Karine Chevreul, Karen Berg Brigham, Isabelle Durand-Zaleski, Cristina Hernández-Quevedo

France: health system review

Book

Health Systems in Transition
Vol. 17 No. 3 2015

France

Health system review

Karine Chevreul
Karen Berg Brigham
Isabelle Durand-Zaleski
Cristina Hernández-Quevedo

European Observatory on Health Systems and Policies
a partnership hosted by WHO

Cristina Hernández-Quevedo (Editor), Ellen Nolte and Ewout van Ginneken (Series editors) were responsible for this HiT

Editorial Board

Health Systems in Transition

Karine Chevreul, *URC Économie de la santé, AP-HP/INSERM/Université Paris Diderot*

Karen Berg Brigham, *URC Économie de la santé, AP-HP/Université Paris-Est*

Isabelle Durand-Zaleski, *URC Économie de la santé, AP-HP/INSERM/Université Paris-Est*

Cristina Hernández-Quevedo, *European Observatory on Health Systems and Policies, LSE Health*

France:

Health System Review 2015

The European Observatory on Health Systems and Policies is a partnership between the WHO Regional Office for Europe, the Governments of Austria, Belgium, Finland, Ireland, Norway, Slovenia, Sweden, 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 Technical University of Berlin.

Keywords:

DELIVERY OF HEALTH CARE

EVALUATION STUDIES

FINANCING, HEALTH

HEALTH CARE REFORM

HEALTH SYSTEM PLANS – organization and administration

FRANCE

Printed and bound in the United Kingdom.

Suggested citation:
Chevreul K, Berg Brigham K, Durand-Zaleski I, Hernández-Quevedo C. France: Health system review. *Health Systems in Transition*, 2015; 17(3): 1–218.

ISSN 1817–6119 Vol. 17 No. 3

Contents

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;
- describe the institutional framework, process, content and implementation of health care reform programmes;
- highlight challenges and areas that require more in-depth analysis;
- 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
- 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 situations. 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 HiT on France was co-produced by the European Observatory on Health Systems and Policies and URC ECO IdF, the Paris Health Services and Health Economics Research Unit (Unité de Recherche clinique en Economie de la Santé d'Ile de France) of the AP-HP (Assistance Publique-Hôpitaux de Paris), which is a member of the Health Systems and Policy Monitor (HSPM) network.

The HSPM is an international network that works with the Observatory on Country Monitoring. It is made up of national counterparts that are highly regarded at the national and international level and have particular strengths in the area of health systems, health services, public health and health management research. They draw on their own extensive networks in the health field and their track record of successful collaboration with the Observatory to develop and update the HiT.

The Paris Health Services and Health Economics Research Unit is a research unit of the AP-HP, the public teaching hospital consortium for the Paris region. Its aim is to help the decision-making process of stakeholders in the health care system. Its projects encompass three levels: decision-making coverage and resource allocation mechanisms at the national level, managers of health care organizations at the institutional level and professionals. URC Eco hosts several thematic projects related, among others, to resource allocation methods in health care, the economic burden of disease, patient pathways and cost–effectiveness of diagnostic, therapeutic and organizational innovations in health care. Located in Paris, URC Eco is a group of approximately 25 researchers from a variety of backgrounds and experiences (mainly researchers in social policy, public health specialists, economists and statisticians).

This edition was written by Karine Chevreul, Karen Berg Brigham and Isabelle Durand-Zaleski (URC Eco IdF). It was edited by Cristina Hernández-Quevedo, working with the support of Ellen Nolte, London Hub Coordinator, and Ewout van Ginneken of the Observatory's team at the Department of Health Care Management, Berlin University of Technology. The basis for this edition was the previous HiT on France, which was published in 2010, written by Karine Chevreul, Isabelle Durand-Zaleski and Stéphane Bahrami (URC ECO IdF) and edited by Cristina Hernández-Quevedo and Philipa Mladovsky.

The Observatory, URC ECO IdF and the authors are grateful to Dr Laure Com-Ruelle (Research Director) from the Institute for Research and Information in Health Economics (Institut de recherche et information en économie de la santé), Dr Alain Fontaine (Chief of the Foresight and Research Mission) from the General Directorate of Health Care Organization of the Ministry in charge of Health, Dr Grégoire De Lagasnerie (Health Economist) from the French National Health Insurance Fund (Caisse nationale d'assurance maladie des travailleurs salariés) and Valérie Paris (Senior Policy Analyst) from OECD for reviewing the report. The authors would also like to thank Nick Fahy for his technical assistance in reviewing the text and for his reworking of the executive summary.

Thanks are also due to the Ministry in charge of Health for providing comments to an earlier version of the report, in particular to Emmanuelle Jouy (Officer) from Delegation of European and International Affairs, Ministry in charge of Health, for coordinating the review across the different services.

The authors greatly benefited from the help of members of URC Eco, with a special mention to Julien Thillard. They would like also to thank Marc Perronin from the Institute for Research and Information in Health Economics, particularly, for his contributions to the text on voluntary health insurance. Thanks are also 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; to the World Bank for the data on health expenditure in central and eastern European countries; and to the European Commission for the Eurostat database. The HiT uses data available as of 31 December 2014, unless otherwise indicated. The HiT reflects the organization of the health system and data availability, unless otherwise indicated, as they were at the end of 2014.

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, Sweden, 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 (LSE) and the London School of Hygiene & Tropical Medicine (LSHTM). The European Observatory has a secretariat in Brussels and it has hubs in London (at LSE and LSHTM) and at the Technical University of Berlin.

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, Jane Ward (copy-editing) and Steve Still (design and layout).

List of abbreviations

Abbreviation	English	French
ACS	Voucher plan for the purchase of complementary health insurance	Aide à l'acquisition d'une complémentaire santé
ADELI	Automated Directory of Health Professionals	Automatisation des listes
AEEH	Special education allowance for children	Allocation d'éducation de l'enfant handicapé
AIDS	Acquired immunodeficiency syndrome	Syndrome de immunodéficience acquise
ALD	Long-term illness	Affection de Longue Durée
AME	State medical assistance	Aide médicale de l'état
AMM	Marketing authorization	Autorisation de mise sur le marché
ANAP	National Agency to Support the Performance of Health and Health and Social Care Institutions	Agence nationale d'appui à la performance des établissements de santé et médico-sociaux
ANSES	French Agency for Food, Environmental and Occupational Health and Safety	Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail
ANSM	French National Agency for Medicines and Health Products Safety	Agence nationale de sécurité du médicament et des produits de santé
APA	Personal autonomy allowance	Allocation Personnalisée d'Autonomie
ARS	Regional health agency	Agence régionale de santé
ASA	Improvement in expected benefit	Amélioration du service attendu
ASMR	Improvement of medical benefit	Amélioration du service médical rendu
CASA	Additional solidarity and autonomy contribution	Contribution additionnelle de solidarité pour l'autonomie
CEESP	Commission for Economic Evaluation and Public Health	Commission d'Evaluation Economique et de Santé Publique
CEPS	Economic Committee for Health Products	Comité Economique des Produits de Santé
CMU	Universal health coverage	Couverture Maladie Universelle
CMU-C	Complementary universal health coverage	Couverture maladie universelle complémentaire
CNAMTS	National health insurance fund for salaried employees (general scheme)	Caisse nationale d'assurance maladie des travailleurs salariés
CNEDIMTS	National Committee for the Evaluation of Medical Devices and Health technologies	Commission nationale d'évaluation des dispositifs médicaux et des technologies de santé
CNOM	French Medical Council	Conseil national de l'Ordre des médecins

Abbreviation	English	French
CNP	National Steering Council	Conseil national de pilotage
CNSA	National Solidarity Fund for Autonomy	Caisse Nationale de Solidarité pour l'Autonomie
CRSA	Regional Conference on Health and Autonomy	Conférence régionale de la santé et de l'autonomie
CSG	General social contribution	Contribution Sociale Généralisée
CT	Computed tomography	Tomodensitométrie
DMP	Electronic patient record	Dossier médical personnel
DPC	Continuing professional development	Développement professionnel continu
DRG	Diagnosis-related group	Groupe homogène de malades
ECN	National competitive examination	Epreuves classantes nationales
EEA	European Economic Area	Espace économique européen
EPRUS	Health Emergency Preparedness and Response Agency	L'Etablissement de préparation et de réponse aux urgences sanitaires
EU	European Union	Union Européenne
EU27	All 27 EU Member States as of 2007	–
EU28	All 28 EU Member States as of 2013	–
FFS	Fee-for-service	Rémunération à l'acte
GDP	Gross domestic product	Produit intérieur brut
GHS	Homogeneous hospital stay groups	Groupes homogènes de séjours
GP	General practitioner	Médecin généraliste ou omnipraticien
HAD	Hospital at home	Hospitalisation à domicile
HAS	French National Health Authority	Haute Autorité de Santé
HCAAM	High Council for the Future of Health Insurance	Haut conseil pour l'avenir de l'assurance maladie
HCSP	High Council for Public Health	Haut conseil de la santé publique
HIV	Human immunodeficiency virus	Virus de immunodéficience humaine
HPST	Hospital, Patient, Health and Territory (Act)	(Loi) Hôpital, patient, santé et territoires
HTA	Health technology assessment	Evaluation des technologies de la santé
IGAS	Inspector General of Social Affairs	Inspection générale des affaires sociales
INCa	National Institute for Cancer	Institut National du Cancer
INPES	National Institute for Prevention and Health Education	Institut national de prévention et d'education pour la santé
InVS	French Institute for Public Health Surveillance	Institut National de Veille Sanitaire
IRSN	Radioprotection and Nuclear Safety Institute	Institut de Radioprotection et de Sécurité Nucléaire
MRI	Magnetic resonance imaging	Imagerie par resonance magnétique
OECD	Organisation for Economic Co-operation and Development	Organisation de coopération et de développement économiques
OFDT	French Observatory on Drugs and Addictions	L'observatoire français des drogues et des toxicomaniees
ONDAM	National ceiling for SHI expenditure	Objectif National des Dépenses d'Assurance Maladie

Abbreviation	English	French
OOP	Out-of-pocket	Reste à charge
PCH	Disability compensation allowance	Prestation de Compensation du Handicap
PET	Positron emission tomography	Tomographie par émission de positons
PMI	Maternal and child protection services	Protection Maternelle et Infantile
PMSI	Program of Medicalization of Information Systems	Programme de médicalisation des systèmes d'information
P4P	Pay-for-performance	Rémunération à la performance
PRS	Regional health project	Projet régional de santé
PSRS	Regional strategic health plan	Plan stratégique régional de santé
ROSP	Payments based on public health objectives	Rémunération sur les objectifs de santé publique
SHI	Statutory health insurance	Assurance maladie
SMR	Medical benefit	Service médical rendu
SNIIR-AM	The SHI interscheme information database	Système National d'Information Inter-Régimes de l'Assurance Maladie
SROS	Regional health organization plan	Schéma Régional d'Organisation des soins
SSIAD	Community nursing service	Service de Soins Infirmiers à Domicile
SSR	Care and rehabilitation	Soins de suite et de réadaptation
SST	Occupational health service	Service de santé du travail
T2A	Activity-based payment	Tarification à l'activité
UNCAM	National Union of Health Insurance Funds	Union Nationale des Caisses d'Assurance Maladie
VHI	Voluntary health insurance	Assurance complémentaire
WHO	World Health Organization	Organisation mondiale de la santé

List of tables, figures and boxes

Tables

Figures

Boxes

Abstract

This analysis of the French health system reviews recent developments in organization and governance, health financing, health care provision, health reforms and health system performance. The French population has a good level of health, with the second highest life expectancy in the world for women. It has a high level of choice of providers, and a high level of satisfaction with the health system. However, unhealthy habits such as smoking and harmful alcohol consumption remain significant causes of avoidable mortality. Combined with the significant burden of chronic diseases, this has underscored the need for prevention and integration of services, although these have not historically been strengths of the French system.

Although the French health care system is a social insurance system, it has historically had a stronger role for the state than other Bismarckian social insurance systems. Public financing of health care expenditure is among the highest in Europe and out-of-pocket spending among the lowest. Public insurance is compulsory and covers the resident population; it is financed by employee and employer contributions as well as increasingly through taxation. Complementary insurance plays a significant role in ensuring equity in access. Provision is mixed; providers of outpatient care are largely private, and hospital beds are predominantly public or private non-profit-making.

Despite health outcomes being among the best in the European Union, social and geographical health inequities remain. Inequality in the distribution of health care professionals is a considerable barrier to equity. The rising cost of health care and the increasing demand for long-term care are also of concern. Reforms are ongoing to address these issues, while striving for equity in financial access; a long-term care reform including public coverage of long-term care is still pending.

Executive summary

Introduction

The French Republic is made up of metropolitan France in western Europe (the mainland plus Corsica) and a collection of overseas islands and territories on other continents. France is the second most populous country in the European Union (EU; *Union Européenne*) after Germany, and has the fifth largest economy in the world.

The overall state of health in France is mixed. On the one hand, overall indicators show that the health of the population is good. French average life expectancy at birth is now over 80 years (82.4 years, compared with the EU average of 80.6) and for women is the second highest in the world (85.6 years). Moreover, older people remain in better health than in many other European countries. However, France suffers from a high rate of premature male deaths from accidents and unhealthy habits such as smoking and harmful alcohol consumption, which are the most common causes of avoidable mortality in France. France also has health inequalities across socioeconomic and geographical groups that are wider than in most other European countries. These inequalities are the result not only of risk factors but also of disparities in access to health services.

Organization and governance

Although the basic form of the French health care system is social insurance on the Bismarckian model, the French health care system has historically had a more centralized character with a stronger role for the state than other social insurance systems. This is illustrated by the single public payer and the increasing importance of tax-based revenue for financing health care, bringing the French system closer to the state-run national health services on the Beveridge model. Statutory health insurance (SHI; *assurance maladie*),

through various schemes, covers the resident population. Which scheme applies depends mainly on where people work; the schemes do not compete. Delivery of care is mixed, including private, fee-for-service (FFS; *rémunération à l'acte*) physicians, public hospitals, private non-profit-making hospitals and private profit-making hospitals.

Management of the health system is split between the state and SHI. Since the mid-1990s, reforms have aimed to devolve power from the national to the regional level, in particular for planning. Regional institutions were created to represent the main stakeholders: SHI schemes, the state, health professionals and public health actors. However, to improve the system's governance, responsiveness to needs and efficiency, the 2009 Hospital, Patients, Health and Territories (HPST) Act (*Loi No. 2009–879 du 21 juillet 2009 portant réforme de l'hôpital et relative aux patients, à la santé et aux territoires*) merged most of these institutions into a single regional health agency (*agence régionale de santé*; ARS). Cutting across the traditional boundaries of health care, public health and health and social care sectors, the ARS aims to ensure that health care provision meets the needs of the population by improving links between ambulatory and hospital sectors, and between health and social care sector services, while keeping within national health expenditure limits.

With increasing health care expenditure and an increasing deficit of SHI (and corresponding increase in tax financing), the role of the state in planning and regulation has increased since the mid-1990s. At the regional level, the ARSs coordinate ambulatory and hospital care for the population as well as health and social care for the elderly and the disabled through a regional strategic health plan (*Plan stratégique régional de santé*; PSRS) based on population needs. This is a first attempt at regional planning of the ambulatory care sector.

In general, in the ambulatory care sector, patients pay providers directly and are reimbursed by SHI, although there are exceptions for the most expensive care as well as for households with low incomes; currently 35% of ambulatory payment is paid directly from the insurer to the provider. Quality of care is regulated at the national level. Hospitals must undergo a certification process every four years but there is no formal recertification or relicensing process for health professionals. However, doctors, pharmacists, dentists and midwives are required to undertake lifelong learning through continuing professional development (*développement professionnel continu*; DPC).

Financing

Health care expenditure in France has grown more rapidly than the economy as a whole for many years (with the exception of the period 1997–2000), and faster than in neighbouring countries (with the exception of the United Kingdom); it rose from 10.4% of gross domestic product (GDP; *produit intérieur brut*) in 1995 to 11.6% in 2013. This is well above the EU average of 9.5%, and in Europe, second only to the Netherlands. From 1996, SHI annual expenditure has been capped by the national ceiling for health insurance expenditure (*Objectif National des Dépenses d'Assurance Maladie*; ONDAM). However, this ceiling was exceeded nearly every year until 2010; since then, the ceiling has been underspent as cost-containment measures have intensified. In 1996, a specific agency for managing social security debt was established, funded by a dedicated tax (amounting to 0.5% of income).

Just over three-quarters of total health care expenditure is publicly funded (77%; just above the EU average of 76%), principally through SHI. The proportion of costs covered by SHI varies across goods and services: from 15% for drugs with low medical benefit (*service medical rendu*; SMR) to 80% for inpatient care. However, there are several conditions for which patients are exempted from paying a part of the costs, such as chronic conditions or pregnancy after the fifth month. Additional co-payments that are not allowed to be covered by voluntary health insurance (VHI; *assurance complémentaire*) have been created with the aim of reducing demand and thus SHI expenditure.

SHI resources mainly come from income-based contributions from employers and employees (including retirees). Since 1998, as a result of attempts to broaden the social security system's financial base, employees' payroll contributions have been almost fully replaced by a dedicated tax called the "general social contribution" (*contribution sociale généralisée*; CSG) based on total income rather than only on earned income, as was previously the case. Additional revenue comes from specific taxes such as taxes on potentially harmful consumption (tobacco, alcohol) and taxes on pharmaceutical companies.

VHI provides complementary insurance, such as for co-payments and better coverage for medical goods and services that are poorly covered by SHI. It finances 13.8% of total health expenditure and covers more than 90% of the population. Over recent decades, VHI has gained a significant role in ensuring equity in access and financing health care. Since 2000, publicly financed

complementary universal health coverage (*couverture maladie universelle complémentaire*; CMU-C) has been offered to those on lower incomes; it covers 7% of the population.

Even after complementary insurance, out-of-pocket (OOP; *reste à charge*) payments from patients themselves account for 7.5% of total health expenditure. This raises issues of equity in access and financing, although this figure remains well below the EU average for OOP payments of 16.1% of total health expenditure.

Funding for long-term care (*soins de longue durée*) for the elderly and disabled is partly provided by a dedicated fund, the National Solidarity Fund for Autonomy (*Caisse Nationale de Solidarité pour l'Autonomie*; CNSA). This was created in 2004 following a heat-wave crisis in the summer of 2003 in which around 15 000 elderly people died. Its resources come from SHI and the "solidarity and autonomy contribution" (*contribution solidarité pour l'autonomie*) that is generated from the revenue equivalent to one unpaid working day (*journeé de solidarité*). Local authorities increasingly also fund long-term care, as do individuals themselves.

Hospital acute care and hospitalization at home (*hospitalisation à domicile*; HAD), providing care equivalent to hospital care but in the patient's own home, are paid by a diagnosis-related group (DRG; *groupe homogène de malades*) method under the medical activity-based payment system (*tarification à l'activité*; T2A). Self-employed professionals are paid on a FFS basis. Tariffs are negotiated between SHI and representatives of health professionals and approved by the Ministry in charge of Health, although extra-billing by doctors above that tariff is allowed in some cases. Pay-for-performance (P4P; *rémunération à la performance*) financial incentives to improve quality and efficiency of doctors' practices were implemented through individual contracts with general practitioners (GPs; *médecin généraliste ou omnipraticien*).

Physical and human resources

Non-profit-making hospitals make up 61% of the total (35% public and 26% private sector) and 39% were private hospitals operated on a profit-making basis, a higher share of profit-making hospitals than in most other developed health systems. Two nationwide capital investment plans have been launched since the early 2000s in order to improve quality and safety standards. In December 2013, the French Government also signed an agreement with the European

Investment Bank to finance public and private hospital construction and renovation projects under the Hospital of the Future Programme (*programme Hôpital Avenir*), amounting to €1.5 billion over three years. The ARSs are responsible for overseeing capital investment and purchasing major medical equipment. The availability of imaging units relative to population size is lower than the averages for Organisation for Economic Co-operation and Development (OECD) countries; particular questions have been raised about the number and distribution of magnetic resonance imaging (MRI; *imagerie par resonance magnétique*) units.

Following the general trend in European countries, the number of acute care hospital beds has been steadily declining since the mid-1990s. In 2013, it was 3.45 beds per 1000 population (slightly below the EU average of 3.56). This was achieved partly by changing acute beds into rehabilitation and long-term care units (*Unités de Soins de Longue Durée*), as well as the development of day surgery and HAD.

About 5.3% of the French population works in the health care sector. France has similar levels of doctors and nurses to other European countries (319 doctors and 1000 nurses per 100 000 population, compared with 347 doctors and 850 nurses for the EU as a whole). However, health care professionals are not spread equally across the country. The Parisian and the southeastern regions (Île-de-France and Provence–Alpes–Côte-d'Azur) have the highest density of health care personnel, followed by the other southern regions, while the northern and eastern regions suffer from a lack of health care professionals. The problem is particularly acute with respect to specialist doctors, for which there is an eight-fold difference between lowest and highest density regions.

Workforce forecasting and planning of educational capacity is mostly made at the national level, through a limit on the number of students trained each year (the *numerus clausus*) that is intended to prevent shortages or oversupply of health professionals. However, this does not regulate the geographical distribution of medical professionals, as self-employed professionals are free to choose where they practise. In order to address the resulting disparities in the distribution of medical professionals, there has been increasing experimentation in transfer of tasks from medical to other professionals such as nurses and development of incentives for attracting health professionals to underserved areas.

Provision of services

Public health responsibilities are divided between many actors at the national and local level. At national level, the key bodies are the French Institute for Public Health Surveillance (*Institut National de Veille Sanitaire*; InVS) and the National Institute for Prevention and Health Education (Institut national de prévention et d'éducation pour la santé; INPES), which is involved in managing health crises and informing the population.

Primary and secondary health ambulatory care is provided by self-employed doctors, dentists and medical auxiliaries (including nurses and physiotherapists) working in their own practices, and, to a lesser extent, by salaried staff in hospitals and health centres. From the late 1990s, GPs have taken on a major role in the coordination of care through a semi-gatekeeping system that provides incentives to people to visit their GP prior to consulting a specialist.

France is the third largest European producer of pharmaceutical products; the French population is also among the largest consumers of pharmaceutical drugs, consuming 22% more than neighbouring countries. Drugs are dispensed by self-employed pharmacists, while the price of drugs is set administratively for all drugs covered by SHI.

Acute medical care is mainly provided by public hospitals, which account for nearly two-thirds of acute medical care capacity (67% of medical beds and 50% of day-care beds) and are responsible for 65% of full-time episodes and 42% of day-care episodes. Private profit-making hospitals tend to specialize in a small number of technical procedures for which there are profit opportunities, such as invasive diagnostic procedures (e.g. endoscopy or coronary angiography), and surgical procedures that can be performed routinely within a short stay with a predictable length. Public hospitals perform a much wider range of surgeries than profit-making hospitals, including the most complex procedures.

As in many other European countries, mental health care policy in France during the second half of the 20th century was influenced by a general movement towards community-based organization of mental health care services – the so-called "deinstitutionalization" process. The vast majority of care in the psychiatric sector is ambulatory, with 77% of patients over the course of a year treated exclusively on an outpatient basis.

Recent reforms

The main objectives of the reforms to the health care system since 2010 were to improve governance and increase transparency of the system, to contain SHI expenditure without damaging equity in financial access, to increase geographical equity in access to care, and to meet the needs of vulnerable populations particularly by ensuring access to care for frail elderly individuals (*personnes agées en risque de perte d'autonomie*) and by decreasing social health inequities.

One of the major changes has been a move towards more transparency in the system, particularly with respect to conflicts of interest of experts that came to light in the "Mediator" (benfluorex) scandal. This anti-diabetes drug remained on the French market until 2009 despite mounting evidence of side-effects that led other countries to ban it as early as 1997. An investigation suggested weaknesses in the regulatory system for drugs, including a structural and cultural conflict of interest on the part of the regulatory agency because of its institutional cooperation with the pharmaceutical industry. The main objectives of the subsequent reforms were to restore confidence in the administrative decision-making process for health products, particularly drugs; to provide greater transparency and reduce the influence of the pharmaceutical industry on experts and treating physicians; and to strengthen drug safety and surveillance.

Cost-containment measures have focused particularly on drug expenditure, with a tendency to de-list drugs with insufficient SMR. However, despite an announcement by the Minister in charge of Health that all drugs with an insufficient SMR would be de-listed or reviewed if coverage was to be maintained, the measure has not been implemented. Tight control of drug prices also continued with the adoption of economic evaluation. However, formal assessment of how this tool has affected prices is not yet available.

In order to preserve equity, controlling the level of OOP payments has been one of the major policy issues in recent years. Two main tools have been employed: expansion of complementary insurance to a larger share of the population and restrictions on the level of extra-billing by doctors (although this has been only marginally effective so far). The development of P4P schemes for doctors was also aimed at increasing the efficiency of the system.

To improve geographical access to care, there have been successive attempts to encourage doctors to move to underserved areas. Financial incentives (both negative and positive) have proved ineffective. Instead, initiatives focusing on improving the workplace quality of life of doctors have flourished at the local

level, such as providing infrastructure, reducing start-up costs and enabling holiday cover. In addition, new methods of health care organization through task transfer and the use of information technologies such as tele-health have been encouraged since 2010.

The increasing demand for long-term care remains a major concern in the government's plan. However, despite strong government support, public coverage of long-term care for the elderly to achieve greater equity in access remains one of the main challenges of the system.

