergency call centre; (2) contact a local GP service; or (3) go directly to the accident and emergency unit of a local hospital (see Fig. 5.6).

Fig. 5.6

Emergency care options in Switzerland



Source: Authors' own compilation based on Marty, 2004; Imbach, 2008.

Box 5.2

Emergency patient pathway

In Switzerland, a woman with acute appendicitis on a Saturday night would take the following steps:

- The woman goes to an emergency unit of a hospital that she can freely select.
- She will be met by a specially trained nurse who assesses the urgency of the case. A structured triage system is only implemented in some Swiss emergency units (Rutschmann, Sieber & Hugli, 2009).
- The patient will then be seen by a doctor diagnosing acute appendicitis. Waiting times depend on the urgency of the case.
- Surgery will be performed by a surgeon.

The patient could also consult either an emergency call service or the GP out-of-hours service. This is more likely in remote rural areas. The call centre might directly refer the patient to a hospital if acute appendicitis is likely while the out-of-hours GP would refer the patient to a hospital after diagnosing appendicitis.

Between 2007 and 2011, the number of emergency department visits in hospitals increased by 26% to roughly 1.6 million cases per year (Vilpert, 2013), and about 32% (or 510 552 cases) of these were admitted as inpatient cases. In response to the increased utilization of emergency departments, many hospitals have begun to set up GP-emergency practices within or closely linked to hospitals in order to deal with uncomplicated cases.

5.6 Pharmaceutical care

5.6.1 Overview of the pharmaceutical market

The pharmaceutical industry is an important part of the Swiss economy, accounting for 3.2% of GDP in 2012, and for about 39% of all private research and development spending (Interpharma, 2014; Suter, Vaterlaus & Tesler, 2013). In the first two quarters of 2014, the industry had 42 000 FTE employees, i.e. about 1.2% of FTE employees in the country (FSO, 2014g). Two of the ten world's largest pharmaceutical companies are located in Switzerland, and the country is one of the largest pharmaceutical exporters worldwide (Interpharma, 2014). At the same time, the country is heavily dependent on pharmaceutical imports from abroad, e.g. almost all antibiotics and insulin have to be imported, and the Federal Department of Economic Affairs operates a safety stock, which can guarantee availability of, e.g. antibiotics and insulin, for several months (BWL/OFAE, 2013).

The value of the Swiss pharmaceutical market in 2013 was about Sw.fr.5.1 billion with Swiss companies having a market share of about 32% (Interpharma, 2014). About 81% of the total market were reimbursable products, almost all of which (94%) were prescription-only medicines. Sales of generics have increased considerably in recent years, also because of considerable political efforts in this area (see below). The market share of generics as a proportion of all reimbursed pharmaceuticals in terms of volume rose from 6.1% in the year 2000 to 23.9% in 2013 (OECD Health, 2014). However, the share of generics remains far below the share of generics in other countries, such as Germany (78.2% in 2012) or Austria (48.5% in 2012).

5.6.2 Distribution of pharmaceuticals

Production and distribution of pharmaceuticals is regulated by the Therapeutic Products Act (TPA), and Swissmedic is the main supervisory authority (see section 2.8.4). Most medicines are distributed by pharmacies,

which accounted for about 52% of medicines sold in terms of value in 2013 (see Table 5.5). The second largest group of distributors (accounting for about 24% of the total value) are the so-called self-dispensing doctors. These are practice-based physicians with a cantonal licence allowing them to dispense medicines, mainly in order to secure supply in rural areas. In 2015, there are 14 cantons that allow physicians to sell medicines without restrictions and another three that allow self-dispensation under certain conditions (Schiesser, 2015).

Table 5.5
Distribution channels for pharmaceuticals in Switzerland, 2013

Distribution channel	Factory prices (million Sw.fr.)	%	Packages (million)	%
Pharmacies	2 625.5	51.7	119.9	57.2
Self-dispensing doctors	1 236.6	24.4	40.2	19.2
Hospitals	1 140.7	22.5	41.0	19.6
Drugstores	74.4	1.4	8.7	4.0
Total	50 772.6	100	209.8	100

Source: Interpharma, 2014.

Physicians dispense pharmaceuticals at retail prices, which include a profit margin. In pharmacies, retail prices are reduced by 2.5% but pharmacists can charge extra for certain services, such as medication checks and compliance assistance (Vaucher & Rohrer, 2015). Average turnover of physicians with self-dispensation was about Sw.fr.200 000 in 2013 (Interpharma, 2014) and the sale of pharmaceuticals can contribute considerably to physicians’ incomes. The inherent perverse incentive for doctors to be able to profit from prescriptions issued is regularly discussed and criticized (Hänggeli et al., 2010; OECD/WHO, 2011). However, self-dispensation is appreciated by patients and is regularly confirmed in legislative processes in the respective cantons.

A limited range of medicinal products can be sold by druggists and some can be sold without limitations, for example, in supermarkets (see section 2.8.4). Mail-order pharmacies are becoming increasingly important. All medicinal products obtained through mail order must be prescribed by a doctor (regardless of their status as prescription or non-prescription drugs) in order to secure professional advice prior to consumption.

In 2012, there was a total of 1740 pharmacies, or 22 pharmacies per 100 000 inhabitants, in Switzerland (Vaucher & Rohrer, 2015). The number of pharmacies has remained relatively stable since the year 2000. The density of pharmacies differs considerably between urban and rural areas and also

between cantons: for example, the density of pharmacies in Basel-Stadt is more than six times as high as in Appenzell Innerrhoden. The pharmacy market has undergone important changes over the past decade or so: in 2014, 30% of all pharmacies belonged to a chain, while 49% were formally independent but were part of one of eight big pharmacy groups (Vaucher & Rohrer, 2015). In addition, borders between pharmacies and drugstores are becoming increasingly blurred, either because drugstores open a pharmacy within the store or because pharmacies expand their supply of drugstore products (cosmetics, non-prescription pharmaceuticals, etc.).

5.6.3 Public coverage of pharmaceuticals

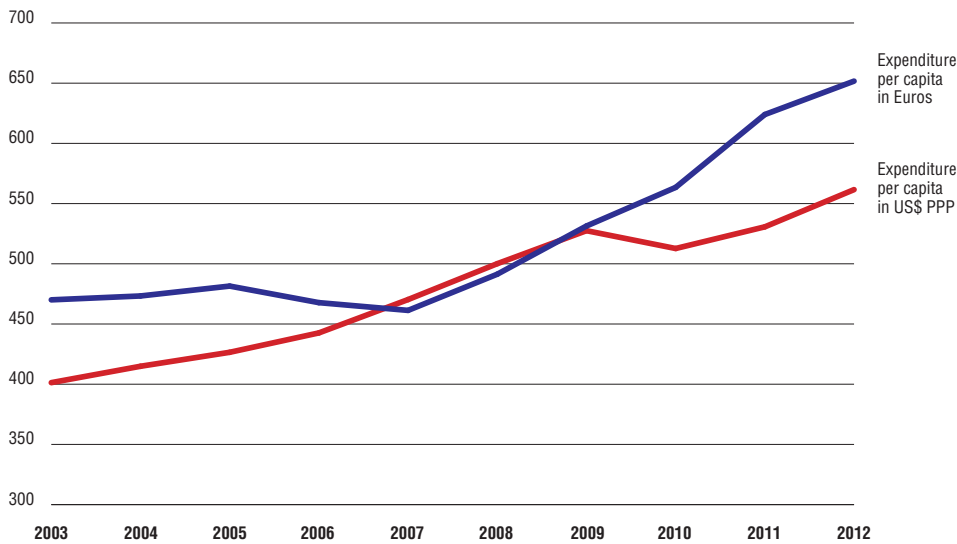
Pharmaceuticals are covered by MHI if they are listed on one of the two positive lists, i.e. either on the list of medicines with tariff (for medicines prescribed by a doctor and prepared in a pharmacy) (FOPH, 2013a) or on the list of pharmaceutical specialties (for industrially produced medicines) (FOPH, 2013j). (For more information see section 2.8.4.)

The same cost-sharing regulations and exemptions apply as for other MHI-covered services (see section 3.4.1): coverage starts only after patients have spent their deductible (Sw.fr.300 to Sw.fr.2500), and there is a 10% co-insurance rate for medicinal products. Since 2006, the co-insurance rate is 20% for original drugs if a generic is available, unless the more costly original is explicitly prescribed for medical reasons (FOPH, 2013c). Since 2011, the higher co-insurance rate is also applied to generics and co-marketing products, if their prices exceed by more than 20% the average of the cheapest third of medications with the same active ingredient. Exemptions and caps on cost sharing exist, in particular for children and pharmaceuticals related to maternal health services (see section 3.4.1).

5.6.4 Reform efforts to control pharmaceutical expenditures

Expenditures on pharmaceuticals in Switzerland were €652 per capita in 2012 – the highest amount of all European countries for which data are available (Eurostat, 2014c), and considerably higher than in Austria (€464), Germany (€510) or France (€548). However, when taking purchasing power into account, spending in Switzerland was US\$ PPP 562 in 2012 (OECD Health, 2014), which was below the amounts spent in Germany or France. Per capita expenditure on pharmaceuticals in Switzerland (measured in euros) remained relatively stable between 2003 and 2007 but increased strongly between 2007 and 2012 by 41% (see Fig. 5.7), which was related to changes in the exchange rate.

Fig. 5.7
Pharmaceutical and other medical non-durables, expenditure per capita in Switzerland, from 2003 to 2012



Source: FOPH/GDK, 2013a.

In recent years, considerable efforts have been made to reduce the relatively high retail prices in Switzerland and to increase the use of generics (OECD/WHO, 2011). Several price control mechanisms are in place that limit prices of new drugs and, since 2009, prices in the positive list are reassessed every three years (see section 2.8.4). The development of pharmaceutical prices since 2005 suggests that these measures have had some effect as prices reduced by more than 20% between 2005 and 2011, although they increased again in 2012 and 2013 (Eurostat, 2014d). In a recent comparison of prices of the top 200 original products in the six reference countries considered for external reference pricing, prices were lower in Switzerland than in Germany and Denmark, although they were still considerably higher than those in Austria, the Netherlands and France (Interpharma, 2014).

The augmented co-payment for generics introduced in 2006 was one measure aimed at increasing the share of generics and, since July 2001, pharmacists had already been paid to substitute cheaper generics for more expensive brand drugs. Also, market entry of generic companies has been encouraged through the introduction of adaptive pricing regulations in 2009. Since then, the discounts

required for generics, when compared with the originators' prices, are based on the originators' volume; this regulation was further refined in 2012 and 2014 (see section 2.8.4).

5.7 Rehabilitation/intermediate care

In 2012, there were 3314 beds in 45 rehabilitation hospitals, with 45 419 hospitalizations and an average length of stay of 24 days (FSO, 2014s). Rehabilitation hospitals are defined as institutions offering inpatient rehabilitation services (FSO, 2010). In addition, a wide range of ambulatory rehabilitation services, such as chiropractic, physiotherapy or occupational therapy, are available.

MHI is the most important payer for rehabilitation services (FSO, 2014e). Accident insurance (UV/AA, see section 3.6.1) pays for rehabilitation services in case of occupational accidents or illnesses, and is the second most important payer. The payment system for inpatient rehabilitation is currently being revised, with the aim of introducing a casemix-based payment system by 2018 (Bachmann, 2015).

Cantons are responsible for the organization and accreditation of rehabilitation services and also contribute to the financing of most institutions. However, cantons may delegate responsibility for the organization of services to municipalities. As in other areas of health care provision, ownership of rehabilitation units can be public, subsidized or private, with private entities operating either on a profit or non-profit basis. Similarly to other inpatient services, smaller cantons often share responsibility for the provision of more specialized services such as rehabilitation. The Swiss National Accident Insurer (SUVA) operates two rehabilitation hospitals.

There are considerable differences in the availability of inpatient and ambulatory rehabilitation services across cantons (Obsan, 2009). The capacity of ambulatory rehabilitation providers has been considerably expanded over the past few years, while inpatient rehabilitation capacity has been reduced (Bachmann, 2015).

Similarly to acute hospital inpatient care (section 5.5), ANQ recently introduced a quality measurement system for rehabilitation hospitals (ANQ, 2014b). Data collection in almost all rehabilitation hospitals started in 2013 and included a patient satisfaction survey and specific indicators for musculoskeletal and neurological rehabilitation (e.g. goal attainment

and functional impairment measurement), as well as for cardiological and pneumological rehabilitation. However, in October 2014, results of the quality measurement initiative were not yet published.

In addition, SwissREHA, an association of a large proportion of rehabilitation hospitals in Switzerland, representing more than 50% of all rehabilitation beds in the country, introduced a quality assessment programme in 2010. As part of this programme, quality in facilities associated with the organization has been monitored and new facilities aiming to join the association have to undergo quality assessment (SwissREHA, 2015). Different quality criteria exist for different areas of specialized rehabilitation, such as cardiac, pulmonary and musculoskeletal rehabilitation. SwissREHA is currently working on developing quality measures for rehabilitation in ambulatory and day care settings.

Since 2011, MHI also covers intermediate care type services for up to two weeks after discharge from hospital if prescribed by a physician (OECD/WHO, 2011). As these usually take place in long-term care settings, they are described in section 5.8.

5.8 Long-term care

In a similar way as for inpatient care (see section 5.4) or rehabilitation care (see section 5.7), cantons are responsible for the organization of long-term care but may delegate responsibility to municipalities. Institutional (residential) long-term care is provided by medical nursing homes or nursing departments of old-age or disability homes, while home care nursing services are provided by so-called Spitex services (derived from the Swiss-German term describing long-term home care, *Spitalexterne Hilfe und Pflege*).

In addition, informal carers play an important role, carrying a considerable part of the total care burden. In 2012, about 338 000 people were receiving long-term care, representing about 4.2% of the Swiss population. Of these, about 64% (215 756 people) were receiving professional care at home, while 36% (121 768) were cared for in an institution (FSO, 2014l, 2014o). In addition, 4.7% of the population and 16.5% of the above 75-year-olds living in a private household were reported in the Swiss health survey to have received regular help from family or friends in 2012 (FSO, 2013c). Furthermore, a considerable but unknown number of people is estimated to receive informal long-term care at home provided by migrant workers (van Holten, Jähnke & Bischofberger, 2013).

Long-term care (institutional care and Spitex services) accounted for about 16% of THE in 2012. Long-term care financing was reformed in 2011 (see section 6.1.5). Currently, MHI covers parts of medical long-term care costs, when prescribed by a physician and after needs assessment, independently of whether it is provided at a nursing home or by home care (Spitex) services (Mösle, 2010). The contribution of MHI for care in nursing homes depends on the level of need determined during the needs assessment (and does not necessarily cover total costs), while the amount covered for Spitex services depends on the type and duration of provided care (see section 3.7.1).

The care level is determined by the long-term care providers and cantons on the basis of instruments that vary across Switzerland. The most important ones are the Resident Assessment Instrument – Resource Utilization Group (RAI-RUG), the BESA (Bedarfsklärungs- und Abrechnungs-System) in the German-speaking part, and the PLAISIR (Planification Informatisée des Soins Infirmiers Requis) instrument in the French-speaking part. Recently, the different assessment instruments were recalibrated in order to lead to more comparable results across Switzerland (GDK/CDS, 2011b). Independent of the instrument, patients are classified into 12 different care levels depending on the planned cumulative care time needed by a patient per day.

Non-medical costs (e.g. social or recreational services) and hotel costs are not covered by MHI. These costs depend on the level and quality of services and are calculated on a per-diem basis. Patients or their families (spouses and sometimes children, e.g. if a parental donation was received prior to institutionalization) have to cover these costs. However, if household resources are insufficient, additional contributions are available from the old-age and disability insurance (mainly the so-called complementary payments, EL/PC of AHV-IV/AVS-AI, see section 3.6). Finally, cantons generally subsidize construction and running costs of services related to long-term care.

As long-term care is mainly organized at the cantonal level there are no national programmes to improve quality but instead there are programmes at the cantonal level. Most cantons are currently applying some form of quality reporting for Spitex services. Recently, a research project supported by the Spitex association developed quality indicators for home care (Gmür & Rüfenacht, 2010; Spitex Verband Schweiz, 2013). Implementation of nationwide quality indicators for home care and nursing homes is planned, although details are still to be determined. The FOPH is currently developing a long-term

care strategy for the Federal Council, which will review current and future challenges in the area of long-term care and may propose legislative measures to address these challenges (FOPH, 2015d).

5.8.1 Community care

Community care or home care for the elderly or people with chronic diseases in Switzerland is provided by Spitex organizations. They offer different services such as basic long-term home care, subacute and intermediate care, household and social support, and may offer complementary services such as meal deliveries, palliative services or chiropody (see Table 5.6). Most providers of Spitex services are private non-profit organizations (associations or foundations), although some are directly operated by municipalities (Gmür & Rüfenacht, 2010).

There is a tendency towards consolidation into larger organizations, and private for-profit services and individual health care workers are gaining market share as they provide more complementary services such as night care or intensified care (Gmür & Rüfenacht, 2010). There is an umbrella organization of public and non-profit Spitex providers called Spitex Association Switzerland, which is concluding administrative contracts with insurers. Private providers founded the Association Spitex Privée Suisse (ASPS) in 2005 (Gmür & Rüfenacht, 2010).

Table 5.6
Services offered by Spitex organizations, by type of organization, 2012

	Total	Percentage	Non-profit (charitable and public)		For-profit (companies)		Individual health care workers	
Number of providers	1 522	100.0%	617	100.0%	273	100.0%	632	100.0%
Number of providers that offer the following services								
Long-term care	1 508	99.1%	605	98.1%	271	99.3%	632	100.0%
Subacute and intermediate care	144	9.5%	120	19.4%	13	4.8%	11	1.7%
Housekeeping and social services	736	48.4%	531	86.1%	176	64.5%	29	4.6%
Meals	282	18.5%	262	42.5%	19	7.0%	1	0.2%
Others	446	29.3%	367	59.5%	56	20.5%	23	3.6%

Source: FSO, 2014o.

In 2012, about 216 000 persons were receiving Spitex long-term services (see Table 5.7), about 52% more than the number of persons being cared for in institutional settings (see section 5.8.2). The vast majority of people were

cared for by non-profit organizations or public providers. Only about 17% (36 582 people) were cared for by for-profit providers or individual health workers in 2012, but the number has increased slightly since 2011, when 16% (31 869) were cared for by for-profit providers. In all age groups, the number of women being cared for is much higher than the number of men.

Table 5.7

Persons receiving Spitex services by type of provider, 2012

	Total		Non-profit (charitable and public)		For-profit (companies)		Individual health care workers	
Age groups	Clients							
Total	215 756	100.0%	179 174	83.0%	17 594	8.2%	18 988	8.8%
Female	138 819	100.0%	115 101	100.0%	11 558	100.0%	12 160	100.0%
0–4	652	0.5%	509	0.4%	17	0.1%	126	1.0%
5–19	931	0.7%	686	0.6%	46	0.4%	199	1.6%
20–64	27 903	20.1%	20 916	18.2%	2 044	17.7%	4 943	40.6%
65–79	37 166	26.8%	31 726	27.6%	3 030	26.2%	2 410	19.8%
80+	72 167	52.0%	61 264	53.2%	6 421	55.6%	4 482	36.9%
Male	76 937	100.0%	64 073	100.0%	6 036	100.0%	6 828	100.0%
0–4	685	0.9%	506	0.8%	19	0.3%	160	2.3%
5–19	1 167	1.5%	881	1.4%	46	0.8%	240	3.5%
20–64	18 745	24.4%	14 493	22.6%	1 394	23.1%	2 858	41.9%
65–79	23 437	30.5%	20 157	31.5%	1 712	28.4%	1 568	23.0%
80+	32 903	42.8%	28 036	43.8%	2 865	47.5%	2 002	29.3%

Source: FSO, 2014a.

Cantons and municipalities are the most important payers for Spitex services, covering about 45% of total costs. The second largest payer is MHI, which covers about 30% of costs, while households carry 15%, and private insurers and complementary payments of AHV-IV/AVS-AI cover the rest (FSO, 2014e).

The availability of Spitex services varies considerably across cantons: there are about three times as many FTE Spitex employees in Geneva as in Aargau (FSO, 2014n). The number of FTE Spitex employees per population above 65 increased by about 33% between 2001 and 2011. The effect of the increasing reliance on Spitex services (instead of residential care) on overall long-term care costs is still under discussion (Gmür & Rüfenacht, 2010): some cantons, such as Basel City and Bern, have both high expenditures on Spitex services and high expenditures on institutional care, while others, such as Geneva, have achieved relatively low institutional care costs as a result of investments in Spitex services.

5.8.2 Residential (institutional) care

Residential (institutional) long-term care for the elderly is mostly provided by nursing homes and by a few nursing departments of old-age homes. Old-age homes mostly provide a sheltered living environment for the elderly with only a few nursing beds (the number of which has been decreasing over time), while nursing homes specifically cater for older people in need of intensified care (FSO, 2013g). In 2012, there were about 92 000 long-term care beds in old-age and nursing homes (see Table 5.8). Together, they had beds for about 6.6% of the population above 65. About 30% of institutions were owned directly by cantons or municipalities, while 30% were subsidized private non-profit institutions and 40% were private for-profit (FSO, 2014k). In addition to long-term care beds, these institutions may also provide subacute or intermediate care in the first 14 days following an inpatient episode (see Table 5.8).

Table 5.8
Beds in old-age and nursing homes in Switzerland, 2012

		Number of beds	Per 1 000 inhabitants (≥65 years)
Old-age homes	Long-term	374	0.3
	Short-term	29	0.0
Nursing homes	Long-term	91 479	65.4
	Short-term	1 430	1.0
	Subacute and intermediate care	246	0.2

Source: FSO, 2014k.

The availability of residential long-term care services is generally considered to be sufficient and regional variation is less pronounced than in many other areas of health care (Mösle, 2010). Interestingly, those cantons that usually have the highest supply of medical care, e.g. Geneva and Basel, do not necessarily have the highest numbers of residential long-term care beds for their populations.

The number of clients living in residential long-term care settings increases with age (see Table 5.9). Although the number of clients by age group in 2012 can not be directly compared with the population at the end of the year, Table 5.9 shows that a large proportion of the population of the very old is living in residential long-term care settings: about 31% of the population between 85 and 89 years old lived (at one point in 2012) in a residential setting, and this proportion increased to almost 66% for the above 90-year-olds.

Table 5.9

Number of clients in old-age homes and nursing homes by age group, 2012

Age groups	Number of clients in old-age homes and nursing homes by age group			Population (31.12.12)	Clients/ population
	Male	Female	Total	Total	
0–69	6 067	5 740	11 807	7 060 607	0.2%
70–74	3 364	4 167	7 531	326 356	2.3%
75–79	5 544	8 818	14 362	261 434	5.5%
80–84	8 399	18 651	27 050	201 444	13.4%
85–89	10 161	28 789	38 950	125 002	31.2%
90+	9 300	32 906	42 206	64 217	65.7%
Total	42 835	99 071	141 906	8 039 060	
Average age	81	85			

Sources: FSO, 2014i, 2014k.

Households bear the greatest part of residential long-term care costs (36.9%). MHI covers about 17.7% of costs, while complementary payments of AHV-IV/AVS-AI pay for about 17.1% of costs. The remaining 30% is distributed across municipalities (8.2%), cantons (7.3%), other social insurance (in particular AHV accounting for 5.9%), and other public (cantonal or municipal long-term care support) or other private sources (donations etc.).

For the disabled, there are different forms of residential and semi-residential care. Institutions generally aim to integrate people with disabilities both socially and professionally. In 2012, there were 20 699 residential places available in Switzerland for people with physical disabilities (FSO, 2014k). About 9300 of these had integrated occupational services. Cantons play the most important role in financing these institutions, bearing about 45% of total cost. Disability insurance (IV/AI) covers about 34%, while households cover 14% (FSO, 2014e).

5.9 Services for informal carers

A considerable share of health care and in particular long-term care is provided by informal carers, and care can be very demanding for carers. About 4.7% of the population is estimated to provide informal help on a daily basis, and an additional 9.6% is estimated to provide informal help about once a week (FSO, 2013c). Often, informal carers ensure care for their family members during the times (e.g. at night) when professional Spitex services are unavailable – or not paid for based on the formal needs assessment.

There is no national system of financial benefits for informal carers but several cantons (Basel-Stadt, Fribourg, Ticino, Vaud, Valais) and municipalities have introduced certain daily or monthly payments for caring relatives (Zumbrunn & Bayer-Oglesby, 2015; Bischofberger et al., 2014). Usually these are in the range of Sw.fr.20 to Sw.fr.30 per day and are limited by certain conditions, e.g. only relatives who live in the close neighbourhood of the cared-for individual are eligible, or when residential long-term care would be needed in the absence of informal care (Bischofberger et al., 2014). Some cantons formalize informal care arrangements by employing caring relatives through Spitex providers (Zumbrunn & Bayer-Oglesby, 2015). Furthermore, informal carers may claim pension benefits if their pension fund contributions have been lowered because of caring for a relative.

Most support services for informal carers are provided by cantons or local organizations. For example, the Swiss Red Cross offers support schemes such as self-help groups and training. However, the availability of these support services varies considerably between regions and so far there are no nationwide structured programmes for supporting and training informal carers (Zumbrunn & Bayer-Oglesby, 2015). In December 2014, an action plan for the support of informal carers was presented by the Federal Council, which includes, among other initiatives, improvements of quality and availability of short-term respite care to allow informal carers to go on holidays (FOPH, 2014d).

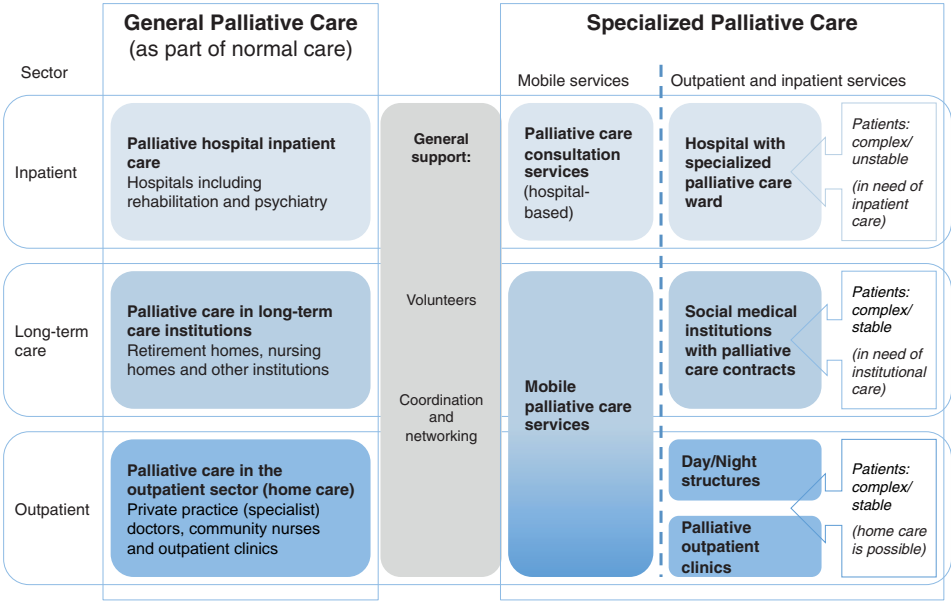
5.10 Palliative care

Considerable efforts have been made in recent years to develop and expand provision of palliative care. In 2010, a national strategy and guidelines for palliative care were issued by the FOPH and the GDK/CDS (FOPH/GDK, 2010a, 2010b), and the strategy was updated in 2013 (FOPH/GDK, 2013a). The palliative care strategy includes measures that aim to: strengthen palliative care at the primary and specialized levels; improve financing; promote education and research. In addition, the strategy explicitly aims to offer alternatives to assisted suicide, of which there were 508 cases registered in 2012 (FSO, 2014r). Legislation for assisted suicide is relatively liberal in Switzerland, although exact regulations differ across cantons (CURAVIVA, 2013).

As in most areas of health care, responsibility for the organization and provision of care lies with the cantons. Palliative care is defined as care for the terminally ill, and it should include medical, psychological, nursing, social and

spiritual dimensions (FOPH/GDK, 2010a). According to the national palliative care strategy (FOPH/GDK, 2013b), most patients can receive general palliative care as part of basic care provision by GPs, hospitals, or long-term care institutions, which have to be adequately qualified (see Fig. 5.8). Only certain more complex cases should receive specialized palliative care. For 2012 it was estimated that around 40 000 (or two thirds of the total of 60 000 deaths) would need palliative care, of which about 8000 would need specialized palliative care (FOPH/GDK, 2013a).

Fig. 5.8
Organization of palliative care in Switzerland



Source: FOPH/GDK, 2013a.

According to a survey of cantonal ministers of health in 2011, updated at the end of 2013 (FOPH/GDK, 2013b), the following specialized services were available in Switzerland: more than 30 specialized palliative wards in hospitals, together providing about 370 beds; 6 hospices; 10 ambulatory palliative care facilities; 18 community-based (mobile) palliative care services; and about 20 specialized consultation services for palliative needs in hospitals. Geographically, the majority of these were concentrated in and around urban areas. About one third of cantons found the availability of hospital inpatient palliative care provision insufficient and another third was still evaluating

its offering, while another third was satisfied with current care provision (FOPH/GDK, 2013b). In addition, most cantons saw deficits in the availability of specialized ambulatory palliative care.

Informal and formal voluntary workers are an important resource in palliative care provision in Switzerland. Informal voluntary workers include, for example, partners and neighbours, and their exact number is hard to measure. Formal voluntary work is also difficult to measure, but recent estimates amount to about 2000 voluntary workers involved in palliative care (SRK/Caritas, 2011). Voluntary workers mainly – but not exclusively – support the social and psychological dimensions of palliative care, and often organizations pay careful attention to distinguishing voluntary from paid (nursing) work. Ideally, paid and unpaid work are interwoven and new strategies for palliative care pay particular attention to integrating voluntary work (SRK/Caritas, 2011; FOPH/GDK, 2013a).

According to a 2010 report of the Economist Intelligence Unit (EIU, 2010), comparing end-of-life care in 40 countries, Switzerland scored relatively poorly on an index evaluating the quality of palliative care (rank 30 out of the 40 countries). Quality of care was measured using indicators such as availability of pain killers, training for end-of-life care in medical schools, do-not-resuscitate policies, and accreditation of palliative care providers. By contrast, availability of palliative care was evaluated as relatively good. However, as the report used data from before the expansion of palliative care services following the national palliative care strategy in 2010, the results are no longer representative for current palliative care provision.

5.11 Mental health care

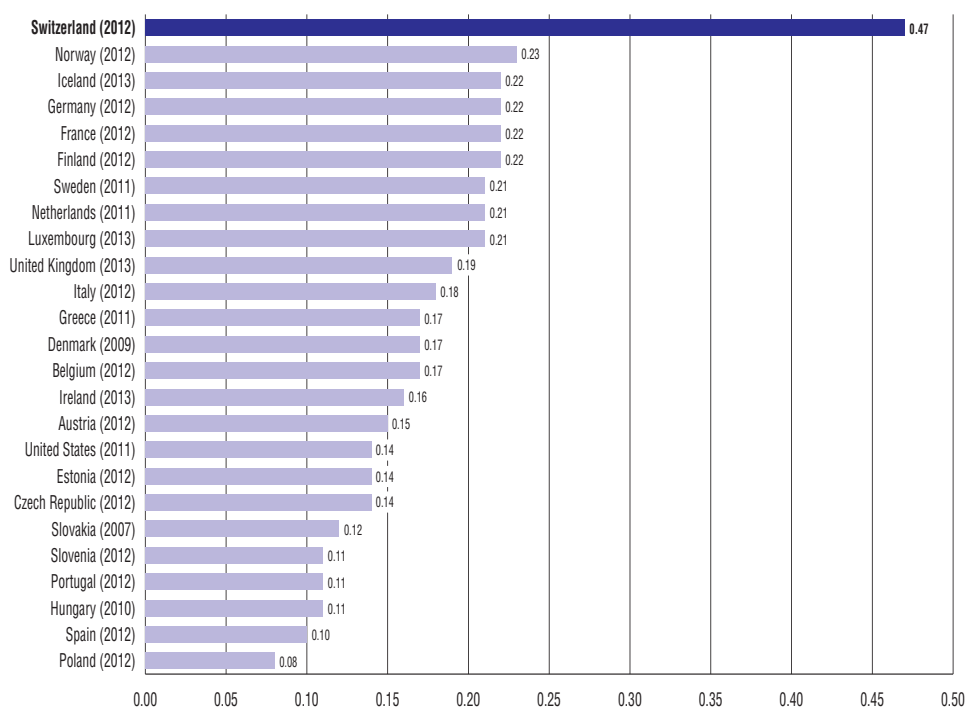
5.11.1 Organization of and resources for mental health

As for health care in general, responsibilities for mental health care are split between the Confederation, the cantons and MHI. The national level is involved in legislation and supervision but has no direct role in the organization or planning of provision structures. Cantons organize and plan mental health care provision and finance about 50% of the costs of psychiatric inpatient care, plus most costs of psychosocial institutions caring for people with long-term mental diseases. MHI is responsible for the financing of most ambulatory psychiatric care provided by psychiatrists in independent practices. However, some cantons also operate and finance specialized psychiatric day care centres.

Resources available for mental health care are quite extensive in Switzerland: in 2012, there were 47 psychiatrists per 100 000 population, more than twice as many as in Germany and France, and almost three times as many as the OECD average (see Fig. 5.9). The number of psychiatric hospital beds also remained comparatively high at about 95 per 100 000 population – higher or similar to Austria (about 78 per 100 000 population) or France (about 92 per 100 000 population) but below numbers in Germany (about 121 per 100 000 population) (WHO Regional Office for Europe, 2014). Since the year 2000, the number of psychiatric inpatient beds has reduced by about 20% in Switzerland (WHO Regional Office for Europe, 2014).

Fig. 5.9

Number of psychiatrists per 1000 population in selected countries, 2013 (or latest available year)



Source: OECD Health, 2014.

5.11.2 Providers, services and reimbursement

Data on mental health care provision are scattered across different provider-specific statistics (Schuler & Burla, 2012). Table 5.10 summarizes available data from different sources and different years. The table shows that psychiatrists in single practices see the largest number of patients, followed by psychologists with training in psychotherapy. In addition, public ambulatory day care units treat a large number of patients but reliable statistics continue to be unavailable (Guggenbühl, Ettlin & Ruflin, 2012).

Psychiatric inpatient treatment takes place mostly in specialized psychiatric hospitals (Table 5.10). In addition, several thousand patients with psychiatric diagnoses are treated at psychiatric departments of acute and rehabilitation hospitals. Furthermore, addiction treatment centres and psychosocial treatment centres exist, offering different care options; sometimes these provide a sheltered living environment and occupational therapy, while others offer day care services.

Table 5.10
Mental health care providers and numbers of patients in Switzerland

	Providers	Patients	Sources
<i>Ambulatory care</i>			
Psychiatrists in single practice (2010)	~2 900	334 906	Schuler & Burla, 2012
Psychotherapists (psychologists) (2012)	~4 800*	~220 000	Stettler et al., 2014
Day care units (2006)	497	175 000	OECD, 2014b
<i>Inpatient care</i>			
Specialized psychiatric hospitals (2013)	49	52 540	FOPH, 2015f
Psychiatric departments of other hospitals (2013)	29	18 415	FOPH, 2015f
Addiction treatment centres (2012)	84	4 142	FSO, 2014k
Psychosocial treatment centres (2012)	122	6 000	FSO, 2014k

Source: see column sources.
Note: *About 3300 of these were working in practices, while 1500 were providing ambulatory care in institutions.

Ambulatory psychiatrists can be accessed directly by patients without GP referral and care is reimbursed by MHI. Psychotherapy by psychologists is reimbursed only if a doctor with a specific licence delegates treatment to a psychologist who operates in the same practice as the doctor. Any doctor (GP or specialist) may apply for the required licence after taking part in a mandatory training course (Sturny & Schaller, 2010).

In 2013, a law about the psychological professions (PsyG/LPsy) was put into force regulating education and licensing of these professionals (see section 2.8.3). Psychologists providing psychotherapy aim to obtain the right to be reimbursed for psychotherapy after prescription by a physician without the need to work in the doctor's practice (Stettler et al., 2014). Psychologists had hoped that the introduction of PsyG/LPsy would pave the way for being allowed to provide MHI-reimbursable services but, at the end of 2014, the topic was still under discussion (PsyKo/PsyCo, 2014).

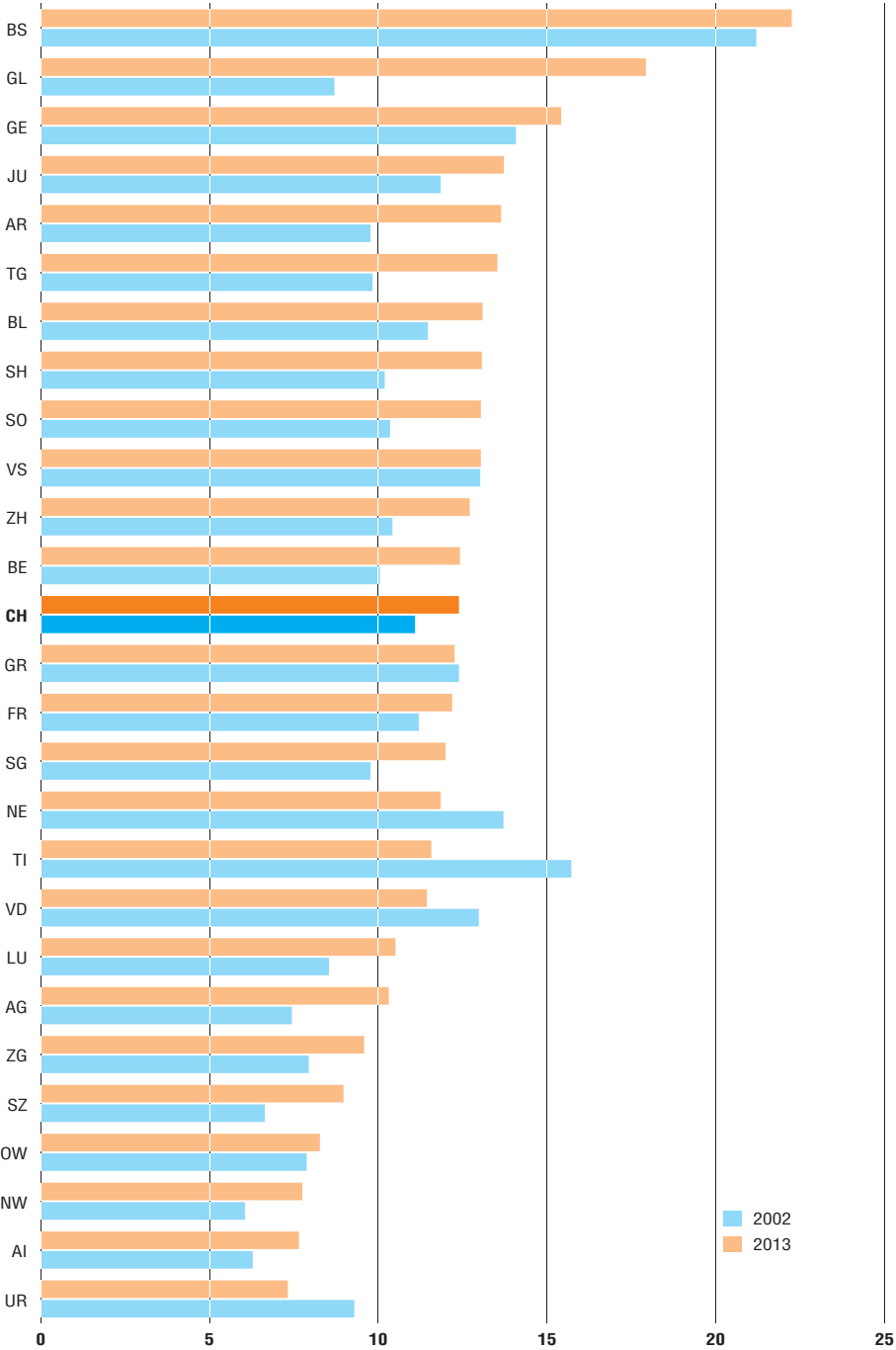
In addition to specialized mental health care services, GPs play an important role in caring for psychiatric patients (Schuler & Burla, 2012). In 2010, 36.0% of all ambulatory psychiatric diagnoses were made by GPs (with the rest made by specialists).

5.11.3 Regional variation

As provision of psychiatric care is organized by the cantons, availability of services differs considerably across cantons. In 2008, the GDK/CDS developed guidelines for cantonal planning of mental health care capacities with the aim of better coordinating inpatient care planning with ambulatory mental care (GDK/CDS, 2008). However, mental health care provision structures continue to vary greatly across cantons, and most cantons find the available day care capacities to be insufficient (Guggenbühl, Ettlin & Ruffin, 2012). In 2008, 37% of all Swiss non-medical psychotherapists and 26% of psychiatrists were located in Zurich, while only 17% of the Swiss population live in Zurich. In less densely populated cantons, such as Uri, there are very few psychotherapists. In these areas psychiatric care provision is largely dependent on basic health care providers such as GPs (Sturny & Schaller, 2010).

Availability and utilization of inpatient care also varies considerably across cantons. In 2013, hospitalization rates for mental disorders ranged from more than 20 admissions per 1000 population in the cantons of Basel-City to between seven and eight admissions in the rural cantons of Uri (UR), Appenzell Innerrhoden (AI) and Nidwalden (NW) (see Fig. 5.10). A report on “the future of psychiatry” is currently being prepared for the FOPH in order to provide an overview of different cantonal concepts with regard to psychiatric care (FOPH, 2015b).

Fig. 5.10
Hospitalization rates per 1000 population by canton, 2002 and 2013



Source: Obsan, 2015.
Note: Considers hospitalizations in a psychiatric clinic or in a psychiatric unit of a general hospital within a year.

5.11.4 Access problems and initiatives to improve mental health

Despite high numbers of psychiatrists and psychiatric hospital beds in the country, access to psychiatric services remains an issue (OECD, 2014b). A recent Swiss study simulating clinical symptoms of acute depression or acute psychotic disorder concluded that making an appointment with a psychiatrist is much more difficult than making an appointment with a GP (Bridler et al., 2013). On average, 7.3 phone calls were necessary to successfully book an appointment with a psychiatrist, which was only possible with 30% of all the contacted psychiatrists. The other psychiatrists were either not reachable or did not accept new patients. The average waiting time for an appointment with a psychiatrist for an acute problem was around six days. One reason for the access problems despite high numbers of psychiatrists is that average treatment duration is very long: according to a study from Bern, average treatment duration in psychiatric practices was between 36 to 90 months (Amsler, Jäckel & Wyler, 2010).

Better integration of care across different institutions and providers was recommended by the GDK/CDS in 2008 (GDK/CDS, 2008). However, in 2012, only six cantons had introduced case managers with the objective of improving care provision for patients (Guggenbühl, Ettlin & Rüfelin, 2012).

As part of an attempt to better coordinate national mental health care activities, a network for mental health was established in 2013 by the Confederation, together with Social Insurances, the GDK/CDS and the Swiss Foundation for Health Promotion (NPG, 2013). This network aims to improve knowledge exchange and collaboration amongst different actors. However, the network does not have executive powers to enforce a coherent national mental health policy.

In 2015, the FOPH, GDK/CDS and Swiss Foundation for Health Promotion published a report on mental health in Switzerland, focusing on health promotion, prevention and early detection of psychiatric diseases (FOPH, 2015h). The report reviews the current situation in Switzerland as well as possible measures that could contribute to improving mental health in Switzerland.

There are also some public and private initiatives that aim to tackle discrimination and social exclusion of the mentally ill in Switzerland. These are mainly organized at the cantonal level. An example of an organization specifically aimed at reducing social stigma is the internet platform “Kein Tabu” in the canton of Zug (Kein-Tabu, 2013). The foundation “Pro Mente Sana” is a nationwide organization and represents the interests of those with mental health

problems (Pro Mente Sana, 2015). Together with several cantons, Pro Mente Sana and other NGOs have launched the mental health campaign “How are you?” (www.wie-gehts-dir.ch).

5.12 Dental care

Dental care in Switzerland is mainly provided by ambulatory dentists in individual practices, but there are also dentist chains organized as joint stock companies. In addition, dental care is offered by ambulatory care units in university hospitals and as part of public health programmes in schools. In 2013, there was a total of 4208 ambulatory dentists, or 52 dentists per 100 000 inhabitants (FSO, 2014q). Compared to 2005, the number of dentists had increased by about 12% but the increase per population was only 3%.

Regulations for dental hygiene for school- and kindergarten-children are issued at the cantonal level and thus differ between cantons. Responsibilities are mostly delegated to municipalities and at least one dental check-up annually is paid for by the communities (SZPI, 2013). As another prophylactic measure, fluoridated toothpaste has been available in Switzerland since the 1970s and fluoridated salt since the 1980s (Marthaler, 2005).

Except for a narrow range of treatments for comparatively rare diseases, dental care is not reimbursed by MHI in Switzerland (Swiss Confederation, 1995). Consequently, in 2012, dental care was almost exclusively (about 89%) financed by OOP payments by households (FSO, 2014e).

The density of dentists in 2012 was lower than in most other OECD countries for which data are available (OECD Health, 2014) and dentist consultations per capita in 2009, the last year for which data are available, were slightly below the OECD average (Switzerland: 1.2, OECD average: 1.3) (OECD Health, 2014).

The Swiss dental association represents the interests of dentists in Switzerland. It is responsible for negotiating fee levels with insurers, and also publishes quality guidelines for its members (SSO, 2013).

5.13 Complementary and alternative medicine

Complementary and alternative medicines have relatively strong support in the Swiss population. In 2009, an article was added to the constitution demanding better integration of CAM (FOPH, 2013d). Consequently, four CAM methods

are currently reimbursed by MHI for a trial period (under a CED regime) if provided by physicians: anthroposophical medicine, homeopathy, phytotherapy and medication therapy of traditional Chinese medicine. Until the end of 2017, the responsible associations must provide evidence for efficacy and cost-efficiency of the different therapeutic options (FOPH, 2013d).

In addition, acupuncture performed by physicians has been reimbursed by MHI since 1999. In fact, the four CAM methods currently being reimbursed under the CED regime were already reimbursed by MHI between 1999 and 2005. In 2005, the ELGK/CFPP found that the available evidence did not support the inclusion of these CAM methods in the benefits basket because they did not comply with the criteria of effectiveness, appropriateness and cost-effectiveness.

More than 1100 doctors had certificates from CAM associations in 2012 (FMH, 2012), indicating a certain degree of acceptance of complementary medical techniques. The proportion of the population who had used complementary medicine during the previous year increased slightly between 2007 and 2012 (according to two rounds of the population health survey) (FSO, 2013c). In particular, use of homeopathy increased from 6.4% to 8.2%, while Chinese medicine increased slightly from 1.7% to 1.9%, and acupuncture remained stable at about 4.9%. Women used all three methods of CAM twice as often as men (FSO, 2013c). CAM methods are also increasingly integrated into inpatient service provision. Especially nursing personnel use alternative methods as part of their care (Ferroni & Studer, 2010).

Currently, cantons regulate CAM and licences to practice have different prerequisites across cantons. There are no definite job titles for non-medically trained personnel and no uniform job requirements yet. The responsible organizations are currently preparing such regulations together with the Confederation (FAMS, 2013). There are further plans to evaluate whether university diplomas for CAM are feasible and how far licensing of CAM drugs can be facilitated (FOPH, 2013d).

5.14 Health services for specific populations

Purchasing MHI is compulsory for anyone living in Switzerland. Thus – in theory – anyone living in Switzerland has MHI and is therefore entitled to the standard health insurance package (see section 3.3). However, the estimated 80 000 to 300 000 so-called “sans-papiers”, the Swiss term for immigrants without papers and thus without a clear legal status, often do not have health

insurance. In theory, they are entitled to purchase MHI and to receive premium subsidies just as other residents (SRK, 2012). Insurance companies as well health care providers are legally bound to confidentiality (Bilger et al., 2011). However, 80–90% of the “sans-papiers” are estimated not to have insurance, partly due to lack of knowledge of their rights and partly due to fear of being reported to the authorities. If in need of health care services, there are some special services for illegal immigrants (without insurance coverage) run by NGOs. In addition, regular providers may claim reimbursement for services provided to illegal immigrants from different sources such as the cantons and municipalities (SRK, 2012).

New collaborations for the improvement of immigrants’ health were recently initiated and information platforms were launched. For the period of 2014 to 2017, the following main areas of action have been formulated: prevention and health promotion; education and service provision; intercultural translations; research (FOPH, 2013h).

6. Principal health reforms

Since the year 2000, numerous reforms have been made, which have optimized the MHI system; changed the financing of hospitals; improved regulations in the area of pharmaceuticals; strengthened the control of epidemics; and harmonized regulation of human resources across the country. As KVG/LAMal is the most important federal law outlining the basic characteristics of the health system, most reforms are, in fact, revisions of KVG/LAMal and the related ordinances.

Making health reforms in Switzerland is difficult as a broad consensus of the main stakeholders is required. Reaching such a consensus is complicated, sometimes impossible, and almost always takes a very long time. Yet, the complex political and institutional structure of the country is very successful at negotiating compromises that are supported (or at least not opposed) by all relevant stakeholders. This leads to lengthy reform processes but also to solid reforms, which are – once implemented – almost never reversed. This characteristic feature of policy-making in Switzerland is supported also by a high degree of political and personal continuity within political institutions.

One important trend across all reforms since 2000 (and even before that) has been a tendency towards more harmonization of national health policy-making. Many reforms have strengthened the role of the federal government, which has obtained more influence on hospital inpatient care provision, insurance supervision and public health. In addition, the cantons are increasingly coordinating their activities, and this has led to a stronger role for the GDK/CDS, in particular in the area of highly specialized medical care. Nevertheless, reforms strengthening the federal level are often highly contested as cantons are reluctant to allow more federal intervention in health care, as they perceive this to be one of their core competences; other stakeholders exploit and support this cantonal attitude.

Future reforms are guided by the federal government's Health2020 strategy paper, which outlines the reform priorities for the coming years. These include: (1) quality of life; (2) equality of opportunity; (3) quality of health care provision; and (4) transparency. Three particularly important areas of reform are: (1) improving the use of information; (2) improving planning of ambulatory care; and (3) improving health care provision for people with specific needs. Given the lengthy process of making health reforms, most of these areas have been on the political agenda for quite some time already but it will still take several more years before activities will ultimately lead to institutional or legislative changes.

One important topic of ongoing debate, cutting across different areas of reform, concerns the future role of the cantons and the federal government in health policy-making. A consensus seems to be emerging that a greater role for the federal level, at least for coordination of activities, is necessary. Most current reform proposals confirm the trend towards more influence for the federal level (i.e. the federal government, GDK/CDS and national bodies of corporatist actors), although the constitutional distribution of competences will likely remain untouched.

6.1. Analysis of recent reforms

Health reforms in Switzerland require a particularly large consensus in order to be adopted and implemented. Reaching such a consensus is complicated – sometimes impossible – and almost always takes a very long time (Bolgiani, Crivelli & Domenighetti, 2006). However, the lengthy and difficult process of consensus seeking is also an important strength of the political system because it ensures that passed reforms are supported (or at least not opposed) by all relevant stakeholders.

Extensive consultations with cantons and other stakeholders, including with corporatist bodies and civil society organizations, during the early phases of reforms often lead to the incorporation of legitimate concerns into reform proposals. The possibility for the population (or pressure groups that are successful at mobilizing popular support) to veto reforms or demand change through public referendum imposes strong popular control. Therefore, the government has to make sure that it has good arguments in favour of proposed changes, meaning that reform proposals have to be based on solid policy analyses and implemented reforms will usually undergo rigorous evaluations.

Reforms or significant developments can be initiated in Switzerland by several actors and via different policy paths. Reforms of federal laws are usually proposed by the Federal Council or Parliament. However, other reforms or significant developments are initiated by cantons either independently or jointly via the GDK/CDS, while still others are started by corporatist bodies or via popular initiatives.

Table 6.1 summarizes major reforms and reform attempts as well as other significant developments that occurred in the health system between 2000 and 2014. As KVG/LAMal is the most important federal law outlining the basic characteristics of the health system (see section 2.1), most reforms are, in fact, revisions of KVG/LAMal. The most important areas of reform were:

- reforms of the hospital sector (see section 6.1.2),
- reforms of the MHI system (see section 6.1.3),
- reform measures aiming to improve public health (see section 6.1.4), and
- other reforms, including improvements in the regulation of human resources, changes in the financing of long-term care, and the introduction of an article into the Federal Constitution recognizing that the federal level has a role in ensuring primary health care provision for all (see section 6.1.5).

Before discussing these reforms in more detail, section 6.1.1 describes the context and origin of several of these reforms to illustrate the long, difficult and not always successful, political processes of making health reforms in Switzerland.

One important trend across all reforms since 2000 (and even before that) has been a tendency towards more harmonization of national health policy-making (see section 2.4). Many reforms have strengthened the role of the federal government, which has obtained more influence on hospital inpatient care provision, insurance supervision and public health. In addition, cantons are increasingly coordinating their activities, leading to a stronger role for the GDK/CDS and the need for more formal collaboration with the federal government through the National Dialogue on Health Policy. Nevertheless, reforms leading to a stronger role for the federal government are often highly contested as cantons are reluctant to allow more federal intervention in one of their core competences.

Table 6.1

Major health reforms and other significant development in the health system, 2000 to 2014

Reforms of the hospital sector	Contents	Year passed	Year implemented
Hospital Financing Reform (revision of KVG/LAMal)	Adoption of Swiss DRGs for payment of inpatient care. Co-funding of inpatient care by cantons (55%) and insurers (45%). Inter-cantonal portability of the insurance coverage for inpatient care (with limitations). Inter-cantonal hospital planning for highly specialized medicine.	2007	2012
Inter-Cantonal Agreement on Highly Specialized Medical Services	Organization of the inter-cantonal planning of highly specialized medicine.	2008	since 1.1.2009
Creation of the National Association for Quality Improvement in Hospitals and Clinics (ANQ)	Hospitals, cantons and insurers agreement on merging two previously existing quality initiatives into one national association.		2009
Adoption of the Zurich model of hospital planning by most cantons	The Zurich model defines groups of hospital services and specifies quality criteria that hospitals have to fulfil in order to be allowed to provide these services.		2015
Reforms of the MHI system	Contents	Year passed	Year implemented
Parliamentary rejection of the second revision of KVG/LAMal	The reform package included different measures concerning risk adjustment, long-term care financing, hospital financing and better coordination of care across providers.	Rejected in 2003	–
New Federal Law on Fiscal Equalization (FiLaG/PFCC)	The system of co-financing of premium subsidies by the federal government and cantons was changed.	2003	2005
Improvement of risk adjustment (Revision of KVG/LAMal)	The criterion of “hospitalization of three or more days in the previous year” was added to the previous criteria of age and sex.	2007	2012
Parliamentary approval of Managed Care Reform Law (Revision of KVG/LAMal)	The proposed reform aimed to improve the coordination of care across providers by promoting and financially incentivizing insurance contracts, where patients agree to a restriction of choice in exchange for lower premiums.	2011 Rejected by popular referendum in 2012	–
Improvement of risk adjustment (Revision of KVG/LAMal)	The criterion of “expenditures for pharmaceuticals exceeding Sw.fr.5000 in the previous year reimbursed by the MHI” has been added to previous criteria.	2014	2017
Federal Law on the Supervision of MHI (KVAG/LSAMal)	Stronger monitoring by the FOPH of premiums proposed by insurers. Clearer separation between the MHI and VHI schemes issued by the same insurer.	2014	To be determined by the Federal Council
Popular initiative “For a public sickness fund” rejected in referendum	The initiative proposed to replace the multiple competing MHI companies with a single, public sickness fund.	September 2014	–

Reforms in public health	Contents	Year passed	Year implemented
Establishment of the foundation Health Promotion Switzerland	Cantons and insurers created the foundation to promote the coordination and evaluation of prevention activities.		1989
Federal Law on the Prevention of Passive Smoking	Indoor smoking ban in public buildings or workplaces, including public administrative buildings, hospitals, restaurants, public transport, etc.	2008	2010
Parliamentary rejection of the proposed Federal Law on Disease Prevention and Health Promotion	The proposal aimed at better coordination of prevention activities and a stronger role for the Confederation.	Rejected in 2012	–
Revision of the Epidemics Act (EpG/LEp)	Improvement of early detection and effective action in a crisis. Development of national programmes in the areas of antibiotic resistance and hospital-acquired infections. Clarification and restriction of the situations in which cantons can introduce mandatory vaccination.	2012 Confirmed by popular referendum in 2013	2016
Other reforms	Contents	Year passed	Year implemented
Federal Law on Therapeutic Products (HMG/LPTh)	Harmonization of the procedures for marketing authorization and surveillance of pharmaceuticals and medical devices; establishment of Swissmedic.	2000	2002
Establishment of the foundation Patient Safety Switzerland	The federal government, the SAMW/ASSM and many professional associations created the foundation with the aim of improving patient safety.	2003	2004
Federal Law on University Medical Professions (MedBG/LPMéd)	New harmonized regulation of university education and professional practice of medical doctors, dentists, pharmacists, chiropractors and veterinary surgeons.	2006	2007
Creation of the Swiss Medical Board	Canton of Zurich creates the Medical Board with the aim of promoting HTA and economic evaluations. The organization was joined by the GDK/CDS in 2009, and by FMH and SAMW/ASSM in 2010.		2008
Federal Law on new long-term care financing arrangements	Clearer responsibilities for MHI insurers, cantons, other social insurance, patients and their families. Equal reimbursement for services provided by public and private home care organizations.	2008	2011 (2011–2013 transition period)
Federal Law on Psychological Professions (PsyG/LPsy)	Regulation of university education and the professional practice of psychologists.	2011	2013
New article on primary care added to the Federal Constitution (Art. 117a)	The new article assigns co-responsibility to the Confederation and the cantons for providing the entire population with high-quality primary care, as well as for promoting family medicine. For the first time the Swiss Constitution provides for an explicit right to health care and for a federal role in health care provision.	2013 Confirmed by popular referendum in 2014	2014

Source: Authors' own compilation.

6.1.1 Context, origin and processes of reforms

Many of the reforms and reform attempts included in Table 6.1 were already proposed by the Federal Council as part of an attempted revision of the KVG/LAMal in 2000. Box 6.1 shows a timeline from the introduction of KVG/LAMal until 2012, focusing on two reforms, which were part of this initial reform package: the hospital financing reform and the unsuccessful managed care reform.

Box 6.1
Timeline of the hospital financing reform and proposed managed care reform

Federal Health Insurance Law (KVG/LAMal) adopted by Parliament		1994	
KVG/LAMal in force		1.1.1996	
25 studies about the functioning and impact of KVG/LAMal commissioned by the Federal Council		1996–2000	
Final synthesis report of the 25 studies recommends (amongst others) a reform of the hospital financing system and the promotion of managed care		12.2001	
Proposal of a revision of KVG/LAMal by the Federal Council, which included proposals for a reform of hospital financing and for the introduction of managed care as well as changes to risk adjustment and long-term care financing		18.9.2000	
Parliamentary debate		2001–2003	
Rejection of the second revision by Parliament		17.12.2003	
Unbundling of the second revision into 4 + 2 law proposals		26.5.2004 and 15.9.2004	
Hospital financing reform proposal of the Federal Council	15.9.2004	Managed care reform proposal of the Federal Council (then, integrated care)	15.9.2004
MHI companies, H+, FMH and cantons create SwissDRG as a foundation	April 2004		
Parliamentary debate	2006–2007	Parliamentary debate	2006–2007
Reform adopted by Parliament	21.12.2007	Reform adopted by Parliament	30.11.2011
Deadline (elapsed) for possible popular referendum	17.4.2008	Popular referendum rejects the reform	17.6.2012
New law in force	1.1.2009		
Implementation of the SwissDRG-based hospital payment system	1.1.2012		

Source: Authors’ own compilation.

After the implementation of KVG/LAMal in 1996, the Federal Council commissioned a package of 25 studies to evaluate whether the fundamental changes to the health system resulting from this reform had achieved the desired effects (BSV/OFAS, 2001). The evaluation found that KVG/LAMal had been successful at improving solidarity of the insurance system (despite problems with risk adjustment) and ensuring good quality of care but had been unsuccessful at controlling the escalating costs. Reforms were recommended that should focus on increasing efficiency and quality through (amongst others) better coordination of care provision (managed care), and changes to the system of hospital financing and planning.

The package of reforms proposed by the Federal Council in 2000 contained a host of measures that took up the recommendations of this evaluation. Besides the hospital financing reform and the managed care proposal, the package included modifications to the system of long-term care financing and improvements to the system of risk adjustment. However, after prolonged discussions, the reform proposal was rejected by Parliament in 2003.

According to the Federal Council, each of the proposed measures had the support of the parliamentary majority but the reform package was rejected because opposition of minorities against individual parts of the proposal accumulated into a majority. Therefore, the Federal Council unbundled the original reform into six separate proposals (Crivelli, 2004).

The hospital financing reform was proposed again in 2004 with only minor revisions. Simultaneously, developments started at the level of the corporatist bodies (MHI companies, hospitals, FMH) and cantons. A foundation called SwissDRG was created by these actors in April 2004 to start preparing the introduction of DRGs in Switzerland. In 2007, Parliament finally accepted the proposed reform, which led to the implementation of a DRG-based hospital payment system in 2012 – almost twelve years after the initial proposal in 2000.

Also, the managed care reform was launched again in 2004. After lengthy discussions in Parliament, which considerably changed the original proposal of the Federal Council, the reform was ultimately approved by Parliament in 2011. However, a popular referendum – supported (for different reasons) by the FMH and the Socialist Party – rejected it in 2012 (see section 6.1.3).

6.1.2. Reforms of the hospital sector

The hospital financing reform of 2007 has considerably increased the role of the federal government in defining the conditions of inpatient care delivery in Switzerland. The reform has had far-reaching consequences on the hospital sector that are linked with – but go far beyond – the introduction of the SwissDRG system for the payment of acute inpatient care. First, DRG-based payment has increased transparency and is expected to lead to higher efficiency; second, the reform has increased competition between public and private hospitals by specifying that the same payment system applies to both; third, the reform has increased choice for patients (and competition for hospitals) by expanding options for obtaining care outside the canton of residence; and finally, it has improved cantonal planning of inpatient care provision and coordination of planning across cantons.

Transparency has improved because DRGs enable comparisons of inpatient activity and facilitate benchmarking of costs across hospitals and cantons. Efficiency is thought to increase because hospital payment now depends on the treatment of cases independent of (or less dependent on) the costs of provision. Also, insurers are increasingly attempting to negotiate lower base rates based on information about negotiated payments for DRGs in other hospitals. In addition, DRGs make transparent the costs of local political decisions. DRG-based payments have to cover the full costs of service provision (capital and running costs) but explicitly exclude the costs of “public interest functions of hospitals”. According to KVG/LAMal, public interest functions, such as university education, research, or ensuring regional accessibility, have to be funded separately by cantons.