Assessment of the health care system

The French health care system has long enjoyed the reputation of being one of the best in the world, combining universal health coverage (*Couverture Maladie Universelle*; CMU) with a generous supply of health services. This reputation comes in large part from success in meeting its goals of full coverage, access without waiting lists, patient choice and satisfaction. The combination of a basic universal public health insurance system and voluntary complementary private insurance (which provides reimbursement for co-payments required by the public system as well as coverage for medical goods and services that are poorly covered by the public system) results in low OOP costs and high medical care utilization. France's average life expectancy of over 80 years is in part testament to the strong combination of good health care and good public health policies in France.

Despite these positives, there are also some shortcomings, especially when considering efficiency and socioeconomic inequalities in health outcomes and inequities in access to health care. Major problems include lack of coordination between the hospital sector, the ambulatory care sector and the health and social care sector, in particular in caring for patients with chronic diseases. France has also been slow in developing preventive care and intersectoral policies. However, major efforts have been undertaken in the last five years to address these issues.

France is among the OECD countries for which public financing of health care expenditure is the highest and OOP spending is the lowest. The high level of health expenditure has become increasingly significant at a time when the public system is facing chronic deficits, and improving allocative and technical efficiency is a major concern in order to ensure the financial viability of the system. Measures implemented since 2010 have been particularly effective in

achieving SHI cost-containment and financing fairness, as reflected by the fact that the ONDAM has not been exceeded since 2010 while maintaining stability in the percentage of OOP expenditure over the same period.

1. Introduction

The French Republic is situated in western Europe. It is a unitary state with administrative subdivisions, including five overseas departments (*départements*) and seven overseas territorial authorities. Its strong executive branch is headed by the president, who appoints a prime minister to lead the government, which is, in turn, accountable to the bicameral parliament. France is the second most populous country in the EU and has the fifth largest economy in the world.

The overall picture of the state of health in France contains apparent contradictions. On the one hand, indicators such as life expectancy, disability-free life expectancy and healthy life expectancy show that the health of the population is good. The French average life expectancy is now over 80 years and is the second highest in the world for women. The French population is ageing but not as a result of decreasing fertility as in other European countries. Indeed, France has the second highest fertility rate in the EU. Moreover, older people remain in better health than in many other European countries. The main causes of death in France are cancer, cardiovascular diseases, accidents and diseases of the respiratory system. However, France compares well with regard to cardiovascular diseases, while its relative position with respect to mortality caused by alcoholism, cirrhosis and cancer of the cervix is improving. On the other hand, France suffers from a high rate of premature male deaths from accidents and unhealthy habits such as smoking and harmful alcohol consumption, which are the most common causes of avoidable mortality in France. Additionally, France has long-reported health inequalities across socioeconomic and geographic groups that are wider than in most other European countries. These inequalities result not only from risk factors but also from disparities in access to health services.

1.1 Geography and sociodemography

The French Republic comprises metropolitan France, located in western Europe (the mainland plus Corsica), and a collection of overseas islands and territories on other continents. The five overseas departments (French Guyana, Guadeloupe, Martinique, Mayotte and Réunion) are an integral part of the French Republic and subject to the same laws and regulations, although local adjustments are possible. The other overseas territories (French Polynesia, Saint Barthélemy, Saint Martin, Saint Pierre and Miquelon, Wallis and Futuna, New Caledonia and the French Southern and Antarctic Lands) are also part of France but have differing legal status.

Metropolitan France is bordered from north to east and south by Belgium, Luxembourg, Germany, Switzerland, Italy, Monaco, Andorra and Spain (Fig. 1.1). Its geography is varied, from coastal plains in the north and west to mountain ranges in the south-west (the Pyrenees) and the south-east (the Alps), including Mont Blanc, the highest point in western Europe at 4810 m (15781 ft). The climate is temperate.

Fig. 1.1
Map of France

Source: CIA, 2009.

On 1 January 2013, the French population totalled 63.7 million inhabitants in metropolitan France and 2.1 million inhabitants in the five overseas departments (INSEE, 2013a). It is the second most populous country in the EU after Germany. Table 1.1 shows the most recent demographic indicators.

Table 1.1
Trends in demographic and socioeconomic indicators for metropolitan France, 1980–2014 (selected years)

	1980	1990	1995	2000	2005	2010	2014
Total population (millions)	53.7	56.5	57.7	58.8	60.9	62.7	66.2
Population, female (% of total)	51.2	51.3	51.4	51.5	51.6	51.6	51.0
Population aged 0–19 years (% of total)	30.6	27.8	26.1	25.6	25.0	24.5	24.4[a]
Population aged ≥60 years (% of total)	17.0	19.0	20.0	20.6	20.9	22.8	24.0[a]
Population aged ≥75 years (% of total)	5.7	6.8	6.1	7.2	8.1	8.9	9.2[a]
Population growth (average annual growth rate)	0.4	0.5	0.4	0.7	0.8	0.5	0.5[b]
Population density (average per km^2)	100.83	106.65	108.72	111.22	115.36	118.74	121.00
Fertility rate, total (births per woman)	1.9	1.8	1.7	1.9	1.9	2.0	1.9[a]
Birth rate, crude (per 1,000 people)	14.9	13.4	12.6	13.1	12.7	12.8	12.2[a]
Death rate, crude (per 1,000 people)	10.2	9.3	9.2	9.0	8.6	8.6	8.8[a]
Age dependency ratio (% of working population)	57.0	51.0	54.0	54.0	54.0	54.0	59.0
Percentage population urban	73.3	74.1	74.9	76.9	81.5	85.2	79.0
Proportion of single-person households	24.6	27.1	na	31	32.8	33.6[c]	na
School enrolment, tertiary (% gross tertiary enrolment)	25.0	37.0	50.0	54.0	55.0	57.0	60.0

Sources: INSEE, 2013a; World Bank, 2015.
Notes: [a]2013 data; [b]2012 data; [c]2009 data; na: Not available.

Metropolitan France covers an area of about 552 000 km^2, and with an average population density of 119/km^2 it ranks 12th in the EU. However, average density conceals considerable variations; half of the population lives in just over 10% of this territory, while large areas remain sparsely populated. By 2012, 86% of the population lived in urban areas, with the greatest growth in outer suburbs and rural areas surrounding towns, rather than in the city centres. Nonetheless, the population of rural areas has grown 1.5 times faster than urban areas over the past ten years (Brutel & Levy, 2012).

Historically, French immigration policy has been characterized by a tradition of welcome, assimilation and integration of foreigners. However, recent laws have imposed stricter conditions for family reunification and asylum. In 2008, an estimated 5.3 million immigrants (born in a foreign country) resided in France, representing 8.3% of the population (INSEE, 2012b). Individuals born in Algeria, Morocco and Tunisia accounted for 30% of France's immigrant population.

France is ethnically heterogeneous, counting more than a hundred different ethnic groups within its territory. The government does not gather data on ethnicity, although ad hoc surveys may be used to estimate the level of discrimination in access to schools, housing or the labour market. A 2008 survey found that approximately 15% of the French population (10 million) had an origin other than French (INED, 2010).

While the government does not maintain statistics on religious adherence, a 2008 demographic survey showed France to be multidenominational: 43% Roman Catholic, 8% Muslim, 2% Protestant, 0.5% Orthodox, 0.5% Jewish, 0.5% Buddhist and 0.5% other (INED, 2010). Nearly 45% of the population aged 18–50 years declared themselves agnostic or atheist.

Among the EU Member States as of 2013, France has the second highest fertility rate (2.02 births per woman in 2010 and 1.97 in 2013) (see Table 1.1). The French population is ageing because of increasing life expectancy but not because of declining fertility rates as in other European countries. The baby boom after the Second World War will exacerbate this trend in the medium term, and people aged over 75 years are expected to constitute 15.6% of the population by 2050, compared with 9.2% in 2011 (Vasselle, 2011).

Just over 70% of the French population has attained upper secondary education (INSEE, 2013a). In 2011, nearly 60% of the population in the five-year age group following secondary school was enrolled in higher education (Table 1.1).

1.2 Economic context

France is the fifth largest economy in the world and the second largest in Europe. Thanks to its overseas departments and territories, France has the second largest exclusive economic zone in the world in terms of area, second only to that of the United States.

In 2014, the GDP of France exceeded €2 trillion (Table 1.2). The per capita GDP was €27 643 in 2012, ranking 11th among EU27 countries. The budget deficit was 4.8% of GDP in 2012 compared with 5.3% in 2011 and 7.1% in 2010.

Table 1.2

Macroeconomic indicators, 1980–2014, selected years

	1980	1990	1995	2000	2005	2014
GDP (€, millions)	444 706	1 032 780	1 196 181	1 439 603	1 718 047	2 132 449
GDP, PPP (current international US$, millions)	522 735	1 000 996	1 200 881	1 533 008	1 860 700	2 571 970
GDP per capita (€, base 2005)	18 733.8	22 459.6	23 367.0	26 127.1	27 288.6	27 643.7[a]
GDP per capita, PPP (current international US$)	8 071.3	17 764.2	20 143.2	23 707.0	27 288.6	38 847.0
GDP average annual growth rate for previous 10 years (%)	1.6	2.6	2.0	3.7	1.8	0.0
Public expenditure (% of GDP)	na	na	47.2	44.6	46.1	57.5
Cash surplus/deficit (% of GDP)	–0.3	–2.5	–5.5	–1.5	–2.9	–4.8[a]
Tax burden (% of GDP)	na	na	18.8	23.2	22.4	21.3[b]
Public debt (% of GDP)	20.7	35.2	55.5	55.7	66.8	95.6
Value added in industry (% of GDP)	32	27	25	23	21	19
Value added in agriculture (% of GDP)	5	4	3	3	2	2
Value added in services (% of GDP)	63	69	72	74	77	79
Labour force (total in millions)	22.7	23.2	23.1	25.1	25.8	25.8[b]
Unemployment, total (% of labour force)	5.3	7.9	10.0	8.5	8.9	9.8
Poverty rate (%)[c]	14.2[d]	13.8	14.5[e]	13.6	13.1	13.9[a]
Income inequality (Gini coefficient)	na	na	na	na	0.3	0.3[a]
Real interest rate	0.9	7.6	6.8	5.0	4.8[f]	3.3[b]
Official exchange rate per US$ (French francs 1980–1995; € 2000–2012)	4.2	5.4	4.9	0.9	1.2	1.3[a]

Sources: European Central Bank, 2013; INSEE, 2013a, 2015a,b; World Bank, 2015.
Notes: [a]2012 data; [b]2011 data; [c]Population at risk of poverty provided by the National Institute of Statistics and Economic Studies follows Eurostat's definition as the number of people who have an equivalized disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalized disposable income (after social transfers); [d]1979 data; [e]1996 data; [f]2004 data; na: Not available; PPP: Purchasing power parity.

In 2011, 25.8 million people (56.5% of the metropolitan population) were active in the labour market (Table 1.2). Women represented 47.7% of the country's workforce, and their participation in the labour market has increased dramatically in recent decades. Between 2008 and 2009, unemployment increased by 23% (from 7.4% to 9.1%), reflecting the effect of the economic crisis. Since then, the rate has continued to climb despite a slight dip in 2011 to 9.2%, reaching 9.8% in 2014 (INSEE, 2015b).

In the past 25 years, the structure of employment has moved away from agriculture (which today accounts for only 2.9% of the workforce) and manufacturing and construction (currently 20.9% of the workforce) towards the commercial and services sectors, which now employ 19.5 million people (75.8% of the workforce) (INSEE, 2013a). In 2012, 14% of the population was below the poverty level, defined as 60% of median income. Income differs

across the population: the income ratio of the richest 10% and the poorest 10% was 3.6 in 2011, and the Gini index was 0.3 in 2012 (Table 1.2). In comparison with other European countries, income is more equally distributed than in Spain, the United Kingdom or Italy, but less so than in Sweden and Germany (Eurostat, 2013).

1.3 Political context

The institutions of the French Republic are governed by the 1958 Constitution, which ushered in the Fifth Republic and strengthened the role of the executive branch (the president of the Republic and the prime minister) relative to the parliament.

The president is elected by direct universal suffrage for a five-year term. The government, led by a prime minister nominated by the president, develops and guides policy implementation. The prime minister is accountable to parliament, which exercises legislative power and is made up of the National Assembly and the Senate. The National Assembly has 577 deputies elected by direct universal suffrage. Voting takes place based on a single majority vote (i.e. voting for one deputy only) in two rounds, within the framework of constituencies of variable size (one deputy for approximately 100 000 inhabitants). The National Assembly's session is five years but can be shortened if the president decides to dissolve the National Assembly, as has happened five times since the inauguration of the Fifth Republic. The Senate consists of 348 senators who are elected for nine years by indirect universal suffrage through an electoral college consisting of elected officials in each department. One-third of its membership is renewed every three years. The method of polling, the senators' term of office and the fact that the Senate cannot be dissolved give the Assembly a high degree of political stability.

The French administration has become more decentralized since the late 1980s, a substantial change from its long tradition of centralizing policies. There are three decentralized levels of administration: the municipality, the department and the region. These three levels are both administrative constituencies of the state and decentralized local communities run by locally-elected assemblies. They have their own separate areas of responsibility in which they are autonomous. However, the state defines the competencies of each level of administration.

The 36 681 municipalities form the basic structure of France's administrative organization; 80% of municipalities have fewer than 1000 inhabitants. They are run by municipal councils elected for six years by direct universal suffrage. The

mayor is both the elected authority of the municipality and the representative of the state within the territory of the municipality. Municipalities oversee local activities, and their responsibilities are extensive in the economic and social sectors.

The 101 departments, 96 in metropolitan France and five overseas, are territorial communities with elected local assemblies (general councils; *conseil généralaux*) that has responsibility in the areas of health and social care and the financing and provision of lower secondary education (*collèges*). The prefect (*préfet*) represents the state's authority within the department. The departments are grouped into 27 regions, 22 in metropolitan France and five overseas, which constitute administrative authorities for planning and development. A 2014 administrative reform will reduce the number of metropolitan regions to 13, effective 1 January 2016. Each region has an elected assembly (the Regional Council, *conseil régional*). Regional jurisdiction mainly concerns planning, development, economic development, vocational training and upper secondary educational institutions (*lycées*).

Configuration of the current government

The current President of the Republic, François Hollande, was elected in May 2012, and he appointed Jean-Marc Ayrault as Prime Minister. Manual Valls replaced Ayrault as Prime Minister following the March 2014 municipal elections, and his government is composed of 16 ministers. The June 2012 election of deputies resulted in a National Assembly with a slim left-wing majority: 51.5% (297) of the deputies are affiliated with left-wing parties, including 48.53% (280) from the president's Socialist Party (*Parti Socialiste*).

Laws and regulations

France is a civil law country whose laws and regulations (acts, ministerial decrees, administrative orders) are broken down into more than 60 codes by subject area. The codes that are directly related to health care are the social security code (*code de la sécurité sociale*), the mutual societies code (*code de la mutualité*), the public health code (*code de la santé publique*) and the social action and families code (*code de l'action sociale et des familles*). However, health care also falls under rules in other codes, such as the labour code (*code du travail*) and the commercial insurance code (*code des assurances*).

Application of the health laws in the French overseas territories varies. For example, French Polynesia and New Caledonia are autonomous with respect to health matters, while Saint Pierre and Miquelon and Wallis and Futuna rely on the French national health authorities.

For major reforms and annual decisions affecting the social security budget, health care laws are enacted by legislation (acts) after discussion in parliament. Following enactment, decrees (*décrets*) are issued by the prime minister. When specified in acts, some decrees must be assessed by the Council of State (*Conseil d'Etat*). Lower level regulations such as administrative orders (*arrêtés*) are signed by the relevant minister.

France and international organizations

France is a founding Member State of the EU. France also belongs to numerous international organizations, including the United Nations, the World Health Organization (WHO), the European Economic Area (EEA; *Espace économique européen*), the OECD, the World Trade Organization, the North Atlantic Treaty Organization and the Council of Europe. France has signed several treaties with direct or indirect impact on health, including the General Agreement on Tariffs and Trade (*accord général sur les tarifs douaniers et le commerce*) and the European Convention on Human Rights.

1.4 Health status

The overall picture of the state of health in France contains apparent contradictions. On the one hand, indicators such as life expectancy and healthy life-years (*années de vie en bonne santé*) show that the health of the population is good (Fig. 1.2 and Table 1.3).

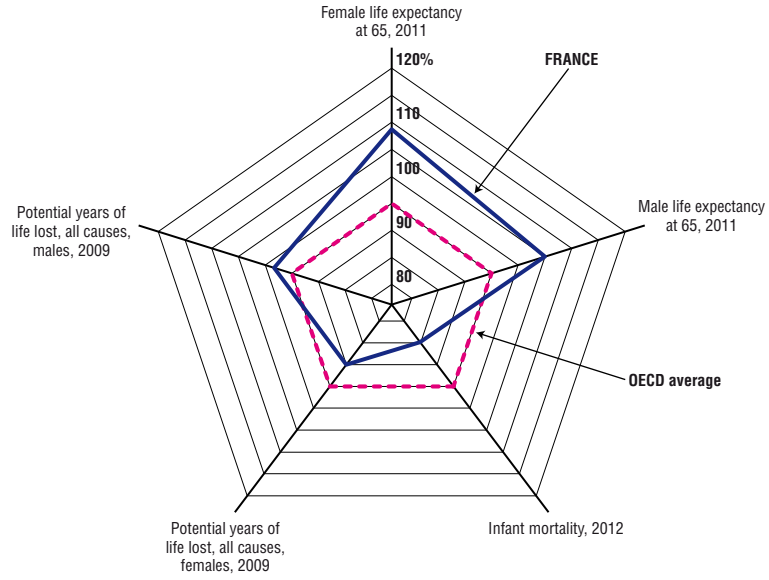
In terms of international comparisons, women live longer and older people remain in better health than in many European countries. France also compares well with respect to cardiovascular diseases, and its relative position regarding mortality caused by alcohol, cirrhosis and cervical cancer is improving. However, France suffers from a high rate of premature male deaths from accidents, smoking and harmful alcohol consumption (HCSP, 2013). The world age-standardized death rate for all cancers is higher among French men (152.62) than for men in Germany, Spain, Italy and the United Kingdom and lower among women (79.87) than for women in these same countries, except for Spain (Malvezzi et al., 2013).

Life expectancy at birth in France is increasing steadily, by three months per year for men and by two months per year for women. The gap between male and female life expectancy remains high, although it is narrowing (Table 1.3). Life expectancy is lower in the overseas departments than in metropolitan France by one year for men and two years for women. In 2013, the expected healthy life-years for both men and women exceeded the EU28 averages both at birth

(63 for men and 64 for women in France and 61.4 for men 61.5 for women in the EU28) and at age 65 (9.8 for men and 10.7 for women in France and. 8.5 for men and 8.6 for women in the EU28) (Eurostat, 2015).

Fig. 1.2

Health status indicators, France versus the OECD average



Source: OECD, 2013.

Table 1.3

Mortality and longevity indicators, 1980–2013, selected years

	1980	1990	1995	2000	2005	2010	2013
Life expectancy at birth, total (years)	74.9	77.6	77.8	79.3	79.9	81.1	82.4
Life expectancy at birth, male (years)	70.8	73.4	73.4	75.3	76.7	78.2	79.0
Life expectancy at birth, female (years)	79.1	81.8	81.8	82.8	83.8	85.3	85.6
Total mortality rate, adult male (per 1,000)	196	168	156	138	127	116	109[a]
Total mortality rate, adult female (per 1,000)	85	69	65	61	57	54	52[a]
HLY at age 65, men	na	na	7.6	7.7	8.5	9.0	9.8
HLY at age 65, women	na	na	8.4	8.6	9.7	9.8	10.7
HLY at birth, men	na	na	60.0	60.1	62.3	61.8	63.0
HLY at birth, women	na	na	62.4	63.2	64.6	63.4	64.4

Sources: INSEE, 2013a; Eurostat, 2015; World Bank, 2015.
Notes: [a] 2012 data; HLY: Healthy life-years; na: Not available.

In 2010, the main causes of death in France were cancer (28.2% of deaths), cardiovascular diseases (26.4%), accidents (external causes) (6.9%), nervous system disorders (6%) and chronic respiratory diseases (5.9%) (Table 1.4).

Table 1.4

Main causes of death, metropolitan France, 1980–2010, selected years

Causes of death[a]	1980	1990	1995	2000	2005	2010
Communicable diseases						
All infectious and parasitic diseases (A00–B99)	6 920 (1.3%)	9 598 (1.8%)	12 472 (2.4%)	10 537 (2.0%)	9 853 (1.9%)	10 718 (2.0%)
Tuberculosis (A15–A19)	1 954 (0.4%)	1 383 (0.3%)	1 119 (0.2%)	1 085 (0.2%)	846 (0.2%)	583 (0.1%)
Sexually transmitted infections (A50–A64)	na	na	na	7	4	3
HIV/AIDS (B20-B24)	0 (0%)	2 738 (0.5%)	4 696 (0.9%)	998 (0.2%)	817 (0.2%)	452 (0.1%)
Noncommunicable diseases						
Circulatory diseases (I00–I99)	203 659 (37.4%)	173 729 (33.2%)	170 886 (32.3%)	161 330 (30.5%)	149 273 (28.4%)	142 456 (26.4%)
Among which:						
Ischaemic heart disease (I20–I25)	50 278 (9.2%)	48 961 (9.4%)	46 711 (8.8%)	45 068 (8.5%)	40 383 (7.7%)	35 324 (6.5%)
Cerebrovascular diseases (I60–I69)	67 462 (12.4%)	48 407 (9.2%)	43 448 (8.2%)	38 308 (7.2%)	33 797 (6.4%)	31 639 (5.9%)
Malignant neoplasms (C00–C97)	123 659 (22.8%)	137 448 (26.3%)	142 245 (26.9%)	143 263 (27.2%)	148 511 (28.3%)	152 209 (28.2%)
Among which:						
Colon cancer (C18)	9 677 (1.8%)	11 424 (2.2%)	12 342 (2.3%)	11 784 (2.2%)	12 265 (2.3%)	12 457 (2.3%)
Cancer of larynx, trachea, bronchus and lung (C32–C34)	21 111 (3.9%)	24 573 (4.7%)	26 231 (5.0%)	26 621 (5.0%)	29 267 (5.6%)	30 772 (5.7%)
Breast cancer (C50)	8 489 (1.6%)	10 269 (2.0%)	10 861 (2.1%)	11 032 (2.1%)	11 481 (2.2%)	11 922 (2.2%)
Cervical cancer (C53)	973 (0.2%)	786 (0.2%)	762 (0.1%)	684 (0.1%)	730 (0.1%)	736 (0.1%)
Diabetes (E10–E14)	7 030 (1.3%)	6 451 (1.2%)	6 421 (1.2%)	10 779 (2.0%)	11 262 (3.1%)	10 679 (2.0%)
Mental and behavioural disorders (F00–F99)	7 972 (1.5%)	12 896 (2.5%)	13 246 (2.5%)	17 305 (3.3%)	17 052 (3.2%)	17 929 (3.3%)
Chronic respiratory diseases (J00–J99)	33 308 (6.1%)	38 000 (7.3%)	40 039 (7.6%)	35 613 (6.7%)	34 992 (6.7%)	31 927 (5.9%)
Digestive diseases (K00–K93)	35 548 (6.5%)	26 998 (5.2%)	26 049 (4.9%)	23 651 (4.5%)	23 118 (4.4%)	23 378 (4.3%)
External causes						
Transport accident (V01–V99)	11 122 (2.0%)	10 084 (1.9%)	8 166 (1.5%)	7 346 (1.4%)	5 224 (1.0%)	3 926 (0.7%)
Suicide (X60–X84)	10 368 (1.9%)	11 354 (2.2%)	11 760 (2.2%)	10 806 (2.0%)	10 673 (2.0%)	10 334 (1.9%)
Ill-defined and unknown causes of mortality (R95–R99)	15 676 (2.9%)	11 344 (2.2%)	10 323 (2.0%)	12 553 (2.4%)	12 857 (2.4%)	21 692 (4.0%)
Total	**544 421 (100%)**	**523 569 (100%)**	**529 370 (100%)**	**528 763 (100%)**	**525 663 (100%)**	**539 083 (100%)**

Source: Epidemiology Centre on the Medical Causes of Death, 2013.
Notes: [a]Categories from ICD-10 (WHO, 2015); HIV/AIDS: human immunodeficiency virus/acquired immunodeficiency syndrome; na: Not available.

However, these death rates differ between men and women, with women's death rates being systematically lower. Lung cancer deaths in women increased dramatically between 2000 and 2008, reflecting an increase in smoking behaviour in women, which commenced later than it did in men (Binder-Foucard et al., 2013). The incidence of diabetes has steadily increased since 2000, while hospitalizations for myocardial infarction and ischaemic heart disease have diminished (Table 1.5).