However, university hospitals claimed that they need higher DRG-based payments (base rates) because SwissDRGs did not adequately reflect service provision in university hospitals, and most cantons have approved higher base rates for university hospitals. The national price watchdog (Surveillant des Prix) monitors negotiated base rates and can recommend reducing base rates if they are found to be higher than in other parts of the country or higher than the costs of service provision (see section 3.3.4). This puts pressure on cantons as they have to justify if they approve higher base rates.

Increasing competition between public and private hospitals was one of the aims of the hospital financing reform. Prior to the reform of inpatient financing, public hospitals received subsidies from cantons for investments and parts of their running costs, while MHI covered a maximum of 50% of the eligible running costs, which excluded, for example, costs of teaching and research.

Private hospitals were partly financed by MHI and partly by VHI. Since the reform, cantons pay between 51% and 55% of each DRG-based payment (although this proportion will increase to at least 55% by 2017) to all hospitals included in cantonal hospital lists, independent of hospital ownership (see section 3.7). Therefore, private hospitals can now (at least in theory) compete on a level playing field with public hospitals, and patients can freely choose to be treated in private hospitals included in cantonal hospital lists.

However, a recent study found that large differences existed in 2012 (the first year of the new financing rules) concerning the degree to which cantonal regulatory arrangements actually allowed competition between public and private hospitals (Widmer & Telser, 2013). Although regulations are likely to have changed in the subsequent years, private hospitals continue to feel disadvantaged by cantonal regulations and subsidies (PKS, 2014).

Hospital competition has also increased because **patients can now choose** to be treated in hospitals outside their canton of residence (see section 5.4.2). Prior to the reform, out-of-canton services were covered by MHI and cantons only in the case of emergency or if the services were not available in the insured's canton of residence. Patients wishing to have choice of provider in other cantons had to take out supplementary VHI or pay directly.

Since the reform, an insured can choose any hospital in Switzerland as long as it is included in the hospital list of the canton of treatment. Hospitals are paid by cantons and insurers on the basis of DRGs, but reimbursement (except in emergencies or medically indicated cases) is limited to the price (base rate) that would have been paid in the canton of residence for the same service. The rest has to be covered by patients OOP or by supplementary insurance. This is unproblematic for patients living in cantons with high base rates but can impose considerable costs on patients living in cantons with low base rates and with no supplementary insurance.

Finally, the law has considerably **improved planning of inpatient care**. On the one hand, it has specified that planning has to be based on objective criteria (see section 2.5.2) and should also include private hospitals in the planning exercise. The Canton Zurich has been very influential in promoting objective planning criteria. It has developed a methodology for estimating future care needs, length of stay, etc., on the basis of epidemiological extrapolations to the year 2020. This methodology was adopted by most cantons for their hospital planning activities for the year 2015.

On the other hand, the reform mandated cantons to **coordinate** their **planning** activities, in particular in the area of **highly specialized medical care** (see section 2.5.2). Joint planning has been successful in so far as there is increasing collaboration between rural and urban cantons, and between cantons with and without university hospitals. The introduction of SwissDRGs has facilitated joint planning by providing a common measure for the analysis of hospital activity.

However, planning of highly specialized medical care has been difficult and highly controversial, and the Federal Government has declared that it might intervene if cantons fail to reach an agreement. Since 2009, the GDK/CDS has engaged in joint planning of highly specialized medical care based on an inter-cantonal agreement, allowing the GDK/CDS to take binding decisions about which hospitals would be allowed to provide which services. However, it has met with considerable resistance from some smaller cantons and small or mid-size hospitals, and disputes have resulted in appeals to the Federal Administrative Court. In March 2014, the court decided that a few of the 39 GDK/CDS planning decisions (i.e. concerning paediatric oncology and rare visceral surgery) had to be revised, although many others were confirmed. Nevertheless, it can be expected that actors will ultimately come to an agreement and concentration of highly specialized medicine will continue.

An important positive development in the hospital sector has been the increasing focus and activity of different actors on **quality improvement and patient safety**. The ANQ (see sections 2.3 and 2.8.2) has promoted the collection of data in order to improve the quality of acute, rehabilitation and psychiatric hospitals. Results of specific indicators are monitored and published on the website of the association. Indicators for acute care hospitals include readmission rates, reintervention rates, surgical infections, patient satisfaction, falls and pressure ulcers (see section 5.4.3). Data collection for psychiatric hospitals started in 2012 and for rehabilitation hospitals in 2013 (see section 5.7).

In addition, the hospital planning methodology developed by the Canton of Zurich has led to an increasing focus on structural quality of care provision as it makes the presence of, for example, intensive care units and qualified staff, as well as minimum volume thresholds, preconditions for allowing hospitals to provide particular services. Finally, the FOPH has introduced the CH-IQI, with a focus on mortality rates (see section 5.4.3).

6.1.3 Reforms of the health insurance system

The three most important successful reforms in the area of health insurance since the year 2000 have been: (1) two rounds of changes to the system of risk adjustment; (2) new rules for the co-financing of premium subsidies by the federal government and cantons; and (3) the strengthening of the federal government in the supervision of MHI companies. Several other reform attempts, such as the attempted managed care reform and the popular initiative for a single public sickness fund, were unsuccessful.

Improved risk adjustment had been on the political agenda right from the initial impact evaluation of KVG/LAMal (see section 6.1.1). Risk adjustment at the time was based purely on the age and sex of the insured and insurers had been found to engage in risk selection by attempting to attract healthy individuals while avoiding the sick (BSV/OFAS, 2001). When the reform package of 2000 proposing changes to the risk-adjustment system was rejected by Parliament in 2003 (see Box 6.1), it took another four years for improved risk adjustment to be incorporated into KVG/LAMal in 2007, and then another five years before it was finally implemented in 2012. The reform added a third criterion (in addition to age and sex) to the risk-adjustment formula, which now also compensates insurers for the higher average costs of insured who have had at least one inpatient stay of more than three nights during the previous year.

The **managed care reform rejected in 2012** would have led to improvements in risk adjustment. However, when this failed, a further reform was passed in 2014 comparatively quickly giving the right to the Federal Council to further improve the risk-adjustment system. This was possible because the popular initiative in favour of a single public sickness fund put pressure on Parliament to improve risk adjustment. As a result, the Federal Council has already defined a fourth criterion, i.e. expenditures for pharmaceuticals exceeding Sw.fr.5000 in the previous year, which will be used from 2017. Further criteria can be defined by the Federal Council if necessary.

The system of **co-financing of public subsidies to low- and middle-income households** for the purchase of MHI (see sections 3.3.2 and 3.3.3) was reformed as a result of a new Federal Law on Fiscal Equalization (FiLaG/PFCC), passed in 2003 and implemented in 2005. The law aimed at reducing general economic and fiscal disparities across cantons and this provided an opportunity for also reforming the co-financing of MHI subsidies. Public subsidies are managed by cantons but about half of the resources are provided by the federal level and cantons have to follow the rules defined in the KVG/LAMal. Prior to the reform,

the Confederation paid two thirds of the total subsidies at the national level but required a matching grant of one third from cantons. Consequently, cantons paying more subsidies also received more funding from the Confederation.

Under the new system, the Confederation pays an amount that is equal to 7.5% of the estimated MHI gross expenditure of the cantonal population and cantons have to use this money to subsidize premiums of the insured. Compared with the previous system, the total funding of premium subsidies by the Confederation has decreased, but this reduction was compensated by an increase in general fiscal equalization measures (independent of premium subsidies). As a result of the reform, cantons have more autonomy in their expenditure decisions (because they are no longer required to match federal subsidy contributions) but this can lead to large differences in premium subsidies across cantons (see section 7.2.1).

Also, the adoption of the **new Federal Law on the Supervision of MHI** (KVAG/LSAMal) by Parliament in September 2014 was helped by the popular initiative “For a single public sickness fund”. The proposed law had been under discussion since early 2012 and a parliamentary majority appeared unlikely because of resistance against more state intervention. However, the proposal was ultimately approved because of fears that a rejection of the law would strengthen arguments of the popular initiative. The proposed law remedied two concerns of proponents of the popular initiative: one was a lack of transparency when insurers offered both MHI and supplementary VHI, potentially using information gathered from MHI to offer better (or worse) conditions for VHI to the healthy (or sick); the other was a concern about unjustified premium increases. The new KVAG/LSAMal mandates insurers to clearly separate MHI from VHI activities and strengthens coordination of supervisory activities of the FOPH with FINMA, which is in charge of supervision of VHI (Federal Council, 2012a). The law also makes clear that premiums of insurers will not be approved by the FOPH if they are found to be too high or too low, and insurers can be mandated to reimburse premiums to insured if they were set too high. In addition, the law introduces new accounting criteria and guidelines for managing insolvencies of insurers.

The **popular initiative “For a public sickness fund”** was similar to two other initiatives that had already proposed radical reform of the MHI system in 2003 and 2007. Both initiatives had been rejected by more than 70% of voters and the most recent initiative was rejected by 62% in September 2014 (De Pietro & Crivelli, 2015). The initiative proposed replacing the existing 61 MHI companies with a single public sickness fund. Besides inadequate risk

adjustment and lack of transparency, proponents of the initiative criticized the current system for several reasons, including: (1) the high per capita health expenditure; (2) the lack of involvement of public authorities in negotiating payments with providers; (3) the lack of incentives to develop prevention programmes; (4) the malfunctioning of the MHI market exhibited by large differences in premium levels across insurers; (5) high administrative costs of the system for marketing, switching insurers, duplicate paperwork, etc.

However, opponents effectively campaigned against the initiative with two main messages: (1) “Public systems cost more than private ones and reduce the freedom of choice”; and (2) “We know what we lose, but we cannot even imagine what we would find”. In view of the liberal values of Swiss society, broad coverage of the standard MHI package, good access to health care services, very high level of choice, and substantial premium subsidies for low-income households, it is no surprise that the initiative was rejected. Nevertheless, the referendum also showed that 38% of the electorate was willing to radically reform the existing system.

Another major reform attempt in the area of health insurance since 2000 was the **managed care reform**. The first managed care reform was proposed as part of the reform package in 2000 and rejected by Parliament in 2003 (see section 6.1.1). The subsequent Federal Council proposal of 2004 suggested introducing integrated networks of providers, where the network would be responsible for coordination of the full set of services offered by MHI and would carry budget responsibility for subscribed patients.

In the subsequent parliamentary debate, the original proposal was abandoned in favour of a more liberal version, where the network would not have had to offer the full set of services but would just coordinate patients on their way through the health care system, while carrying partial budget responsibility. The reform adopted by Parliament in 2011 would have introduced higher financial penalties for traditional forms of insurance to make it comparatively more attractive for insured to opt for managed care plans and MHI companies would have been obliged to offer such plans throughout the country.

However, opponents (notably physicians and the Socialist Party) demanded a popular referendum. Physicians (except for family doctors) criticized the reform on the grounds that it would reduce the choice of physician, while the Socialist Party was against higher user charges for patients in traditional forms of insurance. Ultimately, the reform proposal was rejected by 76% of voters. Nevertheless, despite the failed reform, the idea of managed care is increasingly

successful. In 2014, almost 60% of Swiss residents were insured by so-called alternative insurance plans, which always include some elements of managed care (see section 5.2.2).

6.1.4 Reforms in public health

The general – although contested – trend towards a stronger role for the federal government in determining health policies is particularly evident in the area of public health. The two most important initiatives in this area, i.e. the revision of the Federal Epidemics Law (EpG/LEp) and the proposed Federal Prevention Law, aimed to improve coordination between the different levels of government and strengthen the role of the federal level. Nevertheless, the failed Prevention Law, and the long history preceding the proposal, illustrate that such reforms are difficult in Switzerland and almost always take a very long time.

Box 6.2 shows a timeline of attempts aimed at strengthening the role of the federal government in disease prevention and health promotion. In 1976, a popular initiative aimed to ban advertising for cigarettes and alcohol by adding an article to the Federal Constitution. Despite its rejection in 1979, the initiative kicked off federal activities in the area of disease prevention and health promotion, such as the establishment of committees and the publication of reports. One early result of these developments was the establishment of the foundation Health Promotion Switzerland in 1989.

Almost 20 years later, a draft **Federal Prevention Law** was proposed by the Federal Council in 2009 (Federal Council, 2009). The law aimed to clearly define the responsibilities of the federal level and cantons; to improve coordination of different activities; and to introduce a Swiss Institute for Disease Prevention and Health Promotion, which would have been affiliated with the federal government. When the reform was proposed, the majority of the cantons initially accepted a greater federal role.

However, some (particularly small) cantons later associated themselves with the opponents of the law, consisting of right-wing parties, business sector lobby groups, as well as some insurers. The opponents strongly criticized the establishment of a new Institute for Disease Prevention and Health Promotion as they viewed this as a “state monopoly on prevention”. Instead, they favoured strengthening the role of the existing multi-stakeholder foundation Health Promotion Switzerland. After several years of fierce negotiations and a highly politicized debate (fuelled by support from the tobacco and alcohol industries) on the antagonism between public and individual responsibility (Mattig, 2013), the law was **ultimately rejected** by Parliament in 2012.

Box 6.2**Timeline of the policy processes aimed at strengthening the role of the federal level in health promotion and prevention**

Proposal of the popular initiative “Against advertisement for products inducing dependence” [cigarettes and alcohol]	4.1976
Report by the Federal Council opposes the initiative but promises to discuss federal laws in the coming years	22.3.1978
Referendum rejects the popular initiative	18.2.1979
The FDHA establishes a committee to work on prevention	13.9.1979
The committee presents its report, which is approved by the FDHA	15.9.1982
Following strong opposition by most cantons and other stakeholders in the consultation process, the Federal Council puts the development of a proposal for legislation on hold	13.1.1984
The Federal Council mandates the FDHA to evaluate the possibility of establishing a fund that would financially support existing organizations in public health and promote health information for the general population	3.12.1984
The foundation Health Promotion Switzerland is established by the Confederation and the cantons	1989
The FDHA commissions OECD and WHO to review the Swiss health system	2005
The FDHA establishes the expert committee “Disease prevention + health promotion”	5.9.2005
The Committee presents its report	6.2006
The OECD and WHO present their review, recommending better coordination of disease prevention and health promotion activities via the introduction of a new federal law	10.2006
The Federal Council mandates the FDHA to draft a federal law on disease prevention	28.9.2007
The Federal Council initiates the consultation process on the draft of the federal law	25.6.2008
End of the consultation process (with submissions from 26 cantons, 8 political parties, 114 invited organizations, and 85 other organizations and individuals)	31.10.2008
The Federal Council mandates the FDHA to prepare a new draft of the federal law and a proposal for Parliament	25.2.2009
Proposal of a Federal Law on Disease Prevention and Health Promotion by the Federal Council	30.9.2009
Parliamentary debate	12.4.2011 – 26.9.2012
The Parliament rejects the proposed federal law	27.9.2012

Source: Authors' own compilation.

By contrast, the reform of the **Federal Epidemics Law** was initiated at the request of the cantons in 2006 and was **passed comparatively quickly**. All stakeholders seemed to agree that the existing Epidemics Law dating back to 1970 had to be adjusted to enable effective interventions against health threats posed by new epidemics and increased international mobility. The new law more clearly specifies the responsibilities in case of emergencies, where the federal level is responsible for coordination, supervision and monitoring, while cantons are responsible for implementation of measures (FOPH, 2013i).

In addition, the law adjusts the national reporting system to changes in information technology and improves international collaboration. Furthermore, the federal government now has the power to initiate national programmes in the area of antibiotic resistance and hospital-acquired infections. In 2012, the law was approved by a large majority in Parliament and was confirmed by popular referendum in 2013.

Other important reforms in the area of public health were the introduction of a smoking ban for public buildings or workplaces (including public administrative buildings, hospitals and restaurants) as the result of the implementation of the Federal Law on the Prevention of Passive Smoking in 2010, and amendments to the Road Traffic Act passed in 2001, with stricter rules for alcohol consumption, speed, etc. (see section 7.4.1).

6.1.5 Other reforms

There have been numerous other areas of reform, which can not be discussed in detail. However, four areas were particularly important:

1. *Reforms in the area of pharmaceuticals and medical devices:* A major reform in the regulation of pharmaceuticals and medical devices (see sections 2.8.4 and 2.8.5) was the new Federal Law on Therapeutic Products (HMG/LPTh), which was approved by Parliament in 2000 and became effective in 2002. The law transferred responsibility for issuing marketing authorization to Swissmedic, a newly created institute that is controlled by, but formally outside, the federal government. This has led to more transparent and stricter rules for the issuing of marketing authorizations.

In addition, the law introduced new measures for market surveillance. Subsequent reforms have mostly aimed at controlling expenditure on pharmaceuticals. On the one hand, a system of regular price adjustments was introduced in 2009, which leads to realigning prices of pharmaceuticals to those in comparator countries every three years

and after patent expiry. On the other hand, a system of differential price discounts for generics was introduced in 2012 to make the Swiss market more attractive for generics producers. As a result, discounts required for generics depend on the market volume of the originator drug (with smaller discounts if the market volume is small).

2. *Reforms in financing and provision of long-term care:* In 2008, Parliament approved a proposal of the Federal Council to reorganize the system of long-term care financing, which became effective in 2011. The reform had two main aims: one was to limit the increasing expenditures of MHI on long-term care by more clearly defining the responsibility of MHI for long-term care costs, taking into account that some services in long-term care are not sickness but age related; the other was to better protect certain population groups suffering from the costs of long-term care. As a result of the reform, MHI pays for therapeutic or palliative long-term care, i.e. care that should aim to treat diseases or prevent negative consequences of disease (see sections 5.8 and 3.7.1), while other costs have to be borne by the patients and cantons. However, cantonal regulations for public support of long-term care patients continue to differ and, consequently, considerable heterogeneity exists in the financial burden for patients (Rossini, 2014).

Another important development since 2000 has been the introduction of subacute and intermediate care wards in long-term care institutions (see section 5.8). Concerns emerged in the context of the introduction of DRG-based hospital payment that some patients might require more time to recover and would be discharged too early. Therefore, costs of stays in these wards are since 2011 covered by MHI for a duration of up to 14 days if admission follows a hospital discharge and care is prescribed by a physician.

3. *Reforms in the regulation of health professions:* Two federal laws have harmonized regulations for the training (university, specialization and CME), licensing, reaccreditation and registration of health professionals (see section 2.8.3). First, the Federal Law on Medical Professions (MedBG/LPMéd), passed in 2006, implemented in 2007 and revised in 2015, introduced new regulations for medical doctors, dentists, pharmacists, chiropractors and veterinary surgeons. In addition, the law introduced a federal registry of professionals and determined the rules for the recognition of foreign diplomas.

Subsequently, the Federal Law on Psychological Professions, passed in 2011 and implemented in 2013, introduced similar regulations for psychotherapists, children's and adolescent psychologists, clinical psychologists, neuropsychologists and health psychologists with the aim of protecting these professional titles and improving standards of professional training.

Finally, a new federal law on other health professions (nurses, midwives, dieticians, physiotherapists and occupational therapists) was still under development in mid-2015 after a preliminary parliamentary consultation phase was concluded in mid-2014.

4. *Reforms aiming to promote primary care:* In 2010, the popular initiative “Yes to family medicine” supported by 200 000 signatures proposed to introduce a new article in the Federal Constitution. In response to this, the Federal Council came up with a “counter-proposal” suggesting an article that would assign co-responsibility to the Confederation and cantons for ensuring primary care provision to the entire population. In addition, the article specifies that the federal level regulates training and practice requirements for primary care and ensures adequate remuneration for GPs. This proposal was accepted by Parliament as well as the supporters of the original initiative who decided to withdraw their original proposal. Finally, the new article 117a was approved in a popular referendum in May 2014. The new article constitutes a major change as it introduces an implicit right to (primary) health care into the Federal Constitution, and it explicitly recognizes a role of the federal level in ensuring the provision of health care. Partially as a result of this new article, the Federal Council decided in June 2014 to intervene in the revision of the ambulatory fee-for-service schedule TARMED, which was in deadlock because of disagreement between the corporatist actors, and to financially improve the situation of GPs.

6.2. Future developments

The federal government's Health2020 strategy paper outlines the reform priorities for the coming years (FDHA, 2013). It defines four priority areas for policy action (see section 7.1): (1) quality of life; (2) equality of opportunity; (3) quality of health care provision; and (4) transparency. Reform activities are ongoing in each of the four priority areas, which can not all be summarized here. However, three particularly important areas, which form part of these activities

are: (1) improving the use of information; (2) improving planning of ambulatory care; and (3) improving health care provision for people with specific needs. Given the lengthy process of making health reforms, most of these areas have already been on the political agenda for quite some time. However, it will still take several more years before activities will ultimately lead to institutional or legislative changes.

Across all reforms, there is discussion about the future roles of the cantons and the federal government in health policy development. A consensus seems to be emerging that a greater role for the federal level, at least in the coordination of activities, is necessary. Therefore, although none of the current reform proposals would alter the distribution of competencies, they all confirm the trend towards greater influence for the federal government in the health system.

6.2.1 Improving the use of information: HTA, quality improvement and e-health

There are two important fields in which legislative activity is currently ongoing: one is the area of quality improvement and HTA, where a draft Federal Law on the Centre for Quality in MHI was recently abandoned in favour of the idea of a Network for Quality in Health Care. The other is the area of e-health, where a proposed Federal Law on Electronic Health Records (EPDG/LDEIP) was adopted by Parliament on 15 June 2015.

In fact, **improving quality management and HTA** has already been on the political agenda for quite some time. In 2009, the FOPH published a National Quality Strategy for the Health System (FOPH, 2009) and measures to implement the strategy were proposed in 2011 (FOPH, 2011b). In the area of HTA, two associations have been founded since 2008 (the Swiss Medical Board and SwissHTA), which aim to promote the use of HTA for decision-making on health care coverage (see section 2.7.1), and consensus seems to be emerging that a stronger process for systematic HTA is needed. A draft Federal Law on the Centre for Quality in MHI was proposed in 2014 with the aim of creating a national centre for quality as a public institution under the Federal Council (Federal Council, 2014). This new structure would have strengthened activities of the federal government in the areas of quality management, patient safety and HTA.

However, during a preliminary parliamentary consultation process, it became evident that considerable opposition existed against the creation of a new institute. In particular, concerns were raised by many actors concerning the relationship between the new institute and existing structures, such as the

ANQ, the Foundation Patient Safety Switzerland and the Swiss Medical Board. Opposition was strongest at the level of the corporatist actors, such as MHI companies, hospitals, physicians and the existing institutions. Together, these actors lobbied for strengthening existing multi-stakeholder structures instead of creating a new institute under the Federal Council. As a result, the Federal Council is now proposing to set up a Network for Quality in Health Care and the FOPH is currently drafting a new proposal for an amendment to KVG/LAMal (FOPH, 2015a). The idea is to strengthen existing institutions, programmes and projects by securing sufficient financial resources for quality management, patient safety and HTA.

The recently adopted EPDG/LDEIP is only one of many initiatives of the Federal Council that aim to **promote the use of e-health in the health system**. A national e-health strategy was published as early as 2007 and eHealth Suisse, a joint coordination body of the Confederation and the cantons, was created in 2011 to coordinate the development of e-health initiatives in Switzerland and to implement the federal strategy (see section 4.1.4). There have been substantial delays in the implementation of the strategy; notably in the development of electronic health records because of legal uncertainties. The EPDG/LDEIP aims to provide the required legal certainty. The general idea of the law is that patients remain in control of their data as they can decide if they want their data to be integrated into a virtual electronic health record and can define which providers are to be allowed access to their data. For ambulatory providers the use of electronic health records would be voluntary, but hospitals would have to integrate relevant data into electronic health records. The proposed law was approved by the Council of States in June 2014. However, the other chamber of parliament (the National Council) subsequently passed a stronger version of the law, which meant that it required a re-examination by the Council of States before being passed in June 2015.

In addition, there are a host of cantonal activities in the area of e-health with the most advanced (pilot) projects existing in Aargau, Basel City, Fribourg, Genève, Luzern, St. Gallen, Ticino, Valais, Vaud and Zurich.

6.2.2 Improving planning of ambulatory care

In February 2015, the Federal Council proposed a revision of KVG/LAMal with the aim of improving planning of ambulatory care. Despite the size of the ambulatory care sector in Switzerland, which accounts for more than 30% of THE (only slightly less than hospital inpatient care; see section 3.2), there has been no mechanism for systematic planning of ambulatory care (see section 2.5).

The only measure available to cantons for influencing ambulatory care provision has been a temporary ban on new ambulatory facilities, which was originally introduced in 2001. The ban was continually renewed until the end of 2011 and allowed cantons to withhold MHI charging licences if there was no need for additional providers in the canton (Bolgiani, 2009). In July 2013, the ban was again renewed for three years until mid-2016.

The draft law has proposed replacing the temporary ban with **a more comprehensive solution for ambulatory care planning**. The overall aim is to ensure wide availability of primary care providers, while preventing an uncontrolled increase of specialist providers. If the law is enacted, cantons will be able to take measures against both an oversupply and undersupply of ambulatory care providers. They will be able to withhold MHI charging licences for new physicians (e.g. in certain specialties), chiropractors and hospital outpatient departments, and they may provide financial incentives (e.g. free infrastructure) for providers in underserved areas.

Cantons will not be obliged to plan ambulatory care provision. However, if they wish to undertake measures against over- or undersupply, the law defines two prerequisites. First, they will have to assess the ambulatory care needs of their populations. The Federal Council will define the criteria and methods for the assessment, and cantons will coordinate their assessment with neighbouring cantons. Second, cantons will have to convene a commission of insured, insurers and providers, which will be asked to comment on ambulatory care provision in the canton and to make recommendations on measures against over- or undersupply. Cantons will have to take these recommendations into account and will have to justify their actions if they decide to implement different measures.

The intention of the Federal Council is that the draft law will replace the temporary ban in mid-2016. However, the responsible parliamentary committee has disagreed with the proposition and it is uncertain if the reform will pass. If the reform is not passed by mid-2016, it is possible that the temporary regulation will be extended or made permanent.

6.2.3 Improving health care provision and prevention for people with specific needs

Improving health care provision for people with specific needs is an area in which reforms are likely to be developed over the coming years. In response to the rejection of the managed care reform in 2012, the Federal Council is currently exploring **new measures for improving coordination and quality**

of care for those patients with the highest health care needs (FOPH, 2014c). The 2015 National Health2020 Conference was dedicated to the topic of improving coordination of care. In addition, national plans for specific health conditions have already been developed over the past few years, usually originated by the National Dialogue on Health Policy (see section 2.3). The National **Dementia** Strategy 2014–2017, the National Strategy for **Palliative Care** 2010–2012 (prolonged for 2013–2015), and the National Cancer Strategy 2014–2017 are the three most important ones. A draft for a national strategy for the **Prevention of NCDs** was presented in August 2015.

All these strategies pave the way for further developments, both at the federal and the cantonal level (changes in the university programmes, new programmes of continuous education, etc.), and often they are linked to current reform proposals. A major example referring to the National Strategy against Cancer is the Federal Council's proposal for a Federal Law on the Registration of Cancer, which was sent to Parliament at the end of 2014. The draft law proposes harmonizing the registration of cancer cases across Switzerland and integrating information from cantonal cancer registries (which would continue to operate) into a national registry.

7. Assessment of the health system

Population health indicators are very good in Switzerland: average life expectancy in 2013 was 82.8 years and was exceeded in Europe only by Iceland. Men can expect to live four years longer than the average in the EU28 and women have almost three more years than the average. For healthy life years, the differences to the EU averages are even larger. Patients are highly satisfied with the health system, perceive quality to be good or very good, and there are virtually no waiting times. Avoidable hospital admissions are relatively low and OECD quality indicators confirm that health care quality is high – although not exceptional.

Nevertheless, there is room for improvement, in particular concerning the health care financing system. Financial protection of Swiss households from the costs of medical care is good – and better than in many European countries. However, the very high share of OOP payments – related to the exclusion of certain services from coverage (notably dental care) and to the relatively high user charges – means that financial protection is more limited than, for example, in Austria, Germany or the Netherlands. Surveys indicate that almost 3% of the poorest income quintile have an unmet need for medical examination or treatment because of costs – a share that is considerably higher than in Austria, Germany or the Netherlands.

Low-income households contribute a greater share of their income to the financing of the health system than higher-income households. In addition, individuals and households at the same level of income often contribute very different shares of their income depending on their place of residence. The existing cantonal mechanisms of premium subsidies do not sufficiently reduce the financial burden on lower-income households and they contribute to the variation in financial burden depending on the place of residence.

In view of escalating costs, it is very likely that resources could be used more efficiently. Research indicates that the variation in expenditures across cantons is at least partially related to supplier-induced demand, resulting from flawed incentives of (unlimited) FFS reimbursement, subsidized hospital investments and fragmentation of provision. So far, there is limited use of independent HTA to inform coverage decisions and to limit expenditures on existing and new services of uncertain benefit. The use of medical guidelines could be strengthened to help professionals “choose wisely”, when examining and treating patients.

In addition, the large number and the small size of hospitals in Switzerland implies that there is considerable room for efficiency improvement by exploiting economies of scale. Furthermore, prices of pharmaceuticals remain higher than in Austria, the Netherlands or France, while the share of generics remains relatively small. Finally, efficiency and quality could be increased by systematically addressing patient safety issues and by improving coordination of care.

7.1 Stated objectives of the health system

The objectives of the health system are defined at both the federal and the cantonal level in several laws and policy documents. The Federal Constitution (Art. 41) explicitly states as one social objective of the Confederation and cantons that “every person has access to the health care that they require”. In addition, Art. 117a, which was adopted by popular referendum in 2014 (see section 6.1.4), has added to the constitution the objective of ensuring “the adequate provision of high-quality primary medical care that is accessible to all”.

Cantonal constitutions (e.g. the constitutions of Basel, Bern, Geneva and Zurich) often contain a specific section on health and health care. Although exact provisions differ, these usually state that the canton (and municipalities) will protect and promote health, and will ensure the provision of sufficient and affordable medical care to its population. In addition, specific objectives are often developed by cantons, which may go beyond those stated at the federal level.

The KVG/LAMal – the most important law defining the legal framework of the MHI system (see section 2.1) – was introduced with the aim of achieving three main objectives (FOPH, 2012a): (1) to ensure universal access to high-quality health care; (2) to improve solidarity by reducing the financial burden of insurance premiums on low-income households; and (3) to contain the growth of health care expenditures. These objectives have also remained the guiding principles of most reforms since 2000 (see Chapter 6), which have aimed to improve the functioning of the health insurance system by revising the KVG/LAMal.

Currently, the Health2020 strategy paper approved by the Federal Council in January 2013 summarizes the objectives of the federal government for the health system over the coming years (FDHA, 2013). The document highlights four priority areas for policy action (shown in Box 7.1), each including three objectives, which are then further broken down into three specific activities.

The objectives outlined in Health2020 are at the origin of most ongoing and planned health reforms (see section 6.2). One cross-cutting objective of the strategy, reflected in several of the measures summarized in Box 7.1, is to **contain the growth of health expenditures**. In addition, some areas of policy actions have been prioritized and some have already resulted in policy proposals or reforms (e.g. the new KVAG/LSAMal – see section 6.1.3; the planned revision of KVG/LAMal to improve planning in ambulatory care – see section 6.2.2).

Box 7.1

The Health2020 priority areas for policy action

Priority area 1: Ensure quality of life

Objective 1.1: Improve health care delivery by: (i) integrating care across providers; (ii) modifying long-term nursing care structures to ensure needs-based care and sufficient staff levels; and (iii) promoting health services research.

Objective 1.2: Complement health protection by: (i) avoiding exposure to radiation and better monitoring of population health; (ii) controlling antibiotic resistance; and (iii) reducing avoidable infections in the hospital setting.

Objective 1.3: Intensify health promotion and disease prevention in the areas of: (i) NCDs; (ii) mental health; and (iii) addiction disorders.

Priority area 2: Reinforce equality of opportunity and individual responsibility

Objective 2.1: Reinforce fair funding and access by: (i) reducing risk selection by insurers; (ii) protecting vulnerable groups; and (iii) reducing the financial burden (lower co-payments, no premiums for children) for lower-income households.

Objective 2.2: Keep health affordable through increased efficiency by: (i) lowering prices of pharmaceuticals and increasing the uptake of generics; (ii) reforming provider payment mechanisms; and (iii) concentrating highly specialized medicine.

Objective 2.3: Empower insurees and patients by: (i) including patients and insurees in health policy-making processes; (ii) increasing health knowledge and skills; and (iii) placing greater emphasis on patients' rights.

Priority area 3: Safeguard and increase the quality of health care provision

Objective 3.1: Promote quality of health care services by: (i) implementing the national quality strategy; (ii) reducing ineffective and inefficient services, medicines and processes; and (iii) increasing organ donations.

Objective 3.2: Make greater use of e-health by: (i) introducing and promoting e-medication; (ii) introducing and promoting electronic health records; and (iii) implementing digital treatment process support.

Objective 3.3: Have more and well-qualified health care workers by: (i) training a sufficient number of doctors and nurses in relevant disciplines; (ii) promoting primary care; and (iii) introducing a law for non-university health care professions.

Priority area 4: Create transparency, better control and coordination

Objective 4.1: Simplify the system and create transparency by: (i) improving the supervision and regulation of MHI companies; (ii) expanding and improving data collection; and (iii) reducing the number of different insurance plans (278 000 in 2013).

Objective 4.2: Improve management of health policy by: (i) reinforcing collaboration between federal government and cantons and clarifying responsibilities; (ii) improving planning, e.g. of hospital outpatient care; and (iii) making use of new responsibilities to overcome deadlocks in fee negotiations, particularly for TARMED.

Objective 4.3: Reinforce international integration by: (i) finalizing and implementing the health agreement with the EU; (ii) implementing the country's foreign health policy; and (iii) drawing inspiration for reforms from comparisons and collaborations with countries that have similar health systems.

Source: FOPH, 2013b.

7.2 Financial protection and equity in financing

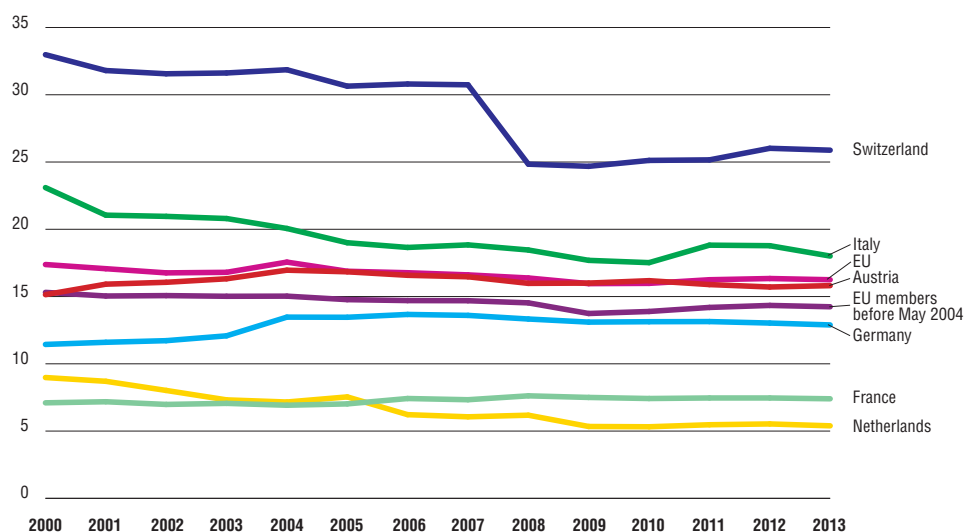
7.2.1 Financial protection

Limited financial protection can be problematic for two main reasons: (1) costs of medical care may pose a financial burden on households; and (2) costs may lead individuals to postpone or forego necessary care. Both of these adverse effects are more likely to disproportionately affect lower-income households and to impact on equity of access (see section 7.3.2). The degree of financial protection provided by a health system is determined by the extent to which people are protected from the financial consequences of illness. If the population has to pay a large share of total health expenditures out of pocket, financial protection is rather limited.

The proportion of OOP payments out of THE in Switzerland, at about 25.9% in 2013, was almost twice as high as the average in the EU15 countries (see Fig. 7.1). More than three quarters of OOP payments were related to direct payments by patients for services not covered by insurance (see section 3.4), notably dental care, complementary ambulatory services and long-term care. Slightly less than a quarter of OOP payments are related to user charges for services covered by MHI or VHI.

Fig. 7.1

Out-of-pocket payments as a proportion of THE in Switzerland and selected countries, 2000 to 2013



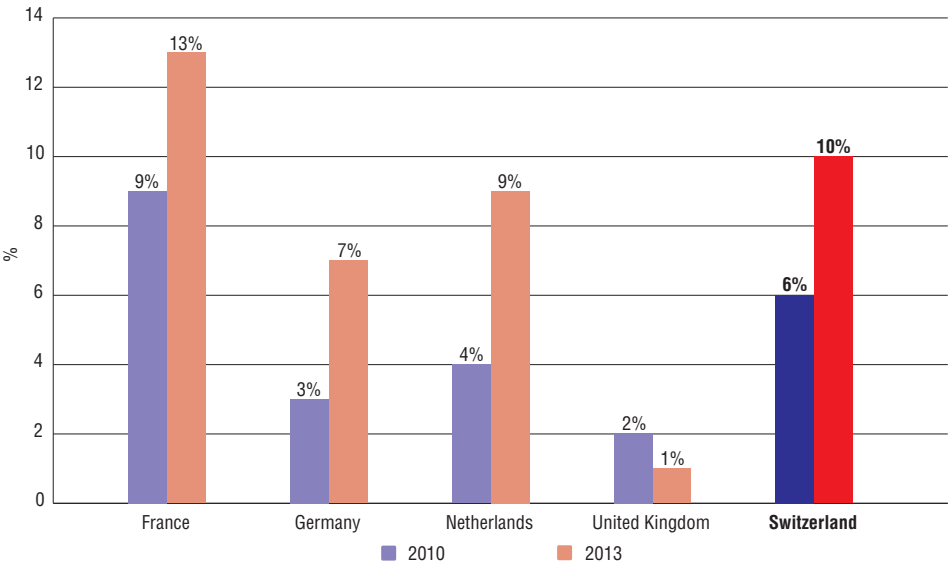
Source: WHO Regional Office for Europe, 2015.

Despite this large share of OOP payments, the high income of Swiss households (average monthly disposable income of Sw.fr.7112 in 2012) (FSO, 2014b), a cap on annual user charges (limiting expenditures to Sw.fr.1000 or Sw.fr.3200 depending on the insurance plan) and a generous social security system protect the population against the economic consequences of serious illnesses or major health risks. The interplay of different social insurances (accident insurance, old-age, survivors' and invalidity insurance), in combination with public support systems of the cantons and municipalities, ensure that even heavy disabilities do not tend to impoverish relatives and families (Federal Council, 2005).

Nevertheless, data from the Commonwealth International Health Policy Survey show that 10% of Swiss interviewees in 2013 reported having had serious problems paying or being unable to pay for medical bills in the past year (see Fig. 7.2). This is more than the corresponding figures in Germany (7%) or the Netherlands (9%), and far above the number in the United Kingdom (1%). Moreover, the proportion of the population with problems paying for medical bills was found to have increased between 2010 and 2013.

Fig. 7.2

Proportion of interviewees with serious problems paying or unable to pay medical bills in the past year in selected countries, 2010 and 2013



Source: Commonwealth Fund, 2014.

Also, in the 2013 survey of EU Statistics on Income and Living Conditions (EU-SILC), 5.6% of Swiss interviewees reported having an unmet need for medical (1.0%) or dental (4.6%) care because of costs (Eurostat, 2015b). This proportion of the population is considerably higher than in Germany (2.5%), Austria (1.4%) or the Netherlands (1.0%), but much lower than in Italy (15.6%). Similarly, a survey conducted in Geneva in 2008–2009 found that 14.5% of households did not access health care (mostly dental care) for economic reasons (Wolff, Gaspoz & Guessous, 2011). In addition, anecdotal evidence exists that the relatively high annual deductibles (of up to Sw.fr.2500), which are a characteristic feature of some insurance contracts in Switzerland, lead to individuals postponing medical care to the next year with potentially adverse consequences for health.

Taken together, these figures suggest that financial protection of Swiss households from the costs of medical care is good (and better than in many European countries). Nevertheless, the exclusion of certain services from coverage (notably dental care) and the relatively high user charges (see section 3.3.1) lead to a situation where financial protection is more limited than, for example, in Germany, Austria or the Netherlands.

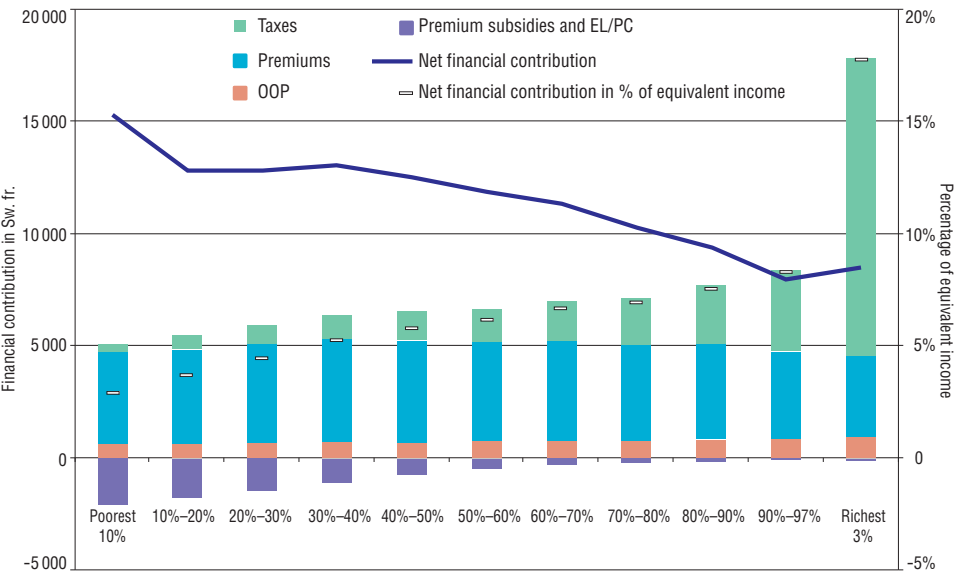
Reforms since the year 2000 have had only minor consequences on financial protection at the national level. An exception, however, was the federal law on new long-term care financing arrangements passed in 2008 and implemented by 2011 (see section 6.1.4), although the reform has had different results on financial protection depending on the canton. In addition, some cantons have reformed their systems of subsidizing user charges of low-income households, which has sometimes improved financial protection. Despite the increasing popularity of managed care plans (see section 3.3.3), many insured have high deductibles of up to Sw.fr.2500, which means that they have chosen to be unprotected against expenditures up to this threshold.

7.2.2 Equity in financing

Equity in financing is associated with the concepts of vertical and horizontal equity. Vertical equity refers to the idea that people with a greater ability to pay should pay more than people with a lesser ability to pay. Vertical equity in financing is best achieved with a progressive financing system, i.e. one where higher-income individuals pay a larger share of their income, while lower-income individuals contribute a smaller share. Horizontal equity by contrast refers to the idea that individuals with similar resources should contribute similarly to the health system.

It is difficult to assess the financial contributions of individuals at different income levels to health because tax systems and regulations for MHI premium subsidies differ across cantons. Nevertheless, Fig. 7.3 shows on the basis of data from a recent study (Ecoplan, 2013), that lower-income households pay a much larger share of their income on health (more than 15%) than higher-income households (below 10%), although higher-income households contribute more money in absolute terms. The high share paid for health by lower-income households is clearly related to the community-rated MHI premiums and to considerable OOP payments. Transfers for premium subsidies and complementary payments (EL/PC) only partially compensate the financial burden of premiums and OOP payments.

Fig. 7.3
Financial contributions to health of different income groups by type of contribution and in percent of equivalent income, 2010



Source: Ecoplan, 2013, with modifications.

Several studies have confirmed that financing of the health system is highly regressive in Switzerland (Crivelli & Salari, 2014; Bilger, 2008; Wagstaff et al., 1999), i.e. lower-income households contribute a greater share of their income to the financing of the system than higher-income households. The most widely used approach for measuring progressivity (or regressivity) of financing is the Kakwani index. If the index is positive, the system is progressive. If the index

is negative, the system is regressive. The most recent study based on data from 1998 to 2005 found that the system was most regressive in 1998 (Kakwani index -0.13) but that there has been no clear trend concerning regressivity since the year 2000 (Kakwani indices between -0.084 and -0.110) (Crivelli & Salari, 2014).

The only (rather old) study of Wagstaff et al., (1999) comparing vertical equity in financing across 13 OECD countries found that financing of the Swiss health system was one of the most regressive (i.e. similar to the financing system of the United States). Comparing results of Crivelli and Salari (2014) with international results of Wagstaff et al. (1999) suggests that financing of the health system has likely remained considerably more regressive than in other European countries (Kakwani indices in these countries were usually considerably below -0.1).

A particularity of the Swiss financing system is that large differences exist across cantons. Cantons apply different eligibility rules for MHI premium subsidies and provide different amounts of subsidies to lower-income households (see section 3.3.3). In addition, taxes and social transfers differ across and sometimes also within cantons. As a result, the level of vertical equity in financing differs widely across cantons. Crivelli and Salari (2014) show that Schaffhausen and Schwyz are the most regressive cantons (with Kakwani indices of -0.15 and -0.13), while Jura, Obwalden and Ticino (all with a Kakwani index of around -0.05) are the least regressive. In fact, this difference in the Kakwani indices is almost as large as the difference between Sweden (Kakwani index -0.015) and the United States (-0.13) in the study of Wagstaff et al. (1999).

The large differences across cantons also have an implication on horizontal equity. Individuals and households at the same level of income often contribute very different shares of their income to health expenditures depending on the canton in which they live. First, average cantonal MHI premiums for adults in 2015 ranged from Sw.fr.3836 in Appenzell Innerrhoden to Sw.fr.6398 in Basel Stadt (FOPH, 2014k). Second, as cantonal systems of premium subsidies differ considerably, lower-income households will have to pay different amounts depending in which canton they live. Third, different tax systems across cantons further contribute to differential burdens on households at the same income levels. Taken together, these three factors contribute to considerable horizontal inequity in Switzerland (Crivelli & Salari, 2014).

In summary, vertical and horizontal inequities exist in the financing of the Swiss health system: higher-income households contribute a smaller share of their income to health than lower-income households, and households at the same level of income pay very different amounts. The system of premium subsidies reduces vertical inequities (to a certain extent) as it lowers the financial burden on lower-income households. However, at the same time, the different cantonal systems for premium subsidies contribute to the existence of horizontal inequities.

7.3 User experience and equity of access to health care

7.3.1 User experience

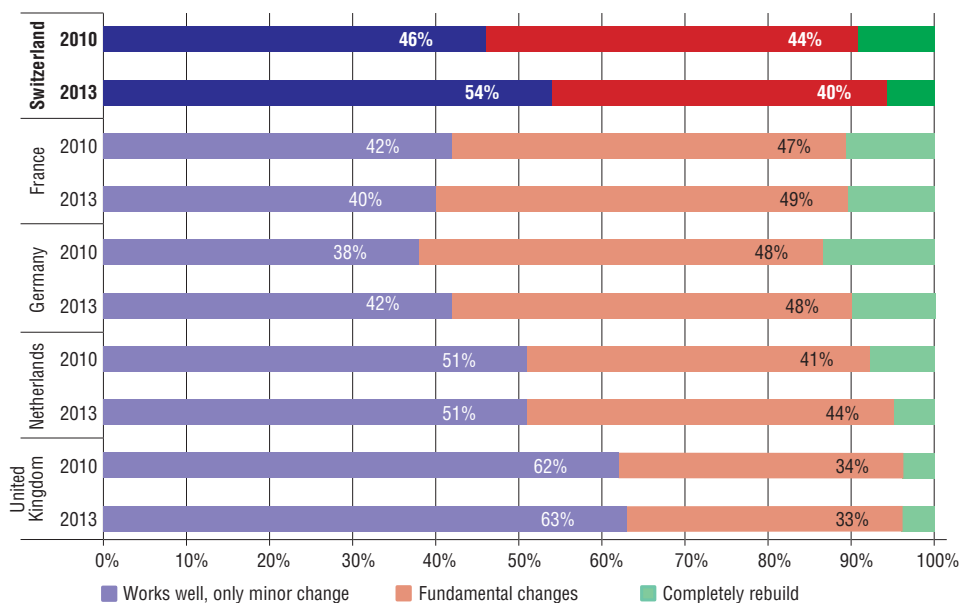
Different measures from both national and international surveys are available for the assessment of user experiences and population views about the health system. Most of these indicate that Swiss citizens and patients are very satisfied or quite satisfied with their health system.

According to the Swiss Health Monitor 2014 (Longchamp et al., 2014), public satisfaction with the health system is very high and has increased over recent years: more than 80% of the population had a rather positive or very positive view of the health system in 2014, while this number was only slightly above 60% in 2012. However, the proportion of the population assessing quality of the health system as very good has considerably decreased since 2010, from above 40% to about 23% in 2014. Simultaneously, the proportion assessing quality as rather good (but not good or very good) has increased to 31%.

The Commonwealth Fund (2014) survey provides comparative information about population views on how well health systems are functioning in different countries (see Fig. 7.4). In 2013, 54% of Swiss interviewees said that the system was working well and that only minor changes were needed. In France, Germany and the Netherlands, the proportion of the population saying that fundamental changes were needed was larger than in Switzerland. Only in the United Kingdom, the population was even more satisfied with the current system than in Switzerland.

Fig. 7.4

Population views of the health care system in five countries, 2010 and 2013



Source: Commonwealth Fund, 2014.

Interestingly, in a 2011 survey focusing specifically on the chronically ill (Sturny & Camenzind, 2011), views of the interviewees were even more positive: 69% of Swiss chronically ill said their system was working well, while this number was at or below 50% in all other countries. In addition, more than 95% of chronically ill patients said that quality of care was good or very good, a proportion that was higher than in the 10 other surveyed countries.

The Commonwealth Fund data also allow comparison of waiting times across countries. In Switzerland, more than 80% of patients waited less than a month to see a specialist in 2013, and only 3% waited two months or more (Commonwealth Fund, 2014). In all other countries, patients had to wait longer. However, the proportion of the population (adults 55+) saying that they can see a doctor when sick on the same day was 68% in Switzerland in 2014 (Camenzind & Petrini, 2014). This proportion was higher than in the US (54%) or the UK (62%) but lower than in France (83%), Germany (81%) or the Netherlands (76%).

Also, the European Health Consumer Index (Björnberg, 2015), which has received widespread attention internationally although the positioning of a country in the overall ranking should be interpreted carefully, has recently

found that Switzerland was best at accessibility (together with Belgium). This finding was based on the assessment that waiting times were low for GPs, specialists, elective surgery, cancer therapy, CT scans, and waiting times at emergency departments. However, the report also highlights that Switzerland is less good concerning the involvement of patients' organizations in decision-making, the availability of information on quality of care, and the integration of e-health (e-prescriptions and online booking of appointments).

A survey of patient views of general practice in 2009, evaluating 23 dimensions of primary care including waiting times, data confidentiality and involvement in treatment decisions, found that Swiss patients were very satisfied with the received care (Petek et al., 2011). In fact, overall they were more satisfied than patients in seven other European countries, including Austria, France, Germany and the Netherlands.

Since 2012, information on patient satisfaction with care received in 143 participating hospitals has been published by the ANQ on its website (ANQ, 2014c) (see sections 2.8.2 and 5.4.3). In 2012, information was published on results of individual hospitals and satisfaction was relatively high in all hospitals. For example, for the question "How good was the quality of care that you received?", no hospital scored below 8.5 and very few scored above 9.5 (on a scale from 0 to 10).

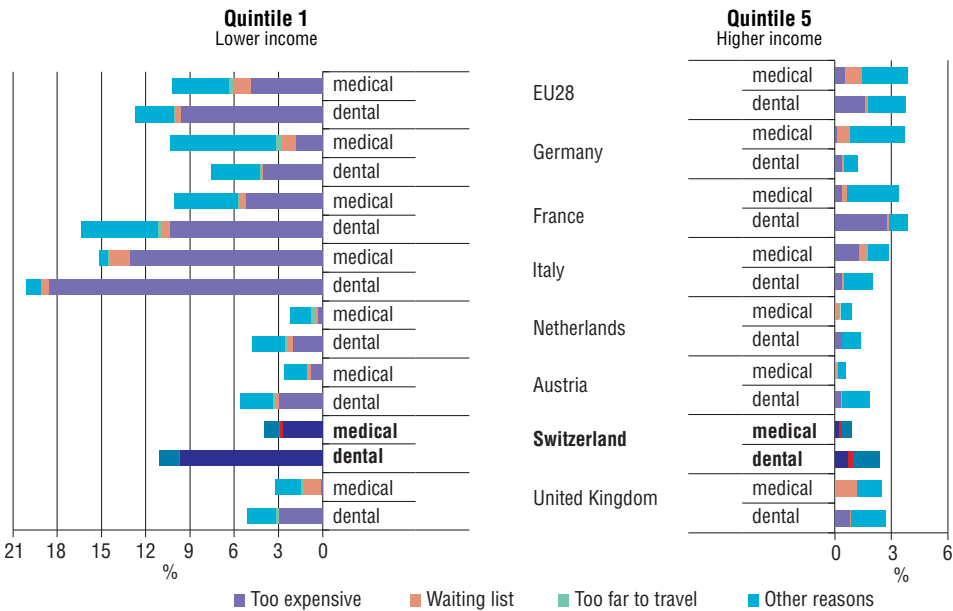
An important recent development concerning the involvement of patients in treatment decisions has been a reform of legislation for the protection of the elderly and the young, in force since 2013 (see section 2.9.3). In particular, the reform has strengthened the position of patients in designating a legal guardian in advance (e.g. in the case of dementia) and in determining through a living will what kind of medical treatment they wish to receive.

7.3.2 Equity of access to health care

Easy geographical access to health care services is supported in Switzerland by the high availability of capital and human resources (see Chapter 4). Nevertheless, considerable variation exists in the availability of health care services across cantons and subcantonal regions. This gives rise to much political debate, although the small size of the country and excellent public transport infrastructure generally ensure easy access for the entire population, even to highly specialized medical care. Yet, two areas of care in which geographical inequities are likely to be relevant, are pre-hospital emergency services and home care services, as these services are largely regulated and often directly managed by cantonal authorities.

The most important equity concerns relate to financial barriers: the exclusion of certain services from coverage (notably dental care) and the relatively high user charges lead to financial access barriers for a small but not negligible part of the population. Data from the EU-SILC (2013) show that almost 10% of the poorest income quintile reported having an unmet need for dental examination or treatment because of costs, while this number was below 1% in the richest income quintile (see Fig. 7.5). Unmet need for dental examination or treatment among the poor was considerably higher in Switzerland than in Austria, Germany, the Netherlands and the United Kingdom, but considerably lower than in Italy or France. Inequitable access to dental care was found to be even more important in a survey from Geneva, where 23.5% of poorer individuals (monthly household income <Sw.fr.3000) reported having foregone dental care for economic reasons, whereas this proportion was at 2.4% for wealthier individuals (household income >Sw.fr.13 000) (Guessous et al., 2014).

Fig. 7.5
Unmet needs for medical or dental examination or treatment by income quintile and type of reason, 2013



Source: Eurostat, 2015b.

A similar pattern as for dental care is also evident for medical care: in Switzerland, almost 3% of the lower-income quintile report having an unmet need for medical examination or treatment because of costs. By contrast, financial reasons do not pose a relevant barrier for the highest-income quintile. In Austria, Germany, the Netherlands and the United Kingdom, the proportion of low-income populations reporting unmet needs for financial reasons is smaller than in Switzerland (see Fig. 7.5).

Data from the OECD show that there are almost no income-related inequalities in access to GPs in Switzerland (as in most European OECD countries) (OECD, 2012a). However, access to specialists is somewhat less equitable in Switzerland (again as in most European OECD countries), although the United Kingdom provides considerably more equitable access.

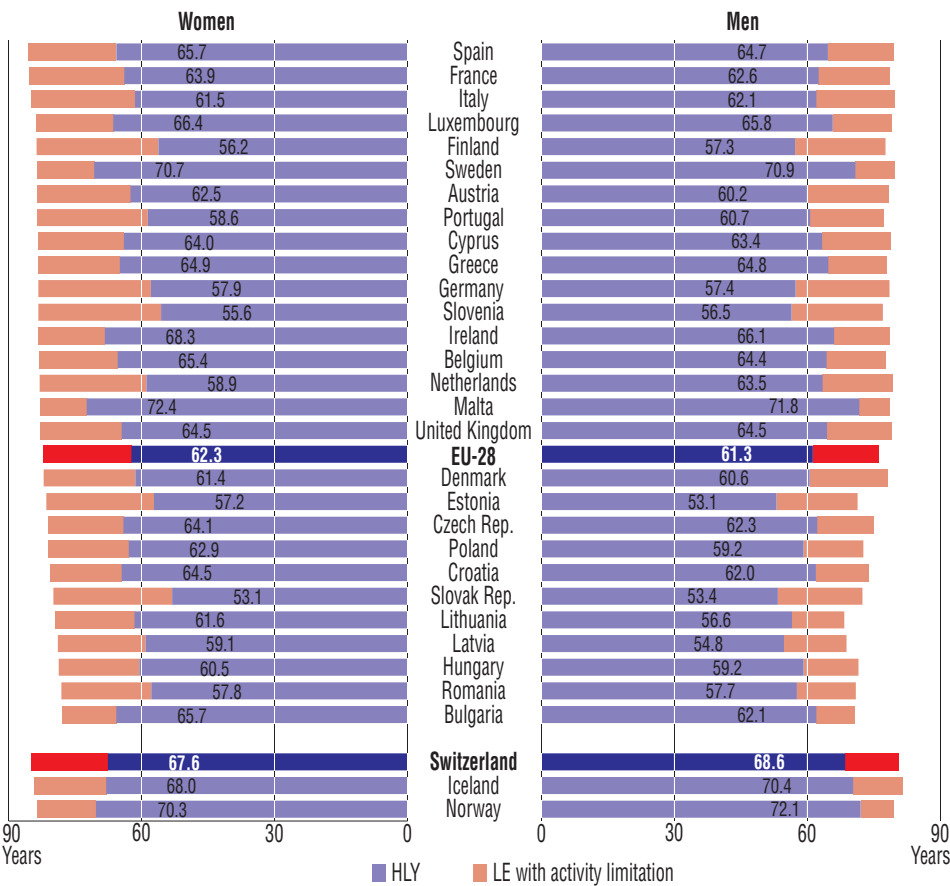
An important concern relates to undocumented migrants (Bilger et al., 2011) and also partially to non-permanent foreign residents. The regulation of responsibilities of these population groups (in particular the obligation to purchase MHI) and their rights (in particular the entitlement to subsidies) has been the subject of several federal reforms. For example, in 2011, the Federal Council clarified that MHI is compulsory for asylum-seekers even if their application for asylum is either rejected or not accepted. This implies that cantonal authorities have the obligation to provide financial assistance for the purchase of MHI if individuals have insufficient resources.

7.4 Health outcomes, health service outcomes and quality of care

7.4.1 Population health

Life expectancy and healthy life expectancy in Switzerland are among the highest in Europe. In 2013, average life expectancy was 82.8 years in Switzerland, which was exceeded in the European Region only by Iceland at 82.9 years (World Bank, 2014). In particular, men could expect to live longer and in better health than in any other country in Europe except for Iceland (see Fig. 7.6). Life expectancy in Switzerland was more than four years above the average in the EU28 for men and almost three years above the average for women. For HLY, the differences with the EU averages were even larger.

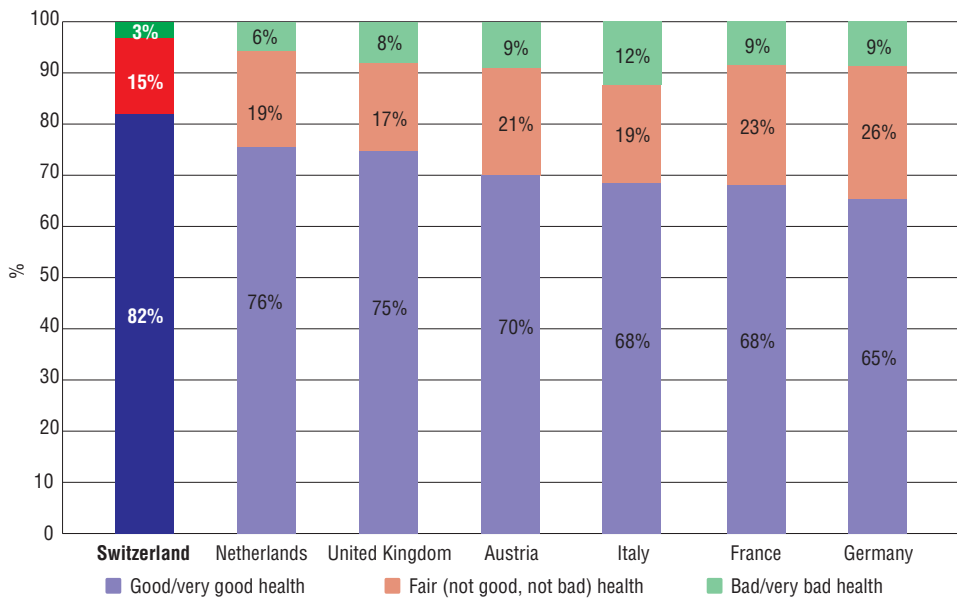
Fig. 7.6
Life expectancy (LE) and healthy life years (HLY) in European countries, 2013



Source: OECD, 2014a.

Other indicators are also extremely favourable: Switzerland has the second highest life expectancy in Europe at age 65, with almost 21 years (OECD Health, 2014). Self-reported health is the second best in Europe (after Ireland): 81.9% of the population aged 15 or above (84% of men and 80% of women) perceive their state of health as good or very good, considerably more than in neighbouring countries, the Netherlands or the United Kingdom (see Fig. 7.7). Also, oral health status as measured by the proportion of children with decayed, missing or filled teeth at age 12 (DMFT-12) is considerably better than in most European countries (CAPP, 2015).

Fig. 7.7
Perceived health status, percentage of the population aged 16 years and over, 2012



Source: OECD, 2015b.

In 2012, the leading causes of death in Switzerland were diseases of the circulatory system and cancers, each accounting for about 30% of deaths for both men and women (see section 1.4). In international comparison, age standardized death rates per 100 000 population were comparatively low for circulatory diseases (144.9 per 100 000), although France (107.2), Spain (130.4), the Netherlands (136.4) and Denmark (135.9) had even lower rates in 2011 or 2012 (the last years for which data are available in international databases) (WHO Regional Office for Europe, 2015). Also, for cancers, death rates were amongst the lowest in Europe. Transport accident mortality has reduced considerably since the year 2000 (from 7.1 to 3.25 deaths per 100 000 population in 2010) but was still higher than in Denmark (2.6 deaths per 100 000 population in 2012).