Table 1.5

Morbidity and factors affecting health status, 2000–2008, selected years

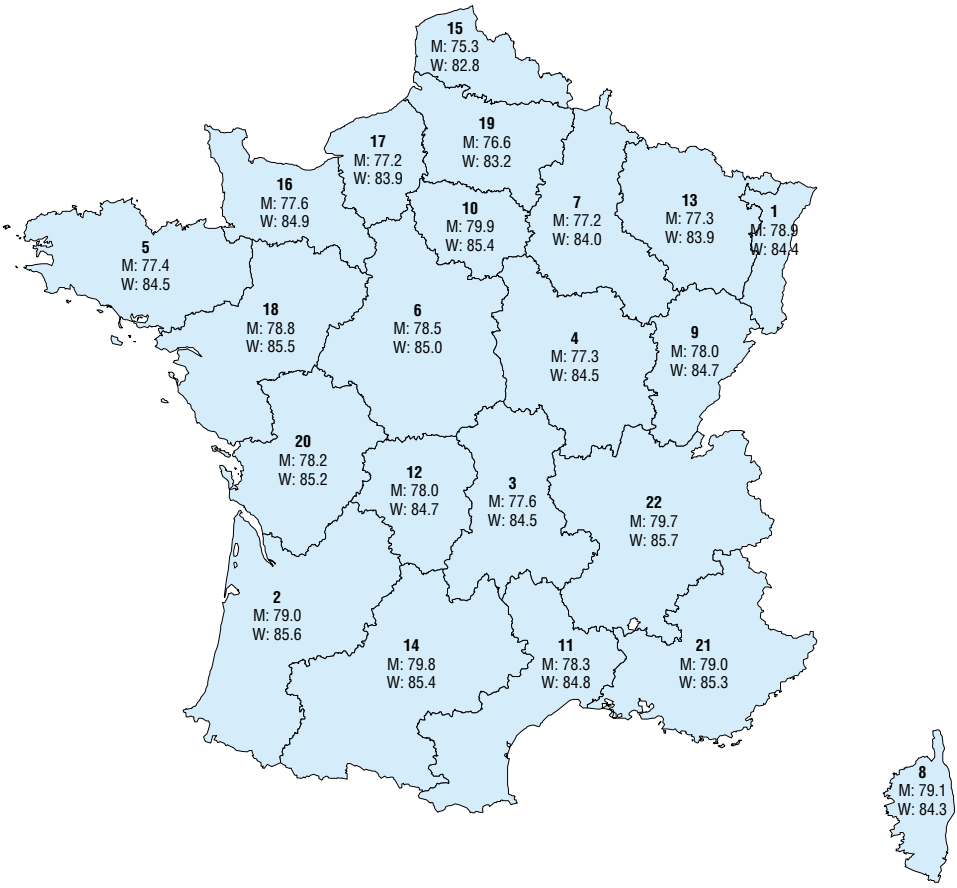
Diseases	2000			2005			2008		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Diabetes (SIR)	121.5	106.3	236.0	143.0	113.7	270.0	154.0[a]	121.0[a]	286.0[a]
Cancer (SIR)	351.7	234.9	na	396.1	248.8	na	362.6[b]	252[c]	na
Myocardial infarction (raw hospitalization rate/100,000)	146.1	52.7	95.0	128.0	47.0	83.7	120.4	43.2	78.7
Stroke (SIR)	169.2	112.8	137.1	163.8	109.6	133.3	162.9	110.3	133.5
Ischemic heart disease (hospital discharges/100,000)	75.7	29.8	49.4	61.7	24.4	40.39	49.7[c]	18.8[c]	32.1[c]

Sources: Fagot-Campagna et al., 2010; de Peretti et al., 2012ab; Binder-Foucard et al., 2013.
Notes: [a]2006 data; [b]2012 data; [c]2009 data; na: Not available; SIR: Standardized incidence rate per 100,000.

Social and geographical inequalities in health remain substantial (Fig. 1.3). All indicators show higher mortality rates in the northern part of France (from Brittany in the west to Alsace in the east), and in regions located on an axis from the north-east to Auvergne in the centre of the country. Along this axis, the higher rates of mortality concern all causes of death, whereas in the northern crescent (Brittany, Normandy, Nord-Pas-de-Calais and Alsace), risk factors such as alcohol consumption explain some of the higher mortality. Alcohol and tobacco use are not independent of socioeconomic status and are often higher in poorer regions affected by higher unemployment and other socioeconomic indicators (INPES, 2013).

Fig. 1.3

Life expectancy at birth in metropolitan France by region, 2011



Source: INSEE, 2012a.
Notes: France: 31.4 million men and 33.5 million women. M: Men; W: Women; 1: Alsace; 2: Aquitaine; 3: Auvergne; 4: Burgundy 5: Brittany; 6: Centre; 7: Champagne-Ardenne; 8: Corsica; 9: Franche-Comté; 10: Île de France; 11: Languedoc-Rousillon; 12: Limousin; 13: Lorraine; 14: Midi-Pyrennées; 15: Nord-Pas-de-Calais; 16: Normandy (Basse); 17: Normandy (Haute); 18: Loire Valley; 19: Picardy; 20: Poitou-Charentes; 21: Provences-Alpes-Côte d'Azur; 22: Rhône-Alpes.

Lifestyle factors affecting health status

Tobacco and alcohol, respectively, are the first and second most common causes of avoidable mortality. Tobacco was estimated to cause 73 000 attributable deaths (59 000 men and 14 000 women) in 2004 (Hill, 2012) and alcohol to cause 49 000 deaths in 2009 (Guérin et al., 2013). A number of tobacco and alcohol control policies based on regulation of publicity and sales as well as taxes have been implemented with the goal of decreasing consumption.

A tobacco ban initially in public places and workplaces was progressively implemented in France (Act of 31 December 1970, Act of 9 July 1976, Act of 10 January 1991, Act of 21 July 2009). Since 1 January 2008, the tobacco ban has been extended to bars, pubs, restaurants, hotels, casinos and nightclubs. Individuals not respecting this ban may be fined from €68 to a maximum of €450 (Ministerial Circular of 29 November 2006). After a decrease in the prevalence of daily smokers between 2000 and 2005, smoking prevalence increased from 27.3% in 2005 to 29.1% in 2010, the first significant increase since the 1991 Evin Law prohibited smoking in most enclosed public places (Beck et al., 2010). By comparison, the 2012 EU27 average percentage of daily smokers was 28% (Danet, 2012). Two subpopulations are responsible for this increase between 2005 and 2010: women (increasing from 23.3% to 26%) and unemployed persons (from 44% to 50.8%). Nonetheless, the emergence and increasing popularity of electronic cigarettes in recent years appears to be reversing this trend. In 2013, cigarette sales declined 7.6% according to the French Observatory on Drugs and Addictions (*L'observatoire français des drogues et des toxicomanies*; OFDT) (OFDT, 2014).

The alcohol industry is a powerful economic sector in France, and wine constitutes a particularly important cultural reference. The 1991 Evin Law imposed a partial ban on alcohol advertising and permitted advertising requires the following health warning: "alcohol abuse is dangerous for your health". The 2009 HPST Act increased the legal drinking age to 18, banned open bars and set limits on the sale of alcoholic beverages in petrol stations. Alcohol is the most consumed psychoactive substance in France, with 9.7 million regular users, corresponding to 21% of the population (OFDT, 2010). In 2012, annual alcohol consumption was 11.8 litres per inhabitant aged over 15 years (INSEE, 2013a). Despite a steady decrease over the last 50 years, this number remains higher than the target of 11.5 litres set by the 2004 Public Health Act (Danet, 2012). It is important to note that indicators such as average consumption do not reveal the extent of harmful use of alcohol. In 2010, nearly a quarter of adults aged 18 to 75 indicated that they had engaged in risky drinking behaviours (Danet, 2012).

Socioeconomic health inequalities

France has long reported health inequalities across socioeconomic groups that are wider than in most other European countries. These inequalities are more pronounced for men than for women, with working-class individuals having a significantly higher risk of death before age 65 than managers. At age 35, a male labourer has a 13% risk of dying before age 65, while the risk for a male manager is 6% (Blanpain, 2011).

The French trends in improving health status, as reflected by the increase in life expectancy and the decrease in infant mortality, have not been equally beneficial across socioeconomic groups, with the greatest improvement being observed among the wealthiest. For example, life expectancy at 35 is seven years lower for working class men and three years lower for working class women compared with managers (Danet, 2012). These inequalities also exist when morbidities or risk factors such as obesity are examined (Table 1.6).

Table 1.6

Social inequalities in health and access to care between workers and managers in France, 2010

	Average number diseases declared	Obesity (% population)	Dental problems (% population)	Access to dental care in the last 2 years (% population)[a]
Workers	2.9	15.2	44.0	63.9
Managers	2.5	6.3	29.4	82.3

Sources: Dourgnon, Guillaume & Rochereau, 2012; Clavet, Moisy & Chardon, 2013; OECD, 2013.
Note: [a]2009 data.

These social health inequalities result not only from risk factors such as alcohol and tobacco consumption but also from differences in access to health care that seem to increase over time. In 2012, 26% of the population reported having forgone health care in the last 12 months for financial reasons (Célant, Guillaume & Rochereau, 2014). This inequity in access is concentrated in a limited number of goods and services for which OOP expenditure by patients is the highest. Dental health care is of great concern (18% of the population aged 18–64 years have forgone dental health care in the last 12 months), followed by eye care (10%) (Célant, Guillaume & Rochereau, 2014). Forgoing health care increases inversely with the level of income: people in the lowest income quintile (under €926 a month) are nearly three times more likely to forgo care than people in the highest income quintile (more than €2120 a month) (Célant, Guillaume & Rochereau, 2014).

Recent immigrants have lower health status than individuals who were born in France. This is partly explained by lower socioeconomic status, lower complementary VHI coverage and by the economic level of the country of origin. Immigrants also have lower access to health care, with greater barriers for specialist visits than for visits to GPs (Berchet & Jusot, 2011, 2012). Several

public policies have been implemented since the late 1990s to address these issues, mainly focused on improving access to health care, but to date they have not shown significant results (see section 2.2).

Sexually transmitted diseases and human immunodeficiency virus

In recent years, there has been a growth in sexually transmitted diseases. The number of gonorrhoea infections has risen steadily since 1996, reflecting an increase in risky sexual behaviours, and there is growing concern about antibiotic resistance (Nguyen et al., 2011). There has also been a steady increase in the number of *Chlamydia* infections in recent years, particularly among young women (Goulet et al., 2011). The evolution in the number of cases of syphilis has been marked by phases: a rapid increase between 2000 and 2002, followed by relative stability between 2003 and 2006, a significant increase in 2007 and a 12% decrease between 2007 and 2009 (Bouyssou et al., 2011). In the early 2000s, the Paris region saw the greatest share of cases, but over time, the epidemic has spread to other regions. Over this 10-year period, the majority of cases (83%) were in homosexual men. France is a low endemic country for the hepatitis B virus, with incidence of acute symptomatic cases estimated at 1/100 000 inhabitants (Antona et al., 2011).

In 2012, the estimated incidence of human immunodeficiency virus (HIV; *virus de immunodéficience humaine*) infection was 6400 new infections (100 million inhabitants) increasing to 7500 when the estimated proportion of undiagnosed cases was included (Ndawinz et al., 2011; Cazein et al., 2014). The prevalence of undiagnosed HIV infection is estimated at 28 800 (450/million population) (Deuffic-Burban & Costagliola, 2006). Heterosexual transmission accounted for 56% of new infections in 2012, with three-quarters of these infections in people coming from sub-Saharan African countries. Transmission was 1% among injecting drug users, reflecting risk-reduction policies put into place over the past 20 years. In contrast to overall incidence, which has remained stable since 2007, the incidence among homosexual men increased 39% between 2003 and 2012 (Cazein et al., 2014), accounting for 42% of new infections in 2012. There are geographical disparities, with higher HIV infection rates in the Parisian area and overseas departments (Danet, 2012).

By the end of 2012, a total of 88 000 cases of the acquired immunodeficiency syndrome (AIDS; *syndrome de immunodéficience acquise*) and 47 000 related deaths had been recorded in France since the beginning of the epidemic. After reaching a peak of 5800 cases a year in 1996, the AIDS incidence decreased dramatically to 2300 cases per year in 1998, following the increased use of antiretroviral drugs. Since then, AIDS incidence has decreased at a slower rate,

falling to about 1500 cases per year in 2012. The male:female ratio decreased up to 2004 and has remained constant since then at around 2.2:1. France remains one of the western European countries with a relatively high rate of AIDS; however, it is lower than other European countries such as Portugal and Spain (WHO Regional Office for Europe, 2012).

Dental health and immunization

Oral health estimated by the average number of decayed, missing or filled teeth at age 12 is 1.2 in France (2006), which is the same level as in Belgium, Italy and Spain, but not as good as in the United Kingdom and Germany, each of which reported 0.7 in 2005 (OECD, 2009).

One of the measures for improvement of health status in France is the national immunization programme (see section 5.1). Only three immunizations are obligatory for the general population: tetanus, diphtheria and poliomyelitis; however, many others are recommended depending on age (Houssin, 2010). Vaccination coverage varies with the type of vaccination and age. One of the public health objectives of the 2004 Public Health Act was to reach at least 95% coverage rate at appropriate ages by 2008; this target has been partly met (Guthmann, Fonteneau, & Lévy-Bruhl, 2012). Weaknesses remain, with insufficient coverage in teenagers and a low rate of uptake of the measles and hepatitis B vaccinations in children (HCSP, 2010).

Maternal and child health

With regard to reproductive health, the overall French situation is generally good. The average age of women at first childbirth increased from 29.3 years in 2001 to 30.1 years in 2011. In that same period, the number of adolescents giving birth decreased to 34 per 1000 women aged 15–19 (Table 1.7).

Table 1.7

Maternal, child and adolescent health indicators, 1980–2010, selected years

Indicators	1980	1990	1995	2000	2005	2010
Adolescent birth rate (per 1,000 women 15–19 years)	89	44	39	39	37	34 (p)[a]
Termination of pregnancy (abortion) rate (per 1,000 women)	13.2	14.6	13.1	14.2	15.1	15.7
Neonatal mortality (per 1,000 births)	5.8	3.6	3.0	2.9	2.5	2.5
Postneonatal mortality rate (per 1,000 live births)	4.3	3.8	2.0	1.6	1.3	1.1
Infant mortality rate (per 1,000 live births)	10.0	7.3	4.9	4.4	3.6	3.3[a]
Under-5 mortality rate (per 1,000 live births)	12.0	9.0	7.0	5.0	5.0	4.0[b]
Maternal mortality rate (per 100,000 live births)	12.9	10	9.2	6.8	5.8	8.9
Perinatal and neonatal mortality rate (per 1,000 births)[d]	10.2	6.1	4.8	0.8	3.8	3.9[c]

Sources: Eco-Santé, 2013; INSEE, 2013a.
Notes: [a]2012 data; [b]2011 data; [c]2008 data; [d]The apparent strong growth in perinatal mortality/stillbirth rates reflects legislative changes to criteria for intrauterine deaths and stillborn. Therefore, these definitional differences mean that it is not possible to compare France with other countries (see definitions, perinatal mortality in OECD health data (OECD, 2013); (p): Provisional data.

In terms of contraception, oral contraceptives remain the most popular form of birth control, used by 55.5% of women aged 15–49 in 2010. However, 7.7% of women at risk for an unplanned pregnancy stated that they used no form of contraception. From age 15, minors have free access to contraceptives covered by SHI with a prescription and free and anonymous access to emergency contraception without a prescription. Between 2000 and 2010, the proportion of sexually active women aged 15–49 who indicated that they had used emergency contraception increased from 9% to 24% (Danet, 2012).

Abortion is legal on demand in France up to 12 weeks following conception. Terminations at later stages require certification by two physicians that the abortion is necessary to prevent grave permanent injury to the woman's physical or mental health, that the woman's life is at risk or that the child will suffer from a particularly severe illness that is considered incurable. Despite the growing use of contraception and the availability of emergency contraception, the voluntary abortion rate has not fallen (Table 1.7). Since 2000, 5–6% of the total number of abortions was among women under age 18. Drug-induced abortions accounted for half of the total abortions (Danet, 2012).

In 2010, the French number of neonatal deaths per 1000 births was 2.5 (Table 1.7), the same as the EU27 average. Mortality rates have diminished for each age group, except for infant mortality, which remained stable at 3.3 per 1000 live births in 2012. In the overseas departments, infant mortality is more than two times that of metropolitan France. After a significant decrease in 2005, maternal mortality has once again increased, and in 2010 the rate was 8.9 deaths per 100 000 births (Table 1.7). A 2011 ministerial circular directed the ARSs to make the reduction of avoidable maternal deaths a priority.

2. Organization and governance

The French health care system is of a mixed type, structurally based on a Bismarckian approach with Beveridge goals reflected in the single public payer model, the current increasing importance of tax-based revenue for financing health care and strong state intervention. SHI, under various schemes, currently covers almost 100% of the resident population. The delivery of care is shared among private FFS physicians, public hospitals, private non-profit-making hospitals and private profit-making hospitals. In addition to the health care sector and the social sector, there is a health and social care sector, known as the "third" sector (*le secteur médico-social*), which provides care and services to elderly and disabled people.

Jurisdiction in terms of health policy and regulation of the health care system is divided among the state (parliament, government), SHI and, to a lesser extent, local authorities, particularly at the regional level. However, trends in the reforms since the mid-1990s have attempted to devolve a greater remit in governance and health policy decision-making, in particular in the area of planning, to the regional level. Several regional institutions were created to represent the main stakeholders – SHI schemes, the state, health professionals and public health actors – at the regional level. However, with the aim of achieving better governance of the system at the regional level, better responsiveness to needs and higher efficiency, the 2009 HPST merged most of these institutions into a single "one-stop shop", the ARS. Cutting across the traditional boundaries of health care, public health and health and social care sectors, the ARS has responsibility for ensuring that health care provision meets the needs of the population by improving articulation between ambulatory, hospital and health and social care sectors, while respecting national health expenditure objectives.

Planning and regulation involve negotiations among provider representatives (hospitals and health professionals); the state, represented by the ministries in charge of health and in charge of the budget and public accounts; and SHI.

The outcome of these negotiations is translated into administrative decrees and laws passed by the parliament and collective agreements signed by SHI and health professionals' representatives. These include the Public Health Act (*Loi relative à la politique de santé publique*), Social Security Finance Act (*Loi de financement de la sécurité sociale*) and other reform acts. In the context of increasing health care expenditure and the increasing deficit of SHI, the role of the state in planning and regulation has increased since the mid-1990s. Responsibility for capacity planning is shared by the central and the regional levels. At the regional level, the ARSs coordinate ambulatory and hospital care for the population as well as health and social care for the elderly and the disabled through the PSRS, which is based on population needs. Each sector's planning process must comply with the PSRS. This is a first attempt at regional planning of the ambulatory care sector.

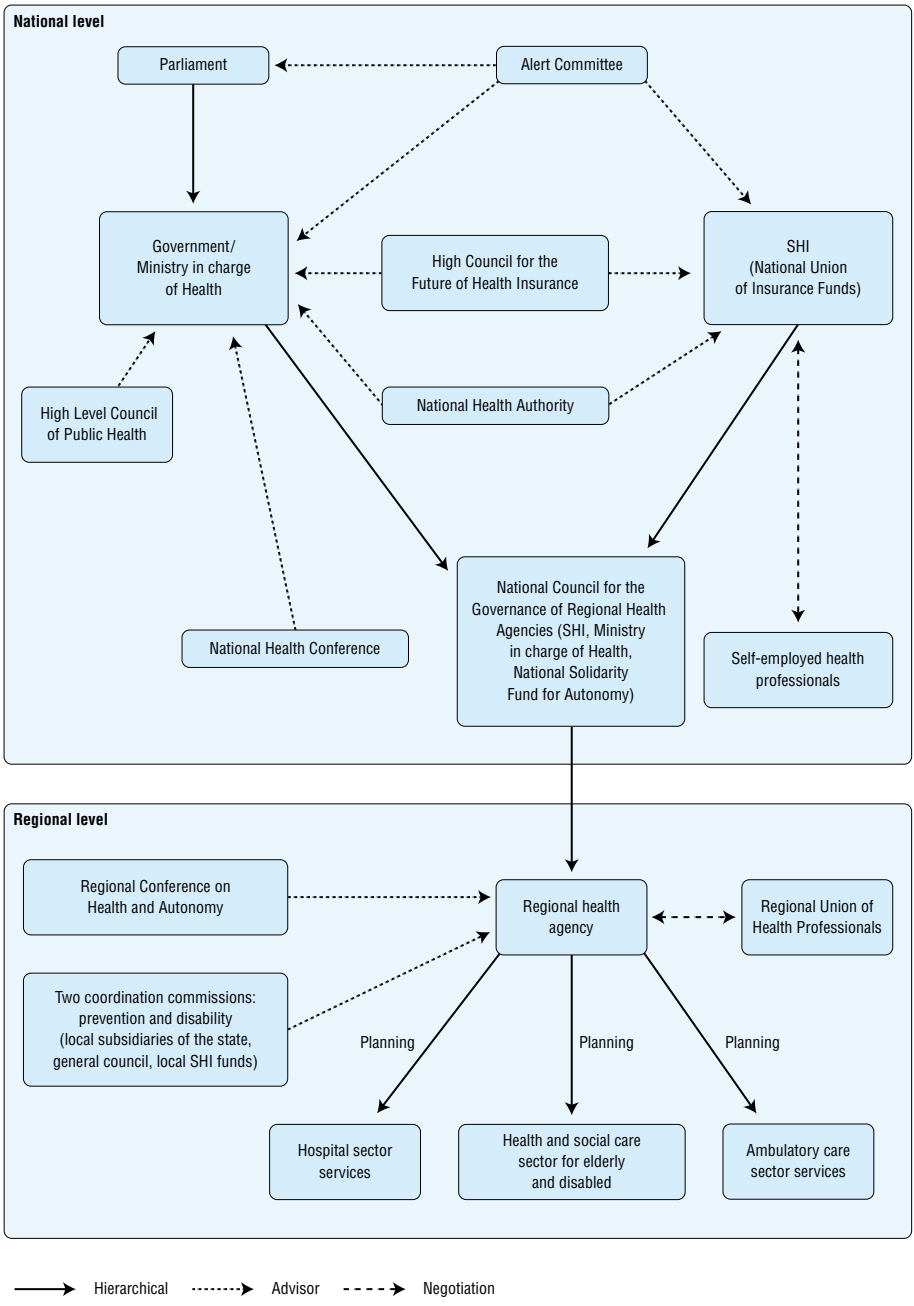
Providers are paid by SHI, but patients may have to pay the provider and claim reimbursement by SHI afterwards (e.g. for GP visits). The statutory tariffs are set through negotiations between providers and SHI and are approved by the Ministry in charge of Health. Quality of care is regulated at the national level. Hospitals must undergo a certification process every four years but there is no formal recertification or relicensing process for health professionals. However, doctors, pharmacists, dentists and midwives are required to follow lifelong learning activities through professional continuous development.

2.1 Overview of the health system

The French health care system is structurally based on a Bismarckian approach, with goals of universality and solidarity that have led to an increasingly Beveridge style of system. SHI currently covers almost 100% of the resident population. Jurisdiction over health policy and regulation of the health care system (Fig. 2.1) is divided among:

- the state: the parliament and the government, specifically the Ministry in charge of Health;
- SHI; and
- local communities to a lesser extent, particularly at the regional level.

Fig. 2.1
Overview of the health system in France, 2014



Delivery of care is shared among private, independent physicians, public hospitals, private non-profit-making hospitals and private profit-making hospitals. Alongside the health care sector and the social sector, there is a combined health and social care sector, the "third sector", that provides care and supportive services to elderly and disabled people.

2.2 Historical background

The present system of social security, including SHI, was established after the Second World War. Prior to this, health and social care were largely provided through mutual benefit associations. The statutory system first emerged with the 1930 Act on Social Insurance, which created a system of compulsory protection paid for by employers for employees whose earnings fell below a certain level. Coverage encompassed five areas: illness, maternity, disability, old age and death. By 1939, two-thirds of the French population was covered for illness by mutual benefit associations, with free choice of the organization providing coverage. The creation of SHI in 1945 within the social security system changed the role of these associations, which either disappeared or became providers of VHI (see section 3.3.2).

Social security consists of compulsory protection, with four branches covering health, work-related illness and injuries, retirement and family. SHI is the branch of social security covering health (disease, maternity, incapacity and death) and is funded by contributions from both employers and employees, with benefits provided in cash and in-kind. While the founders of the social security system, largely inspired by the Beveridge report in the United Kingdom, aimed to ensure uniform rights for all, this was opposed by certain social–professional groups that already benefited from insurance coverage with more favourable terms. Several of them succeeded in maintaining their particular systems, which were transformed into small SHI schemes. However, today, three main SHI schemes cover 95% of the population (see section 2.3.5).

Initially, SHI covered workers and their families only. However, the principle of expanding coverage to the whole population had been raised as early as 1945 but was only put into practice in stages (for more details, see section 2.2 in Chevreul et al., 2010).

The shift from an employment-based system towards the CMU system was nearly achieved with the 1999 Universal Health Coverage Act (*Loi No. 99–641 du 27 juillet 1999 portant création d'une couverture maladie universelle*), which

instituted a residency-based right to SHI coverage and created the CMU Fund (*Fonds CMU*; see section 3.2) to provide free public coverage for individuals whose incomes fall below a certain level; individuals above this threshold who are not entitled to SHI on an occupation basis must pay a share of their income to be covered on a voluntary basis by SHI. Undocumented immigrants are not eligible for access through CMU. However, those who have lived in France for at least three months are eligible for free coverage under the state medical assistance (*aide médicale de l'état*; AME) (see section 3.3.1). In parallel, from the late 1990s, funding methods on the beneficiary side have shifted from an earned income-based social contribution to an earmarked tax, the CSG (see section 3.3.1).

2.3 Organization

The current institutional organization of the health system is the result of the will of the founders of the social security system to create a single block system, guaranteeing uniform rights for all. Health insurance in France, therefore, has always been more concentrated and uniform than in other Bismarckian systems. Another key difference is that the French SHI has never really had the management responsibilities accorded to SHI regimes and funds such as those in the German health care system. The state rapidly took responsibility for the financial and operational management of SHI (e.g. setting premium levels and the prices of goods and services), and nowadays management responsibilities are shared between the state and SHI.