Looking at major risk factors, Switzerland was better or slightly better than the European average in 2012 (OECD, 2014a): the daily smoking rate among adults (population aged 15 years and above) was 20.4% in Switzerland, slightly below the EU28 average (23%) but above smoking rates in Sweden (13%, the lowest value in European OECD countries). Alcohol consumption was at the European average of 10 litres per capita per year (aged 15 years and above), which was considerably above consumption in Italy (6 litres). Obesity rates were lower than on average in the EU28 (10.3% of the population versus 17%).

Several of these indicators have been at the centre of policy debates on public health in Switzerland. One example of a reform in the area of public health was the introduction of smoking bans. Since 2010, a federal law has been in place, which bans smoking in public spaces including bars, restaurants, schools, hospitals and shopping malls, but allowing exceptions for small catering outlets and small venues of up to 80 square metres. Cantons are allowed to enact stronger smoking regulations. Another area of intersectoral action has been the federal programme *Via Sicura* (“Safe road”), which aimed to halve traffic deaths by 2010, whilst avoiding restrictions on mobility (FEDRO, 2005). Recent amendments to the Road Traffic Act passed since 2001 have included the reduction of the blood alcohol concentration limit to 0.5 mg/ml, a stricter system for withdrawing driving licences, a probationary driving licence, the introduction of two-phase driver training, mandatory use of lights during the day, and stiffer penalties for speeding (FEDRO, 2005).

In general, the very good health status of the Swiss population is likely to benefit strongly from the overall very favourable living conditions in Switzerland: good housing conditions, a high-quality education system, low rates of unemployment, good road networks and other public infrastructure all contribute to healthy living conditions for the entire population.

7.4.2 Health service outcomes and quality of care

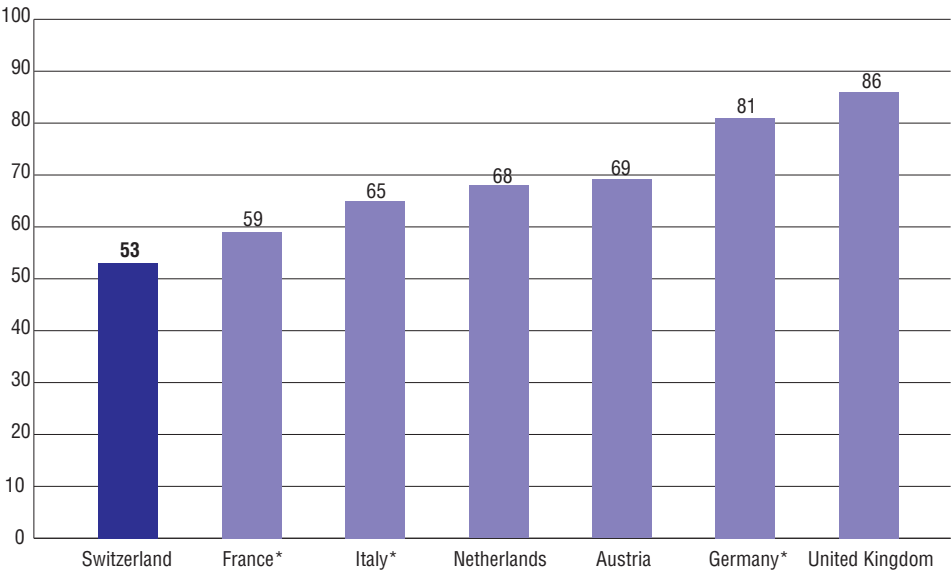
According to the Swiss Health Monitor 2014 mentioned above (Longchamp et al., 2014), well above 60% of the Swiss population evaluate quality of the health system as good or very good (although this proportion has somewhat decreased over recent years).

The availability of objective (and internationally comparative) indicators for quality of care has improved considerably over recent years. In addition, national quality indicators are increasingly being collected in Switzerland, in particular for inpatient care (Vincent, 2013) (see section 5.4.3).

One measure for assessing the quality of health care is the concept of “amenable mortality”. Deaths that should not occur in the presence of timely and effective health care are considered to reflect amenable mortality. Based on a comparison of Swiss data with OECD data (Gay et al., 2011), it has been estimated that amenable mortality is lower in Switzerland than in any other OECD country (see Fig. 7.8).

Fig. 7.8

Amenable mortality (age-standardised rate per 100 000 population) in selected countries, 2007 (or latest available year)

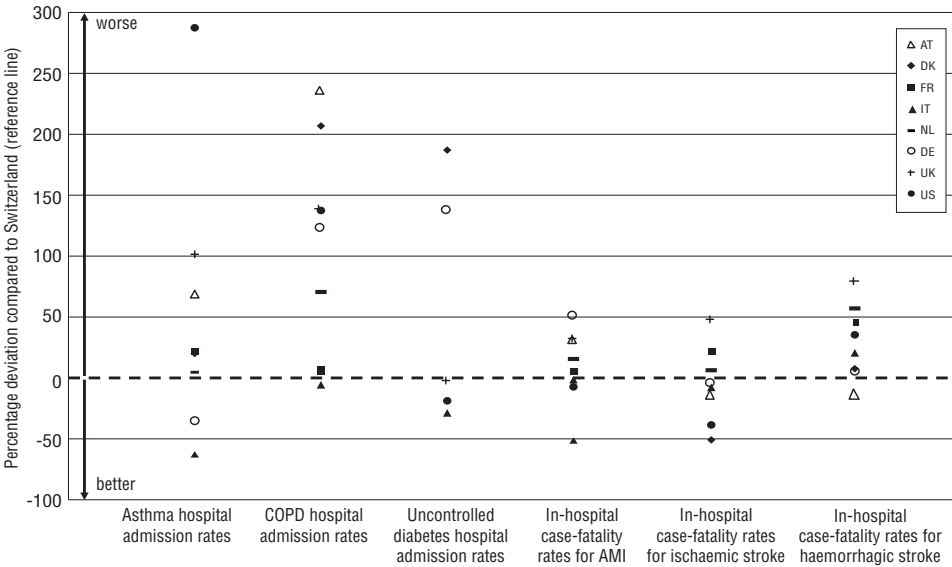


Sources: Gay et al. 2011; Swiss data based on Canton Ticino, 2012.
Note: *based on data from 2006.

The OECD Health Care Quality Indicators Project is the most comprehensive attempt at comparing health care quality across countries. Since 2006, data have been published for a set of indicators related to, amongst others, primary care, acute inpatient care, cancer care and patient safety (Kelley & Jurst, 2006). Variations across countries can partially be explained by different classification systems and recording practices but indicators provide the best currently available data for international comparisons.

OECD quality indicators for primary care are based on the assumption that some hospital admissions, e.g. for asthma, chronic obstructive pulmonary disease (COPD) and uncontrolled diabetes, are avoidable if patients are well managed at the primary (or ambulatory) care level. Fig. 7.9 shows that comparatively few patients in Switzerland are admitted to hospital for asthma (30.2 per 100 000), COPD (95.1) or uncontrolled diabetes (23.3). Only very few countries had even lower rates of avoidable hospital admissions. Nevertheless, according to a recent study from Switzerland, avoidable hospital admissions accounted for 3.1% of all inpatient stays, but the rate of avoidable hospital admissions varied greatly across regions (Berlin et al., 2014).

Fig. 7.9
Avoidable hospital admissions and in-hospital mortality in Switzerland (reference line) compared with (percentage deviation) selected countries, 2012 (or latest available year)



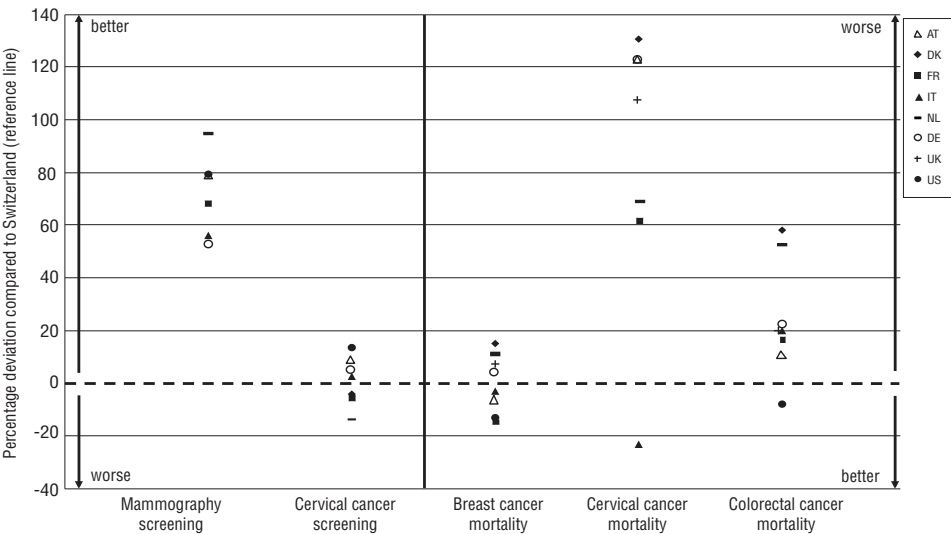
Source: OECD, 2015b.
Notes: AMI = acute myocardial infarction; COPD = chronic obstructive pulmonary disease.

Fig. 7.9 also shows OECD quality indicators for acute hospital inpatient care. These include case-fatality rates for acute myocardial infarction (AMI), as well as for ischaemic and haemorrhagic stroke. In 2012, age–sex standardized, admission-based (same hospital) case-fatality rates within 30 days from admission in Switzerland were 5.9% for AMI, 7.0% for ischaemic and 16.5% for haemorrhagic stroke. In international comparisons, these were relatively good results. However, in Denmark, case fatality for AMI and stroke was 50% lower than in Switzerland and also the US had considerably lower rates for stroke.

OECD quality indicators for cancer care are based on relative five-year survival rates, which are unavailable for Switzerland. However, data are available for screening rates and cancer mortality (see Fig. 7.10). Mammography screening rates are comparatively low in Switzerland (only 44.8% of 50–69-year-olds had been screened by 2007) as there are only a limited number of cantonal screening programmes. By contrast, cervical cancer screening rates are similar to those in other countries (between 71% and 81%). Breast cancer mortality is similar to mortality in other countries, while cervical and colorectal cancer mortality is relatively low in Switzerland.

Fig. 7.10

Cancer screening rates and cancer mortality in Switzerland (reference line) compared with (percentage deviation) selected countries, 2012 (or latest available year)



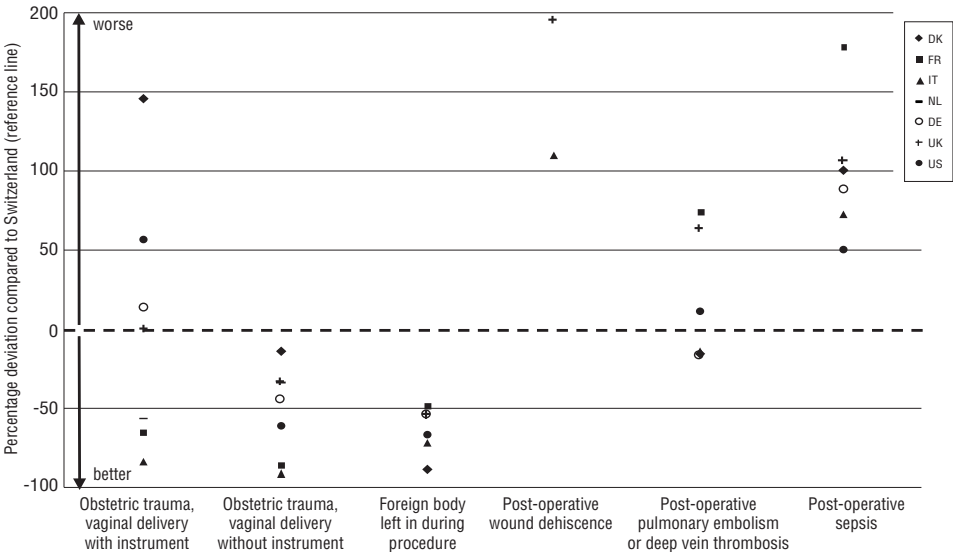
Source: OECD, 2015b.

OECD Patient Safety Indicators show a varied picture with considerable room for improvement in certain areas (see Fig. 7.11). In particular, Switzerland had a very high rate of foreign bodies left in during procedures in adults (11.6 per 100 000 discharges), which was more than twice as high as in countries such as Germany and France. For rates of postoperative pulmonary embolism, Switzerland (499.6 per 100 000 discharges) was considerably better than France (864.9) or the United Kingdom (812.0) but had higher rates than Germany, Denmark and Italy (all with rates between 420 and 435).

One common indicator for quality of preventive services is vaccination rates. In 2012, 92% of children at 1 year had been vaccinated against measles, which was lower than the average for EU28 countries (94%) (OECD, 2014a). Switzerland also had lower rates than the EU28 average for diphtheria, tetanus and pertussis (95% versus 98%). The vaccination rate for influenza among the population aged 65 and over was 46% in Switzerland, higher than the average of those EU countries for which data were available but much lower than in the United Kingdom (76%) or the Netherlands (74%).

Quality and patient safety are important issues for future health policy-making in Switzerland, as stated in the first report of the Scientific Advisory Board on Safety and Quality appointed by the Swiss FOPH in September 2013

Fig. 7.11
Relative performance on patient safety indicators in Switzerland (reference line)
compared with (percentage deviation) selected countries, 2012 (or latest available year)



Source: OECD, 2015b.

(Vincent, 2013). One issue of concern is the considerable practice variations that have been documented both for inpatient care (see, for example, Beyer et al. (2009)) and ambulatory services (see, for example, (Busato et al., 2010, 2012)), drawing into question the appropriateness of care (Chmiel et al., 2015).

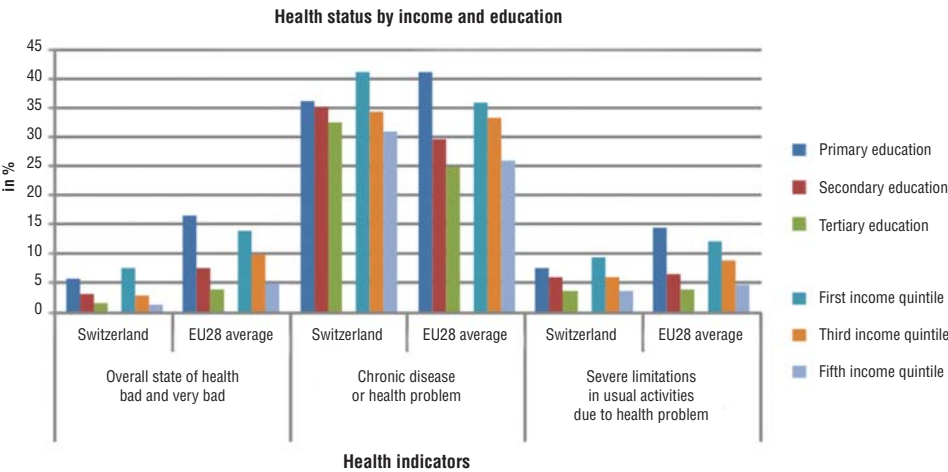
Another important area of concern is insufficient coordination of care, which is particularly important given the ageing of the population and the increasing prevalence of patients with multiple chronic conditions. A recent report (Camenzind & Petrini, 2014), based on Swiss data from the Commonwealth Fund’s International Health Policy Survey, shows that coordination in Switzerland is average or good compared to other countries. However, there is considerable room for improvement: 10% of respondents reported that the family doctor did not give any information to their specialist and 15% said that the specialist did not pass information to the family doctor. Doctors did not explain side-effects of prescribed drugs (according to 53%), and did not provide drugs lists to patients (62%). When leaving the hospital, 44% of respondents having been hospitalized in the previous two years reported that no written information was provided about care after hospitalization, and 19% said that no organization of follow-up services was provided.

7.4.3 Equity of outcomes

There are several data sources showing that there is a social gradient in health. The FSO estimates that life expectancy of 30-year-old men with primary education in 2007 was 77.9 years, i.e. almost 5 years less than life expectancy of men with tertiary (university) education, who could expect to live 82.5 years (FSO, 2014c). The difference is smaller for women, where life expectancy was estimated to be 83.9 years for women with primary education and 86.2 years for women with tertiary education.

Data from the EU-SILC also show that there is a social gradient in health, in relation to both education and income (see Fig. 7.12). The overall state of health is assessed as bad or very bad by about 6% of the population with only primary education, while this proportion is below 2% for people with tertiary education. This difference is even larger when comparing inequalities in overall health status by income quintile. On average in the EU28, more people report a health status that is bad or very bad and the absolute difference between lower socioeconomic groups and higher socioeconomic groups is larger than in Switzerland. However, given the higher level of bad health, the relative difference is smaller in the EU28. Other indicators show similar results (see Fig. 7.12). In addition, studies analysing the Swiss Health Survey have also illustrated a social gradient in health outcomes (Reinhardt et al., 2012).

Fig. 7.12
Income-related and education-related inequalities in health outcomes, most recent years



Source: Education-related inequalities are for 2012, based on FSO, 2013c; income-related data are for 2013, based on Eurostat, 2014b.

In the case of depression, Baer et al. (2013) found that the disease is associated with lower education, unemployment, single parenthood, divorce, immigrants and elderly people. Most indicators of health outcomes show a social gradient, with lower prevalence of bad health among higher socioeconomic groups. However, a recent study found that an inverse relationship exists for feelings of stress or burnout, which were more prevalent among higher socioeconomic groups (Hämmig & Bauer, 2013).

7.5 Health system efficiency

In 2012, Switzerland spent 11.3% of its GDP on health, considerably more than the EU average (9.5%) (see section 3.1), although less than the Netherlands, France and Austria. Per capita expenditures in Switzerland were US\$ PPP 6062, which was far above the EU15 average (US\$ PPP 3852) and was exceeded in the European region only by Luxembourg. Above average expenditures are not problematic if resources are spent efficiently and if expenditures reflect population preferences for more and better care. A 2010 OECD study (Joumard, André & Nicq, 2010) examined efficiency of different health care systems and found that Switzerland was among the most efficient countries, in terms of achieving high life expectancy for employed resources. However, a detailed analysis of allocative and technical efficiency of the Swiss health system reveals that inefficiencies are likely to exist in both.

7.5.1 Allocative efficiency

The term “allocative efficiency” refers to the notion that society’s resources should be used in such a way that they best satisfy the population’s needs and wants. In the case of the health sector this is usually interpreted to mean that the allocation of resources between the various levels and types of care is consistent with health system objectives (e.g. maximization of health). In Switzerland, allocative efficiency can be assessed at three different levels: (1) the allocation of resources to different regions; (2) the allocation of resources to different types of provider; and (3) the allocation of resources to different types of service.

Resources allocated to health vary widely across cantons: public expenditures in 2012 differed almost twofold between the eight cantons with the lowest costs (Sw.fr.3000 to Sw.fr.3500) and the canton with the highest costs (Basel Stadt with more than Sw.fr.5900) (see section 3.1). The reasons for these differences have been explored in numerous studies (Busato et al., 2010, 2012; Reich et al., 2012b; Camenzind, 2012a; Crivelli, Filippini & Mosca,

2006; Schleiniger, 2014), and a host of different factors, such as provider density, payment mechanisms, population demographics, urbanity and per capita income have been identified as explanatory factors. However, most researchers conclude that supplier-induced demand, resulting from flawed incentives of (unlimited) FFS reimbursement, subsidized hospital investments and fragmentation of provision, is an important factor leading to inappropriate (and inefficient) use of resources (Trageser et al., 2012).

Regional resource allocation in Switzerland is mostly determined by historic factors, reflecting past (political) planning and investment decisions of cantons, provider choices about their preferred place of practice, and patient choices of their preferred provider. Objective criteria, such as population demographics and epidemiology, only have an indirect effect if they are reflected in cantonal planning decisions or in differences of MHI premiums. Although recent reforms have attempted to improve cantonal inpatient planning (see section 6.1.2), and future reforms are focused on better planning of ambulatory care (see section 6.2.2), large unintentional differences in expenditures are likely to remain across regions. In addition, the restriction of the MHI risk-adjustment system to account only for differences within cantons (or within subcantonal premium regions) prevents the redistribution of resources across cantonal borders, even if demographic or epidemiological factors would demand that resources are allocated differently.

Concerning the second point, i.e. the allocation of resources to different types of provider, flawed financial incentives exist at different levels of the health system, potentially distorting the allocation of resources to different providers. First, the dual (cantons and MHI companies) system of financing of inpatient care (see section 3.7.1) means that MHI companies have no interest in promoting less costly (and more efficient) ambulatory care, where they would have to cover the full costs, rather than more expensive inpatient care, where more than 50% of costs are covered by cantons (Trageser et al., 2012). At the same time, cantonal hospitals might have an interest in increasing the provision of ambulatory care reimbursable by MHI in order to amortize their otherwise underutilized infrastructures (such as radiology departments, laboratories, etc.). Concerns exist that the flawed incentives of this dual financing lead to inappropriate use of inpatient care and parliamentary initiatives, as well as some MHI companies, have repeatedly asked to discontinue the dual system of financing to eliminate these incentives (FOPH, 2014e).

However, expenditure on acute inpatient care is at about the average level of other EU countries (OECD, 2014a); the number of beds per 1000 population has been considerably reduced and is below the EU average (see section 4.1.2); and avoidable hospital admissions are relatively low (see Fig. 7.9).

Second, the ambulatory FFS schedule TARMED is outdated and financially awards technical services (mostly of ambulatory specialists) with more money than the non-technical services provided by primary care physicians. This has led to federal intervention amending the fee schedule in favour of primary care physicians (FOPH, 2014l). However, a more permanent solution has to be found by MHI companies and physicians, which are jointly responsible for reforming the fee schedule. Third, the recently introduced SwissDRG-based hospital payment system allows hospital-specific base rates to be negotiated. It is at least conceivable that high base rates are negotiated and approved by cantons for cantonal hospitals even if care could be provided more efficiently in other hospitals (e.g. in other cantons or in private hospitals).

The third point, i.e. the allocation of resources to different types of service, is a particular area of concern in Switzerland, which is reflected in current reform discussions (see section 6.2.1). The existing system of HTA (see section 2.7.1) is often regarded as insufficient, as most new medical services are automatically covered by MHI unless they are challenged by a relevant stakeholder (see section 2.8.1). There is no system of horizon scanning to identify potentially controversial technologies with a high financial impact. This may lead to public resources being spent on services that provide no or very little benefit (Trageser et al., 2012).

In particular, the high availability of medical technology in Switzerland (see section 4.1.3), coupled with the limited development and use of medical guidelines in the country, carries the danger that (supplier-induced) high-tech services are provided when the same result could have been achieved in a more efficient way using less complex services. A systematic analysis of cost-effectiveness of services in the MHI benefits package could potentially improve efficiency in the allocation of resources to different types of services.

7.5.2 Technical efficiency

A recent OECD study shows that Switzerland has the highest prices of health services in Europe (Koechlin et al., 2014). Health services cost more than twice the average price of comparable services in EU countries and hospital services are almost 2.5 times more expensive than the average in the EU (compared to 1.5 times higher prices in the general economy). However, higher prices are

not necessarily an indication of technical inefficiencies in the production of health system outputs as they may also reflect differences in input prices and differences in quality. A range of other indicators of technical efficiency are also available for different sectors.

As regards acute hospital care, indicators point in different directions. Average length of stay in Swiss hospitals decreased considerably from 9.3 days in 2000 to 6.5 days in 2011, indicating increased technical efficiency (see section 4.1.2). However, ALOS is still slightly above the average of countries in the EU (6.4 days) and considerably higher than in France (5.1 days) or the Netherlands (5.8 days). The national introduction of DRG-based hospital payment in 2012 puts pressure on hospitals to reduce costs and is expected to contribute to a further reduction of ALOS. Bed occupancy rate in Switzerland (89.1% in 2010) is far above the EU average (75.9% in 2011) and is in fact amongst the highest in Europe, showing that available beds are used efficiently. The number of physicians per 100 discharges is considerably higher in Switzerland (1.5 FTE physicians (FOPH, 2015f)) than, for example, in Germany (0.8 FTE physicians (Destatis, 2013)), which might indicate that human resources could be used more efficiently.

Several other studies have explored potential sources of inefficiencies in the hospital sector (Trageser et al., 2012). In particular, the small size of hospitals in Switzerland has been found to imply considerable room for efficiency improvement as a result of the existence of economies of scale (Farsi & Filippini, 2008). In summary, technical efficiency appears to have improved since the year 2000 but certain (rather rough) indicators suggest there might be further room for improvement.

In ambulatory care, the number of consultations per doctor has been reported to be relatively low in Switzerland (slightly above 1000 in 2007) when compared with other OECD countries (OECD, 2011), such as Germany, the Netherlands and France (all with above 2000 consultations per doctor), although this might, of course, also reflect differences in quality.

A number of Swiss studies have assessed efficiency in ambulatory care by comparing traditional forms of insurance with patients insured under managed care contracts (Trageser et al., 2012; Beck et al., 2011; Reich, Rapold & Flatscher-Thöni, 2012a), where patients are cared for by HMOs or networks of physicians (see also section 5.2.2). Patients insured under managed care contracts were found to have lower costs than patients in traditional insurance. Although earlier studies often did not sufficiently control for the self-selection effect that healthier individuals are more likely to opt for managed care type

contracts (Trageser et al., 2012), more recent studies confirmed on the basis of panel data using comprehensive methods of risk adjustment that costs are still lower in managed care type contracts after controlling for the self-selection effect (Beck et al., 2011; Reich, Rapold & Flatscher-Thöni, 2012a). The size of the reduction in costs depends on the type of contract (Reich, Rapold & Flatscher-Thöni, 2012a): patients cared for by a network of physicians who coordinated their care had 15.5% lower costs, while patients insured by networks carrying budget responsibility (e.g. HMOs) had 21.2% lower costs than patients in traditional insurance. This suggests that better coordination of ambulatory care providers could considerably increase efficiency (Trageser et al., 2012).

Prices of pharmaceuticals have reduced considerably in Switzerland since the year 2000, although they remain higher than in Austria, the Netherlands or France (Interpharma, 2014). Several reforms since 2000 have aimed to lower prices of pharmaceuticals (see sections 5.6.4 and 6.1.4). Nevertheless, pharmaceutical spending in Switzerland is considerably above the EU average (OECD, 2014a), and it is increasing (see section 5.6.4). Prices of pharmaceuticals in Switzerland have increased automatically and relatively strongly in international comparison in recent years as a result of devaluation of the Euro in relation to the Swiss franc. The current practice of price adjustments after three years means that producers have the chance to benefit from the devaluation for three years before prices in Switzerland are realigned with comparator countries.

In addition, the share of generics in the Swiss pharmaceutical market is relatively small, i.e. 23.9% of the total volume and 18.4% of the total value of reimbursed pharmaceuticals in 2013 (OECD, 2015b). A recent reform in 2012 has attempted to make it more attractive for generic producers to enter the small Swiss pharmaceuticals market. In summary, efficiency in the use of pharmaceuticals has improved considerably but other countries appear to have been even more successful at reducing prices and making more rational use of pharmaceuticals by shifting a larger share of the market to generics.

7.6 Transparency and accountability

Increasing transparency and accountability in the health system remains an important topic for the political agenda for the coming years (see Box 7.1). Considerable improvements in the quality and quantity of available information since the year 2000 have led to more transparency in the health system but

opacity remains in several important areas. Financial indicators of MHI companies and information on expenditures are collected and published by the FOPH, including detailed information on insurance policies (e.g. concerning levels of deductibles and managed care contracts). However, criteria for coverage decisions are not transparent and reports on individual decisions are not publicly available. The emergence of parallel HTA structures, such as the Swiss Medical Board, puts pressure on the system to improve transparency, which is reflected in current reform proposals (see section 6.2.1).

The availability of information on service provision in hospitals has improved considerably since the year 2000 including (from 2005) information on costs of care and (from 2008) on the quality of care (see section 2.7.1). Since the introduction of DRG-based hospital payment in 2012, all hospitals classify their patients using SwissDRGs, which improves comparability of information across cantons. Starting in 2015, information will be collected on hospital outpatient care provision. In addition, the FOPH publishes a considerable amount of information on inpatient care provision in an easily accessible format on its website.

Information on ambulatory providers has improved as a result of the introduction of the Register of Medical Professionals (see section 2.8.3) and the introduction of federal statistics on ambulatory care providers is planned for 2016. Voluntary quality initiatives, in particular the ANQ, publish information on quality in a large majority of hospitals and the quality measurement of the ANQ is expanding to include rehabilitation and psychiatric hospitals as well.

Information on other areas of care, such as ambulatory, emergency, long-term and Spitex services, remains more fragmented, with information being collected by cantons or municipalities in different formats. Information on quality in the ambulatory sector remains largely unavailable. Information on health outcomes, e.g. cancer survival, remains limited because of a lack of national registries. However, a proposed Law on the Registration of Cancer has been debated by Parliament in 2015 (see section 6.2.3).

In addition, considerable opacity persists around financial flows at the level of the cantons and municipalities. The available information on cantonal premium subsidies makes it difficult to monitor their effects. Financial reports of private and often public providers as well are not made publicly available. Cantonal subsidies to care institutions operated under their ownership are not tracked in a systematic manner. The system of negotiations about base rates under the DRG-based hospital payment system and the outcome of these

negotiations are still not transparent. Furthermore, because the development of electronic health records has been slow, patients can not yet easily obtain an overview of the services they have received.

Accountability consists of two broad elements: the rendering of an account (provision of information) and the consequent holding to account (sanctions or rewards) (Smith et al., 2012). The fragmented responsibilities and lack of systematic information on quality and costs of service provision (except in the acute inpatient sector) mean that there are important deficits in the “rendering of account” process. Nevertheless, residents (citizens), patients, policy-makers and other stakeholders have numerous mechanisms of holding each other to account.

First, market-based mechanisms (choice of insurer and provider) exert pressures on MHI companies and providers to provide services that satisfy the needs and wants of their insured and patients. Second, direct democracy provides strong control measures to citizens, enabling them to hold politicians directly to account during the legislative process and making it possible to demand changes or block reforms; and extensive consultation procedures ensure that policies reflect the interests and needs of all relevant stakeholders. Third, the FOPH holds MHI companies to account and has received additional competencies as a result of the new KVAG/LSAMal; cantonal health departments hold hospitals to account, when developing cantonal hospital lists, which are increasingly linked to quality of care (see section 6.1.2); the payment of ambulatory providers on a FFS basis ensures that services are delivered but there are only very limited measures of quality assurance (see section 2.8.2). Fourth, corporatist actors (in particular the FMH) exert a certain level of professional oversight and control. Finally, the high quality of cantonal and federal administration and the favourable socioeconomic conditions (high education and disposable incomes, low corruption, low tax evasion, no informal payments, etc.) enable effective implementation of health policies and of new regulations, thereby supporting the overall effectiveness of the system.

8. Conclusions

The structure and history of the Swiss health system have been shaped by an intriguing mix of the traditions of federalism, liberalism, corporatism and direct democracy. The federal setup of the country with a high level of cantonal autonomy has led to decentralized structures for the financing, organization and provision of health care and has often complicated reforms in the field of health. The tradition of liberalism is reflected in the relatively strong reliance on market mechanisms, in particular in the areas of health insurance, health care provision, and the production and distribution of health care products. Corporatism has shaped the interactions of insurers with providers, which collaborate in joint institutions for the development of tariff frameworks and negotiate collective contracts for service provision. Finally, direct democracy has a pervasive influence on health policy-making, sometimes blocking reforms, while at others leading to change – either directly through referendum or indirectly by providing momentum for developments that might have been on the agenda for years (see Chapter 6).