2.3.1 The parliament

The parliament has control over the health care system and its resources. It has control over health policy priorities by passing public health acts. The first Public Health Act was passed in 2004 (*Loi No. 2004–806 du 9 août 2004 relative à la politique de santé publique*) and a new one is expected in late 2015. The parliament has control over resources by passing an annual Social Security Finance Act. This Act is proposed by the government, based on the reports of (1) the Auditor's Office (*Cours des comptes*), which is an independent public body responsible for monitoring state and social security bodies, to ensure adequate control over and proper use of public funds; (2) the High Council for the Future of Health Insurance (*Haut conseil pour l'avenir de l'assurance maladie*; HCAAM); (3) the High Council for Public Health (*Haut conseil de*

la santé publique; HCSP); and (4) the National Health Conference (*Conférence nationale de santé*) (the last three advisory bodies are described in section 2.3.7). This Act on Social Security Finance:

- sets a projected target (ceiling) for health insurance spending for the following year (ONDAM);
- approves a report on trends in policy for health and social security; and
- contains new provisions concerning benefits, regulation and measures to reach the target.

The parliament also approves the revenue side of the budget based on the contribution rates for employers, beneficiaries and employees, and specific earmarked taxation proposed by the government.

The government, however, retains the leading role in proposing both public health acts and the annual Social Security Finance Act to the parliament and in writing the by-laws and decrees that result from the acts passed.

2.3.2 Ministry in charge of Health

The Ministry in charge of Health is the central level of the Administration of Health and Social Affairs (*Administration sanitaire et sociale*). It comprises four directorates, which have the following responsibilities:

- General Directorate of Health (*Direction générale de la santé*), which oversees health policy;
- General Directorate of Health Care Supply (*Direction générale de l'organisation des soins*), which manages the human and capital resources of the entire health care system;
- Directorate of Social Security (*Direction de la sécurité sociale*), which is responsible for the policies, governance and financing of the social security system, including preparation of the annual Social Security Finance Act passed by the parliament; and
- General Directorate for Social Policy (*Direction générale de la cohésion sociale*), which is responsible for health and social care for elderly, disabled or vulnerable people.

Depending on the government in place, the Ministry in charge of Health may have a different name; it will include the four directorates or fewer and each of the directorates will be the responsibility of one or more ministers. This

depends on the political power of the minister who is in charge of health. Since 2014, the Ministry in charge of Health also has responsibility for social affairs and women rights.

The Ministry in charge of Health is responsible for preparing and implementing government policy in the areas of public health and organization and financing of the health care system in the frame of the Public Health Act. It controls a large part of the regulation of health care expenditure based on the overall framework established by the parliament. Its specific responsibilities include:

- allocating the budgeted expenditure among the different sectors (hospitals, ambulatory care, mental health care, social and health sector for disabled) and, with respect to hospitals, among the different regions;
- deciding on the number of medical students to be admitted to medical school each year (*numerus clausus*), the number of hospital beds and the amount of heavy medical equipment, including expensive medical technologies;
- setting the lump sum tariffs for public and private hospitals under the T2A system;
- approving the agreements signed between SHI and unions representing self-employed health care professionals;
- setting the prices of drugs and devices on the basis of proposals from the National Health Authority (*Haute Autorité de Santé*; HAS) ad hoc committees;
- establishing safety standards in hospitals; and
- defining priority areas for national programmes.

At the regional level, the Administration of Health and Social Affairs is represented by the ARSs (see section 2.4), which are not directly under the supervision of the Ministry in charge of Health but fall under the administrative supervision of the National Steering Council (*Conseil national de pilotage*; CNP), which is composed of delegates of the ministries in charge of health and in charge of public accounts and social security, the SHI and the CNSA.

2.3.3 Subordinate agencies/arm's length bodies

The Ministry in charge of Health relies upon a number of health agencies, which are under its supervision, and other public bodies in the development and implementation of policies for which it is responsible. Some of these agencies are part of the public health prevention and health safety surveillance network (see section 5.1.1).

French Biomedicine Agency (Agence de la biomédecine). This is a public organization operating in four key areas of human biology and medicine: assisted reproductive technologies; prenatal and genetic diagnosis; embryo and stem cell research; and the procurement and transplant of organs, tissues and cells.

French National Agency for Medicines and Health Products Safety (Agence nationale de sécurité du médicament et des produits de santé; *ANSM).* The ANSM is the competent authority for all safety decisions taken concerning health products from their manufacturing to their marketing. It carries out four core missions: (1) scientific evaluation, (2) laboratory oversight and advertising regulation, (3) inspection of industrial sites, and (4) information for health professionals. The ANSM also coordinates vigilance activities relating to all relevant products. This Agency, successor to the French Health Products Safety Agency (*Agence Française de Sécurité Sanitaire des Produits de Santé*), was created in the wake of the scandal over Mediator, an anti-diabetes drug that remained on the French market until 2009 despite mounting evidence of serious side-effects that led other countries to ban it as early as 1997 (see section 6.1).

French Blood Agency (Etablissement français du sang). This is the single operator for blood transfusions in France, and its mission is to ensure the availability and the safety of red blood cells, platelets and plasma throughout France.

InVS. The Institute is responsible for surveillance and alert in all domains of public health. Its mandates include monitoring and permanent observation of population health conditions, health surveillance and health alerts, including the safety of products intended for human use.

INPES. The Institute is in charge of implementing policies in matters of prevention and health education within the government's public health policy framework. It also has in its remit management of emergency or exceptional situations having serious consequences on the health of the general population.

Health Emergency Preparedness and Response Agency (L'Établissement de préparation et de réponse aux urgences sanitaires; *EPRUS).* The Agency was created to respond to serious health threats in France, as well as around the world, by facilitating the organization and deployment of health personnel in the event of a major health crisis. EPRUS maintains a corps of health reservists, including working and retired health professionals as well as students at the end of their studies, who are prepared to intervene on the ground in France or abroad. It also manages France's strategic pharmaceutical stock.

French Agency for Food, Environmental and Occupational Health Safety (Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail; *ANSES).* The ANSES evaluates risks in food, the environment and workplaces through monitoring, alert, research and investigation. It was created in July 2010 by the fusion of the French Agency for Health Safety, Environment and Labour (*Agence française de sécurité sanitaire de l'environnement et du travail*) and the Food Safety Agency (*Agence française de sécurité sanitaire des aliments*).

Radioprotection and Nuclear Safety Institute (Institut de Radioprotection et de Sécurité Nucléaire; *IRSN).* The IRSN was created in 2002 and is under the joint authority of the ministries of the environment, health, industry, research and defence. The IRSN's field of expertise covers all of the risks related to ionizing radiations used within industry and medicine, as well as natural radiation rays.

Agency for Information on Hospital Care (Agence technique de l'information sur l'hospitalisation). The Agency manages the information systematically collected from all hospital admissions and used for hospital planning and financing.

National Agency to Support the Performance of Health and Health and Social Care Institutions (Agence nationale d'appui à la performance des établissements de santé et médico-sociaux; *ANAP).* The ANAP provides advice and support to health and social care organizations for internal reorganization plans; when facing financial difficulties for asset management; for merger and acquisition programmes; for assessment, audit and expertise of strategic plans, with a particular focus on buildings, equipment and the information systems; and for audits of performance. ANAP is also required to provide support to the ARSs (see section 2.4) and to the Ministry in charge of Health in monitoring the performance of health and social care organizations

and in the strategic planning of health care provision and delivery. The development of tools to monitor and improve the performance of hospitals and social care organizations is also in the remit of ANAP.

National Agency for the Quality Assessment of Health and Social Care Organizations and Services (Agence nationale de l'évaluation de la qualité des établissements et services sociaux et médico-sociaux). The remit of the Agency is to promote an environment of "empathic treatment" (bientraitance) in health and social care, which encompasses the promotion of patient rights and the development of preventive measures to avoid mistreatment, in particular in vulnerable populations such as elderly, disabled people, children, adolescents and socially excluded people. It produces practice guidelines for the health and social care sector and evaluates organizations and services.

National Institute for Cancer (Institut National du Cancer; *INCa).* This is the national health and scientific agency for oncology and it provides expertise in the field of cancer and scientific programming, evaluation and financing of projects. It mainly provides expertise in the field of treatment and develops clinical guidelines, monitors and finances research and development in cancer and contributes to continuing medical education in the field of cancer.

The merger of three of these health agencies has been proposed as part of the planned 2015 Health Reform Law (*projet loi de santé 2015,* see section 6.2): InVS (public health surveillance), INPES (education and prevention) and EPRUS are to be absorbed into a National Institute for Prevention, Surveillance and Public Health Intervention.

2.3.4 Independent health authority

The HAS is an independent public body with financial autonomy to bring together within a single entity a number of activities designed to improve the quality and the efficiency of patient care. The HAS remit is diverse, ranging from assessment of drugs, medical devices and procedures to publication of guidelines and accreditation of health care organizations and certification of doctors. It is mandated by law to carry out specific missions on which it reports to the government and the parliament. It liaises closely with government health agencies, SHI funds, research organizations, unions of health care professionals and patients' representatives. Its agenda is defined by a board of eight directors designated by the presidents of the French Republic, the National Assembly, the Senate and the Economic and Social Council. The HAS board provides governance. Each board member heads a specialist committee and is responsible for a specific mission or specific aspects of a mission. It has recently

been considered too independent in terms of defining its work programme and, therefore, not responding appropriately to the need of the government and the state for more guidance concerning the efficiency of the system. The planned 2015 Health Reform Law (see section 6.2) is, therefore, considering a change in the strategic governance of HAS to ensure that it will respond more appropriately to public needs.

2.3.5 SHI

SHI is composed of several schemes, which cover virtually the entire population. Individuals and their families are affiliated with a scheme based on their employment status and remain in this scheme in retirement. Working people have no choice regarding the scheme in which they are enrolled and may not opt out of coverage except in certain cases (e.g. expatriates and employees of international corporations or institutions). Consequently, there is no competition among the schemes. Non-working people are automatically enrolled in the general scheme.

The three main schemes and beneficiaries in 2011 are as follows:

The general SHI scheme (*Caisse nationale d'assurance maladie des travailleurs salariés*; CNAMTS) covers employees in commerce and industry and their families (57 million beneficiaries accounting for 88% of the population) and individuals eligible for CMU basic coverage (2.2 million beneficiaries, 3.4% of the population).

The agricultural SHI fund (*Mutualité Sociale Agricole*) covers farmers and agricultural employees and their families (3.4 million beneficiaries, 5.1% of the population).

The SHI scheme for self-employed people (*régime social des independents*) covers artisans and self-employed people (with the exception of self-employed agricultural workers), including professionals such as lawyers and independent health professionals (4 million beneficiaries, 6% of the population).

The schemes are represented by the National Union of Health Insurance Funds (*Union Nationale des Caisses d'Assurance Maladie*; UNCAM) in negotiations with health care providers.

Each of the three major health insurance schemes is made up of a national health insurance fund and local structures corresponding to the degree of geographical distribution involved.

Smaller schemes cover just over two million people, also on an employment-related basis. Several are linked to the general scheme, including those for local and national civil servants, doctors working under state health agreements, students and military personnel. Other schemes, such as those for miners, employees of the national railway company, the clergy, seamen and the national bank, function autonomously. For historical reasons, people from the Alsace and Moselle regions benefit from their own scheme, which offers better coverage with higher contribution rates.

2.3.6 Professional organizations

There are two types of professional organizations: professional associations or chambers (*conseil de l'ordre*) and trade unions. For most medical specialties, both an association and a union exist. Professional associations or chambers for doctors, pharmacists, dentists, midwives, physiotherapists and nurses are concerned with medical ethics and the supervision of professional practice. The association is responsible for all matters pertaining to the scientific activities of a specialty, including developing guidelines and ensuring compliance with annual DPC requirements, while the union is in charge of the negotiations between the professionals and SHI over fees and other matters affecting practice. In addition to their professional organizations and unions, health professionals may also join any of the trade unions that exist to represent workers in all fields of industry and services.

Trade union representation is fragmented, not only because of the existence of different professions but also through differences in status, for example, between salaried and self-employed professionals. In addition to "vertical" unions, which represent interests at the national level, "horizontal" unions have developed at the departmental level. There are five unions for self-employed doctors that are considered representative and competent to sign fee agreements with SHI. Because of this diversity, the unions' positions on government measures may differ. Only 15–20% of physicians in private practice are union members (Borgetto, 2008).

At the national level, an umbrella organization represents all health care professionals in private practice, the National Union of Health Professionals (*Union Nationale des Professions de Santé*). It sets the agenda for negotiations between health professionals and SHI and VHI (see section 3.3.4). Similarly, at regional level, regional unions of health professionals (*Unions Régionale des Professionnels de Santé*) negotiate with the ARSs (see section 2.4).

Moreover, physicians working in public hospitals pay a membership fee to the National Union of Hospital Physicians (*Syndicat des Praticiens des Hôpitaux Publics*). This organization provides financial assistance in case of illness, which has resulted in membership of almost 100%.

Fragmentation of professional representation is not exclusive to doctors. For example, the 4000 private laboratories that carry out analyses for outpatients have four representative organizations, resulting mainly from divisions among large laboratories and small local units.

Hospitals are represented by different organizations, depending on their status (public, private non-profit-making or private profit-making). Finally, pharmaceutical manufacturers and producers of medical devices each have their own union.

2.3.7 The policy formulation process

The Ministry in charge of Health has substantial control over the health system, although reforms at both the regional and the national levels have challenged its traditional role. For example, at the regional level, the regional health authorities (see section 2.4) have public health and health care planning and financing responsibilities within their remit; at the national level, the HAS independently assesses technologies, hospitals, professionals and the basic benefit package (see section 2.3.4).

The policy agenda is set by the Ministry in charge of Health through acts approved by the parliament that define health targets pursuant to the objectives of the Public Health Act. However, this is done jointly with the Ministry in charge of Finance and Public Accounts with respect to the annual Social Security Finance Act, which deals with the collection of revenues and delivery of health services.

Policy formulation is undertaken with the help of several advisory committees such as the HCAAM, the National Health Conference and the HCSP.

HCAAM is an independent committee that publishes an annual report on the situation of the health care system. Members are representatives of all stakeholders and a few experts selected by the Ministry in charge of Health to provide detailed figures and policy forecasts as well as policy proposals to ensure the sustainability and fairness of the system.

The National Health Conference brings together representatives of the health professions, health care facilities, the Regional Conference on Health and Autonomy (*Conférence régionale de la santé et de l'autonomie*; CRSA) and other experts, to discuss and define health care priorities at the national level. The strategy is mainly implemented through the regional health projects (*projets régionaux de santé*; PRS), through which the PSRS is developed by the ARSs in consultation with the stakeholders who participate in the CRSAs on health and autonomy (see section 2.4).

The HCSP is composed of numerous independent public health experts and volunteers appointed by the minister *intuitu personae* and a share of representatives of various subordinate health agencies. It provides guidance regarding public health problems and issues related to the organization of health care. It undertakes regular overviews of the population's health status, prepares general analyses and forecasts of public health problems, contributes to the definition of public health objectives (*objectifs de santé publique*) and makes proposals for strengthening preventive measures. It can also be consulted on specific questions concerning the organization of treatment, and in that context, it can set up working groups to produce reports on issues and formulate proposals. It also monitors the health target objectives of the Public Health Act and suggests new objectives.

2.4 Decentralization and centralization

Regional level

The general philosophy underlying decentralization in France reflects a marked reluctance to reduce central control over policy and finance, and as a result, it has mainly come in the form of deconcentration. The creation of the ARSs in 2010 changed the regional landscape by merging seven regional institutions (see section 2.4 in Chevreul et al., 2010) into a single regional entity traversing the traditional boundaries of health care, public health and health and social care for elderly and disabled people.

The 26 ARSs are responsible for ensuring that the provision of health care services meets the needs of the population by improving the coordination between the ambulatory and hospital sectors and health and social care sector services, while respecting the ONDAM (see section 3.3.3). They are also responsible for implementing regional health policy in relation to occupational health services, mother and child health protection services (*protection maternelle et infantile*; PMI), and university and school health services.

The ARSs monitor the regional health status of the population, ensure that hygiene rules are respected, participate in prevention and patient health education and assess health professionals' education. They also carry out SHI regional programmes, notably in risk management. They authorize the creation of new health services and social and health services for the elderly and disabled. In the environment and health sector, they oversee water and air quality.

The CRSAs inform the ARSs' directors about regional issues, including health care and social service needs. Moreover, the ARSs are advised by two commissions for coordination of public policies that contain representatives of the state, general councils and other local authorities, as well as local SHI fund representatives. One is dedicated to prevention, school health, occupational health and PMI. The other is dedicated to health and social care for elderly and disabled persons.

The ARSs are subsidiaries of the state under the auspices of the ministers in charge of health, social security, the elderly and disabled. However, they are autonomous bodies, and their directors, appointed by the Ministry in charge of Health, have extended autonomy with respect to SHI and CNSA budget management and capacity planning in the region. The Surveillance Council (*Conseil de surveillance*), headed by the regional prefect, is in charge of approving the budgets and expenses of the ARS and providing opinions on the PRS, the main regional capacity planning tool. In order to implement national policies at the regional level, services of the state do not communicate directly with the ARSs but rather are approved first by the CNP, which passes orders on to the ARSs. The National Steering Council contains representatives of SHI, CNSA and the ministries in charge of health, social security and the elderly and disabled.

This organization, by increasing delegation to the ARSs, has sometimes led to coherence problem between regional policies and national health policies to meet the cost-containment constraints and improve health services delivery and the objectives of the triennial agreement on objectives and management between SHI and the state (*Convention d'objectifs et de gestion*; see section 2.8.1). The planned 2015 Health Reform Law (see section 6.2) has recommended establishing a contract between SHI and ARSs at the regional level.

Institutions at the department level

Each ARS covers several departments. The ARS is represented in each department by a local delegation (*délégation territoriale de l'agence regionale de santé*) that is responsible for implementing the ARS's regional policies and supporting local actors.

Several health and social services that are not under the remit of the ARSs come under the jurisdiction of the General Council (see section 1.3). These include:

- health and social care institutions and services for elderly and disabled people (nonmedical facilities come under the authority of the general councils, who supervise and finance them through social assistance budgets, while facilities combining social and medical services come under the joint supervision of the state and the general councils);
- social welfare and work programmes supporting individuals with low incomes, elderly and disabled people in institutions and financing of home assistance;
- protection of children, particularly through the management of PMI centres, which offer consultations and free health care;
- prevention of certain diseases, such as tuberculosis, sexually transmitted diseases and cancer; and
- public health and hygiene (environmental health, sanitation, etc.), in conjunction with municipalities.

2.5 Planning

2.5.1 Capacity/capital planning

Health services are provided by office-based physicians and hospitals. Office-based physicians are self-employed. Ownership of hospitals is divided among government (public hospitals); non-profit-making organizations that are linked to the public sector and tend to be owned by foundations, religious organizations or mutual-insurance associations; and private profit-making hospitals, ownership of which is increasingly concentrated in large international groups. Responsibility for planning health system resources and capacity is shared by the Ministry in charge of Health and the 26 ARSs. The goal of this partial devolution of the planning function is to enable regional authorities to meet the health needs of the population more appropriately.

Hospitals

Other corporate actors, such as the hospital federations (see section 2.3.6) and public representatives, also participate in the planning process and may play an important role during consultations. The regulatory framework for hospitals applies equally to public, private non-profit-making and private profit-making providers.

Planning largely takes place at the regional level, involving the CRSA and the ARSs. The Ministry in charge of Health has a stewardship role, establishing a catalogue of health services that the regions must incorporate in their plans based on a national assessment of needs and (sometimes politically driven) priorities. The strategy is mainly implemented through a regional health organization plan (*Schema Régional d'Organisation de soins*; SROS) developed by the ARSs in consultation with the stakeholders (including the Ministry in charge of Health) who participate in the CRSA. Developed every five years, the SROS aims to tailor health care delivery to local needs by setting strategic goals for health care delivery and defining priorities based on the objectives of the PSRSs. Strategic planning requires the ARS to assess population health needs based on regional data regarding health care utilization, mortality and morbidity. Data are analysed by region and compared across regions to identify demand and over- or undercapacity.

The SROS also forms the legal basis for multiyear contracts for targets and resources contracts (*contract pluriannuels d'objectifs et de moyens*) between hospitals and the ARSs in terms of the responsibilities of each hospital and the volume of services to be provided. These contracts are typically negotiated for a period of five years and require hospitals to obtain authorization from the ARS for the services they provide (including expensive health technologies). They also require annual evaluation of existing capacity and service volumes. Hospitals may be financially penalized (up to 5% of total revenue) for failure to adhere to target contracts and the ARSs may suspend the authorization for the service. However, to date no hospital has been penalized. A new model contract was negotiated by the Ministry in charge of Health and the hospital federations for the SROSs for 2013–2018.

Health and social care services for the frail elderly and disabled

Since the creation of the ARSs, planning is done through an organizational pyramid.

1. At the top of the pyramid, a regional scheme for organization of the health and social care sector (*Schéma Régional de l'Organisation Sociale et Médico-Sociale*) is established by the director of the ARS, on the advice of a dedicated ARS commission, the coordination committee dedicated to the health and social care sector (*Commission de coordination dédiée au secteur médico-social*), composed of representatives of the state, of the general councils and of the social security schemes involved in financing the sector, and of the heads of the general councils. This regional scheme should meet the objective of the PRS.

2. In the middle is the interdepartmental programme of support for individuals with disabilities or loss of autonomy (*programme interdépartemental d'accompagnement des handicaps et de la perte d'autonomie*), which translates the regional scheme for health and social care sector organizations into authorization for capacity-building. It is established by the ARS directors and the heads of the general councils.
3. At the bottom of the pyramid, the heads of the general councils design departmental schemes for the disabled (*schémas départementaux relatifs aux personnes handicapés ou en perte d'autonomie*) to plan health and social care services in conjunction with the ARS commissions, the representatives of health and social care services and service users living in the departments.

Once this planning process is completed, a call for proposals is made by an ARS selection committee to choose capacity-building projects that meet the identified local priorities.

2.5.2 Human resources planning

The National Observatory of Health Professionals (*Observatoire National de la Démographie des Professions de Santé*) was created in 2003 to provide figures and guidance to the Ministry in charge of Health. Its annual reports provide information on weaknesses in information required for the steering of human resources in the French health care system by the Ministry in charge of Health. It also identifies gaps in strategic planning at the national and regional levels.

At the national level, the numbers of doctors, and to some extent their areas of specialization, are regulated by the *numerus clausus,* which is set by the government annually and controls access to the second year of study in medical schools. This *numerus clausus* is then applied at the regional level, taking into account current inequalities in the geographic distribution of doctors. There is also a *numerus clausus* limiting the entry of students in other health professions, such as nursing, midwifery, dentistry, speech pathology and physiotherapy (see section 4.2.1).

For doctors, after six years of study, all medical students undertake a national competitive examination (*épreuves classantes nationales*; ECN). Based on the results, students apply for open internship posts by area of specialization and location. In recent years, the lack of interest in certain specialties (anaesthesiology, intensive care, gynaecology and obstetrics, and paediatrics) has led the government to block a number of places for these

specialties in the national examination. A 2011 decree (*décret n° 2011-954 du 10 août 2011*) prohibited students from sitting for the ECN if they failed to gain access to medical studies in France following the common first year (*Première Année Commune aux Études de Santé*) and pursued their medical studies in another EU country (see section 4.2.2). A Romanian medical school challenged the law, and in early 2013, the decree was overturned. Some unions of health professionals fear that allowing foreign-trained students access to the ECN will undermine regulatory effectiveness of the *numerus clausus*.

After graduation, there is no restriction on the areas where professionals are allowed to practise. Hospital work is dependent on posts offered by institutions but self-employed professionals can establish their practices wherever they want. As a result, there are regional disparities in the distribution of self-employed doctors and other health professionals.

Since the early 1990s, a range of tools and incentives have been developed that are designed to address the inequitable supply of physicians and to meet the objectives of the SROS. Access to medical specialties in each territory is now regulated by quotas set five years in advance, and a system of financial incentives to encourage doctors to work in underserved areas was established. The public service commitment contract (*contrat d'engagement de service public*) may be offered to medical students and residents who receive a monthly allowance during their studies in return for the commitment to work in an underserved area without practising extra-billing (i.e. under Sector 1 agreements; see section 3.7.2). For nurses, a first attempt to implement a tighter form of planning was implemented following the 2007 national agreement of nurses with SHI. This includes financial and material incentives for nurses to settle in underserved areas and prohibition of settlement in overserved areas unless a retiring or leaving nurse is replaced (see section 4.2.1). For more details on incentives developed to address inequitable supply, see section 6.1.3.

2.5.3 Major medical equipment

Purchase of major medical equipment in both outpatient and inpatient settings in the private and public sectors is subject to authorization by the ARSs. In 2013, five types of equipment required such authorization: computed tomography (CT) scanners, MRI equipment used for clinical purposes, positron emission tomography (PET; *tomographie par émission de positons*) devices, decompression chambers and cyclotrons used for cancer therapy. Authorization is granted for five years, according to needs defined in the SROS.

2.5.4 Cross-border mobility of patients and health workers

France has entered into trans-border agreements for the use of hospital facilities in the border regions of Belgium, Italy, Spain and Switzerland. France and Belgium, which have the most extensive cross-border patient movements, have implemented common protocols for emergency care as well as an agreement established by four hospitals in neighbouring cities that allows patients from both countries to receive care without preliminary authorization from either health system. Wider patient mobility throughout the EU, the EEA and the rest of the world is governed by European regulations and international agreements (see section 2.9.6).

In terms of mobility of health workers, France is a net receiving country, as emigration of French-trained professionals is low. French law distinguishes professionals with European diplomas, who are entitled to the same rights as French-trained professionals pursuant to European regulations, and those with diplomas from outside the EU, who are subject to stricter standards. Doctors with non-EU diplomas may be authorized to practise on a case-by-case basis, while paramedical professionals trained outside of the EU must resume their studies and obtain a French diploma (see section 4.2.2).

2.5.5 Health sector preparedness

Responsibility for the government's response to exceptional health emergencies (*situations sanitaires exceptionnelles*) falls largely under the Minister of the Interior and the Ministry in charge of Health within the context of an interministerial crisis unit (*cellule interministérielle de crise*). Four national agencies have key roles: InVS, ANSM, ANSES and EPRUS (see section 2.3.4). EPRUS, in particular, has a transverse role, falling under the shared oversight of the General Directorate of Health and Health Emergencies Department (*Département des Urgences Sanitaires*), with a director selected from the prefectural corps attached to the Interior Ministry. EPRUS provides logistic expertise and support in terms of materials, training and personnel, including 6000 voluntary reservists, mostly doctors and nurses.

At the regional level, health crisis preparation is undertaken pursuant to the organization plan for the health system response to public health emergencies (*Organisation de la réponse du système de santé en situations sanitaires exceptionnelles*), which defines appropriate care pathways for various emergency situations as well as coordination modalities among the actors, including assignment and management of response measures and the training

of health professionals to respond to such emergencies. The ARSs must develop an organization plan, which is implemented under the control of the prefect in the event of a crisis.

2.6 Intersectorality

The National Public Health Committee (*Comité national de santé publique*) is the steering committee for broad intersectoral health plans. Created by the 2004 Public Health Act, it was designed to improve coordination and information exchange among the ministries whose policies may have a health impact, particularly in the areas of health security and prevention. The Committee comprises directors or representatives from the ministries in charge of health, social security, social affairs, labour, education, security, defence, justice, finance, agriculture and environment, as well as UNCAM, the Directorate of Research, Studies, Evaluation and Statistics (*Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques*) and the interministerial missions regarding drugs and addictions, cities and road safety. While this is an intersectoral approach, to date the Committee has undertaken few operational activities.

Nonetheless, there are specific areas in which intersectoral cooperation is better defined and developed, as it is the case, for example, with health emergency preparedness (see section 2.5.5) and with policy against drug addiction, which is the oldest and more developed intersectoral action based on the Health in All policy approach. Ten ministries are part of the Interministerial Mission for the Fight against Drugs and Addictive Behaviours (*Mission interministèrielle de lute contre les drogues et les conduites addictives*). The interministerial mission was created in 1982 with the objectives of coordinating public policies on this matter but also providing funding and help in designing appropriate policies (MILDECA, 2015). It works with the help of the OFDT and the interministerial centre for anti-drug training (*Le centre interministériel de formation anti-drogue*), which focuses on the fight against cocaine.

Moreover, the Interministerial Committee to Combat Exclusion (*Comité interministériel de lutte contre l'exclusion*) currently takes actions that aim to reduce health inequalities within a multiyear plan against poverty and social inclusion, which was adopted in December 2012. Key initiatives include reducing financial barriers to access to care, for example by making more user-friendly access to programmes providing CMU-C (see section 3.5.1);

or by providing financial assistance to obtain CMU-C under a voucher plan for its purchase (*aide à l'acquisition d'une complémentaire santé*; ACS) (see section 3.5.4).

In order to promote healthier diets, the Ministry in charge of Health launched in 2005 the National Health Nutrition Programme (*Programme national nutrition santé*). This enlisted support from other ministries, most notably the Ministry of Agriculture, which in 2007 developed a food policy "to incite the agricultural and agrifood industries to launch varied, high-quality foods that meet consumer expectations and public health objectives". The programme also focused on encouraging people to exercise more. Another objective concerned salt intake, including a contractual partnership between public health stakeholders and food industries to achieve a reduction in salt, sugar and fat intake.

2.7 Health information management

2.7.1 Information systems

Information on consumption of SHI-covered care by SHI beneficiaries

There are two coexisting information systems in France: one for hospital admissions used by hospitals to bill SHI based on the French DRG system and one for patient reimbursement claims for ambulatory and hospital care. For hospitals, the Agency for Information on Hospital Care groups data from the Programme of Medicalization of Information Systems (*Programme de médicalisation des systèmes d'information*; PMSI) at the national level. For reimbursement claims, there are several systems attached to different SHI schemes that are merged into a single database. Both types of information are used for reimbursement claims but not for medical purposes.

From 2003, they were both integrated in the SHI interscheme information database (*Systeme National d'Information Inter-Régimes de l'Assurance Maladie*; SNIIR-AM) to create a single comprehensive information system. To facilitate research using these data, permanent samples of SHI beneficiaries have been established. In order to improve the interoperability of the information systems and to monitor the creation of a single patient identifier for the electronic patient record (*dossier médical personnel*; DMP), a dedicated information systems agency, the Agency for Health Information Systems (*Agence des Systèmes D'Information Partagés de Santé*), was created in 2009.

PMSI

The PMSI is based on the production of a standard discharge summary (*résumé standardisé de sortie*) for each acute hospital stay, which describes the nature of the treatment and examinations, the diagnosis underlying the hospital admission and associated diagnoses or complications. The discharge summary is then integrated into the homogeneous hospital stay groups (*groupes homogènes de séjours*; GHS), the French DRG system that was adapted from the DRG classification system for hospital stays used in the United States.

The PMSI was first introduced in 1983 and became exhaustive after the 1996 reform. Initially limited to the acute care sector (médecine, chirurgie, obstétrique), it was later extended to HAD, for the rehabilitation sector (*soins de suite et de réadaptation*; SSR) and for the psychiatric sector (based on the summary of medical information for psychiatry (*recueil d'informations médicalisées en psychiatrie*). All of these systems retain data from their implementation date, and a patient's course may be followed over the years and across systems.

National cost scales (*echelle nationale des coûts à méthodologie commune*) have been established. A national baseline for costs per stay (DRG based) in the acute care sector has been constructed from a voluntary sample of public and private hospitals, with a detailed accounting system producing an evaluation of the total cost of each stay. For each DRG, the median cost of all stays in the sample is taken as a reference point. Similarly, national cost scales exist for HAD and SSR. The SSR sector is also supposed to be paid on a DRG basis system in the near future.

Reimbursement claim systems

Reimbursement claim systems include patient data such as age, gender, place of residence, affiliation number, eligibility for 100% coverage and reasons for eligibility (such as CMU or long-term illness (*affection de longue durée*; ALD)) and data on type and quantity of care consumed.

In the SHI general scheme, the system for extraction, research and analysis for economic follow-up (*extraction, recherches et analyses pour un suivi medico-économique*) collects data on health care consumption. Data are maintained for the previous two years plus the current running year and older data are archived.

Since October 2009, most of these systems have been merged into the SHI Interscheme Consumption Data Mart (*Données de consommation inter-régime*). This system includes information on ambulatory care usage for most of the population for the previous two years plus the current running year. The data for only a few small SHI schemes (such as the miners' scheme) are not included.

The SHI interscheme system

The 1999 Social Security Finance Act (*Loi No. 98–1194 du 23 décembre 1998 de financement de la sécurité sociale pour 1999*) established a national information system for SHI, the SNIIR-AM, primarily to provide information and feedback on professional practice for office-based physicians and public and private hospitals. The SNIIR-AM exhaustively regroups SHI claim and hospital stay information from most of the SHI schemes in the Interscheme Consumption Data Mart and PMSI for the previous two years plus the current running year. The unit of analysis is the prescribing physician and the patient, and thus information may be linked in order to study a patient's care pathway or a physician's practice profile.

As a research tool, SNIIR-AM has both strengths and weaknesses. Among its strengths are its exhaustivity and precise chronology, which allow for longitudinal analysis. However, there are data that SNIIR-AM cannot capture, including socioeconomic characteristics, diagnoses, risk factors, test results and compliance with treatment. Until recently, access to these data has been strictly limited. Following the Mediator scandal (see section 2.3.4), the push for greater transparency, including open data, has led to legislation to broaden access to the SNIIR-AM data for researchers and public institutions under certain technical and legal conditions (planned 2015 Health Reform Law; see section 6.2).

Samples of beneficiaries

Because the SNIIR-AM is based on reimbursement claims, it does not contain any information on beneficiaries who do not consume any care covered by SHI. To overcome this shortcoming, samples of beneficiaries have been established. A sample of beneficiaries (*échantillon généraliste de beneficiaires*) is a 1/97th sample of SHI beneficiaries and currently includes 600 000 people affiliated with the three largest SHI funds.

The DMP

In 2004, the DMP grouping of patients' medical information and care consumption in ambulatory and hospital settings was initiated on a voluntary basis in order to improve quality of care and decrease redundancy in

consumption. Implementation has not been smooth because of both technical and patient privacy concerns. As a result, by June 2013, fewer than 400 000 patients had DMPs (see section 4.1.4).

National information system on health professionals
The national Automated Directory of Health Professionals (*Automatisation des listes*; ADELI) provides information on gender, geographical distribution, specialty, type of practice (employed, self-employed, both), starting practice date, etc.) of all practising health professionals.

2.7.2 Health technology assessment

Governance and organization of health technology assessment (HTA; *évaluation des technologies de la santé*) are defined by the government and SHI. The major HTA body in France is the HAS, which has in-house expertise as well as the authority to commission assessments from external groups such as academic centres or professional societies.

All medical procedures and technologies (drugs, devices, equipment, reagents and tests) are assessed at the request of manufacturers or, in the case of procedures, professional societies. For technologies, regulatory approval is based on safety and may be supranational, for example undertaken by the European Medicines Agency (*Agence européenne des médicaments*) for medicines. The second assessment aims to inform coverage and pricing decisions and is specific to the French health care system.

Assessments are performed by ad hoc committees. Drugs are assessed by the Transparency Commission (*Commission de la Transparence*), while devices and procedures are assessed by the National Commission for the Evaluation of Medical Devices (*Commission nationale d'évaluation des dispositifs médicaux et des technologies de santé*; CNEDIMTS).

In order to be listed in one of the positive lists and covered by SHI, all new drugs, devices and procedures must undergo an assessment. This assessment is prior to market launch and is used directly to determine the coverage rate and less directly the price (statutory tariff). For new technologies, assessment is based on the documents provided by the manufacturer. The studies are critically appraised by two reviewers and discussed by the committee. There is a two-tier procedure.

Is the technology effective? Assessment of the level of medical benefit of the technology reflecting its clinical efficacy and its possible side-effects, the severity of the disease it is indicated to treat and the public health relevance

of the technology (*intérêt de santé publique*), which includes epidemiological aspects and quality of life. The degree of medical benefit or therapeutic value is represented by two assessments: SMR for drugs and one for devices and medical procedures (*service attendu*). These two are evaluated in absolute terms for all different types of use. The assessment informs decisions on coverage and the coverage rate, from 0 to 100% (see section 2.8.4).

Is the technology more effective than the available comparators? An assessment is made of the relative medical benefit of the technology in comparison with similar available treatments, termed the improvement in the relative medical benefit (*amélioration du service medical rendu*; ASMR) for medicines or the improvement in expected benefit (*amelioration du service attendu*; ASA) for medical devices and procedures. There is an explicit pricing decision based on the grade given by the drug or the device committee (Transparency Commission or CNEDIMTS) depending upon the improvement in medical effectiveness over the existing comparators (rated on a scale from 1 for major improvement, usually assigned to life-saving technologies, to 5 for no improvement) (see section 2.8.4). Manufacturers have an incentive to provide sufficient data to assess drugs and devices because of the pricing objective.

Technologies are reassessed every five years based on the documents provided by the manufacturer and on systematic reviews of the literature.

Starting in October 2013, an economic evaluation has become a part of the assessment or reassessment of drugs and medical devices under certain circumstances. The HAS Commission for Economic Evaluation and Public Health (*Commission d'Évaluation Économique et de Santé Publique*; CEESP) undertakes an economic evaluation if:

- the product or technology is being initially assessed or confirmed as having an ASMR/ASA level 1, 2 or 3; and
- the product or technology may significantly affect SHI expenditure, given its impact on the organization of health services, professional practices or conditions of coverage of patients and, if appropriate, its price; or
- if the provisional or actual turnover for the product after two years on the market is €20 million or higher.

For other technologies, such as the equipment required for a procedure, reports are commissioned by the Ministry in charge of Health. The HTA report may recommend waiting until additional information is available or may commission surveys or observational studies. The manufacturer is usually

required to fund the studies, but the investigators must be independent from the manufacturer. Manufacturers may appeal the decisions of the drugs and devices committees and request a second hearing. HAS is empowered to undertake evaluation of medical practices and health programmes, which is also sometimes performed by hospitals.

2.8 Regulation

The French health care system was initially organized according to a Bismarckian model of provision and payment for health care. However, it has developed into a mixed Beveridge and Bismarck model, characterized by an almost single public payer, the increasing importance of tax-based revenue for financing health care and strong state intervention. SHI is financed by employer, employee and retiree contributions, increasingly substituted by earmarked income taxes. Providers of outpatient care are largely private, while hospital beds are predominantly found in public or private non-profit-making hospitals.

In the context of increasing health care expenditure, the increasing deficit of SHI and the overall social security system, the role of the state in steering the system through regulation has increased since the early 1990s. Regulation, therefore, involves negotiations among provider representatives (hospitals and health professionals), the state, represented by both the Ministry in charge of Health, the Ministry in charge of the Budget and Public Accounts, and SHI. The outcome of these negotiations is translated into administrative decrees and laws passed by the parliament. These include public health acts and acts related to social security funding and reforms.

The Directorate of Social Security proposes an annual Social Security Financing Act, which is debated and then approved by the parliament. This Act establishes the provisional health care budget, or rather the expected ONDAM (see section 3.3.3). Because in France providers are mostly paid by FFS and a per-case basis retrospectively, ensuring that SHI health expenditure will match the (approved) national ceiling for SHI expenditure is difficult (see section 3.3.3). Indeed, the Ministry in charge of Health approves statutory tariffs but does not control volume as there is still freedom of choice and no limitation of utilization of services. However, regulatory mechanisms such as semi-gatekeeping with financial incentives and non-refundable deductibles on physician visits, drugs and ambulance transportation (see section 3.4.1) can be seen as attempts to regulate volume by using price sensitivity.

2.8.1 Regulation and governance of third-party payers

SHI

SHI schemes are under the supervision of the Directorate of Social Security. In order to ensure that SHI measures will meet the objectives of the government health policy, SHI schemes sign a triennial contract with the Ministry in charge of Health defining the objectives, the management and the governance of SHI. The objectives of this agreement are: to improve efficiency in the management of SHI, reduce inequities in access to health care services and develop risk management. Actions to meet these objectives set forth in the 2014–2017 agreement on objectives and management include developing good quality patient care pathways.

UNCAM (see section 3.3.3) represents the SHI funds in negotiations with the state and health care providers. The director-general of UNCAM is also the director of CNAMTS. The director-general is appointed by the government, and the executive power of this position has been strongly reinforced at the expense of the UNCAM board, whose role is now limited to strategic matters. Collective agreements with doctors and other organizations of professionals in private practice are negotiated and signed by the director-general alone, illustrating the withdrawal of employee and employer unions from the management of SHI. SHI is, therefore, fully responsible for the economic consequences of the agreements that it negotiates and signs, for example with health professionals in private practice. SHI can also set the level of user charges, although this power is limited to a certain extent by the political acceptability of the proposals.

VHI

There are three types of VHI suppliers (see section 3.3.2), which operate under three different sets of regulation: the mutual insurance companies are regulated by the mutual insurance code, the commercial insurance companies are regulated by the commercial insurance code, and the provident institutions are regulated by the social security code. All three types of VHI suppliers fall under the supervision of the Prudential Control and Resolution Authority (*Autorité de contrôle prudentiel et de résolution*).

VHI suppliers participate in the governance of the health care system through the National Union of Complementary Health Insurance Organizations (*Union Nationale des Organismes d'Assurance Maladie Complémentaire*), which is consulted prior to the annual Social Security Finance Act and all health care reforms, in particular when they are related to health care system financing. It is also consulted prior to changes on SHI coverage rate and prior to the introduction of new products in the SHI benefit package and participates in the

negotiation of national agreements with health care professionals. As a member of the pricing committee, the Economic Committee for Health Products (*Comité Économique des Produits de Santé*; CEPS), the National Union participates in the negotiation of drugs and medical devices prices, along with representatives of several ministries and SHI.

2.8.2 Regulation and governance of providers

Professionals

Professionals practise under the regulations of the public health code, which includes all regulations related to patient and professional rights with respect to medical goods and health services, planning the provision of out-of-hospital services and ensuring coordination between hospital and ambulatory care. In France, roughly two-thirds of practising health professionals are independent self-employed providers. Despite recent regulations aiming to plan geographical distribution of doctors, they retain the freedom to establish their practices where they wish (see section 6.1.3).

The National Union of Health Professionals is the single organization that can legitimately negotiate with the payers at the national level on behalf of all types self-employed independent health professional. It is consulted annually by SHI and VHI representatives on matters related to the organization of the health care system and health professions, such as the relationship between office-based and hospital physicians, demography of medical professions, access to care, continuing medical training and regulation of health care expenditure. At the regional level, regional unions of health professionals negotiate with the ARSs (see section 2.4).

There is no formal recertification or relicensing process. However, in order to ensure lifelong quality of practice of health professionals, doctors, midwifes, dentists, pharmacists, biologists, nurses, physiotherapists and podiatrists must undergo DPC. Within the DPC process, accreditation exists for a limited number of high-risk medical specialties (i.e. specialties with a high medical risk for the patients). It is optional and concerns physicians or medical teams practising in hospitals. Medical specialties involved include obstetrics and gynaecology (including ultrasound imaging), surgery, interventional radiology, anaesthesiology and other interventional specialties such as cardiology. Accreditation permits physicians to claim a deduction on the premium they pay for their professional insurance. The accreditation process includes a registry of adverse events, use of practice guidelines and review criteria and participation in educational sessions in risk reduction.

Hospitals

Both human and physical resources of hospitals are controlled by the government through different mechanisms. The Ministry in charge of Health, thorough the HAS, ensures that public and private hospitals and hospital physicians meet standards of competence through a certification process every four years.

Certification is a two-step process. First, a self-appraisal is conducted by hospitals based on HAS guidelines. It requires the compilation of a large amount of information, particularly with respect to quality indicators. Second, a team of experts assigned by HAS visits the hospital and undertakes the certification review.

Hospital quality assurance and risk management are monitored by the Ministry in charge of Health through Scope Santé (http://www.scopesante.fr/). Hospital quality indicators are also compiled through the Coordination for the Measurement of Hospital Performance and Improvement in Quality of Care (*Coordination pour la mesure de la performance et l'amélioration de la qualité hospitalière*). Experimentation with financial incentives has been ongoing since 2012 under the programme of financial incentives to improve quality (*Incitation Financière à l'Amélioration de la Qualité*). Moreover, in the field of rare diseases, France has developed dedicated centres.

2.8.3 Registration and planning of human resources

At the national level, the number of doctors, and to some extent their areas of specialization, is regulated by the *numerus clausus,* which is set by the government annually and controls access to the second year of study in medical schools. This *numerus clausus* is then applied at the regional level, taking into account current inequalities in the geographic distribution of doctors. There is also a *numerus clausus* limiting the entry of students in other health professions, such as nursing, midwifery, dentistry, speech pathology and physiotherapy.

Registration by their professional association (see section 2.3.6) is mandatory for practising doctors, pharmacists, dentists, midwives, physiotherapists and nurses. It is usually granted upon request after the initial training and it is good for life. Moreover, registration in the national information system on health professionals (ADELI) in the ARSs is also mandatory for almost all health professionals.

2.8.4 Regulation and governance of pharmaceuticals

Before being put on sale, all drugs must obtain market authorization (*autorisation de mise sur le marché*; AMM) either at European or national level. This specifies the conditions for the prescription and supply of drugs for which a medical prescription is mandatory and identifies drugs that are subject to special prescription rules (see section 5.6.3).

In order to qualify for SHI coverage, a drug must be included in the so-called "positive list" of reimbursable drugs established by ministerial decree on the advice of the HAS Transparency Commission (see section 2.7.2) and the CEPS pricing committee.

In order to be included on the positive list, evidence must be supplied of the SMR for the drug (see section 2.7.2). The coverage and level of coverage is determined by decree based on the SMR and the seriousness of the condition (Table 2.1). However, drugs that lead to lower cost of treatment can be covered despite the fact that their SMR is insufficient.

Table 2.1

Rate of coverage of drugs according to the seriousness of the pathology and evaluation of the SMR, 2014

	SMR	Rate of coverage (%)[a]
	Serious illness	*Illness usually benign*
Major or considerable	65	35
Moderate	30	30
Low but justifying reimbursement	15	15
Insufficient	0	0

Note: [a]Some ambulatory drugs are recognized as irreplaceable and particularly expensive by the Ministry in charge of Health, in which case they are covered at a 100% level.

The vast majority of drugs are covered at a 65% rate. In 2011, among the 240 new drugs examined, 191 were found to justify 65% coverage.

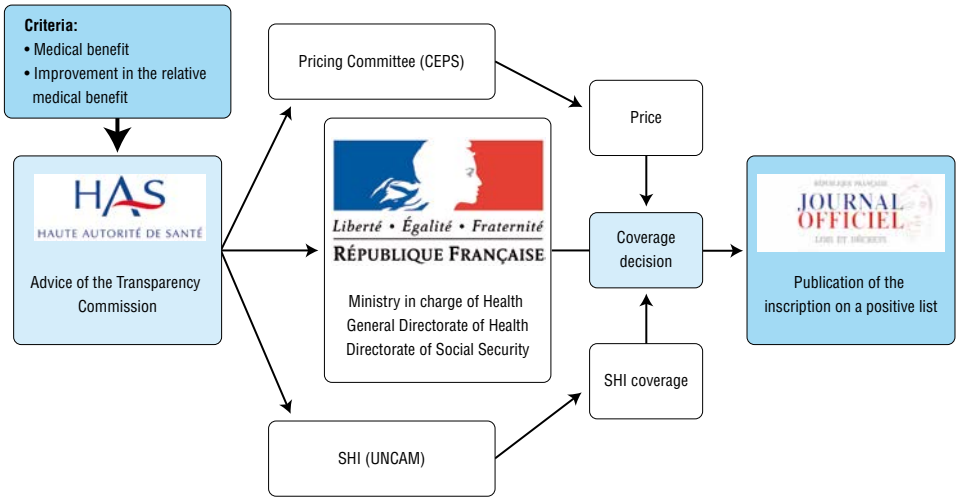
In addition to the SMR, the Transparency Commission evaluates the ASMR in comparison with available treatments or drugs already available for the same pathologies (see section 2.7.2).

The drug price, which serves as the basis for reimbursement, is then set through a bargaining process between the CEPS and the manufacturer, using an international benchmarking procedure for the most innovative products.

CEPS is an interministerial committee defined by decree (article D162-2-1 of the social security code). It is composed of representatives of the ministers in charge of health, of the economy and of research, plus representatives from SHI and complementary health insurance organizations. According to the social security code, the price must be set according to the ASMR, the price of other drugs with same therapeutic indications and the estimated volume of sales. Drugs offering a therapeutic advance can have a price higher than the reference, whereas drugs classified with no relative medical benefit (ASMR group 5) would get a statutory tariff, and so be subsequently covered only if its price is lower than that of its alternatives. Since 2003, a new procedure has allowed the manufacturer to propose a price that is consistent with prices already defined in four other European countries (the United Kingdom, Germany, Spain and Italy); the procedure was initially limited to ASMR groups 1 and 2 (major and important improvement) products but has now been extended to ASMR 3 and certain 4 (low and minor improvement) drugs as well; it is worth noting that the manufacturer may nevertheless opt for the standard bargaining process. Drug coverage and pricing processes are summarized in Fig. 2.2.

Depending on their level of toxicity or risk of inappropriate use, medicines are classified in the public health code based on different categories that will determine their prescription rules and facility of access. Drugs that fall into the category that does not require a prescription can currently only be sold in pharmacies. The distribution of drugs is closely regulated, both for wholesalers and for pharmacies. Wholesalers (*grossistes-répartiteurs*) have a public service mission and fall under the regulatory control of the ANSM. They are regulated in terms of the range of drugs supplied, level of stock, territory, delivery time and mark-ups. Since January 2012, the mark-up is 6.68% for manufacturer prices below €450 and 0% for prices above €450.

Fig. 2.2
Process for deciding SHI coverage and official tariffs for drugs



Source: HAS, 2010.

Pharmacies have a monopoly on the dispensing of medicines. Generally, retail pharmacies must be owned by a qualified pharmacist or by a group of pharmacists associated within a company; these pharmacists or companies cannot be proprietors of more than one pharmacy. As an exception to this rule, mutual insurance associations and the SHI scheme for miners may also own retail pharmacies. The number of pharmacies is regulated by a *numerus clausus* that takes into account both the size of the population to be served and the distance to the nearest pharmacy. Pharmacists have financial incentives to deliver generic drugs (see section 3.7.1).

Direct-to-consumer advertising for drugs is subject to prior authorization and is restricted to specialties that meet three criteria: they can be delivered without physician prescriptions; they are not covered by SHI; and no restriction on advertisement has been included in the AMM of the product. Vaccines are the only exception to this rule. Since 2012, advertisements directed at health professionals are also subject to prior authorization and are prohibited for health products that are undergoing a risk–benefit re-evaluation.

Internet sales of non-prescription drugs have been authorized since 2013, but uptake has been very limited because of the significant regulatory burden in establishing an online sales presence. Only pharmacists are eligible to engage in this activity, which must be directly linked to a physical pharmacy and authorized by the ARS.

All drug-related adverse events must be reported by physicians, dentists, midwives and pharmacists to the regional centre for pharmaceutical vigilance (*Centre régional de pharmacovigilance*), which is responsible for making the necessary inquiries and notifying the manufacturer. The ANSM oversees and coordinates the national system for pharmaceutical vigilance. Since 2011, patients and patient associations may directly declare adverse events. Validated reports of adverse events must be reported to the European Medicines Agency within 15 days. Moreover, ANSM inspectors have a key role in the fight against counterfeit pharmaceuticals, in collaboration with customs inspectors, the Ministry of Justice, the police and the gendarmerie. In the event of suspected fraud, drugs may be subject to recall or quarantine.