The health system scores very well on a broad range of indicators: life expectancy in Switzerland is the highest in Europe after Iceland, and healthy life expectancy is several years above the EU average (see section 7.4.1). Almost the entire population is covered by MHI, which grants access to a standard benefits package, including a broad range of services. The system offers a high degree of choice and direct access to all levels of care with virtually no waiting times.

Far above average numbers of hospitals (see section 4.1), high availability of high-tech equipment, above average numbers of physicians and the highest number of nurses per population in Europe (after Monaco, see section 4.2), combined with the small size of the country and excellent public transport infrastructure, ensure easy access to care for the entire population. Public

satisfaction with the system is high and quality is generally viewed to be good or very good (see section 7.3.1). Most OECD quality indicators also confirm that health care quality is high – although not exceptional (see section 7.4.2).

However, maintaining this high level of capital and human resources has its price, and Switzerland is spending almost US\$ PPP 6200 on health per capita per year – the third highest amount in Europe (after Luxembourg and Norway, see section 3.1). The health care financing system is characterized by a high level of fragmentation with almost equal shares being contributed from taxes (federal, cantonal and municipal), social insurance contributions (MHI and others), and private sources (OOP payments and VHI).

Financial contributions place a considerably larger burden (measured in percent of equivalent income) on lower-income households because premium subsidies only partially compensate the proportionately higher costs of community-rated MHI premiums (see section 7.2.2). In addition, the exceptionally high level of OOP payments related to the exclusion of certain services from coverage (notably dental care) and to the relatively high user charges means that financial protection is more limited than, for example, in Austria, Germany or the Netherlands (see section 7.2.1). This has implications for equity of access to health care, as is documented by the considerably larger shares of lower-income households reporting unmet needs for medical or dental examinations in Switzerland than in Austria, Germany or the Netherlands (see section 7.3.2).

Since the year 2000, numerous reforms have been made (see section 6.1), which have optimized the MHI system, changed the financing of hospitals, improved regulations in the area of pharmaceuticals, strengthened the control of epidemics, and harmonized regulation of human resources.

However, making health reforms in Switzerland is difficult as a very broad consensus of the main stakeholders is required – and reaching such a consensus is complicated, sometimes impossible, and almost always takes a very long time. Yet, the complex political and institutional structure characterized by the multiple levels of government, strong corporatist bodies and direct democracy, is very successful at negotiating compromises that are supported (or at least not opposed) by all relevant stakeholders. This leads to lengthy reform processes but also to solid reforms, which are – once implemented – almost never reversed, a feature that is also supported by a high degree of political and personal continuity within political institutions.

One of the most ambitious reforms of the last decade, which aimed to improve coordination of care by strengthening managed care type insurance, was rejected by referendum 12 years after the original proposal for a law had been submitted to Parliament. However, a fascinating feature of the system is that change may also take place without new federal laws, either at the cantonal or corporatist level, or as a result of market mechanisms.

Despite the failure of the managed care reform, managed care type insurance has gradually become the dominant form of insurance in Switzerland, with more than 60% of insured opting for these plans in 2013, while this proportion was below 10% in 2003. Yet, this was not the result of an explicit policy but was related to broader developments in the health system. For example, the large increase in MHI premiums for traditional types of insurance has played an important role and some would say it has forced insured into managed care type plans. In addition, these plans are not always strongly engaged in coordinating care and have instead often focused on attracting the healthy while avoiding the sick because risk adjustment was very weak prior to a recent reform (see section 6.1.3).

An important trend since the year 2000 has been a slow (and not always linear) process towards more harmonization of national health policy-making. Greater mobility of patients and health professionals, the requirements for developing a functioning e-health infrastructure, and the ever-increasing specialization of medicine demand better coordination. Many reforms have strengthened the role of the federal government. At the same time, cantons are increasingly coordinating their activities, strengthening the GDK/CDS, and formal collaboration between cantons and the federal government has been institutionalized through the National Dialogue on Health Policy.

The federal government's Health2020 strategy formulating national priorities is an important step towards more strategic guidance for the health system, providing a federal framework for developments in the coming years. However, reforms leading to a stronger role for the federal government are often highly contested as cantons are reluctant to allow more federal intervention in one area of their core competences.

One of the greatest challenges for Swiss policy-makers remains controlling the high and rising costs of MHI premiums, which have increased more quickly than incomes since 2003. The annual premium increases are always an important topic of political debate around the time of their publication by the FOPH in September, when insured can change their MHI plan for the

next year. In fact, this is a more important issue than the growing costs of the health system as a whole because the relatively strong growth of GDP enables Switzerland to afford the high costs of its system (THE as a proportion of GDP has remained relatively stable since 2003).

Nevertheless, there are good arguments in favour of more efficient and rational use of resources. This would require: a more systematic and stringent process of HTA to assess products and services for both inclusion in and removal from the MHI benefits basket; greater use of medical guidelines to help professionals “choose wisely”; further investment in patient safety; and the reduction of waste by improving coordination within and between different levels of care. These arguments are increasingly being promoted by the medical professions rather than just by economists; current reform initiatives can be expected to ultimately lead to a stronger process of HTA in Switzerland (see section 6.2.1).

Another related challenge is that rising health care costs place an increasingly large financial burden on households with lower and middle incomes. The large variation of premiums across cantons and the different cantonal subsidy systems often lead to very different proportions of income being spent on health care depending on the place of residence. While health care provision is increasingly taking place beyond cantonal borders, health care financing remains limited to small cantonal risk pools, where high cost cases can have a significant impact on premium levels.

The current risk equalization scheme attenuates but does not eliminate this challenge. Current discussions about possible financing and payment reforms, which aim to change the way cantons and MHI companies split the bill of health care provision (dual versus monistic financing of inpatient care versus dual financing of all levels of care), could potentially address not only the distortion of incentives resulting from the current system of financing (see section 7.5.1) but also questions of horizontal and vertical equity (see section 7.2.2).

A potentially important challenge is the heavy reliance of Switzerland on health workers trained abroad. In 2013, almost 40% of all specialization diplomas in Switzerland were awarded to foreign-trained physicians, and the number of foreign-trained nurses is also very high. As a result of the adoption of the popular initiative “Against mass immigration” in 2014, the Federal Council will have to introduce a system of immigration quotas and a mechanism for giving employment priority to Swiss residents.

Depending on the specificities of the future system, this might considerably complicate the recruitment of health professionals from abroad. For example, if quotas are awarded by auction to the highest bidder, this could potentially lead to a shortage of health workers in the country because other sectors of the economy are likely to have larger financial capacity. If other criteria, such as ensuring availability of health services were to be considered, this could potentially mitigate some of the problems. In fact, recent efforts to expand national training capacities (see section 4.2.3) may ultimately reduce the reliance on foreign health professionals, which is also desirable because importing health professionals from abroad is often problematic for the countries of origin.

Finally, strengthening disease prevention, health promotion and intersectoral approaches for improving health remain important priorities on the political agenda – even though the proposed Federal Prevention Law was rejected in Parliament in 2012 (see section 6.1.4). It is true that very favourable living conditions in Switzerland, such as good housing conditions, a high-quality education system, low rates of unemployment, good road networks and other public infrastructure, contribute to healthy living conditions.

Nevertheless, NCDs are responsible for more than 85% of the burden of disease and about 80% of total costs of the health system. Expenditures on public health remain comparatively low by international standards. Increasing activities in the area of disease prevention and health promotion as part of the current development of a national strategy on prevention of NCDs could potentially have a large impact on further improving the very good health status of the population, while avoiding the costs associated with the treatment of these (often) preventable diseases.

9. Appendices

9.1 References

- Achtermann W, Berset C (2006). *Gesundheitspolitiken in der Schweiz – Potential für eine nationale Gesundheitspolitik*. Bern, Bundesamt für Gesundheit (BAG) (http://www.fasmed.ch/fileadmin/pdf/polit_dossiers/Band_1_d.pdf, accessed 10 October 2015).
- Amsler F, Jäckel D, Wyler R (2010). *Schlussbericht zur Evaluation der institutionellen ambulanten und teilstationären Psychiatrieversorgung des Kantons Bern unter besonderer Berücksichtigung der Pilotprojekte – Angebote, Lücken und Mängel*. Biel, Gesundheits- und Fürsorgedirektion Bern (http://www.gef.be.ch/gef/de/index/gesundheit/gesundheits/psychiatrie/versorgungsplanung.assetref/content/dam/documents/GEF/SPA/de/Versorgungsplanung/20112014/gef_versorgungsplanung_5_eval_ambu_teilstationaere_psychiatreivers_d.pdf, accessed 10 October 2015).
- ANQ (2011). *Nationaler Qualitätsvertrag*. Bern, National Association for Quality Improvement in Hospitals and Clinics (http://www.anq.ch/fileadmin/redaktion/deutsch/20110309_ANQ_nationaler_Q-Vertrag_def_Unterschrift_dt_01.pdf, accessed 10 October 2015).
- ANQ (2013). *Nationale Patientenbefragung, Nationaler Vergleichsbericht Messung 2012*. Bern, National Association for Quality Improvement in Hospitals and Clinics (http://www.hplusqualite.ch/fileadmin/documents/20140131_Nationaler_Vergleichsbericht_Patientenbefragung_2012_V1_3_final_de.pdf, accessed 22 October 2015).
- ANQ (2014a). *ANQ Jahresbericht 2013*. Bern, National Association for Quality Improvement in Hospitals and Clinics (http://www.anq.ch/fileadmin/redaktion/deutsch/20140325_ANQ_Jahresbericht_2013_def_de.pdf, accessed 10 October 2015).
- ANQ (2014b). *Messplan Rehabilitation*. Bern, National Association for Quality Improvement in Hospitals and Clinics (<http://www.anq.ch/rehabilitation>, accessed 23 October 2015).
- ANQ (2014c). *Patientenzufriedenheit 2012*. Bern, National Association for Quality Improvement in Hospitals and Clinics (<http://www.anq.ch/messergebnisse/ergebnisse-akutsomatik>, accessed 10 October 2015).
- Ausbildung-Weiterbildung.ch (2014). *Alternativmedizin: 256 Anbieter* [online]. Bärenswil, Modula AG: Ausbildung-Weiterbildung.ch (<http://www.ausbildung-weiterbildung.ch/alternativmedizin-info.html>, accessed 5 December 2014).
- Bachmann S (2015). Rehabilitation. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017: Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.
- Baer N et al. (2013). *La dépression dans la population suisse. Données concernant l'épidémiologie, le traitement et l'intégration socioprofessionnelle*. Neuchâtel, Obsan (<http://www.bfs.admin.ch/bfs/portal/fr/index/news/publikationen.html?publicationid=5192>, accessed 10 October 2015).

- Baur R (2005). *Managed Care-Modelle: Bestandesaufnahme 2004*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/06392/06517/index.html?lang=de&download=NHZLpZig7t,lnp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCFd4R_f2ym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19Xl2IdvoaCUZ,s-, accessed 10 October 2014).
- Bayer-Oglesby L, Roth M (2012). Grenzüberschreitende Zusammenarbeit Deutschland – Schweiz im Gesundheitswesen. Evaluation des Pilotprojektes in der Grenzregion Basel-Stadt/Basel-Landschaft/Landkreis Lörrach. *Phase II Monitoring-Bericht 2011*. Neuchâtel, Swiss Health Observatory.
- Beck K et al. (2011). *Steigern Schweizer Ärztenetze die Effizienz im Gesundheitswesen?* Luzern, CSS Institut für Empirische Gesundheitsökonomie (https://www.css.ch/downloadpdf.html?fileRef=%2Fcontent%2Fdam%2Fcss-institut%2Fde%2Fdocuments%2Fbericht_aerztenetze_in_der_schweiz_v4.pdf&mimeType=application/pdf&charset=utf-8, accessed 10 October 2015).
- Berchtold P, Peier C (2012). Ärztenetze in der Schweiz 2012: Eindrückliches Wachstum. *Care Management*, 5(3).
- Berchtold P, Peytremann-Bridevaux I (2011). Integrated care organizations in Switzerland. *International Journal of Integrated Care*, 11(special edn):e010.
- Berchtold P, Schmitz C, Maier J (2012). *Guidelines in Schweizer Ärztenetzen: Entwicklung und Bedeutung*. Neuchâtel, Schweizerisches Gesundheitsobservatorium (Obsan) (<http://opac.admin.ch/gw/toc/pdf/toc001670980.pdf>, accessed 10 October 2015).
- Berger S, Bienlein M, Wegmüller B (2010). Spitäler. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2010–2012: Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.
- Berger S et al. (2015). Spitäler. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017: Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.
- Berlin C et al. (2014). Avoidable hospitalizations in Switzerland: a small area analysis on regional variation, density of physicians, hospital supply and rurality. *BMC Health Services Research*, 14:289.
- Beyer K et al. (2009). Hypertension and intra-operative incidents: a multicentre study of 125 000 surgical procedures in Swiss hospitals. *Anaesthesia*, 64(5):494–502.
- Bieri O, Köchli H (2013). *Regionale Unterschiede bei der Belastung durch die obligatorischen Gesundheitsausgaben. Obsan Dossier 25*. Neuchâtel, Swiss Health Observatory (Obsan) (http://www.obsan.admin.ch/sites/default/files/publications/2015/obsan_dossier_25.pdf, accessed 22 October 2015).
- Bilger M (2008). Progressivity, horizontal inequality and reranking caused by health system financing: a decomposition analysis for Switzerland. *Journal of Health Economics*, 27(6):1582–1593.
- Bilger V et al. (2011). *Health Care for Undocumented Migrants in Switzerland. Policies – People – Practices*. Vienna, Federal Office Of Public Health, International Center For Migration Policy Development, Swiss Forum For Migration And Population Studies – University Of Neuchâtel (https://www2.unine.ch/files/content/sites/sfm/files/nouvelles%20publications/Booklet-Publikation_FINAL_03082011_A5.pdf, accessed 10 October 2015).
- Bischofberger I et al. (2014). *Betreuungszulagen und Entlastungsangebote für betreuende und pflegende Angehörige*. Bern, FOPH and BASS (http://www.bag.admin.ch/themen/gesundheitspolitik/14437/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCMdYJ2e2ym162epYbg2c_JjKbNoKSn6A-, accessed 10 October 2015).

- Björnberg A (2015). *Euro Health Consumer Index 2014 – Report*. Brussels, Health Consumer Powerhouse (http://www.healthpowerhouse.com/files/EHCI_2014/EHCI_2014_report.pdf, accessed 10 October 2015).
- Bolgiani I (2009). Which regulation for ambulatory medical care? *Health Policy Monitor*, 14 (<http://www.hpm.org/ch/a14/2.pdf>, accessed 10 October 2015).
- Bolgiani I, Crivelli L, Domenighetti G (2006). Le rôle de l'assurance maladie dans la régulation du système de santé en Suisse. *Revue française des Affaires sociales*, 2(2–3):239–262.
- Bridler R et al. (2013). In need of psychiatric help – leave a message after the beep. *Psychopathology*, 46(3):201–205.
- BSV/OFAS (1998). *Statistik über die Krankenversicherung 1996*. Bern, Federal Social Insurance Office (<http://www.bag.admin.ch/themen/krankenversicherung/01156/02446/index.html?lang=de&download=NHZLpZig7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCEfX95g2ymI62dpYbUzd,Gpd6emK2Oz9aGodetmqnA19XI2IdvoaCUZ,s,->, accessed 10 October 2015).
- BSV/OFAS (2001). *Wirkungsanalyse Krankenversicherungsgesetz: Synthesebericht*. Bern, Federal Social Insurance Office (http://www.bsv.admin.ch/dokumentation/medieninformationen/archiv/presse/2001/d/01121701_synthesebericht.pdf, accessed 10 October 2015).
- Burla L, Vilpert S, Widmer M (2014). *Monitoring des Personals der nicht ärztlichen Gesundheitsberufe – 1. Teil: Pflegepersonal*. Neuchâtel, Schweizerisches Gesundheitsobservatorium (Obsan) (http://www.gdk-cds.ch/fileadmin/docs/public/gdk/Dokumentation/Berichte/BT_OBSAN_Personalmonitoring-2013-final_2014.03.31.pdf, accessed 10 October 2015).
- Busato A et al. (2010). Supply sensitive services in Swiss ambulatory care: an analysis of basic health insurance records for 2003–2007. *BMC Health Services Research*, 10:315.
- Busato A et al. (2012). Geographic variation in the cost of ambulatory care in Switzerland. *Journal of Health Services Research & Policy*, 17(1):18–23.
- BWL/OFAE (2013). *Bericht zur wirtschaftlichen Landesversorgung 2009–2012*. Bern, Bundesamt für wirtschaftliche Landesversorgung/Office fédéral pour l'approvisionnement économique du pays (http://www.bwl.admin.ch/dokumentation/00532/01099/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCDdXx7fGymI62epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- Camenzind P (2012a). Explaining regional variations in health care utilization between Swiss cantons using panel econometric models. *BMC Health Services Research*, 12:62.
- Camenzind P (2012b). The Swiss Health Care System, 2012. In: Thomson S et al., eds. *International Profiles of Health Care Systems*. New York, The Commonwealth Fund.
- Camenzind P, Petrini L (2014). *Personen ab 55 Jahren im Gesundheitssystem: Schweiz und internationaler Vergleich 2014. Auswertung der Erhebung «The Commonwealth Fund's 2014 International Survey of Older Adults»*. Neuchâtel, Obsan (<http://www.obsan.admin.ch/bfs/obsan/fr/index/05/publikationsdatenbank.html?publicationID=5798>, accessed 10 October 2015).
- Caminada M et al. (2015). Tarife und Tarifverhandlungen. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017: Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.
- Canton Bern et al. (2013). *Die Patientenrechte im Überblick* (<http://www.aspr-svg.ch/ocm/ocmaddins/images/CustomerData/Die%20Patientenrechte%20im%20Überblick.pdf>, accessed 10 October 2015).

- Canton Ticino (2012). *Mortalità evitabile per cantone, 2004–2008 [Avoidable mortality per canton]*. Lugano, Canton Ticino (http://www4.ti.ch/fileadmin/DSS/DSP/UPVS/PDF/Indicatori/INDICATORI/1_Stato_di_salute/1_4_10_Mortalita-evitabile.pdf, accessed 10 October 2015).
- Canton Zurich (2011). *Zürcher Spitalplanung 2012: Strukturbericht – Das Wichtigste in Kürze*. Zurich, Canton Zurich, Department Of Health (http://www.gd.zh.ch/dam/gesundheitsdirektion/direktion/themen/behoerden/spitalplanung/strukturbericht/strukturbericht_september_2011/strukturbericht_sept_2011/zh_spitalplanung_2012_wichtigste_kuerze.pdf.spooler.download.1320158045845.pdf/zh_spitalplanung_2012_wichtigste_kuerze.pdf, accessed 10 October 2015).
- Canton Zurich (2014). *Spitalplanungs-Leistungsgruppen (SPLG) Akutsomatik* [online]. Zurich, Canton Zurich, Department Of Health (http://www.gd.zh.ch/internet/gesundheitsdirektion/de/themen/behoerden/spitalplanung_leistungsgruppen.html#a-content, accessed 10 October 2015).
- CAPP (2015). *Country Oral Health Profiles: WHO Regions*. Malmö, Oral Health Country/Area Profile Project (CAPP) (<http://www.mah.se/CAPP/Country-Oral-Health-Profiles/EURO>, accessed 10 October 2015).
- Chmielewski C et al. (2015). Appropriateness of diagnostic coronary angiography as a measure of cardiac ischemia testing in non-emergency patients – a retrospective cross-sectional analysis. *PLOS One*, 10(2).
- Christen A et al. (2013). *Gesundheitswesen Schweiz 2013: Der Spitalmarkt im Wandel*. Zurich, Credit Suisse Group AG (<https://www.credit-suisse.com/media/production/pb/docs/unternehmen/kmugrossunternehmen/gesundheitsstudie-de.pdf>, accessed 10 October 2015).
- Colombo F (2001). Towards more choice in social protection? Individual choice of insurer in basic mandatory health insurance in Switzerland. *Labour Market and Social Policy – Occasional Papers*, 53. Paris, Organisation for Economic Co-operation and Development.
- Common Institution (2014). *Geschäftsbericht 2013*. Solothurn, Gemeinsame Einrichtung KVG (<http://www.kvg.org/stream/de/download--0--0--0--495.pdf>, accessed 22 October 2015).
- Commonwealth Fund (2014). *International Survey Data Center*. New York, Commonwealth Fund (<http://www.commonwealthfund.org/interactives-and-data/international-survey-data>, accessed 10 October 2015).
- Crivelli L (2004). *Unbundling the reforms of the Health Insurance Act* [online]. Gütersloh, Bertelsmann Stiftung (http://hpm.org/en/Surveys/USI_-_Switzerland/03/Unbundling_the_reforms_of_the_Health_Insurance_Act.html, accessed 10 October 2015).
- Crivelli L, Filippini M, Mosca I (2006). Federalism and regional health care expenditures: an empirical analysis for the Swiss cantons. *Health Economics*, 15(5):535–541.
- Crivelli L, Salari P (2014). The inequity of the Swiss health care system financing from a federal state perspective. *International Journal for Equity in Health*, 13:17.
- CURAVIVA (2013). *Organisierte Suizidbeihilfe in Alters-, Pflege und Behinderteninstitutionen* (<http://www.curaviva.ch/Fachinformationen/Themendossiers/Beihilfe-zum-Suizid/opwygXZg/PQBbv/>, accessed 22 October 2015).
- De Pietro C, Crivelli L (2015). Swiss popular initiative for a single health insurer... once again! *Health Policy*, 119(7):851–855.
- Destatis (2013). *Gesundheit: Grunddaten Der Krankenhäuser*. Wiesbaden, Statistisches Bundesamt (https://www.destatis.de/DE/Publikationen/Thematisch/Gesundheit/Krankenhaeuser/GrunddatenKrankenhaeuser2120611127004.pdf?__blob=publicationFile, accessed 10 October 2015).

- Dettwiler S (2015). Militärversicherung. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017. Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.
- Dumont J-C, Lemaître G (2005). *Counting Immigrants and Expatriates in OECD Countries: A new perspective*. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd.org/migration/mig/33868740.pdf>, accessed 10 October 2015).
- Ecoplan (2013). *Umverteilungseffekte in der obligatorischen Krankenversicherung: Mikrosimulation für die Schweizer Bevölkerung auf Basis der SILC-Erhebung unter Berücksichtigung der kantonalen Strukturen*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/krankenversicherung/06392/06517/index.html?lang=de&download=NHZLpZig7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCLfX13g2ym162dpYbUzd.Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCUZ,s->, accessed 10 October 2015).
- EIU (2010). *The quality of death: Ranking end-of-life care across the world*. London, Economist Intelligence Unit (<http://graphics.eiu.com/upload/eb/qualityofdeath.pdf>, accessed 10 October 2015).
- Enthoven AC (1988). *Theory and Practice of Managed Competition in Health Care Finance*. Amsterdam, Elsevier Science.
- Eurostat (2014a). *Database by themes: broadband and connectivity households*. Luxembourg, European Commission.
- Eurostat (2014b). *Database by themes: population and social conditions: health*. Luxembourg, European Commission.
- Eurostat (2014c). *Database by themes: population and social conditions: health: health care: health expenditures*. Luxembourg, European Commission.
- Eurostat (2014d). *Database by themes: prices: harmonised indices of consumer prices*. Luxembourg, European Commission.
- Eurostat (2014e). *Tertiary educational attainment by sex, age group 30–34*. Luxembourg, European Commission.
- Eurostat (2015a). *Database by themes: population and social conditions: health*. Luxembourg, European Commission.
- Eurostat (2015b). *Unmet needs for health care*. Luxembourg, European Commission.
- FAMS (2013). *Kantone*. Abtwil, Föderation Alternativ Medizin Schweiz (<http://www.fams.ch/berufsbedingungen-in-der-ch/kantone>, accessed 23 October 2015).
- Farsi M, Filippini M (2008). Effects of ownership, subsidization and teaching activities on hospital costs in Switzerland. *Health Economics*, 17(3):335–350.
- FDFA/FDHA (2012). *Swiss Health Foreign Policy*. Bern, Federal Department of Foreign Affairs/Federal Department of Home Affairs (http://www.bag.admin.ch/themen/internationales/13102/index.html?lang=en&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIad1IZn4Z2qZpnO2Yuq2Z6gpJCKfH52g2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FDHA (2013). *The Federal Council's health-policy priorities*. Bern, Federal Department Of Home Affairs (http://www.bag.admin.ch/gesundheit2020/index.html?lang=en&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIad1IZn4Z2qZpnO2Yuq2Z6gpJCLdIF4gWym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- Federal Council (1991). *Botschaft über die Revision der Krankenversicherung*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/00305/13058/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCLdYJ6g2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).

- Federal Council (2005). *Botschaft zum Bundesgesetz über die Neuordnung der Pflegefinanzierung*. Bern, Federal Chancellery (<http://www.admin.ch/opc/de/federal-gazette/2005/2033.pdf>, accessed 10 October 2015).
- Federal Council (2009). *Bundesgesetz über Prävention und Gesundheitsförderung – Entwurf*. Bern, Swiss Confederation (<https://www.admin.ch/opc/de/federal-gazette/2009/7189.pdf>, accessed 10 October 2015).
- Federal Council (2011). *Strategie gegen Ärztemangel und zur Förderung der Hausarztmedizin*. Bern, Swiss Confederation (http://www.bag.admin.ch/themen/berufe/13932/13933/14201/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCKdnt,f2ymI62epYbg2c_JjKbNoKSn6A-, accessed 10 October 2015).
- Federal Council (2012a). *Messaggio concernente la legge federale sulla vigilanza sull'assicurazione sociale malattie [Message of the Federal Council on the Federal Law on the Supervision of MHI]*. Bern, Swiss Confederation (<http://www.admin.ch/opc/it/federal-gazette/2012/1623.pdf>, accessed 10 October 2015).
- Federal Council (2012b). *Strategie Nachhaltige Entwicklung 2012–2015*. Bern, Federal Council (http://www.are.admin.ch/themen/nachhaltig/00262/00528/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCEd3I9gGymI62epYbg2c_JjKbNoKSn6A-, accessed 10 October 2015).
- Federal Council (2014). *Erläuternder Bericht zum Bundesgesetz über das Zentrum für Qualität in der obligatorischen Krankenpflegeversicherung (Stärkung von Qualität und Wirtschaftlichkeit)*. Bern, Federal Council (https://www.admin.ch/ch/d/gg/pc/documents/2425/BG-Zentrum-fuer-Qualitaet_Erl.-Bericht_de.pdf, accessed 10 October 2015).
- Federal Council (2015). *Analysenliste*. Bern, Federal Council (http://www.bag.admin.ch/themen/krankenversicherung/00263/00264/04185/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCMdYR_e2ymI62epYbg2c_JjKbNoKSn6A-, accessed 10 October 2015).
- FEDRO (2005). *Via Sicura: Federal Action Programme for Greater Road Safety*. Bern, Federal Roads Office (http://www.bfu.ch/de/Documents/04_Forschung_und_Statistik/01_Forschung/Via%20Sicura%20für%20Links/2005_FEDRO_060116_schlussbericht_ViaSicura_en.pdf, accessed 10 October 2015).
- Ferroni B, Studer H-P (2010). Komplementärmedizin. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2010–2012*. Bern, Verlag Hans Huber.
- FINMA (2014). *Faktenblatt – Die FINMA und die Krankenzusatzversicherungen*. Bern, FINMA (<https://www.finma.ch/de/~media/finma/dokumente/dokumentencenter/myfinma/faktenblaetter/faktenblatt-krankenzusatzversicherung.pdf?la=de>, accessed 22 October 2015).
- Fischer W (2009). *Notfallvergütung im Krankenhaus: Patientenklassifikationssysteme und Notfallpauschalen bei DRG-basierter Vergütung von stationären Behandlungen*. Wolfertswil, Zentrum für Informatik und wirtschaftliche Medizin (ZIM) (<http://fischer-zim.ch/studien-pdf/Notfallverguetung-im-Krankenhaus-0910-ZIM.pdf>, accessed 10 October 2015).
- Fischer W (2014). *Diagnosis Related Groups (DRGs) und verwandte Patientenklassifikationssysteme: Kurzbeschreibungen und Beurteilung*. Wolfertswil, Zentrum für Informatik und wirtschaftliche Medizin (ZIM) (<http://fischer-zim.ch/studien/DRG-Systeme-0003-Info.htm>, accessed 10 October 2015).
- FMC (2014a). *Erhebung Ärztenetze in der Schweiz 2014* [online]. Neuägeri, Forum Managed Care ([http://fmc.ch/infothek/lexikon-integrierte-versorgung/lexikon-detailseite/?tx_lexikon_rubric\[rubric\]=10&tx_lexikon_rubric\[action\]=show&tx_lexikon_rubric\[controller\]=Rubric](http://fmc.ch/infothek/lexikon-integrierte-versorgung/lexikon-detailseite/?tx_lexikon_rubric[rubric]=10&tx_lexikon_rubric[action]=show&tx_lexikon_rubric[controller]=Rubric), accessed 10 October 2015).

- FMC (2014b). *Infothek: Lexikon integrierte Versorgung: HMO* [online]. Neuägeri, Forum Managed Care ([http://fmc.ch/infothek/lexikon-integrierte-versorgung/lexikon-detailseite/?tx_lexikon_rubric\[rubric\]=10&tx_lexikon_rubric\[action\]=show&tx_lexikon_rubric\[controller\]=Rubric](http://fmc.ch/infothek/lexikon-integrierte-versorgung/lexikon-detailseite/?tx_lexikon_rubric[rubric]=10&tx_lexikon_rubric[action]=show&tx_lexikon_rubric[controller]=Rubric), accessed 10 October 2015).
- FMH (2012). *Statistik 2012 der Fähigkeitsausweise der Komplementärmedizin*. Bern, FMH Swiss Medical Association (http://www.unioncomed.ch/app/download/5957513962/FMH_Statistik_+2012.pdf?t=1425913903, accessed 22 October 2015).
- FMH (2013a). *Aussergerichtliche FMH-Gutachterstelle: Jahresbericht 2013*. Bern, FMH Swiss Medical Association (http://www.fmh.ch/files/pdf15/SAEZ_27-28_Jahresbericht_Gutachterstelle_2013_D.pdf, accessed 10 October 2015).
- FMH (2013b). *Kantonale Ärztgesellschaften – regionale Stärke* [online]. Bern, FMH Swiss Medical Association (http://www.fmh.ch/ueber_fmh/aerzteorganisationen/kantonale_aerztgesellschaften.html, accessed 10 October 2015).
- FMH (2014). *Ärztstatistik 2013*. Bern, FMH Swiss Medical Association (<http://www.fmh.ch/services/statistik/aerztstatistik.html>, accessed 22 October 2015).
- FMH (2015). *Ärztstatistik 2014*. Bern, FMH Swiss Medical Association. (<http://www.fmh.ch/services/statistik/aerztstatistik.html>, accessed 22 October 2015).
- FOJ (2012). *Revision des Vormundschaftsrechts*. Bern, Federal Office of Justice (<https://www.bj.admin.ch/bj/de/home/gesellschaft/gesetzgebung/archiv/vormundschaft.html>, accessed 27 October 2015).
- FOPH (2005). *Leitbild für eine multisektorale Gesundheitspolitik*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/gesundheitspolitik/00403/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCGdYR9g2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FOPH (2007a). *Prävention und Gesundheitsförderung in der Schweiz*. Bern, Federal Office Of Public Health (http://www.bag.admin.ch/themen/gesundheitspolitik/07492/07495/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCGeIR6fWym162epYbg2c_JjKbNoKSn6A--, accessed 22 October 2015).
- FOPH (2007b). *Strategie "eHealth" Schweiz*. Bern, Federal Office Of Public Health (http://www.e-health-suisse.ch/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCDdHt5f2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FOPH (2008a). *Antragsprozess neue Leistungen, Produkte, Analysen*. Bern, Federal Office Of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/00263/00264/04853/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCGfYN5fWym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FOPH (2008b). *Medizinische Behandlung im Ausland (letter to KVG insurers)*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/00316/03846/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCGfXt,2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FOPH (2009). *Qualitätsstrategie des Bundes im Schweizerischen Gesundheitswesen*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/14791/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2Yuq2Z6gpJCHfYJ8f2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).