2.8.5 Regulation of medical devices and aids

The market for medical devices is more loosely regulated than the markets for drugs or major medical equipment, particularly in terms of quality and safety standards. Compliance with quality and safety standards is assessed by the provider for devices that present a very low risk for the patient (medical beds, stethoscopes, etc.). Other devices must be assessed by an independent body selected by the manufacturer (to obtain a European conformity (*Conformité Européene*) mark). Monitoring of the market is under the responsibility of the ANSM.

The CNEDIMTS advises the Ministry in charge of Health, which decides whether to include a device in the positive list based on its medical benefit rating. It also advises CEPS regarding pricing, which will depend on the ASA (see section 2.7.2). In this sector, the market price generally is not fixed; rather, the SHI statutory tariff is negotiated with the manufacturer and then is used as the basis for reimbursement. As a result, there is a high level of extra-billing for medical devices. Medical devices and prostheses are subject to various rates of coverage depending on the device. In certain cases (e.g. spectacles, dentures, hearing aids), the levels of coverage are particularly low.

2.8.6 Regulation of capital investment

The ARSs are generally responsible for planning services and for the authorization of hospitals as well as for changes to the existing hospital infrastructure, including restructuring and mergers. The overall strategy for capacity and investment planning is mainly implemented through SROSs and the related target contracts (*contrats d'objectifs et de moyens*; see section 2.5.1). Target contracts form a regulatory framework that is explicitly designed to implement changes; this framework applies equally to all hospital facilities that fall within the health care sector. The only exception is the construction of (new) hospitals (private and public) and comprehensive emergency centres, which must be authorized by the Ministry in charge of Health. The ARS also delivers authorizations for the implementation of major medical technologies (see section 2.5.3).

There is a large body of legal rules controlling the building and operation of hospital facilities, covering infrastructure and equipment. All the relevant texts are referenced in a guide that is published by the Ministry in charge of Health.

Depending on the specific sector and public health priorities, capital investments in the health care sector are either covered by payments for service delivery or funded by specific national or regional programmes (see section 4.1.1). The ANAP (see section 2.3.3) oversees and audits hospital investments and reorganizations in the health and social care sectors; it also provides expertise to the central administration and to the ARSs.

2.9 Patient empowerment

The principles of health democracy (*démocratie sanitaire*) were instituted by the 2002 Act on Patients' Rights and Quality of Care (*Loi No. 2002–303 du 4 mars 2002 relative aux droits des malades et à la qualité du système de santé*), which included improved representation of health system users; the right of patients to directly access their full medical records; and principles of professional liability and compensation for victims of medical malpractice. However, since then, public debate has focused on how to better account for the expectations of health care users.

2.9.1 Patient information

In recent years, the government has taken the initiative in developing health information web sites for the general public. Since late 2013, two databases provide health care consumers with searchable data: one includes all drugs available in the French market (*Base de données publique des médicaments*; http://base-donnees-publique.medicaments.gouv.fr/) and the other, Scope Santé (http://www.scopesante.fr), is a web site set up by the HAS to provide data on quality and safety indicators for all public and private hospitals. The public also has access to the applicable official tariffs for physicians on the official SHI web site (http://www.ameli.fr/).

In terms of freedom of information, public access to documents, including medical records, is provided through the Commission on Access to Administrative Documents (*Commission d'accès aux documents administratifs*), an independent administrative authority that provides opinions on requests for information. However, even with a favourable opinion from the Commission, national and regional authorities comply with only approximately half of the requests for access to documents (CADA, 2012).

2.9.2 Patient choice

France is generally perceived as a country with extensive patient choice. Indeed, the public health code states that a patient's right to choose a health professional and hospital is a fundamental principle of France's health law. Implementation of a gatekeeping function has not significantly limited that right, as patients may designate the treating physician of their choice and, once a specialist referral is made, may visit any professional in that specialty even if it is not the specialist identified by the gatekeeper. In addition, patients can always visit another GP or a specialist without referral even though they are entitled to lower levels of reimbursement if they do so. Nonetheless, real choice, particularly with respect to specialists, may be undermined by extra-billing and geographical disparities.

2.9.3 Patient rights

Patient information on the process of care is mandated by law and must be provided in understandable terms. A number of tools exist to facilitate awareness of patient rights, including:

- Charter of Rights and Freedom (*La charte des droits et des libertés*), which states the principles that apply to all hospitalized patients, including non-discrimination, respect of dignity and privacy, right to information, protection, informed consent and autonomy;
- information booklet provided to every person admitted to hospital;
- specific "admission contract" that must be given to individuals who are admitted to an institution for an extended period of time (over 2 months), signed by the patient or his representative; and
- provision of assistance from a "qualified person" to help to enforce patient rights.

Courts have repeatedly ruled that a signed document is neither necessary nor sufficient to meet the obligation of informed consent because physicians could simply ask a patient to sign the form without providing sufficient information. The recommended form of information and consent is by writing in the patient's medical chart, which the patient may access, the exact information process that took place before the procedure. Nonetheless, many professional organizations continue to use information leaflets that patients must sign before undergoing an invasive procedure.

Patients are often unaware of their rights. A 2011 survey undertaken on behalf of the Ministry in charge of Health found that 70% of those questioned did not know their rights within the health context, including 44%, who believed that they were required to obtain their doctor's authorization in order to access their health records (Ministry in charge of Health, 2011). To address this lack of awareness, the Minister in charge of Health, in conjunction with the Rights Advocate (*Défenseur des droits*), an independent constitutional authority charged with protecting rights and liberties and promoting equality, developed a comprehensive guide covering the major aspects of health care: access to care, the patient as actor in his or her health, quality of care, information regarding end-of-life issues and recourse and representation in the event of complaints against hospitals or health professionals (Ministry in charge of Health, 2014b).

The 2005 Act for Equal Rights, Access, Participation and Citizenship for Handicapped Persons (*Loi pour l'égalité des droits et des chances, la participation et la citoyenneté des personnes handicapées*) requires that all establishments open to the public, including hospitals and health professionals' offices, be accessible to people with disabilities by no later than 1 January 2015. By 2014, only 30% of the establishments covered by this Law had met their obligations. A new voluntary measure, the programmed accessibility agenda

(*Agendas d'accessibilité programmée*), provides extended deadlines of one to six years to entities that agree to make all of the required changes within a defined time frame.

2.9.4 Complaint procedures

The 2002 Patients' Rights and Quality of Care Act enumerated the general rules for patient complaint and compensation procedures, which differ depending on the setting in which care is delivered. It also established the possibility for patients to obtain compensation without demonstrating that there was an error either by a health professional or by an institution and simplified the procedure for patients pursuing claims in court (for more details see section 2.5.6 in Chevreul et al., 2010).

In public hospitals, the first step of a patient's complaint (before a formal case is brought against the hospital) is addressed through a conciliatory procedure involving the hospital mediator (usually a senior physician) and the patient or the patient's family.

Patients with complaints against self-employed doctors (office-based or working in private profit-making hospitals) may bring a case against doctors in the courts of justice and may bring a case to the physician's professional association. The physicians' associations are qualified to take disciplinary sanctions against their members.

2.9.5 Public participation

Patients and their representatives may participate in the CRSA in defining public health priorities at the regional level, including development of the PSRS (see section 2.3.7). Nonetheless, patient participation remains insufficient, although it is stronger at the hospital level.

Therefore, measures to improve patients' participation are part of the planned 2015 Health Reform Law (see section 6.2) by putting representatives of patients on the board of each health agency and enlarging hospital patients' commissions, which will be consulted on the hospital quality and safety policy and informed of adverse events.

2.9.6 Patients and cross-border health care

Unanticipated emergency care for French SHI beneficiaries travelling outside of France, including outside the EEA, may be reimbursed at the usual SHI tariffs upon presentation of the bills and justification of the urgency of the medical

need. Within the EEA and Switzerland, medically necessary care arising in the context of short stays (holidays, professional travel, language study, etc.) is facilitated by European health insurance card (*carte européenne d'assurance maladie*), which ensures that care is provided under the same conditions as for beneficiaries in that country.

For planned ambulatory care in a foreign country covered by regulation or agreement, the patient is not required to seek pre-authorization from the SHI fund and normally would pay for the services and then submit the bills for reimbursement based on the usual SHI tariffs. For scheduled hospitalizations and treatments involving major equipment (MRI, PET, etc.), the patient must seek authorization from the SHI fund, explaining the nature and reasons for seeking treatment outside of France. Hospitalizations are usually authorized unless it involves a treatment not covered by SHI.

In 2012, France reimbursed €583 million for cross-border health care, which constitutes a 43% increase over 2011 (Centre for European and International Liaisons for Social Security, 2012). Care provided for French SHI beneficiaries in Belgium, Spain and Portugal accounted for two-thirds of the cross-border reimbursements.

3. Financing

Health care expenditure in France has grown more rapidly than the economy as a whole for many years (with the exception of the period 1997–2000), and faster than in neighbouring countries (with the exception of the United Kingdom); it rose from 10.4% of gross domestic product (GDP; *produit intérieur brut*) in 1995 to 11.6% in 2013. This is well above the EU average of 9.5%, and in Europe, second only to the Netherlands. From 1996, SHI annual expenditure has been capped by the national ceiling for health insurance expenditure (*Objectif National des Dépenses d'Assurance Maladie*; ONDAM). However, this ceiling was exceeded nearly every year until 2010; since then, the ceiling has been underspent as cost-containment measures have intensified. In 1996, a specific agency for managing social security debt was established, funded by a dedicated tax (amounting to 0.5% of income).

Just over three-quarters of total health care expenditure is publicly funded (77%; just above the EU average of 76%), principally through SHI. The proportion of costs covered by SHI varies across goods and services: from 15% for drugs with low medical benefit (*service medical rendu*; SMR) to 80% for inpatient care. However, there are several conditions for which patients are exempted from paying a part of the costs, such as chronic conditions or pregnancy after the fifth month. Additional co-payments that are not allowed to be covered by voluntary health insurance (VHI; *assurance complémentaire*) have been created with the aim of reducing demand and thus SHI expenditure.

SHI resources mainly come from income-based contributions from employers and employees (including retirees). Since 1998, as a result of attempts to broaden the social security system's financial base, employees' payroll contributions have been almost fully replaced by a dedicated tax called the "general social contribution" (*contribution sociale généralisée*; CSG) based

on total income rather than on only earned income, as was previously the case. Additional revenue comes from specific taxes such as taxes on potentially harmful consumption (tobacco, alcohol) and taxes on pharmaceutical companies.

VHI provides complementary insurance, such as for co-payments and better coverage for medical goods and services that are poorly covered by SHI. It finances 13.8% of total health expenditure and covers more than 90% of the population. Over recent decades, VHI has gained a significant role in ensuring equity in access and financing health care. Since 2000, publicly financed complementary universal health coverage (*couverture maladie universelle complémentaire*; CMU-C) has been offered to those on lower incomes; it covers 7% of the population.

Even after complementary insurance, out-of-pocket (OOP; *reste à charge*) payments from patients themselves account for 7.5% of total health expenditure. This raises issues of equity in access and financing, although this figure remains well below the EU average for OOP payments of 16.1% of total health expenditure.

Funding for long-term care (*soins de longue durée*) for the elderly and disabled is partly provided by a dedicated fund, the National Solidarity Fund for Autonomy (*Caisse Nationale de Solidarité pour l'Autonomie*; CNSA). This was created in 2004 following a heat-wave crisis in the summer of 2003 in which around 15 000 elderly people died. Its resources come from SHI and the "solidarity and autonomy contribution" (*contribution solidarité pour l'autonomie*) that is generated from the revenue equivalent to one unpaid working day (*journeé de solidarité*). Local authorities increasingly also fund long-term care, as do individuals themselves.

Hospital acute care and hospitalization at home (*hospitalisation à domicile*; HAD), providing care equivalent to hospital care but in the patient's own home, are paid by a diagnosis-related group (DRG; *groupe homogène de malades*) method under the medical activity-based payment system (*tarification à l'activité*; T2A). Self-employed professionals are paid on a FFS basis. Tariffs are negotiated between SHI and representatives of health professionals and approved by the Ministry in charge of Health, although extra-billing by doctors above that tariff is allowed in some cases. Pay-for-performance (P4P; *rémunération à la performance*) financial incentives to improve quality and efficiency of doctors' practices were recently implemented through individual contracts with general practitioners (GPs; *médecin généraliste ou omnipraticien*).

3.1 Health expenditure

In 2013, total expenditure on health (*dépenses totales de santé*) in France was estimated at €235 billion, or 10.9% of GDP[1] (Table 3.1), being higher than the average for EU countries (Figs 1.1–1.3). Health care expenditure in France grew more rapidly than national wealth for many years, with the exception of the period 1997–2000. Total expenditure on health as share of GDP has risen slightly faster than in neighbouring countries (with the exception of the United Kingdom), from 10.4% in 1995 to 11.6% in 2013 (Fig. 3.2).

Table 3.1

Trends in health expenditure in France, 1995–2013, selected years

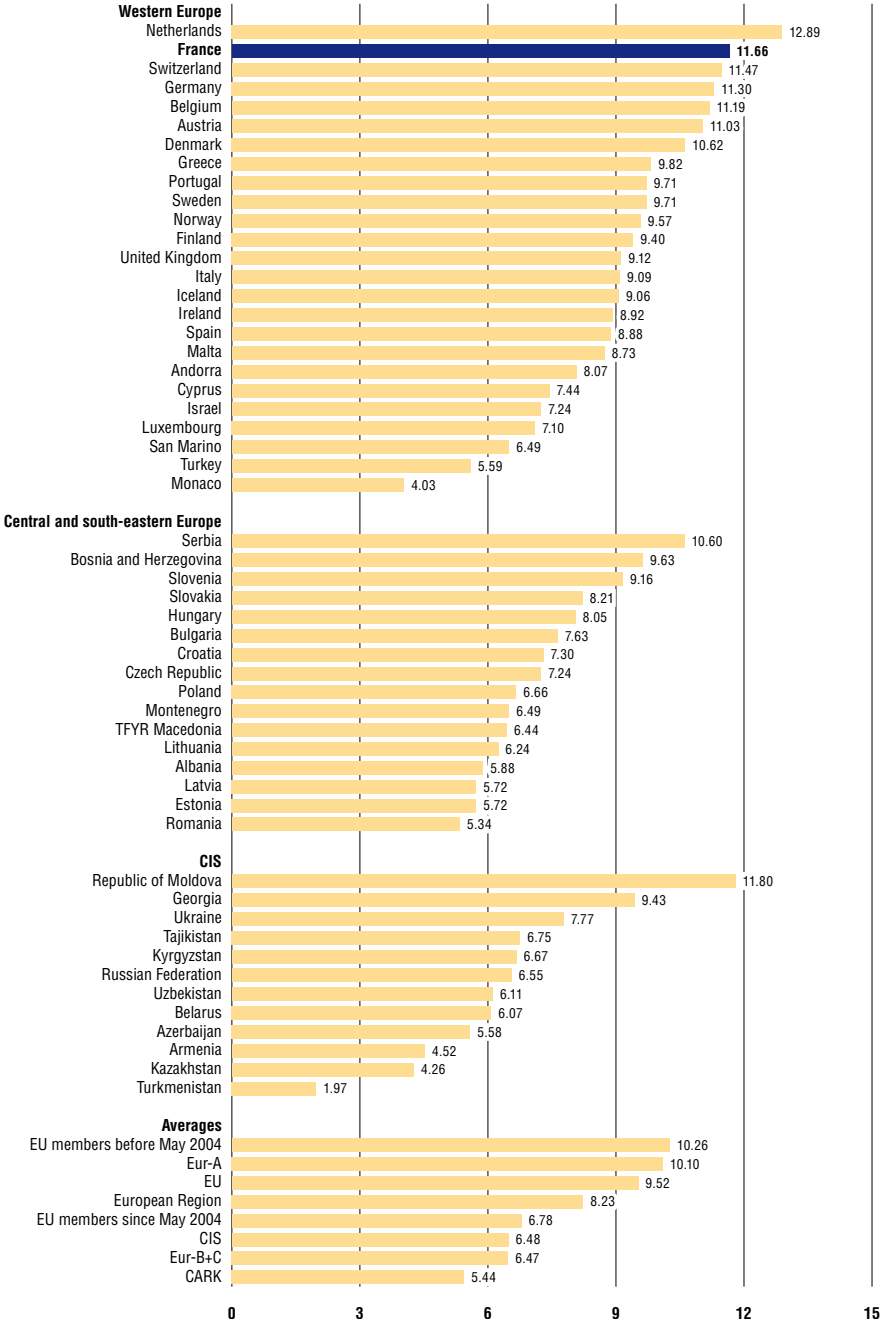
	1995	2000	2005	2010	2013
Current expenditure on health, per capita (US$ PPP)	2 040	2 485	3 101	3 881	4 124
THE (US$ PPP)	2 099	2 546	3 229	4 029	4 361
Current expenditure on health (% of GDP)	9.8	10.0	10.2	10.8	10.9
THE (% of GDP)	10.4	9.8	10.6	11.2	11.6
Average annual real growth rate in THE (%)[a]	na	3.1	1.9	1.3	na
Average annual growth rate in GDP	2.1	4.0	1.6	2.0	0.7
Public expenditure on health (% THE)	79.1	79.0	78.7	78.0	78.7
Private expenditure on health (% THE)	20.9	21.0	21.3	22.0	21.3
Government health spending, including social security (% of total government spending in US$ PPP)	13.1	14.0	14.5	14.5	14.6[b]
Government health spending (% GDP)	7.8	8.0	8.0	8.4	8.5
OOP payments (% private expenditure on health)	na	na	34.6	35.2	31.6
OOP payments (% current expenditure on health)	na	na	7.4	7.7	6.7
VHI (% current expenditure on health)	na	na	13.2	13.5	13.9
VHI (% of private expenditure on health)	na	na	62.1	61.7	65.4

Source: OECD, 2014.
Notes: [a] Calculated as the mean of the annual growth rates in national currency units at PPP prices; [b] 2012 data; na: Not available; PPP: Purchasing power parity; THE: Total expenditure on health.

[1] Data on health care expenditure reported in this section are from the OECD (OECD, 2014). Data for international comparisons is from the WHO Health for All database (WHO Regional Office for Europe, 2014). Caution must be taken in comparing health expenditures among countries as certain OECD countries (Belgium, Luxembourg and Switzerland) do not account for gross fixed capital formation.

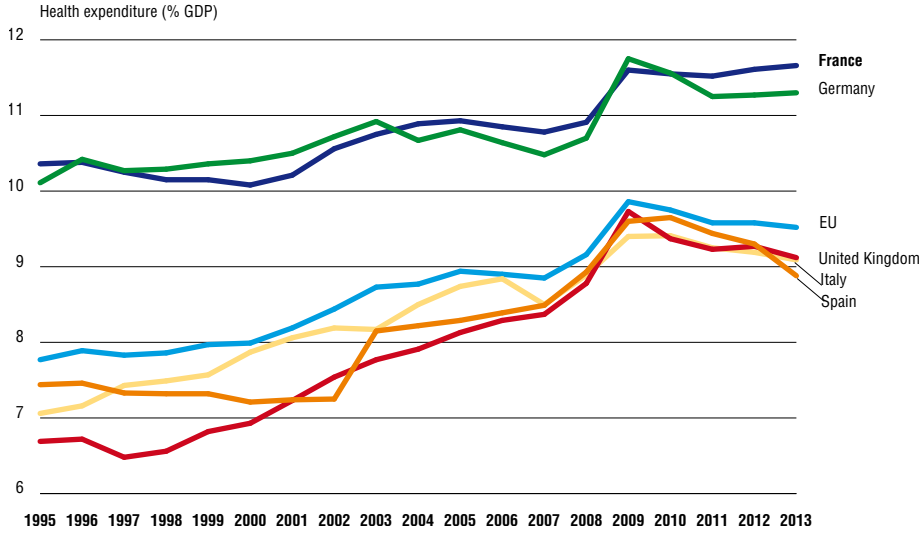
Fig. 3.1

Health expenditure as a percentage of GDP in the WHO European Region, 2013



Source: WHO Regional Office for Europe, 2015.
Notes: CARK: Central Asian Republics and Kazakhstan; CIS: Commonwealth of Independent States; Eur-A,B,C: Regions as in the WHO list of Member States, last available year; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Fig. 3.2
Trends in health expenditure as a percentage of GDP in France and selected countries, 1995–2013



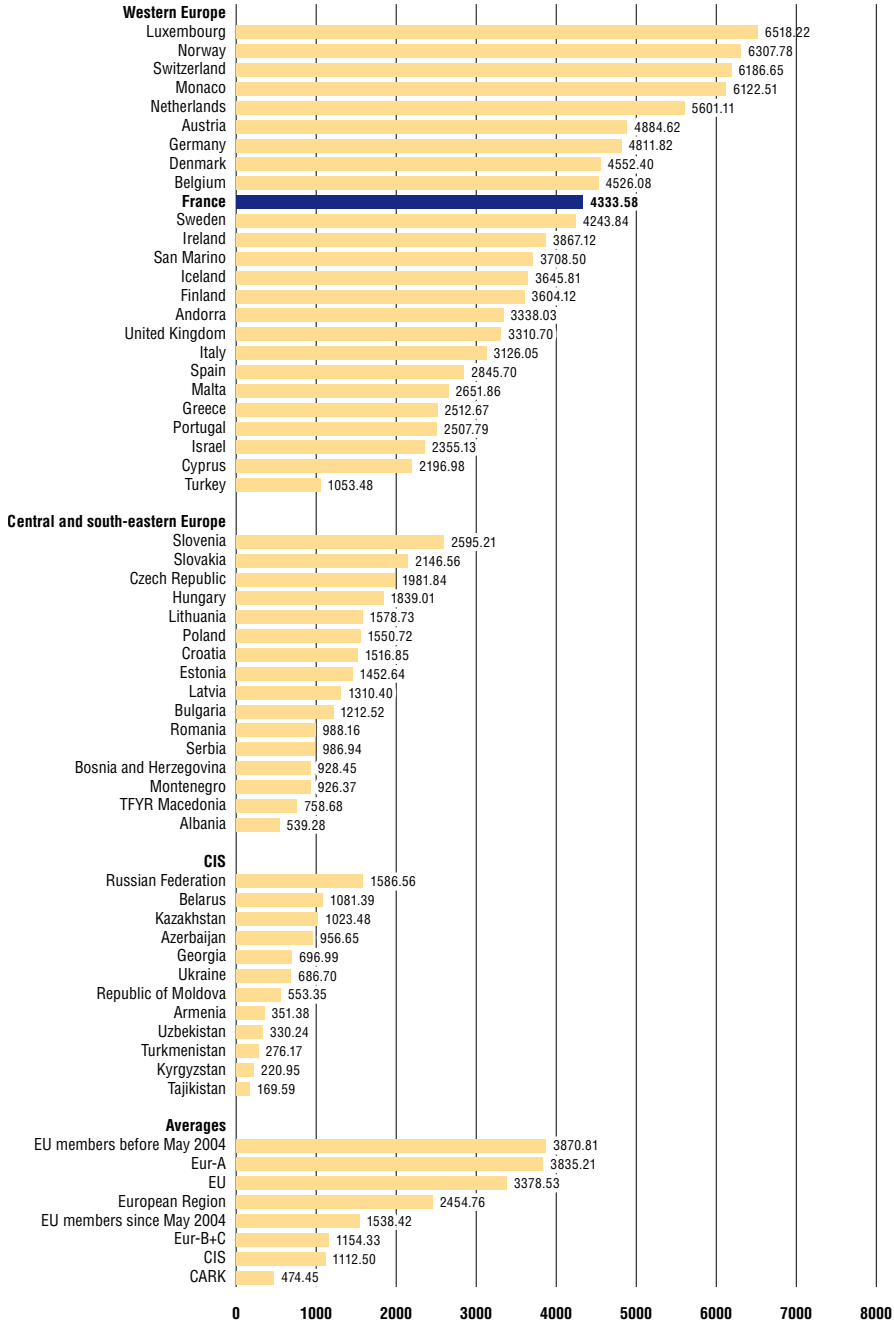
Source: WHO Regional Office for Europe, 2015.

In 2013, France ranked 10th among WHO European Region countries for the level of per capita health care expenditure (Fig. 3.3), but in third place for health care expenditure as a proportion of GDP, after the Netherlands (12.9%) and ahead of Austria (11%), Switzerland (11.5%) and Germany (11.3%) (Fig. 3.1).

In terms of the share of public health care expenditure, France ranks 15th among WHO European Region countries, with a 77% share of total expenditure on health (Fig. 3.4).