- FOPH (2011a). *Operationalisierung der Begriffe Wirksamkeit, Zweckmässigkeit und Wirtschaftlichkeit*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/00263/00264/04853/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6ln1acy4Zn4Z2qZpnO2YUq2Z6gpJCKdXt9g2ym162epYbg2c_JjKbNoKSsn6A--, accessed 10 October 2015).
- FOPH (2011b). *Rapport au Conseil fédéral sur la concrétisation de la stratégie fédérale en matière de qualité dans le système de santé*. Bern, Federal Office of Public Health (http://swiss-q.admin.ch/pdf/rapport_sur_la_concretisation_de_la_strategie_qualite_2011.pdf, accessed 10 October 2015).
- FOPH (2012a). *Allgemeine Informationen zum Krankenversicherungsgesetz (KVG)*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/00305/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6ln1acy4Zn4Z2qZpnO2YUq2Z6gpJCKdXt9g2ym162epYbg2c_JjKbNoKSsn6A--, accessed 10 October 2015).
- FOPH (2012b). *Kennzahlen der Schweizer Spitäler 2010*. Bern, Federal Office of Public Health (http://www.bag-anw.admin.ch/kuv/spitalstatistik/data/download/kzpl10_publication.pdf?version=1439213904&webgrab=ignore, accessed 10 October 2015).
- FOPH (2012c). *Masterplan «Hausarztmedizin und medizinische Grundversorgung»*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/berufe/13932/13933/14198/index.html?lang=de>, accessed 27 October 2015).
- FOPH (2012d). *Nationale Strategie zur Masernelimination 2011–2015*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/medizin/00682/00684/01087/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6ln1acy4Zn4Z2qZpnO2YUq2Z6gpJCKeYR,fWym162epYbg2c_JjKbNoKSsn6A--, accessed 23 October 2015).
- FOPH (2012e). *Nationales Programm Tabak 2008–2016*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/shop/00031/00083/index.html?lang=de>, accessed 10 October 2015).
- FOPH (2013a). *Arzneimittelliste mit Tarif (ALT)*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/06492/06493/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6ln1acy4Zn4Z2qZpnO2YUq2Z6gpJCHdIR7gWym162epYbg2c_JjKbNoKSsn6A--, accessed 23 October 2015).
- FOPH (2013b). *Eine umfassende Strategie für das Gesundheitswesen*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/gesundheit2020/index.html?lang=de>, accessed 27 October 2013).
- FOPH (2013c). *FAQ zur Kostenbeteiligung*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/krankenversicherung/04114/04285/?lang=de>, accessed 22 October 2015).
- FOPH (2013d). *Fünf Methoden der Komplementärmedizin werden unter bestimmten Bedingungen während sechs Jahren provisorisch vergütet*. Bern, Federal Office of Public Health (<https://www.news.admin.ch/message/?lang=de&msg-id=37173>, accessed 10 October 2015).
- FOPH (2013e). *Impfungen*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/medizin/00682/00685/index.html?lang=de>, accessed 22 October 2015).
- FOPH (2013f). *Medizinalberufe*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/berufe/13932/index.html?lang=de>, accessed 10 October 2015).
- FOPH (2013g). *Meldesysteme*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/k_m_meldesystem/, accessed 22 October 2015).

- FOPH (2013h). *Nationales Programm Migration und Gesundheit – Bilanz 2008–13 und Schwerpunkte 2014–17*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/gesundheitspolitik/07685/index.html?lang=de&download=NHzLpZeg7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCLdn53g2ym162epYbg2c_JjKbNoKSn6A--, accessed 22 October 2015).
- FOPH (2013i). *Revision Epidemiengesetz*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/medizin/03030/03209/03210/index.html?lang=de>, accessed 29 October 2015).
- FOPH (2013j). *Spezialitätenliste (SL)*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/krankenversicherung/00263/00264/00265/index.html?lang=de>, accessed 10 October 2015).
- FOPH (2013k). *Verhütung von Berufsunfällen und Berufskrankheiten (Arbeitssicherheit)*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/versicherung/00338/00340/?lang=de>, accessed 10 October 2015).
- FOPH (2014a). *Coverage with Evidence Development (CED): CED-Checklist for Medical Interventions*. Bern, Federal Office of Public Health. (http://www.bag.admin.ch/themen/krankenversicherung/00263/00264/04853/index.html?lang=de&download=NHzLpZeg7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCMdIB7gWym162epYbg2c_JjKbNoKSn6A--, accessed 27 October 2015).
- FOPH (2014b). *Erläuternder Bericht über die Änderung des Bundesgesetzes über die Krankenversicherung (Anpassung von Bestimmungen mit internationalem Bezug)*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/00305/14968/index.html?lang=de&download=NHzLpZeg7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCMdIB6e2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FOPH (2014c). *Erläuternder Bericht: Teilrevision des Bundesgesetzes vom 18. März 1994 über die Krankenversicherung (KVG): Steuerung des ambulanten Bereichs*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/00305/14851/index.html?lang=de&download=NHzLpZeg7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCLfXx9f2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FOPH (2014d). *Faktenblatt „Aktionsplan zur Unterstützung von betreuenden und pflegenden Angehörigen“*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/gesundheits2020/14638/14639/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCLe3l7f2ym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCUZ,->, accessed 10 October 2015).
- FOPH (2014e). *Faktenblatt „Einheitliche Finanzierung stationäre und ambulante Leistungen (Mitfinanzierung der Kantone)“*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/gesundheits2020/14638/14672/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCLe4F7f2ym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCUZ,->, accessed 23 March 2015).
- FOPH (2014f). *Faktenblatt „Erhöhung der Abschlusszahlen in Humanmedizin“*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/gesundheits2020/14638/14671/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCLe4F3f2ym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCUZ,->, accessed 10 October 2015).

- FOPH (2014g). *Faktenblatt „HTA-Programm/HTA-Strategie und Zulassungsverfahren“*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/gesundheit2020/14638/14671/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yyq2Z6gpJCLe4B,e2ym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCUZ,s->, accessed 10 October 2015).
- FOPH (2014h). *Qualitätsindikatoren der Schweizer Akutspitäler 2012*. Bern, Federal Office of Public Health (<http://opendata.admin.ch/dataset/qualitaetsindikatoren-der-schweizer-akutspitaeler-2012>, accessed 10 October 2015).
- FOPH (2014i). *Richtlinien zur Durchführung der eidgenössischen Prüfung Chiropraktik für das Jahr 2014* (http://www.bag.admin.ch/themen/berufe/07918/07921/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yyq2Z6gpJCKe35_g2ym162epYbg2c_JjKbNoKSn6A--, accessed 23 October 2015).
- FOPH (2014j). *Statistikbericht Humanmedizin 2013*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/berufe/13930/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yyq2Z6gpJCMd392fWym162epYbg2c_JjKbNoKSn6A--, accessed 23 October 2015).
- FOPH (2014k). *Statistiken zur Krankenversicherung – Statistik der obligatorischen Krankenversicherung 2013*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/01156/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yyq2Z6gpJCMdHx_fWym162epYbg2c_JjKbNoKSn6A--, accessed 23 October 2015).
- FOPH (2014l). *Verordnung über die Anpassung von Tarifstrukturen in der Krankenversicherung: Inhalt und Kommentar*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/06492/06494/14853/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yyq2Z6gpJCLfXx_f2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2014).
- FOPH (2014m). *Wechsel in der obligatorischen Krankenpflegeversicherung*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/04114/04125/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yyq2Z6gpJCMdH96g2ym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FOPH (2015a). *Ein Netzwerk für mehr Qualität in der Gesundheitsversorgung*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/krankenversicherung/14791/14792/index.html?lang=de>, accessed 10 October 2015).
- FOPH (2015b). *Faktenblatt „Erstellen des Berichts zum Thema «Zukunft der Psychiatrie in der Schweiz» in Erfüllung des Postulats Stähelin (10.3255)“*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/gesundheit2020/14638/14639/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yyq2Z6gpJCLe4B2g2ym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCUZ,s->, accessed 10 October 2015).
- FOPH (2015c). *Faktenblatt: Nationale Qualitätsprogramme*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/14791/14792/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yyq2Z6gpJCMdH8g2ym162epYbg2c_JjKbNoKSn6A--, accessed 23 October 2015).
- FOPH (2015d). *Faktenblatt „Strategie zur Langzeitpflege“*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/gesundheit2020/14638/14639/index.html?lang=de&download=NHzLpZig7t,Inp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2Yyq2Z6gpJCLe317gWym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCUZ,s->, accessed 10 October 2015).

- FOPH (2015e). *Health Professionals*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/berufe/index.html?lang=en>, accessed 15 January 2015).
- FOPH (2015f). *Kennzahlen der Schweizer Spitäler 2013*. Bern, Federal Office of Public Health (http://www.bag-anw.admin.ch/kuv/spitalstatistik/data/download/kzpl3_publikation.pdf?version=1439213909&webgrab=ignore, accessed 22 October 2015).
- FOPH (2015g). *Patientenrechte und Patientenpartizipation in der Schweiz*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/gesundheitspolitik/15437/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2YUq2Z6gpJCMelN6gWymI62epYbg2c_JjKbNoKSn6A--, accessed 23 October 2015).
- FOPH (2015h). *Psychische Gesundheit in der Schweiz: Bestandsaufnahme und Handlungsfelder*. Bern, Federal Office of Public Health (http://www.gdk-cds.ch/fileadmin/docs/public/gdk/themen/praevention_gesundheitsfoerderung/psychische_gesundheit/bt_dialog_ngp_psych_gesundheit_20150520_d.pdf, accessed 23 September 2015).
- FOPH (2015i). *Steuerung des ambulanten Bereichs (Botschaft zur Änderung des Bundesgesetzes über die Krankenversicherung)*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/krankenversicherung/00305/14851/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2YUq2Z6gpJCMdoF9f2ymI62epYbg2c_JjKbNoKSn6, accessed 29 October 2015).
- FOPH (2015j). *The FOPH* [online]. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/org/index.html?lang=en>, accessed 10 October 2015).
- FOPH/GDK (2010a). *Nationale Leitlinien Palliative Care*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/gesundheitspolitik/13764/13768/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2YUq2Z6gpJCMdnt7gWymI62epYbg2c_JjKbNoKSn6A--, accessed 22 October 2015).
- FOPH/GDK (2010b). *Nationale Strategie Palliative Care 2010–2012*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/gesundheitspolitik/13764/13769/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2YUq2Z6gpJCHfYF7f2ymI62epYbg2c_JjKbNoKSn6A--, accessed 22 October 2015).
- FOPH/GDK (2013a). *Nationale Strategie Palliative Care 2013–2015*. Bern, Federal Office of Public Health (http://www.bag.admin.ch/themen/gesundheitspolitik/13764/13769/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2YUq2Z6gpJCKfX16e2ymI62epYbg2c_JjKbNoKSn6A--, accessed 22 October 2015).
- FOPH/GDK (2013b). *Stand und Umsetzung von Palliative Care in den Kantonen 2013*. Bern, Federal Office of Public Health.
- FOPH/GDK/CDS (2013). *Nationale Strategie gegen Krebs 2014–2017*. Bern, Federal Office of Public Health, Cantonal Directors Of Health (GDK/CDS) (http://www.bag.admin.ch/themen/gesundheitspolitik/14296/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2YUq2Z6gpJCLeHx8f2ymI62epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FOPH/GDK/CDS (2014). *Nationale Demenzstrategie 2014–2017*. Bern, Federal Office of Public Health, Cantonal Directors Of Health (GDK/CDS) (http://www.bag.admin.ch/themen/gesundheitspolitik/13916/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042l2Z6lnlacy4Zn4Z2qZpnO2YUq2Z6gpJCMdYn3fWymI62epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- FSO (2006). *Krankenhaustypologie Version 5.2*. Neuchâtel, Federal Statistical Office (http://www.bfs.admin.ch/bfs/portal/de/index/infothek/erhebungen__quellen/blank/blank/kh/02.Document.86653.pdf, accessed 22 October 2015).

- FSO (2010). *Krankenhausstatistik – Detailkonzept*. Neuchâtel, Federal Statistical Office (http://www.bfs.admin.ch/bfs/portal/de/index/infothek/erhebungen__quellen/blank/blank/kh/02.Document.140897.pdf, accessed 22 October 2015).
- FSO (2012). *Internet in den Schweizer Haushalten – Ergebnisse der Erhebung Omnibus IKT 2010*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/16/22/publ.Document.155228.pdf>, accessed 22 October 2015).
- FSO (2013a). *Bestand und Dichte der Ärzte, Zahnärzte und Apotheken nach Kanton 2011*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/14/03/03/key/01.Document.21521.xls>, accessed 23 October 2015).
- FSO (2013b). *Medizinische Statistik der Krankenhäuser 2011 – Standardtabellen: Definitive Resultate*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.Document.167675.pdf>, accessed 22 October 2015).
- FSO (2013c). *Schweizerische Gesundheitsbefragung 2012*. Neuchâtel, Federal Statistical Office (<http://www.portal-stat.admin.ch/sgb2012/files/de/00.xml>, accessed 10 October 2015).
- FSO (2013d). *Schweizerische Gesundheitsbefragung 2012: Arztbesuche (12 Monate): Insgesamt*. Neuchâtel, Federal Statistical Office (<http://www.portal-stat.admin.ch/sgb2012/files/de/02f1.xml>, accessed 23 October 2015).
- FSO (2013de). *Spitallandschaft Schweiz 2011*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.Document.171318.pdf>, accessed 10 October 2015).
- FSO (2013f). *Statistiken der ambulanten Gesundheitsversorgung (MARS)* [online]. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/news/00/06.html>, accessed 10 October 2015).
- FSO (2013g). *Statistik der sozialmedizinischen Institutionen 2011 – Standardtabellen: Definitive Resultate*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.Document.167681.pdf>, accessed 23 October 2015).
- FSO (2014a). *Ärzte, Zahnärzte und Apotheken, Entwicklung des Bestande*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/14/22/lexi.Document.21519.xls>, accessed 10 October 2015).
- FSO (2014b). *Einkommen und Ausgaben der Privathaushalte in der Schweiz*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/news/medienmitteilungen.Document.187010.pdf>, accessed 10 October 2015).
- FSO (2014c). *Gesundheitsstatistik 2014*. Gesundheit, 14. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.Document.193423.pdf>, accessed 23 October 2015).
- FSO (2014d). *Haushalte und Bevölkerung – Internetzugang der Haushalte*. Neuchâtel, Federal Statistical Office (http://www.bfs.admin.ch/bfs/portal/de/index/themen/16/04/key/approche_globale.indicator.30109.301.html, accessed 10 October 2015).
- FSO (2014e). *Kosten, Finanzierung – Daten, Indikatoren*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/14/05/blank/key/leistungserbringer.html>, accessed 10 October 2015).
- FSO (2014f). *Kosten und Finanzierung des Gesundheitswesens. Detaillierte Ergebnisse 2012*. Neuchâtel, Federal Statistical Office (http://www.bfs.admin.ch/bfs/portal/de/index/themen/14/01/new/nip_detail.html?gnpID=2014-368, accessed 10 October 2015).
- FSO (2014g). *Medienmitteilung: Zunahme der Beschäftigung im tertiären Sektor verlangsamt sich*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/03/22/press.Document.183199.pdf>, accessed 14 October 2014).

- FSO (2014h). *Nettofinanzbedarf der Kantone und der Gemeinden im Gesundheitswesen 2012 – Total*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/infothek/lexikon/lex/0.Document.21549.xls>, accessed 10 October 2015).
- FSO (2014i). *Ständige Wohnbevölkerung nach Alter, Kanton, Bezirk und Gemeinde, am 31.12.2012*. Neuchâtel, Federal Statistical Office.
- FSO (2014j). *Ständige und nichtständige Wohnbevölkerung nach Kanton, Geschlecht, Zivilstand und Alter*. Neuchâtel, Federal Statistical Office (https://www.pxweb.bfs.admin.ch/Selection.aspx?px_language=de&px_db=px-x-0102010000_102&px_tableid=px-x-0102010000_102\px-x-0102010000_102.px&px_type=PX, accessed 28 October 2015).
- FSO (2014k). *Statistik der sozialmedizinischen Institutionen 2012 – Standardtabellen: Definitive Resultate*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.Document.176957.pdf>, accessed 23 October 2015).
- FSO (2014l). *Statistisches Lexikon der Schweiz: 14.4.3: sozialmedizinische Institutionen*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/infothek/lexikon/lex/0.topic.1.html>, accessed 23 October 2015).
- FSO (2014m). *Sterbeziffern für 30 wichtige Todesursachen nach Geschlecht 1995 bis 2012*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/14/02/04/key/01.Document.103006.xls>, accessed 23 October).
- FSO (2014n). *T7.8 Spitex Versorgungsdichte 2012*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/infothek/lexikon/lex/0.Document.77720.xls>, accessed 10 October 2015).
- FSO (2014o). *T14.3.4.2 Langzeitpflege nach Leistungserbringertyp*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/infothek/lexikon/lex/0.Document.165369.xls>, accessed 23 October).
- FSO (2014p). *T 14.4.2.2 Leistungen und Inanspruchnahme: Krankenhäuser: Diagnose und Behandlungen*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/infothek/lexikon/lex/0.topic.1.html>, accessed 23 October 2015).
- FSO (2014q). *T 14.2.2.2 Bestand und Dichte der Ärzte, Zahnärzte und Apotheken nach Kanton*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/14/03/03/key/01.Document.21521.xls>, accessed 23 October 2015).
- FSO (2014r). *T 14.2.5.14 Assistierter Suizid nach Geschlecht und Alter*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/infothek/lexikon/lex/0.Document.170407.xls>, accessed 23 October 2015).
- FSO (2014s). *T 14.3.2.1 Krankenhäuser*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/infothek/lexikon/lex/0.Document.21531.xls>, accessed 23 October).
- FSO (2015a). *Abbreviations for names of cantons*. Neuchâtel, Federal Statistical Office (http://www.bfs.admin.ch/bfs/portal/en/index/dienstleistungen/premiere_visite/03/03_02.html, accessed 29 October 2015).
- FSO (2015b). *Gross monthly wage by economic branch – private and public sectors combined – Switzerland*. Neuchâtel, Federal Statistical Office (http://www.bfs.admin.ch/bfs/portal/en/index/themen/03/04/blank/data/01/06_01.Document.165042.xls, accessed 10 October 2015).
- FSO (2015c). *Bildungsstand der Wohnbevölkerung nach Alter und Geschlecht, 2014*. Neuchâtel, Federal Statistical Office (http://www.bfs.admin.ch/bfs/portal/de/index/themen/20/05/blank/key/gleichstellung_und/bildungsstand.Document.21677.xls, accessed 23 October).

- FSO (2015d). *Sprachen, Religionen – Daten, Indikatoren*. Neuchâtel, Federal Statistical Office (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/05.html>, accessed 10 October 2015).
- FSO/SHIS (2014). *Online database: Studierende und Abschlüsse der Hochschulen*. Neuchâtel, Federal Statistical Office, Schweizerisches Hochschulinformationssystem (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/15/06/data/blank/01.html>, accessed 15 January 2015).
- Gay J et al. (2011). *Mortality Amenable to Health Care in 31 OECD Countries: Estimates and Methodological Issues*. OECD iLibrary. Paris, Organisation for Economic Co-operation and Development (http://www.oecd-ilibrary.org/social-issues-migration-health/mortality-amenable-to-health-care-in-31-oecd-countries_5kgj35f9f8s2-en, accessed 10 October 2015).
- GBD (2015). *GBD compare*. Washington, DC, Institute for Health Metrics and Evaluation, University Of Washington (<http://vizhub.healthdata.org/gbd-compare>, accessed 16 September 2015).
- GDK/CDS (2008). *Leitfaden zur Psychiatrieplanung*. Bern, Schweizerische Konferenz der kantonalen Gesundheitsdirektorinnen und -direktoren (http://www.gdk-cds.ch/fileadmin/docs/public/gdk/themen/psychiatrieplanung/bt_leitfaden_psychiatrieplanung_d.pdf, accessed 23 October 2015).
- GDK/CDS (2009a). *Empfehlungen der GDK zur Spitalplanung*. Bern, Schweizerische Konferenz der kantonalen Gesundheitsdirektorinnen und -direktoren (http://www.gdk-cds.ch/fileadmin/pdf/aktuelles/empfehlungen/em_spitalplanung_20090514-d.pdf, accessed 23 October 2015).
- GDK/CDS (2009b). *Nationaler Versorgungsbericht für die Gesundheitsberufe 2009*. Bern, GDK/CDS and OdASanté (http://www.gdk-cds.ch/fileadmin/pdf/Aktuelles/Medienmitteilungen/Versorgungsbericht_Deutsch_20091201_def.pdf, accessed 10 October 2015).
- GDK/CDS (2011a). *Empfehlung des GDK-Vorstandes vom 27.1.2011: Spitalplanungs – Leistungsgruppen (SPLG) Akutomatik*. Bern, GDK/CDS (<http://www.gdk-cds.ch/?id=623>, accessed 10 October 2015).
- GDK/CDS (2011b). *Pflegefinanzierung; Kalibrierung BESA/RAI–RUG*. Bern, Schweizerische Konferenz der kantonalen Gesundheitsdirektorinnen und –direktoren (http://www.gdk-cds.ch/fileadmin/docs/public/gdk/Aktuelles/Empfehl/DC_Anpassungen_BESA_RAI_20110825_d.pdf, accessed 10 October 2015).
- GDK/CDS (2014a). *Koordination und Konzentration der hochspezialisierten Medizin*. Bern, GDK/CDS (<http://www.gdk-cds.ch/index.php?id=822>, accessed 10 October 2015).
- GDK/CDS (2014b). *Spitalfinanzierung*. Bern, Swiss Conference of Cantonal Health Ministers (GDK/CDS) (http://www.gdk-cds.ch/fileadmin/docs/public/gdk/Themen/Tarife/Spitalfinanzierung/TB_Zusammenstellung_Kostenteiler.pdf, accessed 10 October 2015).
- GDK/CDS (2015a). *Entscheide des Bundesgerichts und des Bundesverwaltungsgerichts zu Spitalplanung und Spitallisten*. Bern, GDK/CDS (<http://www.gdk-cds.ch/index.php?id=972>, accessed 10 October 2015).
- GDK/CDS (2015b). *Übersicht kantonale Spitallisten und Spitaltarife*. Bern, GDK/CDS (http://www.gdk-cds.ch/fileadmin/docs/public/gdk/themen/spitalplanung/gdk-uebersicht_spitallisten_spitaltarife.pdf, accessed 10 October 2015).
- Gesundheitsförderung Schweiz (2015). *Gesundheitsförderung Schweiz: Wirtschaft: Produkte und Dienstleistungen* [online]. Bern and Lausanne, Gesundheitsförderung Schweiz (<http://gesundheitsfoerderung.ch/wirtschaft/produkte-und-dienstleistungen.html>, accessed 23 October 2015).

- GFA (2010). *Leitfaden für die Gesundheitsfolgenabschätzung in der Schweiz*. Schweizerische Plattform für Gesundheitsfolgenabschätzung (GFA). Basel, Gesundheitsförderung Schweiz (http://www.impactsante.ch/pdf/Leitfaden%20_GFA_2010.pdf, accessed 10 October 2015).
- Gmür R, Rüfenacht M (2010). *Spitex*. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2010–2012*. Bern, Verlag Hans Huber.
- Guessous I et al. (2014). Forgoing dental care for economic reasons in Switzerland: a six-year cross-sectional population-based study. *BMC Oral Health*, 14:121.
- Guggenbühl L, Ettlin R, Ruflin R (2012). *Zukunft Psychiatrie: Kantonale Psychiatriekonzepte und ihre Umsetzung*. Bern, Bundesamt für Gesundheit (http://www.bag.admin.ch/themen/gesundheitspolitik/14149/14150/14168/index.html?lang=de&download=NHZLpZeg7t,Inp6I0NTU042I2Z6lnIacy4Zn4Z2qZpnO2YUq2Z6gpJCLe4R5fWym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- Gurtner F (2008). *Der neue Prozess der Antragsstellung und Beurteilung im Überblick* [online]. Bern, Federal Office of Public Health (<http://www.slideserve.com/erling/der-neue-prozess-der-antragsstellung-und-beurteilung-im-berblick>, accessed 10 October 2014).
- H+ (2014). *Faktenblatt: Ambulante Leistungen in Spitälern und Kliniken*. Bern, H+ The Swiss Hospitals (http://www.hplus.ch/fileadmin/user_upload/Medien/Medienkonferenzen/JMK_2014/Faktenblatt_D.pdf, accessed 10 October 2015).
- Hämmig O, Bauer GF (2013). The social gradient in work and health: a cross-sectional study exploring the relationship between working conditions and health inequalities. *BMC Public Health*, 13:1170.
- Hänggeli C, Bauer W (2010). Ärztliche Fortbildung – Eine neue Ära hat begonnen. *Schweizerische Ärztezeitung*, 91(50):1981–1984.
- Hänggeli C et al. (2010). Freipraktizierende Ärztinnen und Ärzte. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2010–2012*. Bern, Verlag Hans Huber.
- Hostettler S, Kraft E (2014). Neuste Zahlen und Übersicht zur Ärztestatistik 2013. *Schweizerische Ärztezeitung* 95(12):467–473.
- Imbach S (2008). *Rettungswesen Schweiz – Organisation, Rechtliche Grundlagen, Public Private Partnership*. Basel, Der Beauftragte des Bundesrates für den Koordinierten Sanitätsdienst (KSD) (<http://www.lba.admin.ch/internet/lba/de/home/themen/sanit/Organisation/koordinierter0/brosch.parsys.74212.downloadList.46161.DownloadFile.tmp/rettungswesenschweizweiteauflageaktualisierung1.1.08.pdf>, accessed 10 October 2015).
- Indra P, Januth R, Cueni S (2015). Krankenversicherung. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017: Eine aktuelle Übersicht*. Bern, Hans Huber Verlag.
- Interpharma (2014). *Swiss Healthcare and Pharmaceutical Market*. Basel, Interpharma – Verband der forschenden pharmazeutischen Firmen der Schweiz (http://www.interpharma.ch/sites/default/files/rz_iph.01.13.022_inhalt_e_2014.pdf, accessed 10 October 2015).
- IVR (2004). *Richtlinien zur Anerkennung von Rettungsdiensten*. Aarau, Interverband für Rettungswesen (<http://www.ivr.ch/cms/upload/imgfile199.pdf>, accessed 10 October 2015).
- Jaccard Ruedin H, Widmer M (2010). Ausländisches Gesundheitspersonal in der Schweiz. *Obsan Bericht*, 39. Neuchâtel, Schweizerisches Gesundheitsobservatorium (Obsan) (http://www.obsan.admin.ch/sites/default/files/publications/2015/obsan_bericht_39.pdf, accessed 10 October 2015).
- Jaccard Ruedin H et al. (2009). *Personnel de santé en Suisse – Etat des lieux et perspectives jusqu'en 2020*. Neuchâtel, Observatoire Suisse De La Santé (Obsan) (<http://www.obsan.admin.ch/fr/publications/personnel-de-sante-en-suisse-etat-des-lieux-et-perspectives-jusqu'en-2020-0>, accessed 10 October 2014).

- Joossens L, Raw M (2014). *The Tobacco Control Scale 2013 in Europe*. Brussels, Association Of European Cancer Leagues (http://www.europeancancerleagues.org/images/TobaccoControl/TCS_2013_in_Europe_13-03-14_final_1.pdf, accessed 10 October 2015).
- Joumard I, André C, Nicq C (2010). *Health Care Systems: Efficiency and Institutions (Working Paper No. 769)*. OECD iLibrary. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd-ilibrary.org/docserver/download/5kmfp51f5f9t.pdf?expires=1445603178&id=id&accname=guest&checksum=5CA2E209000F20A05136AA121EB4F5E2>, accessed 10 October 2015).
- Kägi W et al. (2012). *Monitoring 2010: Wirksamkeit der Prämienvverbilligung*. Bern, Federal Office of Public Health (<http://www.bag.admin.ch/themen/krankenversicherung/06368/13302/index.html?lang=de&download=NHZLpZig7t,lnp6I0NTU04212Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCKen58fWym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCVZ,s->, accessed 26 October 2015).
- KAV (2013). *Kantonsapotheker* [online]. Kantonsapothekervereinigung (<http://www.kantonsapotheker.ch>, accessed 10 October 2015).
- Kein-Tabu (2013). *Kein Tabu*. Zurich, Werner Alfred Selo Stiftung (<http://kein-tabu.ch>, accessed 23 October 2015).
- Kelley E, Jurst J (2006). *Health Care Quality Indicators Project Conceptual Framework Paper*. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd.org/els/health-systems/36262363.pdf>, accessed 10 October 2015).
- KHZ (2003). *Notfall-Definition*. Zürich, Kantonale Heilmittelkontrolle Zürich (http://www.heilmittelkontrolle.zh.ch/dam/gesundheitsdirektion/khz/ueber_uns/rechtliche%20Grundlagen/notfall_definition.pdf.spooler.download.1301666124349.pdf/notfall_definition.pdf, accessed 23 October 2015).
- Kocher G (2010). Medizintechnik. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2010–2012*. Bern, Verlag Hans Huber.
- Koehlin F et al. (2014). *Comparing Hospital and Health Prices and Volumes Internationally*. OECD iLibrary. Paris, Organisation for Economic Co-operation and Development (<http://dx.doi.org/10.1787/5jxznwrj32mp-en>, accessed 10 October 2015).
- Kraft E, Hostettler S (2013). 31 858 Ärztinnen und Ärzte garantieren die ärztliche Versorgung. *Schweizerische Ärztezeitung*, 94(12):453–457.
- Kraft E, Laffranchi R (2012). Einkommen der frei praktizierenden Ärzteschaft: Validierung der Resultate. *Schweizerische Ärztezeitung*, 93:1376–1379.
- Künzi K, Strub S, Stocker D (2011). Erhebung der Einkommensverhältnisse der berufstätigen Ärzteschaft. *Schweizerische Ärztezeitung*, 92:1361–1366.
- Lafortune G, Balestat G, Duran A (2012). *Comparing activities and performance of the hospital sector in Europe: how many surgical procedures performed as inpatient and day cases?* Paris, Organisation for Economic Co-operation and Development (http://www.oecd.org/health/Comparing-activities-and-performance-of-the-hospital-sector-in-Europe_Inpatient-and-day-cases-surgical-procedures.pdf, accessed 10 October 2015).
- Lang P et al. (2011). The Swiss National Vaccination Coverage Survey, 2005–2007. *Public Health Reports*, 126(Suppl 2):97–108.
- Langenegger M, Schneider T (2012). Qualitätsindikatoren der Schweizer Akutspitäler. *Soziale Sicherheit CHSS*, 5:313–314 (<http://www.bag.admin.ch/index.html?lang=de&download=NHZLpZig7t,lnp6I0NTU04212Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCLdHx6fWym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCUZ,s->, accessed 23 October 2015).