Fig. 3.3

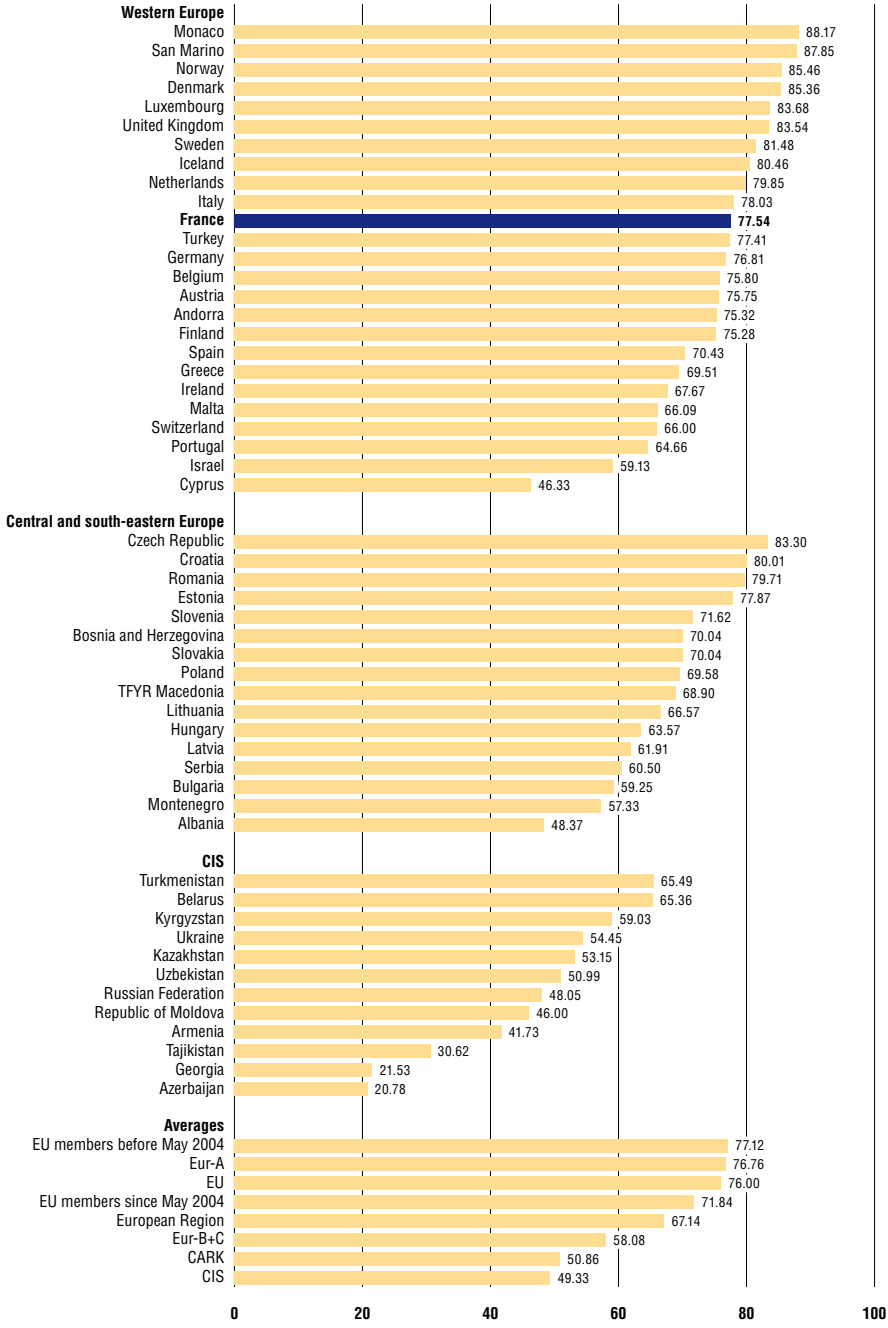
Health expenditure in US$ purchasing power parity per capita in the WHO European Region, 2013



Source: WHO Regional Office for Europe, 2015.
Notes: CARK: Central Asian Republics and Kazakhstan; CIS: Commonwealth of Independent States; Eur-A,B,C: Regions as in the WHO list of Member States, last available year; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Fig. 3.4

Public sector health expenditure as a percentage of total health expenditure in the WHO European Region, 2013



Source: WHO Regional Office for Europe, 2015.
Notes: CARK: Central Asian Republics and Kazakhstan; CIS: Commonwealth of Independent States; Eur-A,B,C: Regions as in the WHO list of Member States, last available year; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Personal health care consumption (i.e. consumption of medical goods and services) accounted for the largest share of public health expenditure (73.2%), followed by home and community health services (16.1%) (Table 3.2). Public expenditure on drugs has decreased by 1 percentage point since 2007, while spending on medical devices and facilities has remained stable (Table 3.3).

Table 3.2

Public expenditure and current health expenditure on health by service programme, 2012

	Percentage of public expenditure on health	Percentage of current health expenditure[a]
Health administration and insurance	4.2	5.9
Education and training	0.9	0.8
Health research and development	1.9	1.5
Public health and prevention	2.3	2.4
Medical services	73.2	75.6
Inpatient care	40.6	35.0
Outpatient care	15.8	19.5
Transport	2.0	1.7
Drugs and medical devices	14.8	19.4
Home or community health services and disability/ dependency allowances	16.1	12.8
Health system subsidies	1.4	1.0

Source: DREES, 2013a.
Note: [a]Current health expenditure accounts for both public and private expenditure; it differs from total health expenditure as it includes per diem allowances, certain public prevention activities, research and training and excludes gross fixed capital formation.

Table 3.3

Public health expenditure on health by service input, 2007–2011

Service input	Public health expenditure[a] (%)				
	2007	2008	2009	2010	2011
Medicines	14.2	13.6	13.4	13.3	13.1
Medical devices	2.0	2.1	2.1	2.2	2.2
Investment in medical facilities at primary, secondary, tertiary, intermediate, social care levels	3.1	3.1	2.9	2.9	3.0

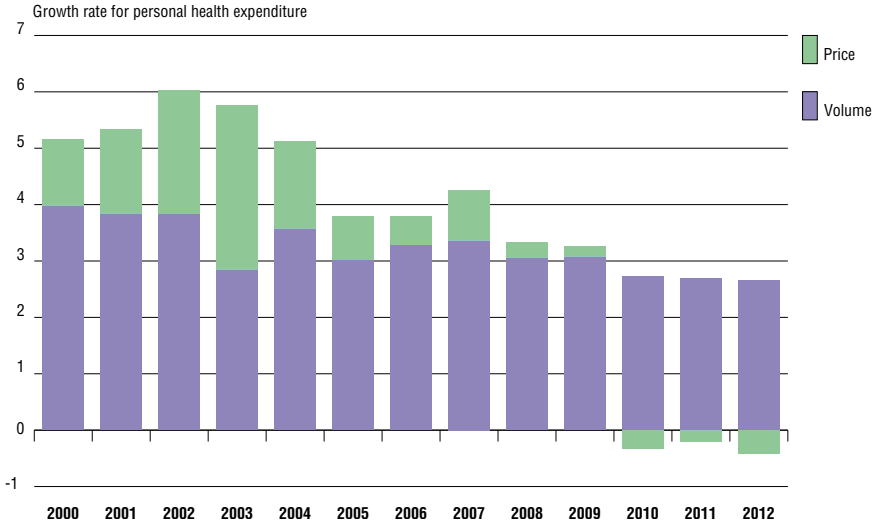
Sources: Eco-Santé, 2014; OECD, 2014.
Note: [a]Public health expenditure on health in million euros, at 2005 GDP price level.

The evolution of personal health care expenditure (i.e. expenditure dedicated to medical goods and services) is a result of growth in the volume of care provided and growth in the price of that care, which in turn is linked to general inflation and specific conditions governing the means of production. Overall, health care prices for medical goods and services have been relatively stable

from 2008 to 2012, ranging from 0.3% in 2008 to 0.4% in 2012 (Fig. 3.5). This is the result of contrasting trends in the relative price of different types of care in different sectors. There was a slight decrease in prices for hospital care and drugs over the last three years, while at the same time the price of outpatient care increased (DREES, 2012).

Fig. 3.5

Growth rate of personal health care expenditure in price and volume, 2000–2012



Source: DREES, 2013a.

In 2012, personal health care expenditure amounted to €183.6 billion, divided as follows by type of service:

- 46.3% on hospital inpatient care in public and private health care institutions;
- 28% on outpatient care, including care provided by doctors (10.8%), care by paraprofessionals (6.9%), dental care (5.7%), laboratory tests (2.3%) and medical transport (2.2%);
- 18.7% on drugs; and
- 7% on medical devices.

The large public sector, the significant debt burden and the budget deficit in France (see section 1.2 and Table 1.2) affect the country's capacity to spend resources on health care. In 2012, the SHI deficit was -€5.9 billion (down from €8.6 billion in 2011), representing approximately 0.3% of GDP. Reforms have been put in place to secure the system's fiscal sustainability, including:

expanding the revenue base to include passive income (not related to labour; see section 3.3.2), which has been important in a context of rising unemployment; instituting ONDAM (see section 3.3.3), which has been in place since 1997 but was exceeded each year until 2010; and increasing reliance on private financing through VHI and higher levels of cost-sharing (see sections 3.4 and 3.5), raising questions about equity in access and financing.

3.2 Sources of revenue and financial flows

In 2012, SHI financed 75.4% of personal health care expenditure and 74.3% of total health expenditure (Table 3.4). Consequently, while France has a universal public health insurance system, the coverage it provides is not complete: 5% of total expenditure on health is financed by the state and around 21%, by private sources (Fig. 3.6). More than 90% of the French population has private complementary VHI that covers 12.9% of total expenditure on health, leaving 7.3% to be paid by private households as OOP payments (Table 3.4). It should be noted, however, that while the amount of health care financed by the government, SHI and VHI is relatively well known, the amount spent by private households is less certain and probably underestimated (Lardellier et al., 2012).

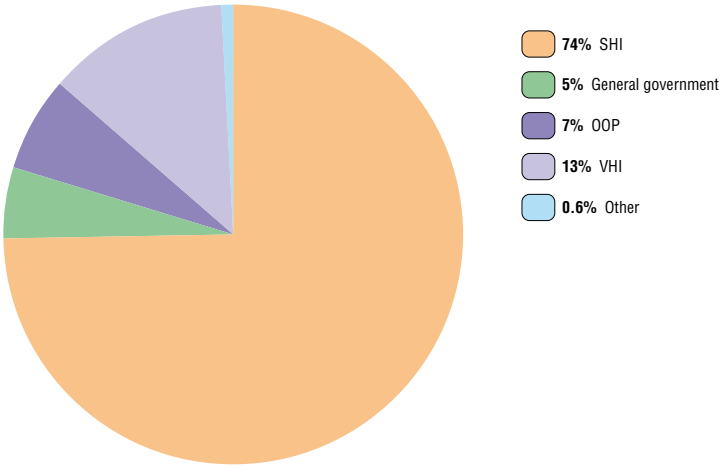
Table 3.4

Total expenditure on health by financing agent, 2000, 2005 and 2007–2013

Financing agent	Percentage of total expenditure on health								
	2000	2005	2007	2008	2009	2010	2011	2012	2013
General government expenditure	5.0	4.9	5.0	5.0	5.2	5.0	4.9	4.9	5.0
SHI spending	74.9	75.3	74.8	74.5	74.5	74.6	74.3	74.3	74.7
OOP payments	7.4	6.8	7.1	7.4	7.3	7.2	7.3	7.3	6.7
VHI	11.9	12.3	12.3	12.4	12.4	12.6	12.8	12.9	12.9
Other private payments	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6

Source: Eco-Santé, 2014.

Fig. 3.6
Percentage of total expenditure on health by financing agent, 2013



Source: Eco-Santé, 2014.

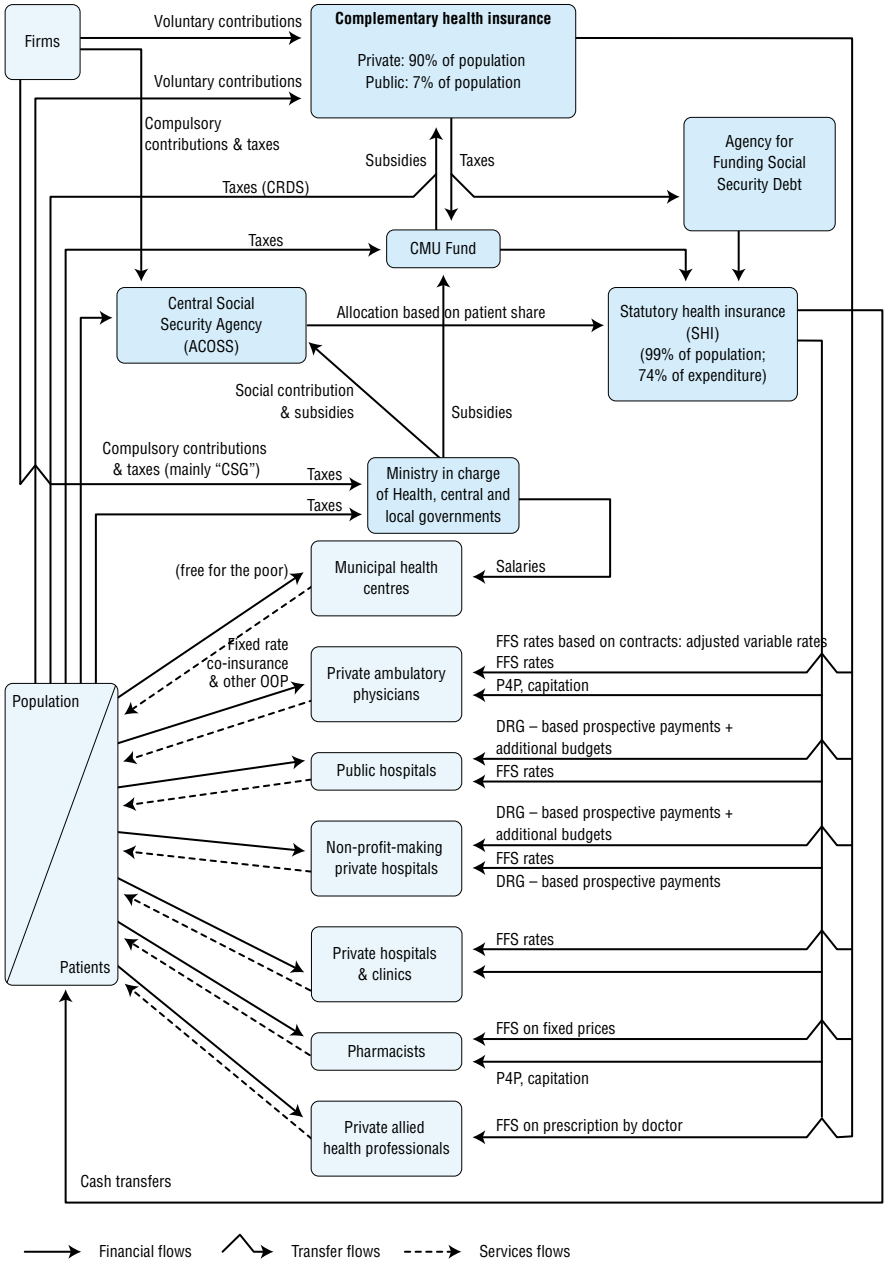
OOP payments are particularly important for optical care, dental care and drugs. They have remained relatively stable since 2000 as a result of an increase in public coverage and contrasting trends in VHI coverage. On one hand, VHI coverage increased with the implementation of free public complementary coverage for the less well off and with better coverage of medical devices (see section 3.5.1). On the other hand, it decreased with the de-listing of drugs with low SMR (see section 6.1.2) and the implementation of semi-gatekeeping and of deductibles (see section 3.3.1) (DREES, 2012).

The respective contributions of financing agents vary across sectors and over time. Since the early 1990s, around 92% of hospital expenditure has been financed by SHI, but the share of outpatient care financed by SHI is smaller and has decreased over time, from 77% in 1980 to 63% in 2010 (Fenina, Garrec & Koubi, 2011). This can be explained, on the one hand, by the fact that in outpatient care some professionals are allowed to charge patients above the official SHI tariffs (extra-billing, see section 3.7.2) and, on the other hand, by the fact that since the late 1970s, most reforms have significantly increased patient user charges on medical goods and overall outpatient care.

The financial flows in the French health care system are depicted in Fig. 3.7 and described in detail in the following sections.

Fig. 3.7

Financial flows in the health care system (excluding long-term care and prevention)



Source: data updated from Chevreul et al., (2010).
Note: CRDS: Social debt repayment contribution.

3.3 Overview of the statutory financing system

3.3.1 Coverage

Breadth of coverage

French SHI provides nearly universal coverage, with 99.9% of the population covered in 2013 (see section 2.3.5). Individuals are generally covered on an employment basis, and any dependants of the insured person are also covered. Employees cannot opt-out.

For those not covered through one of the obligatory SHI schemes on an employment basis, the CMU Act offers SHI coverage to individuals who legitimately reside in France. CMU coverage is free for individuals with household revenues up to an established ceiling (€9534 in 2013–2014); other beneficiaries must pay an annual premium equal to 8% of revenues above the ceiling. Thus, coverage criteria have progressively moved from an employment basis to residency status. For transitory foreigners and undocumented migrants who have resided in France for at least three months, the AME provides free access to medical care for those with revenues below the CMU ceiling. Prisoners and their families are systematically covered by the SHI general scheme for the duration of the imprisonment.

Scope of coverage

Medical goods and services covered by SHI include:

- hospital care and treatment in public or private institutions providing health care, rehabilitation or physiotherapy;
- outpatient care provided by GPs, specialists, dentists and midwives;
- diagnostic services and care prescribed by doctors and carried out by laboratories and paramedical professionals (nurses, physiotherapists, speech therapists, etc.);
- pharmaceutical products, medical appliances and prostheses prescribed and included in the positive lists of products eligible for reimbursement; and
- prescribed health care-related transport.

In order to be eligible for coverage, diagnostic services, treatment, drugs and prostheses must be provided or prescribed by a doctor, a dentist or a midwife and dispensed by health care professionals or institutions recognized by SHI.

Definition of the benefit package

SHI provides benefits in-kind and in-cash. The benefit package in-kind covered by SHI is defined differently for outpatient and inpatient care. Covered outpatient goods and services are included in positive lists (Table 3.5): the common classification of medical procedures for doctors (*Classification commune des actes médicaux*), the general nomenclature of medical procedures for other health care professionals (*Nomenclature générale des actes professionnels*), the list of reimbursable drugs (*Liste des specialités pharmaceutiques remboursables*) and the list of reimbursable medical devices and health materials (*Liste de produits et prestations remboursables*). There is no negative list.

Table 3.5
Positive lists in the SHI benefit package

List	Area of coverage
General nomenclature of medical procedures (Nomenclature générale des actes professionnels)	Health professional procedures other than those of doctors
Biological laboratory tests and procedures (Nomenclature des actes de biologie médicale)	Biological laboratories tests and procedures
Common classification of medical procedures (Classification Commune des Actes Médicaux)	Doctors' technical procedures
List of reimbursable drugs (Liste des spécialités pharmaceutiques remboursables)	Pharmaceuticals
Specific list of drugs for hospitals and other establishments (Liste des spécialités agréées aux collectivités)	Pharmaceuticals
List of reimbursable medical devices and health materials (Liste de produits et prestations remboursables)	Medical devices and related services

For hospital inpatient care, there is a specific list for drugs (Liste des spécialités *agréées aux collectivités*), and the positive lists described above only apply for procedures reimbursed outside of the DRG system. In-hospital, expensive and innovative drugs and devices that are paid in addition to the DRG tariffs are included on special lists. For other categories of care, there is an implicit understanding of the range of services that can be delivered to patients because hospitals are paid on a DRG basis. Unless it is specified elsewhere (e.g. in a regulation or a specific guideline), hospital clinicians can decide what care to provide and what drugs to prescribe to patients (as long as drugs have AMM). Therefore, innovative procedures or products are often introduced first in hospitals (and not paid separately on top of the DRG system) and second inscribed on one of the lists mentioned above (lists included in Table 3.5 or special lists for innovative care are paid for on top of DRG tariffs).

Initially, SHI focused on the coverage of curative care in case of illness or accident. In practice, however, preventive care is increasingly covered, particularly for services provided within doctors' practices, such as mammography or cervical smear tests. Compulsory or recommended immunizations are also reimbursed, and care of pregnant women and newborn babies is free. A lump sum of €50 per year is available to smokers for smoking cessation products (€150 for pregnant women and young adults aged 20–25).

The range of services covered by SHI does not include cosmetic surgery or most thermal spa treatments (unless prescribed by a physician for one of a list of 12 specific conditions defined by SHI, such as rheumatic diseases, and subject to frequency and duration limits), nor does it include some services of uncertain effectiveness. The choices required in the allocation of scarce resources may result in non-reimbursement for certain procedures (e.g. bone densitometry performed in the private sector as a preventive measure) or limits on the frequency with which they can be reimbursed (e.g. mammography for screening purposes).

For most common health care or products, volumes of care are not specified. However, for expensive procedures or devices, volumes may be explicit. This is the case, for example, with respect to in vitro fertilization, for which four attempts are fully covered (the counter is reset in the case of a successful pregnancy) with an age limit of 42; or for drug eluting stents, with generally only one stent covered up to a maximum of three per patient in the case of acute occlusive artery dissection.

For certain kinds of care, such as physiotherapy and thermal spa treatments, prescription by a doctor is not a sufficient condition for reimbursement. Coverage for these kinds of treatment is subject to prior authorization by doctors advising the SHI Medical Service Office (*médecins conseil du service médical*), after examination of the patient's case history and possibly a patient interview.

Cash benefits are also provided by SHI to compensate for sickness, maternity and paternity leaves, as well as in case of incapacity.

Actors involved in defining the benefit package

The positive lists are defined at the national level and apply throughout France in all regions. Drugs and medical devices are added to the list by the Ministry in charge of Health, while procedures are added by SHI (UNCAM) (see section 2.3.5) on the advice of designated committees of the HAS (see

section 2.3.4) based on HTA results (see sections 2.7.2, 2.8.4 and 2.8.5). Key actors involved in defining the benefit package, the rate of coverage and pricing decisions are described in Table 3.6.

Table 3.6

Key actors regarding coverage, rate of coverage and pricing of services and goods covered by SHI

Stage	Drugs	Medical devices	Diagnostic and therapeutic procedures
Clinical studies	Industry	Industry	Teaching hospitals and health professionals
Introduction to the market	ANSM; notified bodies for CE marking	ANSM; notified bodies for CE marking	–
Assessment of clinical benefit	Transparency Commission (Commission de la Transparence) (HAS)	CNEDIMTS (HAS)	CNEDIMTS (HAS)
Assessment of efficiency	CEESP (HAS) for ASMR 1,2, 3[a]	CEESP (HAS) for ASA 1,2, 3[a]	–
Coverage rate	SHI	SHI	SHI
Pricing	CEPS	CEPS	SHI
Coverage decision: registration on a positive list	Ministry in charge of Health	Ministry in charge of Health	SHI

Notes: [a]Most innovative products; CE: European Conformity (Conformité Européene) marking certifies that a product has met EU consumer safety, health or environmental requirements.

Depth of coverage

While the French health care basket is considered very generous in terms of goods and services covered, coverage is generally not 100%. A share of the tariff is the patient's responsibility and varies with the category of goods and services (see section 3.4). Moreover, SHI does not cover extra-billing amounts over the statutory tariffs (see section 3.7.2).

The SHI rate of coverage by type of care is as follows:

Inpatient care. The coverage rate for hospital care is generally 80%, but increases to 100% in a number of cases:

- from the 31st day of a hospital stay;
- maternity care;
- newborns in the first 30 days;
- occupational injuries;
- individuals suffering from a specified ALD from a list of 30 or has an evolving and disabling form of another illness (*affection hors liste*) for treatment related to the chronic illness;

- CMU-C and AME beneficiaries;
- disability pensioners;
- military pensioners;
- minors who are victims of sexual crimes for related treatment; and
- infertility treatments.

For treatments or tests with a tariff over €120, a flat-rate fee (*participation forfaitaire*) of €18 is applied instead of the generally applicable co-insurance amount, subject to the same exceptions listed above. This fee does not apply to diagnostic imaging, emergency transport or transport between care facilities (including HAD) and applies only once per hospital stay. Whatever the level of coverage of care, most patients must pay a flat-rate catering fee (*forfait journalier*) of €18 per day for hospital accommodation (€13.50 in mental health institutions), subject to the following exceptions: maternity care from the last four months of pregnancy until 12 days postpartum, newborns in the first 30 days, beneficiaries of CMU-C and AME, occupational injuries, HAD, disabled children under the age of 20 living in institutions, military pensioners, and those covered under the Alsace-Moselle SHI scheme. This fee may be covered by VHI.

Outpatient care provided by self-employed health professionals. Coverage rates range from 70% of the statutory tariff for health care provided by doctors and dentists to 60% for medical auxiliaries and laboratory tests. The €18 flat-rate fee for treatments with tariffs above €120 also applies to outpatient services in lieu of the applicable co-insurance amount. The flat-rate fee also applies if the cumulative cost of treatments provided within a single visit exceeds €120, but in any case cannot be applied more than once per visit. The reimbursement of services provided by medical auxiliaries and laboratory tests is conditional on a doctor's prescription. However, in order to support the financial incentives to follow a coordinated care pathway, coverage of doctors' visits can vary. Under the "preferred doctor" scheme, patients are requested to register with the doctor of their choice, whom they should see to obtain a referral to a specialist. The preferred doctor is most often a GP, but it may be a specialist of any kind working in the private or public sector. The coverage of patients who directly access specialists or other GPs outside of the coordinated care pathway falls to 30%.

Pharmaceuticals. Most drugs are covered at a rate of 65%, but this ranges from 100% for non-substitutable or expensive drugs to 15% for drugs judged to have a low SMR. Extra-billing for prescription drugs is not allowed and thus the market price is the same as the SHI statutory tariff.

Medical devices. Medical devices and prostheses are subject to various coverage rates depending on the medical device. The reimbursement rate is defined by reference to the statutory tariff, but manufacturers and distributors are free to set a price in excess of this tariff. In certain cases (e.g. spectacles, dentures, hearing aids), the reimbursement levels are particularly low.

Full coverage for defined categories of patients

As noted above, certain hospitalizations are covered for 100% of the statutory tariffs. Exemptions from co-insurance for all types of care apply in certain circumstances:

- exemptions linked to health status, including individuals covered by the ALD programme for treatment related to the condition;
- exemptions linked to the nature of the treatment provided, such as abortion and infertility treatments (AME beneficiaries are not covered for infertility); and
- exemptions linked to the person concerned, such as those involved in accidents at work, pregnant women after the fifth month of pregnancy, contraceptives for minors aged 15 or more, live organ donors, disabled children and pensioners.