- Leimgruber M (2013). *Geschichte der Sozialen Sicherheit in der Schweiz: Krankheit* [online]. Bern, Bundesamt für Sozialversicherungen (<http://www.geschichtedersozialensicherheit.ch/risikogeschichte/krankheit>, accessed 10 October 2015).
- Lobsiger M et al. (2014). Auswirkungen von SwissDRG auf die ambulante Versorgung. *Schweizerische Ärztezeitung*, 95(39):1443–1444.
- Longchamp C et al. (2013). *Gesundheitsmonitor 2013: Trend zu mehr Eigenverantwortung und weniger Solidarität*. Basel, Interpharma.
- Longchamp C et al. (2014). *Das Wichtigste in Kürze zum Gesundheitsmonitor 2014 – Hohe Zufriedenheit und Hoffnung auf Stabilisierung der Gesundheitskosten*. Basel, Interpharma.
- Marthaler T (2005). Overview of salt fluoridation in Switzerland since 1955, a short history. *Schweizer Monatsschrift für Zahnmedizin*, 115(8):651–655.
- Marty F (2004). Ärztlicher Notfalldienst – ein verkannter Dienst der Notfallversorgung im Gesundheitswesen? *Primary Care*, 4(50):1042–1046.
- Mattig T (2013). *Das gescheiterte Präventionsgesetz: ein Lehrstück*. Bern, Gesundheitsförderung Schweiz (http://gesundheitsfoerderung.ch/assets/public/documents/1_de/ueber-uns/5-downloads/Arbeitspapier_009_GFCH_2013-10_-_Praeventionsgesetz.pdf, accessed 10 October 2015).
- Meyer, K (2009). *Gesundheit in der Schweiz – Nationaler Gesundheitsbericht 2008*. Bern, Verlag Hans Huber (http://www.obsan.admin.ch/sites/default/files/publications/2015/gb_d_drucksperr.pdf, accessed 23 October 2015).
- Minder A, Schoenholzer H, Amiet M (2000). *Health Care Systems in Transition (HiT): Switzerland*. Copenhagen, WHO Regional Office For Europe (<http://www.euro.who.int/en/about-us/partners/observatory/publications/health-system-reviews-hits/full-list-of-country-hits/switzerland-hit-2000>, accessed 10 October 2015).
- Mösle H (2010). Pflegeheime und Pflegeabteilungen. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2010–2012: Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.
- Muheim D (2000). Mutualisme et assurance maladie (1893–1912). Une adaption ambiguë. *Traverse: Zeitschrift für Geschichte*, 2:79–93.
- Müller K, Amstad H, Eldessouki R (2012). *Switzerland – Medical Devices and Diagnostics* [online]. Lawrenceville, International Society for Pharmacoeconomics and Outcomes Research (ISPOR) (<http://www.ispor.org/htaroadmaps/switzerlandmdd.asp>, accessed 10 October 2015).
- NPG (2013). *Netzwerk Psychische Gesundheit Schweiz*. Bern, Netzwerk Psychische Gesundheit Schweiz (<http://www.npg-rsp.ch/de/home.html>, accessed 23 October 2015).
- Obsan (2012). Ärztinnen und Ärzte in der Schweiz – Bestand und Entwicklung bis 2011. *Obsan Bulletin*, 3. Neuchâtel, Obsan (http://www.obsan.admin.ch/sites/default/files/publications/2015/obsan_bulletin_2012-03_d.pdf, accessed 10 October 2015).
- Obsan (2013). Ausbildung in der Humanmedizin und in Pflege- und Gesundheitsberufen. *Obsan Bulletin*, 2 (http://www.obsan.admin.ch/sites/default/files/publications/2015/obsan_bulletin_2013-02_d.pdf, accessed 10 October 2015).
- Obsan (2015). *Hospitalisierungsrate bei psychiatrischer Hauptdiagnose*. Neuchâtel, Obsan. (<http://www.obsan.admin.ch/sites/default/files/043-ksly-3-d.xls>, accessed 10 October 2015).
- OdASanté (2014). *Schweizerische Bildungssystematik Gesundheit* [online]. Bern, OdASanté (http://www.bzgs.ch/fileadmin/user_upload/Downloads/Berufliche_Grundbildung/Bildungssystematik_Gesundheit.pdf, accessed 16 November 2015).

- OECD (2011). *Health at a Glance 2011: OECD Indicators*. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd.org/els/health-systems/49105858.pdf>, accessed 23 October 2015).
- OECD (2012a). *Health at a Glance: Europe 2012*. Paris, Organisation for Economic Co-operation and Development (http://ec.europa.eu/health/reports/docs/health_glance_2012_en.pdf, accessed 23 October 2015).
- OECD (2012b). Screening, survival and mortality for breast cancer. *Health at a Glance: Europe 2012*. Paris, Organisation for Economic Co-operation and Development.
- OECD (2012c). Screening, survival and mortality for cervical cancer. *Health at a Glance: Europe 2012*. Paris, Organisation for Economic Co-operation and Development.
- OECD (2014a). *Health at a Glance: Europe 2014*. Paris, Organisation for Economic Co-operation and Development.
- OECD (2014b). *Mental Health and Work: Switzerland*. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd-ilibrary.org/docserver/download/8113251e.pdf?expires=1413978379&id=id&accname=ocid56023174a&checksum=19E6DC26746BD3D983C77EB05A27CAEE>, accessed 10 October 2015).
- OECD (2014c). *OECD Broadband Portal*. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd.org/sti/broadband/oecdbroadbandportal.htm>, accessed 28 October 2015).
- OECD (2014d). *OECD Health Statistics 2014: Definitions, Sources and Methods*. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd.org/els/health-systems/Table-of-Content-Metadata-OECD-Health-Statistics-2014.pdf>, accessed 27 October 2015).
- OECD (2014e). *PISA 2012 Results in Focus*. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf>, accessed 10 October 2014).
- OECD (2015a). *Foreign-born population (Indicator)*. Paris, Organisation for Economic Co-operation and Development (<https://data.oecd.org/migration/foreign-born-population.htm>, accessed 10 October 2015).
- OECD (2015b). *OECD Health Statistics*. Paris, Organisation for Economic Co-operation and Development (<http://www.oecd.org/els/health-systems/health-data.htm>, accessed 23 October 2015).
- OECD Health (2014). *OECD Health Data*. Paris, Organisation for Economic Co-operation and Development (<https://data.oecd.org/health.htm>, accessed 23 October 2015).
- OECD/Eurostat/WHO (2011). *A System of Health Accounts*. Paris, Organisation for Economic Co-operation and Development, Eurostat, World Health Organization (<http://www.who.int/health-accounts/methodology/sha2011.pdf?ua=1>, accessed 10 October 2015).
- OECD/WHO (2011). *OECD Reviews of Health Systems: Switzerland 2011*. OECD Reviews of Health Systems. Paris, Organisation for Economic Co-operation and Development.
- Oggier W (2015). Kosten und Finanzierung. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017: Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.
- Ombudsmann für Versicherungen (2014). *Jahresbericht 2013*. Berlin, Versicherungsombudsmann e.V. (<http://www.versicherungsombudsmann.de/Ressourcen/PDF/Jahresbericht-2013.pdf>, accessed 23 October 2015).

- Paris V, Devaux M, Wei L (2010). Health Systems Institutional Characteristics: A survey of 29 OECD countries. *Health Working Papers No. 50*, Paris: Organisation for Economic Co-operation and Development (http://www.oecd-ilibrary.org/social-issues-migration-health/health-systems-institutional-characteristics_5kmxfq9qbnr-en, accessed 27 October 2015).
- Parlamentarische Verwaltungskontrolle (2009). *Bestimmung und Überprüfung ärztlicher Leistungen in der obligatorischen Krankenpflegeversicherung. Bericht der Parlamentarischen Verwaltungskontrolle zuhanden der Geschäftsprüfungskommission des Nationalrates*. Bern, Parlamentarische Verwaltungskontrolle (PVK) (<https://www.admin.ch/opc/de/federal-gazette/2009/5589.pdf>, accessed 10 October 2015).
- Perleth M et al. (2014). *Health Technology Assessment: Konzepte, Methoden, Praxis für Wissenschaft und Entscheidungsfindung*. Berlin, Medizinisch Wissenschaftliche Verlagsgesellschaft (MWV).
- Perritaz N (2010). Umwelt und Gesundheit. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2010–2012*. Bern, Verlag Hans Huber.
- Petek D et al. (2011). Patients' evaluations of European general practice – revisited after 11 years. *International Journal for Quality in Health Care*, 23(6):621–628.
- Peterli M et al. (2014). C-6266/2013: Zwischenverfügung: Spitalliste Psychiatrie, Beschluss der Regierung des Kantons Graubünden vom 8. Oktober 2013. St Gallen, Bundesverwaltungsgericht.
- pharmaSuisse (2013). *Apotheker: Ausbildung* [online]. Bern, pharmaSuisse (<http://www.pharmasuisse.org/de/bildung/Apotheker/Seiten/Apotheker.aspx>, accessed 10 October 2015).
- PKS (2014). *Privatkliniken Schweiz 2014*. Bern, Privatkliniken Schweiz (http://www.privatehospitals.ch/fileadmin/privatkliniken/Medien/2014_Jahresbericht_PKS_dt.pdf, accessed 10 October 2015).
- Pro Mente Sana (2015). *Pro Mente Sana – Portrait*. Zurich, Pro Mente Sana (https://www.promentesana.ch/fileadmin/user_upload/Ueber_uns/PMS_Portrait.pdf, accessed 10 October 2015).
- PsyKo/PsyCo (2014). *2. Tätigkeitsbericht 1. Mai 2013 – 30. April 2014*. Bern, Psychologieberufekommission (PSYKO), Federal Office of Public Health.
- PwC (2013). *Spitalimmobilien: neue Perspektiven, neue Chancen*. Zürich, Pricewaterhousecoopers AG (http://www.pwc.ch/wordpress/wp-content/uploads/2014/03/pwc_spitalimmobilien_perspektiven_chancen_d.pdf, accessed 10 October 2014).
- Reich O, Rapold R, Flatscher-Thöni M (2012a). An empirical investigation of the efficiency effects of integrated care models in Switzerland. *International Journal of Integrated Care*, 12:e2.
- Reich O et al. (2012b). Exploring the disparities of regional health care expenditures in Switzerland: some empirical evidence. *European Journal Of Health Economics*, 13(2):193–202.
- Reinhardt JD et al. (2012). Social inequalities of functioning and perceived health in Switzerland – a representative cross-sectional analysis. *PLOS One*, 7.
- Rossini S (2014). *La gouvernance des politiques suisses de santé*. Lausanne, Réalités sociales.
- Ruckstuhl B (2010). *Gesundheitsförderung in der Schweiz* [online]. Köln, BZgA (http://www.leitbegriffe.bzga.de/bot_angebote_idx-173.html, accessed 10 October 2015).
- Rutschmann O, Sieber R, Hugli O (2009). Empfehlung der Schweizerischen Gesellschaft für Notfall- und Rettungsmedizin zur Triage in Schweizer Notfallstationen. *Schweizerische Ärztezeitung*, 90:1789–1790.

- SAMW (2013). *Rechtliche Grundlagen im medizinischen Alltag: ein Leitfaden für die Praxis*. Basel, Schweizerische Akademie Der Wissenschaften (http://www.fmh.ch/files/pdf12/Rechtliche_Grundlagen_2013_D.pdf, accessed 10 October 2015).
- SASIS (2014). *Übersicht Kantone-Zulassungsstopp*. Solothurn, SASIS AG (<https://www.sasis.ch/de/document/I0814>, accessed 23 October 2015).
- Schäfer M, Scherrer A, Burla L. (2013). Bildungsabschlüsse im Bereich Pflege und Betreuung Systematische Übersichtsarbeit. *Obsan Dossier*, 24. Neuchâtel, Schweizerisches Gesundheitsobservatorium (Obsan) (<http://www.obsan.admin.ch/bfs/obsan/de/index/05/publikationsdatenbank.Document.171251.pdf>, accessed 10 October 2015).
- Schiesser A (2015). Medikamente. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017*. Bern, Verlag Hans Huber.
- Schleining R (2014). Health care cost in Switzerland: quantity- or price-driven? *Health Policy*, 117(1):83–89.
- Schoen C et al. (2012). A survey of primary care doctors in ten countries shows progress in use of health information technology, less in other areas. *Health Affairs (Millwood)*, 31(12):2805–2016.
- Schuler D, Burla L (2012). Psychische Gesundheit in der Schweiz. Monitoring 2012. *Obsan Bericht*, 52. Neuchâtel, Schweizerisches Gesundheitsobservatorium (Obsan).
- Schwaninger U, Krieger R, Graf M (2010). Arbeit und Gesundheit. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017*. Bern, Verlag Hans Huber.
- SERI (2010). *Masterplan Bildung Pflegeberufe*. Bern, State Secretariat for Education, Research and Innovation (<http://www.sbf.admin.ch/berufsbildung/01539/01541/index.html?lang=de>, accessed 10 October 2015).
- SERI (2013). *Remit of the State Secretariat for Education, Research and Innovation (SERI)* [online]. Bern, State Secretariat for Education, Research and Innovation (<http://www.sbf.admin.ch/org/01644/index.html?lang=en>, accessed 10 October 2015).
- SERI (2014a). *Bundesrat will eine qualitativ hochstehende Ausbildung des Gesundheitspersonals* [online]. Bern, State Secretariat for Education, Research and Innovation (<https://www.news.admin.ch/message/index.html?lang=de&msg-id=55162>, accessed 10 October 2015).
- SERI (2014b). *Masterplan Bildung Pflegeberufe – Zwischenbericht*. Bern, State Secretariat for Education, Research and Innovation (http://www.sbf.admin.ch/berufsbildung/01539/01541/index.html?lang=de&download=NHZLpZeg7t,lnp6I0NTU042I2Z6nlacy4Zn4Z2qZpnO2Yuq2Z6gpJCEdYB7fmyml62epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- SIWF/ISFM (2014). *Komplementärmedizin – seit 1998* [online]. Bern, Swiss Institute for Postgraduate and Continuing Medical Education (SIWF/ISFM) of the FMH (<http://www.fmh.ch/bildung-siwf/weiterbildung/allgemein/komplementaermedizin.html>, accessed 10 October 2015).
- Smith PC et al. (2012). Leadership and governance in seven developed health systems. *Health Policy*, 106(1):37–49.
- Spitex Verband Schweiz (2013). *Qualitätsindikatoren von Spitälern* [online]. Bern, Spitex Verband Schweiz (http://www.spitexbl.ch/Home/P3P3a/?sesURLcheck=true&id=351D8C00-AE37-2351-6610CB5BE94B009F&method=article.detail&p=1&c=&ref_c=&m=, accessed 23 October 2015).

- SRK (2012). *Patientinnen und Patienten ohne Aufenthaltsrecht und ohne Krankenversicherung*. Basel, Nationale Plattform Gesundheitsversorgung für Sans-Papiers (http://www.migesplus.ch/fileadmin/user_upload/Publikationen/Patientinnen_ohne_Aufenthaltsrecht/Informationsbrochuere_Sans-Papier_A5_de_Internet.pdf, accessed 10 October 2015).
- SRK/Caritas (2011). *Nationales Konzept Bildung und Support zur Freiwilligenarbeit in der Palliative Care*. Bern/Luzern, Swiss Red Cross/Caritas (<https://www.redcross.ch/de/file/9729/download>, accessed 23 October 2015).
- SSO (2013). *Leitlinien, Statuten* [online]. Bern, Swiss Dental Association (<http://www.swissdentists.ch/index.cfm?7470E603067A92436AEDD410DF965BB0>, accessed 23 October 2015).
- SSO (2015). *Berufsbilder*. Bern, Swiss Dental Association (<https://www.sso.ch/sso/berufsbilder.html>, accessed 26 October 2015).
- Stettler P et al. (2014). *Strukturerhebung zur psychologischen Psychotherapie in der Schweiz 2012*. Bern, Büro für Arbeits- und Sozialpolitische Studien (BASS) AG (http://www.buerobass.ch/pdf/2013/FSP_2013_StrukturerhebungPsychotherapie_Praesentation_d.pdf, accessed 16 November 2015).
- Sturny I, Camenzind P (2011). *Erwachsene Personen mit Erkrankungen – Erfahrungen im Schweizer Gesundheitssystem im internationalen Vergleich. Auswertung des International Health Policy Survey 2011 des Commonwealth Fund im Auftrag des Bundesamtes für Gesundheit (BAG) (Obsan Dossier 18)*. Neuchâtel, Schweizer Gesundheitsobservatorium (Obsan) (<http://www.obsan.admin.ch/de/publikationen/erwachsene-personen-mit-erkrankungen-erfahrungen-im-schweizer-gesundheitssystem-im>, accessed 16 November 2015).
- Sturny I, Schaller S (2010). Psychiatrie, Psychotherapie, Psychologie. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2010–2012*. Bern, Verlag Hans Huber.
- Suter S, Vaterlaus S, Telser H (2013). *Bedeutung der Pharmaindustrie für die Schweiz*. Basel, Interpharma (http://www.interpharma.ch/sites/default/files/polynomics-2013_bedeutung-der-pharmaindustrie-fuer-die-schweiz_d_0.pdf, accessed 23 October 2015).
- SUVA (2013). *Arbeitsmedizin* [online]. Luzern, Schweizerische Unfallversicherungsanstalt (<http://www.suva.ch/startseite-suva/praevention-suva/arbeit-suva/progres-suva.htm#txt76590-76581>, accessed 10 October 2015).
- Swiss Confederation (1970). *Bundesgesetz über die Bekämpfung übertragbarer Krankheiten des Menschen*. Bern, Federal Council (<https://www.admin.ch/opc/de/classified-compilation/19700277/index.html>, accessed 10 October 2015).
- Swiss Confederation (1995). *Krankenpflege-Leistungsverordnung*. Bern, Federal Council. (<https://www.admin.ch/opc/de/classified-compilation/19950275/index.html>, accessed 23 October 2015).
- SwissDRG (2009). *Reglement für die Durchführung der Kodierrevision unter SwissDRG*. Bern, SwissDRG SA (http://www.swissdrgrg.org/assets/pdf/System_02/08_SwissDRG_Reglement_Kodierrevision_mit_Revisionsbericht_1-0_d.pdf, accessed 10 October 2015).
- Swissmedic (2014). *Geschäftsbericht 2013*. Bern, Swissmedic (https://www.swissmedic.ch/ueber/00134/00441/00445/00568/index.html?lang=de&download=NHZLpZeg7t,lnp610NTU042l2Z6lnlacy4Zn4Z2qZpnO2YUq2Z6gpJCDdoJ9gmym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- Swiss Medical Board (2013). *Systematisches Mammographie-Screening*. Zollikon, Swiss Medical Board (http://www.medical-board.ch/fileadmin/docs/public/mb/Fachberichte/2013-12-15_Bericht_Mammographie_Final_rev.pdf, accessed 10 October 2015).

- Swiss Medical Board (2015). *Das Swiss Medical Board – Betrachtung medizinischer Leistungen aus einer interdisziplinären Perspektive*. Zürich, Swiss Medical Board (<http://www.medical-board.ch/index.php?id=806>, accessed 10 October 2015).
- SwissREHA (2015). *Qualitätskriterien*. Aarau, SwissREHA (<http://www.swissreha.com/swss-reha/qualitaetskriterien/index.php>, accessed 10 October 2015).
- SZPI (2013). *Schulzahnpflege*. Zurich, Stiftung für Schulzahnpflege-Instruktorinnen (<http://www.schulzahnpflege.ch/schulzahnpflege.html>, accessed 10 October 2015).
- Tarifsuisse (2015). *Tarifsuisse ag im Überblick* [online]. Solothurn, Tarifsuisse. (https://www.santesuisse.ch/de/ueber_tarifsuisse.html?navid=2354, accessed 10 October 2015).
- Teisberg E (2008). *Nutzenorientierter Wettbewerb im schweizerischen Gesundheitswesen: Möglichkeiten und Chancen*. economiesuisse, Klinik Hirslanden AG, Interpharma, Schweizerischer Versicherungsverband SVV, Swisscom IT Services AG (http://www.interpharma.ch/sites/default/files/teisberg-2008_nutzenorientierter-wettbewerb-im-schweizerischen-gesundheitswesen_d.pdf, accessed 10 October 2015).
- Trageser J et al. 2012. *Effizienz, Nutzung und Finanzierung des Gesundheitswesens*. Bern, Akademien der Wissenschaften Schweiz (http://www.samw.ch/dms/de/Projekte/Nachhaltige_Medizin/Effizienz_Gesundheitswesen.pdf, accessed 23 October 2015).
- Uhlmann B, Braun D (2011). *Die schweizerische Krankenversicherungspolitik zwischen Veränderung und Stillstand*. Zurich, Rüegger.
- UNICEF (2014). *Statistics at a Glance: Switzerland*. Geneva, UNICEF (http://www.unicef.org/infobycountry/switzerland_statistics.html, accessed 23 October 2015).
- Van de Ven WP et al. (2013). Preconditions for efficiency and affordability in competitive healthcare markets: are they fulfilled in Belgium, Germany, Israel, the Netherlands and Switzerland? *Health Policy*, 109(3):226–245.
- Van Holten K, Jähne A, Bischofberger I (2013). Care-Migration – transnationale Sorgearrangements im Privathaushalt. *Obsan Bericht*, 57. Neuchâtel, Schweizerisches Gesundheitsobservatorium (http://www.obsan.admin.ch/sites/default/files/publications/2015/obsan_57_bericht.pdf, accessed 10 October 2014).
- Vaucher F, Rohrer S (2015). Apotheken und Drogerien. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017*. Bern, Verlag Hans Huber.
- Vilpert S (2013). Konsultationen in Schweizer Notfallstationen. *Obsan Bulletin*, 3/2013. Neuchâtel, Schweizerisches Gesundheitsobservatorium (Obsan) (http://www.obsan.admin.ch/sites/default/files/publications/2015/obsan_bulletin_2013-03_d.pdf, accessed 10 October 2015).
- Vincent C (2013). *Improving the quality and safety of healthcare in Switzerland: reflections on the federal strategy. First Report of the Scientific Advisory Board*. Bern, Federal Office of Public Health (<http://swiss-q.admin.ch/pdf/Final-Input-Paper-Feb-14.pdf>, accessed 10 October 2015).
- VKCS (2013). *Kantonschemiker* [online]. Verband der Kantonschemiker der Schweiz (<http://www.kantonschemiker.ch>, accessed 10 October 2015).
- VKS (2013). *Aufgaben der Kantonsärzte* [online]. Vereinigung der Kantonsärztinnen und Kantonsärzte der Schweiz (<http://www.vks-amcs.ch/index.php?id=496>, accessed 23 October 2015).
- Wagstaff A et al. (1999). Equity in the finance of health care: some further international comparisons. *Journal of Health Economics*, 18(3):263–290.
- Weber F (2015). Unfallversicherung. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017: Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.

- WHO (2014). *Parties to the WHO Framework Convention on Tobacco Control* [online]. Geneva, World Health Organization (http://www.who.int/fctc/signatories_parties/en, accessed 10 October 2015).
- WHO Regional Office for Europe (2013). *European Health For All Database*. Copenhagen, WHO Regional Office for Europe (<http://data.euro.who.int/hfad/>, accessed 5 July 2013).
- WHO Regional Office for Europe (2014). *European Health For All Database*. Copenhagen, WHO Regional Office for Europe (<http://data.euro.who.int/hfad/>, accessed 10 September 2014).
- WHO Regional Office for Europe (2015). *European Health For All Database*. Copenhagen, WHO Regional Office for Europe. (<http://data.euro.who.int/hfad/>, accessed 23 October 2015)
- Widmer P, Telser H (2013). *Die Spitalversorgung im Spannungsfeld der kantonalen Spitalpolitik*. Olten, Polynomics (http://www.polynomics.ch/dokumente/Polynomics_Spitalregulierung_Schlussbericht.pdf, accessed 10 October 2015).
- Wieser S et al. (2014). *Die Kosten der nichtübertragbaren Krankheiten in der Schweiz. Schlussbericht*. Zurich, im Auftrag des Bundesamtes für Gesundheit (http://www.bag.admin.ch/themen/medizin/00683/index.html?lang=de&download=NHZLpZeg7t,lnp610NTU042I2Z6lnlacy4Zn4Z2qZpnO2Yuq2Z6gpJCMdHx4fWym162epYbg2c_JjKbNoKSn6A--, accessed 10 October 2015).
- Wolff H, Gaspoz JM, Guessous I (2011). Health care renunciation for economic reasons in Switzerland. *Swiss Medical Weekly*, 141.
- World Bank (2013). *World Development Indicators Database*. Washington, DC, World Bank (<http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>, accessed 5 July 2013).
- World Bank (2014). *World Development Indicators Database*. Washington, DC, World Bank (<http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>, accessed 10 September 2014).
- World Bank (2015). *World Development Indicators Database*. Washington, DC, World Bank (<http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>, accessed 23 October 2015).
- Ziegler M (2010). Medikamente. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2010–2012*. Bern, Verlag Hans Huber.
- ZTD (2000). *EMS Eignungstest für das Medizinstudium in der Schweiz 2000: Bericht über die Durchführung und Ergebnisse. Berichte des ZTD, Nr. 6*. Fribourg, Zentrum für Testentwicklung und Diagnostik (<http://www.unifr.ch/ztd/ems/doc/Bericht6.pdf>, accessed 10 October 2015).
- ZTD (2001). *EMS Eignungstest für das Medizinstudium in der Schweiz 2001: Bericht über die Durchführung und Ergebnisse 2001. Berichte des ZTD, Nr. 7*. Fribourg, Zentrum für Testentwicklung und Diagnostik (<http://www.unifr.ch/ztd/ems/doc/Bericht7.pdf>, accessed 10 October 2015).
- ZTD (2014). *EMS Eignungstest für das Medizinstudium in der Schweiz 2014 – Bericht 21*. Fribourg, Zentrum für Testentwicklung und Diagnostik (<https://www.unifr.ch/ztd/ems/doc/Bericht21.pdf>, accessed 10 October 2015).
- Zumbrunn A, Bayer-Oglesby L (2015). Pflege durch Angehörige. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2015–2017*. Bern, Verlag Hans Huber.
- Züst B, Baumgartner M (2015). Patientinnen- und Patientenvertretungen. In: Oggier W, ed. *Gesundheitswesen Schweiz 2015–2017*. Bern, Verlag Hans Huber.

9.2 Useful websites

Conference of the Cantonal Ministers of Public Health (CDK/CDS), German/French website:

http://www.gdk-cds.ch/index.php?id=393&no_cache=1&L=1%27A%3D0

Federal Office of Public Health (FOPH), English website:

<http://www.bag.admin.ch/index.html?lang=en>

Federal Statistical Office (FSO), English website:

<http://www.bfs.admin.ch/bfs/portal/en/index.html>

Organisation for Economic Cooperation and Development (OECD) website for Switzerland:

<http://www.oecd.org/switzerland>

Swiss Agency for Therapeutic Products (Swissmedic), English website:

<https://www.swissmedic.ch/index.html?lang=en>

Swiss Health Observatory (Obsan), English website:

<http://www.obsan.admin.ch/en>

Swiss Medical Association (FMH), German/French/Italian website:

<http://www.fmh.ch>

SwissDRG SA, German/French website:

<http://www.swissdrg.org/de/index.asp?navid=0>

TARMED Suisse, German/French/Italian website:

<http://tarmedsuisse.ch>

The Health Systems and Policy Monitor (HSPM), English website:

<http://hspm.org/mainpage.aspx>

The National Association for Quality Improvement in Hospitals and Clinics (ANQ), German/French/Italian website:

<http://www.anq.ch>

The Swiss Association of Hospitals (H+), German/French/Italian:

<http://www.hplus.ch>

World Health Organization (WHO) website for Switzerland:

<http://www.who.int/countries/che/en>

9.3 HiT methodology and production process

HiTs are produced by country experts in collaboration with the Observatory's research directors and staff. They are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources and examples needed to compile reviews. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The most recent template is available online at: <http://www.euro.who.int/en/home/projects/observatory/publications/health-system-profiles-hits/hit-template-2010>.

Authors draw on multiple data sources for the compilation of HiTs, ranging from national statistics, national and regional policy documents to published literature. Furthermore, international data sources may be incorporated, such as those of the OECD and the World Bank. The OECD Health Data contain over 1200 indicators for the 34 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All database. The Health for All database contains more than 600 indicators defined by the WHO Regional Office for Europe for the purpose of monitoring Health in All Policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard Health for All data have been officially approved by national governments. With its summer 2013 edition, the Health for All database started to take account of the enlarged EU of 28 Member States.

HiT authors are encouraged to discuss the data in the text in detail, including the standard figures prepared by the Observatory staff, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT consists of nine chapters.

1. Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.

2. Organization and governance: provides an overview of how the health system in the country is organized, governed, planned and regulated, as well as the historical background of the system; outlines the main actors and their decision-making powers; and describes the level of patient empowerment in the areas of information, choice, rights, complaints procedures, public participation and cross-border health care.
3. Financing: provides information on the level of expenditure and the distribution of health spending across different service areas, sources of revenue, how resources are pooled and allocated, who is covered, what benefits are covered, the extent of user charges and other out-of-pocket payments, voluntary health insurance and how providers are paid.
4. Physical and human resources: deals with the planning and distribution of capital stock and investments, infrastructure and medical equipment; the context in which information technology systems operate; and human resource input into the health system, including information on workforce trends, professional mobility, training and career paths.
5. Provision of services: concentrates on the organization and delivery of services and patient flows, addressing public health, primary care, secondary and tertiary care, day care, emergency care, pharmaceutical care, rehabilitation, long-term care, services for informal carers, palliative care, mental health care, dental care, complementary and alternative medicine, and health services for specific populations.
6. Principal health reforms: reviews reforms, policies and organizational changes; and provides an overview of future developments.
7. Assessment of the health system: provides an assessment based on the stated objectives of the health system, financial protection and equity in financing; user experience and equity of access to health care; health outcomes, health service outcomes and quality of care; health system efficiency; and transparency and accountability.
8. Conclusions: identifies key findings, highlights the lessons learned from health system changes; and summarizes remaining challenges and future prospects.
9. Appendices: includes references, useful web sites and legislation.

The quality of HiTs is of real importance since they inform policy-making and meta-analysis. HiTs are the subject of wide consultation throughout the writing and editing process, which involves multiple iterations. They are then subject to the following.

- A rigorous review process (see the following section).
- There are further efforts to ensure quality while the report is finalized that focus on copy-editing and proofreading.
- HiTs are disseminated (hard copies, electronic publication, translations and launches). The editor supports the authors throughout the production process and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

One of the authors is also a member of the Observatory staff team and they are responsible for supporting the other authors throughout the writing and production process. They consult closely with each other to ensure that all stages of the process are as effective as possible and that HiTs meet the series standard and can support both national decision-making and comparisons across countries.

9.4 The review process

This consists of three stages. Initially the text of the HiT is checked, reviewed and approved by the series editors of the European Observatory. It is then sent for review to two independent academic experts, and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health, or appropriate authority, and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

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Belarus (2008^g, 2013)
Belgium (2000, 2007, 2010)
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Key

All HiTs are available in English.
When noted, they are also available in other languages:

^a Albanian

^b Bulgarian

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HiTs are in-depth profiles of health systems and policies, produced using a standardized approach that allows comparison across countries. They provide facts, figures and analysis and highlight reform initiatives in progress.