Exemptions on economic grounds do not exist. However, the free public complementary VHI coverage for people with low incomes (CMU-C; see section 3.5.1) effectively provides full coverage on an economic basis.

Deductibles for regular goods and services

In order to raise additional revenue for SHI, flat-rate deductibles[2] were introduced in 2005: €1 (*participation forfaitaire*) is charged for every physician visit, laboratory test and diagnostic imaging up to an annual limit of €50. The list of goods and services to which deductibles (*franchise médicale*) apply was expanded in 2008 to include drugs (€0.5 per package), ancillary care (€0.5 per service up to a daily limit of €2) and medical transportation (€2 per transport up to a daily limit of €4). A second annual ceiling of €50 is set for these types

[2] Technically, the term "deductible" usually refers to a fixed amount that is required to be paid by a patient before a third-party payer will begin to reimburse for services. However, in France, the term is used to describe the amount that is deducted from the tariff covered by SHI. For example, if €20 is paid by the patient to the health care professional and the patient sends his/her claim for reimbursement to SHI, first the amount covered is calculated: for example, 70% of the total cost (70% of €20 is €14). Then the "deductible" is taken from this amount (€1, for example). Finally, €13 in total is reimbursed to the patient.

of care. These deductibles do not apply to individuals under 18 years of age, beneficiaries of CMU-C and AME, and pregnant women from the sixth month. "Responsible" VHI contracts do not cover these deductibles (see section 3.5.3).

3.3.2 Collection

General government budget

The state finances 4.9% of total expenditure on health (Fig. 3.6), and only 1.2% of expenditure related to personal health care consumption. The state finances activities in the areas of prevention (28% of state expenditure), medical research (30%), training of medical professionals (15%) and administrative costs of the health care system (7%). Other budget allocations are directed to the AME programme (see section 3.3.1), military hospitals, services for disabled veterans and emergency care (5%). Additionally, 14% of the state expenditure is directed to the CMU Fund for beneficiaries of CMU-C under the SHI funds (see section 3.5.4).

Finally, the state also participates in SHI funding by subsidizing the exemption of employers' SHI contributions in order to encourage employment of low-wage workers in domiciliary support services or in defined areas.

Sources of SHI funding

Between its inception in 1946 and 1998, SHI was almost exclusively funded by contributions from employees and employers as a proportion of wages and salaries, initially with a ceiling on contributions and later without a ceiling. The contribution rates for SHI have steadily increased to cover health care expenditure, which has grown faster than the level of overall contributions for social security. Between 1992 and 1997, contribution rates remained stable at 6.8% of gross earnings for employees and 12.8% for employers. In 2013, the employer contribution rate was 13.1%.

Since 1998, employees' payroll contributions have been progressively replaced by an earmarked tax on all sources of income and have fallen from 6.8% to 0.75% of gross earnings in 2013. As a result of attempts to broaden the social security system's financial base, employee's contributions have been mainly substituted by the earmarked CSG introduced in 1991. The CSG rate varies depending on the source of income. Initially it was a two-tier rate but slowly evolved to a range, with higher rates for revenue from capital or from games of chance and a lower rate for revenue from those with low incomes. It is 7.5% on earned income (of which 5.29 percentage points goes to SHI), 8.2% on capital (5.95 percentage points for SHI), up to 12% on gambling winnings, 6.6% on pensions (4.35 percentage points for SHI) and 6.2% on benefits

(e.g. unemployment and sick leave allowances) (3.95 percentage points for SHI). The rate decreases to 3.8% of earned income for individuals with low incomes who were otherwise exempt from income taxation, which represent nearly half of French households. Moreover, because the revenue base of SHI has been broadened and partly disconnected from earnings, it is less vulnerable to wage and employment fluctuations. A share of CSG contributions is generally deductible from income tax. In 2012, 70% of the revenues from the CSG went to the SHI schemes, accounting for 35% of their financing.

The pharmaceutical industry is also required to contribute through a 1.6% tax on their turnover, a tax on advertising, a tax on drug retailing and an additional tax if their turnover exceeds a limit set in the Social Security Finance Act. In 2012, these taxes raised €1.04 billion for SHI. Additional revenue for SHI is levied on the profits of companies with turnover of more than €760 000. This 0.13% tax is estimated to have levied €55 million in 2013. Other taxes are levied on polluting activities of companies. In 2012, employers' contributions, employee's contributions and CSG revenue accounted for 82.3% of total SHI revenue. The remainder was provided mainly through state subsidies and additional earmarked taxes (e.g. on tobacco and alcohol consumption).

Main body responsible for collecting SHI funds

The Union for the Recovery of Social Security Contributions and Family Allowances (*Union de Recouvrement des cotisations de Sécurité Sociale et d'Allocations Familiales*) is in charge of collecting contributions and CSG at the local level. The money levied flows into a single national pool managed by the Central Social Security Agency (*Agence centrale des organismes de sécurité sociale*) and is distributed among the different national branches (SHI, retirement fund, family allowance, etc.) on the basis of contribution rates defined by law.

Main body responsible for solving the social security debt

Since 1996, the contribution for solving social security debt, the social debt repayment contribution (*contribution pour le remboursement de la dette sociale*) was implemented to address the increasing deficit of the social security system. The contribution is 0.5% of revenue regardless of the source (earned income, benefits, capital, sale of assets, etc.). At the same time, a special fund was created to manage the social security debt, the Agency for Funding Social Security Debt (*Caisse d'amortissement de la dette sociale*). To ensure that the social security debt is not continuously transferred to the next generation, the

parliament requires any new debt transferred to the Agency to be accompanied by an increase in the Agency's income, ensuring that the time frame required to eliminate the debt is not extended.

Financing CMU-C and ACS

Revenues for the CMU Fund, which finances CMU-C for low-income individuals as well as subsidies to purchase VHI for those with revenues up to 135% of the CMU-C ceiling (ACS) (see sections 3.5.1 and 3.5.4), mostly come from an earmarked premium tax on VHI contracts (€2 billion in 2012). The 2013 Social Security Finance Act added a fraction of the revenues from tobacco taxes (3.15%) to the CMU Fund.

3.3.3 Pooling of funds

SHI retrospectively reimburses care and, consequently, there is no formal resource allocation mechanism, although the creation of ONDAM (described below) acts as a soft tool to control and allocate health care expenditure. Because SHI schemes vary in their resources and population characteristics, health insurance schemes are subject to a financial adjustment mechanism that takes into account their demographic profiles.

ONDAM

Since 1996, the parliament has set a maximum national ceiling for SHI expenditure (ONDAM) for the following year, including spending limits for specific health care sectors (ONDAM subtargets), as part of the annual Social Security Finance Act.

In order to set the ONDAM for the coming year (n + 1), the government proposes an annual maximum growth rate for SHI expenditure. This rate is applied to the current year's (n) actual expenditure. However, often the current year's expenditure is a provisional estimate that is calculated in September, since voting on the ONDAM takes place before the end of the year. When genuine expenditure is known for year n, the change in expenditure in year n amounts to a ratification of overspending and to the integration of this overspending into the baseline used for defining the ceiling for the following year (n + 1).

Once the overall ceiling has been set, it is divided into five target groups:

- care provided in private practice;
- hospital care paid on a DRG basis (including outpatient visits in the public sector);

- health and social care for elderly and disabled people financed by SHI through the CNSA;
- expenditure related to the regional intervention funds (*fonds d'intervention régional*); and
- other types of care, for example health care provided to French citizens abroad, social and health care not financed through the CNSA and health care networks.

Since the ONDAM target was introduced, priority has generally been given to the health and social care sector over the health care sector (see Table 3.7).

From 1997 to 2003, there was significant spending in excess of the ONDAM. To address this problem, a parliamentary Alert Committee was created in 2004. If the system exceeds its projected budget by more than 1%, the Alert Committee may ask the Directorate of Social Security (the watchdog for all social security branches) to present a financial rescue plan. From 2003 to 2005, there was a lower degree of overspending achieved through better control of spending for ambulatory care and drugs. However, in 2006 overspending reached 1%, and in 2007 the alert procedure was used for the first time, resulting in the implementation of a range of cost-cutting measures in the fall of 2007. As a result, overspending was more moderate in 2008 and further reduced in 2009, despite the costs associated with two influenza epidemics: seasonal influenza in early 2009 and the H1N1 influenza A at the end of 2009. Since 2010, the ONDAM targets have been underspent (see Table 3.7).

Table 3.7

Target and actual annual expenditure (€, billions) by categories, 1997–2014[a]

	1997		1998		1999		2000		2001		2002		2003		2004	
	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure
Private practice	39.9	39.8	40.8	42.1	41.9	43.6	44.5	47.0	47.6	50.0	51.7	54.5	57.8	57.9	60.5	60.4
Public hospitals	37.1	37.1	37.9	37.7	36.7	38.6	39.8	39.9	41.1	41.2	43.2	43.9	46.1	46.2	48.0	49.1
Private hospitals	6.2	6.2	6.3	6.4	6.3	6.3	6.4	6.5	6.7	6.8	7.0	7.1	7.5	7.8	8.0	9.9
Health and Social care	6.1	6.2	6.3	6.6	6.7	6.7	7.2	7.1	7.7	7.5	8.3	8.3	9.0	9.0	9.8	9.8
Other	2.2	2.1	2.3	2.3	2.4	2.3	2.5	2.5	2.6	2.6	2.7	2.9	3.1	3.2	3.4	0.7
Total	**91.5**	**91.4**	**93.6**	**95.1**	**96.0**	**97.6**	**100.4**	**103.0**	**105.7**	**108.1**	**112.8**	**116.7**	**123.5**	**124.1**	**129.7**	**129.9**

	2005		2006		2007		2008		2009		2010		2011		2012		2013		2014
	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target	Actual expenditure	Target
Private ambulatory care	62.6	65.0	65.3	66.7	66.7	69.8	70.6	71.4	73.2	73.2	75.2	74.8	76.6	76.6	78.9	78.1	80.5	79.2	80.7
Hospitals	60.9	61.7	63.7	63.5	65.7	65.3	67.6	67.7	69.4	70.0	70.9	70.8	72.9	72.6	74.6	74.5	76.5	76.1	75.2
Health and Social care	10.9	10.8	10.9	11.0	11.7	11.8	12.9	12.9	14.1	14.0	15.2	15.1	15.8	15.8	16.5	16.5	17.1	17.1	17.6
For disabled	6.7	6.7	6.6	6.6	7.0	7.0	7.4	7.4	7.7	7.7	7.9	7.9	8.2	8.3	8.4	8.4	8.7	8.7	9.0
For elderly	4.3	4.1	4.4	4.4	4.8	4.8	5.5	5.5	6.4	6.3	7.3	7.2	7.6	7.6	8.0	8.0	8.4	8.4	8.6
Other	0.5	0.7	0.8	0.6	0.7	0.7	0.9	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.1	0.8	1.0	1.3	1.7
Total	**134.9**	**137.6**	**140.7**	**141.8**	**144.8**	**147.6**	**152.0**	**152.9**	**157.6**	**158.2**	**162.4**	**161.9**	**167.1**	**166.3**	**171.1**	**170.3**	**175.4**	**173.8**	**178.3**

Sources: Chevreul et al., 2010; Eco-Santé, 2014 (data extracted December 2014).
Note: [a]This table is split in two because of the change in the breakdown of subtargets after 2005.

Care provided in private practice

This target encompasses health professionals' fees in private practice, including outpatient consultations in private hospitals, as well as prescription of drugs and medical devices, transport and per diem allowances for sickness and occupational accidents. SHI is responsible for ensuring compliance with the growth rates set by the government for these costs, which are included in the budget target agreed between the state and SHI.

During their annual negotiations with health professionals, SHI defines expenditure targets for each profession and measures to enable them to be met. To ensure that the professionals' national agreements on statutory tariffs are consistent with the ONDAM target, the agreements are not implemented for a six-month period and the newly negotiated tariffs only become effective if the target is not exceeded. Otherwise, the previously negotiated tariffs remain in force.

The cost of medical goods prescribed in private practice is not directly regulated through the ONDAM. However, the annual Social Security Finance Act establishes a threshold rate of increase of the overall pharmaceutical companies' turnover on reimbursable drugs: the K rate (*taux K*). Exceeding this rate results in financial penalties for pharmaceutical companies. However, there have been frequent criticisms of the discrepancy between the K rate and the ONDAM growth rate, the K rate being far below the ONDAM (0.4% for 2014 when the ONDAM was 2.4%).

Health care provided by hospitals paid on a DRG basis

This target encompasses spending by public and private hospitals paid on a DRG basis (T2A; see section 3.7.1) and other hospital spending. Since 2010, overspending the ONDAM hospital care target has been strictly prohibited. While the volume (case-mix) of hospital activity has far exceeded projections in recent years, the target has been underspent because of cancellation of reserve appropriations and lower than expected spending on other items within this target. Since 2013, a "prudential coefficient" has reduced the DRG tariffs for both public and private sector by 0.35%. This reserve may be partly or fully returned depending on the level of expenditure relative to the ONDAM target.

Although the ARSs have both a strategic planning and an oversight role with respect to hospitals (see section 2.5.3), their impact on hospital budget allocations is more limited. Of the €42 billion allocated by the ARSs in 2010, they had decision-making power with respect to only €2.9 billion (Cour des comptes, 2012c).

Health and social care for frail elderly and disabled financed by SHI
Budgets corresponding to the targets for health and social care for the elderly and disabled are transferred to the CNSA (see section 3.6). The budget for the elderly is used to finance health care costs and a share of social care cost in nursing homes (*établissements d'hébergement pour personnes âgées dépendantes*) as well as the community nursing services (*Services de Soins Infirmiers à Domicile;* SSIAD). The budget for the disabled is used to finance nursing homes and SSIAD. Budgets are allocated to ARSs depending on service capacities in their geographical areas. The ARSs allocate budgets to services following the same principle (see section 2.5.1).

Regional funding of specific programmes
The ARSs are financed by a state appropriation (77%) and contributions from the SHI schemes (18%) and the CNSA (4%). The regional intervention funds were created under the 2012 Social Securing Financing Act and combine these appropriations and credits to facilitate the capacity of ARSs to undertake transversal actions in the following areas: 24-hour services; experimentation and adaptation of care delivery, including multidisciplinary teams; working conditions in health care institutions; modernization and pooling of facilities, including information systems; and health promotion, educational activities and prevention, with a particular focus on loss of autonomy.

3.3.4 Purchasing and purchaser–provider relations

As already stated, SHI covers care provided by both public and private health care providers. Patients who consult these providers are reimbursed for a share of the cost of care (see section 3.3.1).

The relationship of independent health professionals with SHI is defined at the national level in agreements called "conventions" signed between UNCAM (SHI) (see section 2.3.5) and representatives of the professions. Conventions exist for doctors, nurses, physiotherapists, dentists, midwives, pharmacists, speech therapists, chiropodists, orthoptists, heads of biological laboratories, providers of transport and certain medical devices suppliers (e.g. opticians and orthodontists). In 2012, the first interprofessional agreement (*accord cadre interprofessionel*) was signed. It was designed to facilitate experimentation in coordinated care, with a particular focus on post-hospitalization patient care, care for patients with chronic or multiple diseases, and home care for dependent individuals.

All professionals are subject to the terms of the agreement unless they expressly opt out. In exchange, SHI pays a part of the professionals' social security contributions. These agreements govern health professionals' relations with patients who have public coverage and with SHI. The method of payment and the amount health professionals receive, therefore, should conform to the terms of these agreements or to the minimum contractual regulations that the government sets out in the absence of an accepted agreement. Agreements for each profession cover a period of four or five years or extend until a new agreement is signed. However, there are regular amendments (at least annual for doctors) that take into account changes following the yearly Social Security Finance Act and other new measures. The Ministry in charge of Health plays a significant role in the negotiation. Negotiations between SHI (UNCAM) and doctors tend to be very difficult because of the power of the medical professionals' associations, with SHI rarely managing to implement the full range of measures it seeks.

In recent years, conventions have included several types of measure to promote quality and efficiency in the health system. P4P based on public health objectives was included in the 2011 collective bargaining agreement with physicians (see sections 2.8.3 and 3.7.2). Interestingly, the 2007 nurses' agreement was used as a means of introducing controls on the geographical distribution of health professionals for the first time (other than pharmacists, for whom distribution has long been regulated). However, it was not followed by similar measures for other health professionals, in particular doctors (see section 6.1.3).

Purchasing relations with hospitals differ. The Ministry in charge of Health is responsible for public and private hospitals and sets the DRG tariffs. SHI reimburses hospitals on a case-payment basis in public hospitals, private non-profit-making hospitals and profit-making hospitals with a SHI agreement (*cliniques conventionnées*). For the very few private profit-making hospitals with no SHI agreement (*cliniques non conventionnées*), patients pay for their care directly and are reimbursed based on specific statutory tariffs called tariffs without consultation (*tarif d'autorité*), which are very low and have not been increased since the 1960s.

3.4 OOP payments

Of the 26.9% share of total health care expenditure not paid/reimbursed by SHI, VHI financed a 13.9% share and patients a 7.5% share in 2011 (WHO, 2013). SHI coverage varies across sectors and thus OOP expenditure on health varies inversely with the level of SHI coverage: 39.6% of OOP expenditure is accounted for by medical goods, 8.2% by hospital care and 35.7% by payments to self-employed health professionals (DREES, 2012). Overall, the level of charges left to the patient is 23.3%, which is often covered by VHI.

In the health and social care sector, OOP payments for residential long-term care services have steadily increased and in 2012 averaged €2892 per month (ATIH, 2014), raising concerns about equity in access to these services.

3.4.1 Cost-sharing (user charges)

Patients are directly responsible for:

- the cost of health care not included on one of the positive lists covered by SHI (such as care provided by psychotherapists or psychoanalysts);
- deductibles for consultations, prescription drugs, nursing care and medical transportation up to an annual limit;
- co-payments (such as the hospital catering fee);
- co-insurance (difference between the statutory tariff and the amount reimbursed by SHI);
- additional co-insurance of 40% for care outside of the coordinated care pathway; and
- extra-billing charges by certain professionals.

Exemptions, deductible caps and programmes to facilitate access to VHI help to offset these user charges (Table 3.8; see also section 3.3.1). Nonetheless, extra-billing is frequent, and half of the population pays at least one extra-billing charge per year. These charges vary widely in number and amount across sectors. In 2010, extra-billing by doctors practising in Sector 2 accounted for €2.5 billion, mostly attributable to specialists (€2.1 billion), compared with €18.4 billion reimbursed for doctors' fees excluding extra-billing (CNAMTS, 2011). In the inpatient sector, OOP payments are significant for patients not covered by VHI, ranging from a few hundred to a few thousand euros (HCAAM, 2013c). However, the medical device sector accounts for the largest

share of extra-billing charges. While VHI covers approximately 50% of these charges, coverage varies greatly depending on the VHI contract and the medical device in question.

Table 3.8

User charges for health services[a]

Health service	Type of user charge in place	Cap on deductibles
GP and specialist visit[b]	Co-insurance (30%) + €1 deductible	€50/year
Outpatient prescription drugs	Co-insurance (15–100%) + €0.5 per box	€50/year
Inpatient stay	Co-insurance (20%) + €18 catering fee	–
Dental careb	Co-insurance (30%); €1 deductible applies only to stomatologists, not dental surgeons	€50/year
Medical devices	Co-insurance (various rates; e.g. 40% of official tariff for eyeglasses)	–

Notes: [a]Exemptions and/or reduced rates for all services for chronically ill (ALD), CMU-C and AME beneficiaries, specific treatments, specific populations (e.g. pregnant women, disabled); other protection mechanisms for all services from CMU-C and ACS; [b]Extra-billing may apply.

3.4.2 Direct payments

Since its origins, SHI has been based on the principle that a person consulting a doctor in the ambulatory sector directly pays for the service and is thereafter reimbursed by SHI and, usually, by VHI. Since the 1970s, exceptions have been carved out for the most expensive care as well as for low-income households (beneficiaries of CMU-C, ACS and AME), and currently 35% of ambulatory care is subject to third-party payment (i.e. the health professional receives payment from SHI, and VHI, rather than from the patient). Development of electronic billing since the early 2000s has helped to reduce the delays for reimbursement. Nonetheless, the existence of direct payments is seen as a barrier to equity in financial access to health care, and the government is seeking to universalize third-party payment, as in other countries with SHI systems, including Germany, Austria and the Netherlands (IGAS, 2013b). The planned Health Reform Law will include the generalization of third-party payment among its provisions (see section 6.2).

3.4.3 Informal payments

While certain doctors are legally permitted to bill in excess of official tariffs (see section 3.7.2), informal payments are uncommon in France. Doctors engaging in abusive practices, including insisting on cash payment, are subject to disciplinary sanctions. Nonetheless, a 2014 survey by a collective

of nongovernmental organizations acting for patient rights found that 5% of French patients had been confronted with a request by a health professional for an "under the table" payment, with patients over age 65, retired or chronically ill more frequently facing such requests (Collectif Inter-associatif sur la Santé, 2014).

3.5 VHI

3.5.1 Market role and size

VHI is not used to jump public sector queues or to obtain access to elite providers, unlike in some other countries. The primary role of VHI in France is complementary coverage for patient co-insurance amounts and other user charges. VHI contracts provide better coverage for medical goods and services that are poorly covered by SHI, notably dental and optical care, for which extra-billing is the norm. Since the early 2000s, with the wide development of a market that was almost saturated, VHI providers extended complementary coverage and competed in offering coverage for goods and services that are not covered by SHI, such as omega-3 fatty acids and surgery for myopia. VHI may also be of a supplementary type, providing access to private amenities (such as a private room) that are not included in the benefit basket.

The population covered by VHI contracts increased from 50% in 1970 to more than 90% by 2010. The free CMU-C is offered on a voluntary basis by public SHI schemes to individuals with revenues below a defined ceiling (€7 934 for a single person as of July 2012). In 2012, CMU-C covered 7% of the population.

Among the factors contributing to the growth in the population covered by VHI contracts is the diminishing share of SHI coverage for outpatient care, which has increased households' OOP expenses. The share of total health expenditure financed by VHI has not risen as dramatically, increasing from 11% in 1990 to 13% in 2012 (Fig. 3.5). This is because the number of people with 100% SHI coverage for chronic conditions has increased with ageing of the population, resulting in a higher than expected share of SHI coverage of outpatient costs (HCAAM, 2013c).

3.5.2 Market structure

VHI coverage may be purchased by individuals or by firms for their employees. Group contracts usually offer broader coverage than individual contracts, and 85% are sponsored by employers who pay, on average, 56% of the premium (Perronnin, Pierre & Rochereau, 2012). Premiums for group contracts generally are not risk rated by age, but approximately 30% of contracts premiums are indexed to wages; 43% of privately insured individuals are covered by a company group contract (Garnero & Le Palud, 2013).

Access to VHI remains largely linked to social status. Wealthier people are more likely to be covered by VHI and to buy contracts with higher premiums, which most often reflect broader coverage (Safon, 2013). Among the population with no complementary coverage, 46% reported that they did not access VHI because of financial barriers (Perronnin, Pierre & Rochereau, 2011).

VHI access also varies by age group. The highest rates of people without VHI are observed among those aged between 20 and 29 years and those over 80 years. For the former, this may result from lower health care needs, while reasons for the latter may be related to lower income and lower access to group contracts through loss of group coverage at retirement and higher premiums because of age-rating.

The French VHI market is characterized by a large number of insurers: 682 in 2011 (DREES, 2012). This number has decreased by more than half since 2001, as many firms merged or left the market as a result of heavy competition in a nearly saturated market and stricter underwriting rules.

VHI firms belong to one of three families, which differ according to their logic and principles: mutual, commercial and provident.

Mutual insurance companies. These operate on a non-profit-making basis and their aim is to achieve solidarity and mutual aid among their members by avoiding, to the extent permitted by competition, differentiation in premiums for a given level of coverage. Mutual insurance represent 82% of VHI firms and account for 55% of total VHI turnover. They use limited risk rating, and some have income-adjusted premiums. They mainly offer individual contracts, and the majority of their group contracts are voluntary.

Commercial insurers. By contrast, commercial insurers may use a large set of characteristics, including health status, to rate premiums. These represent 13% of VHI contracts, with 29% of total VHI turnover.

Provident institutions. The smallest share of the VHI market (5%) and total turnover (16%) is held by provident institutions. They have a non-profit-making aim and have specialized in mandatory group contacts, which account for 84% of their health insurance turnover.

3.5.3 Market conduct

There is no restriction on what insurers are permitted to cover; however, there are strong incentives for them to support public sector objectives and the solidarity principle.

In 2004, tax-based incentives were introduced for "responsible contracts" (*contrats responsables*) designed to encourage responsible health care consumption. They cover up to 100% of care provided through a coordinated care pathway with a designated gatekeeper (GPs and specialist visits with referral), at least 95% of the cost of the most important drugs (covered by SHI at the 65% level) and at least 95% of the cost of laboratory tests covered by SHI. Responsible contracts also must cover at least two types of important preventive care from a list defined by HAS (see section 2.3.4). To decrease moral hazard, these contracts are prohibited from covering certain deductibles (see section 3.4.1) and the additional co-insurance and co-payment on doctors' fees when patients opt out of the pathway. Premiums from contracts meeting these criteria are subject to reduced taxes (7% as opposed to 14% in 2014). By 2006, almost all VHI contracts were "responsible contracts" (Garnero & Le Palud, 2013).

VHI contracts differ on the level of coverage of charges above the official tariffs (extra-billing), the cost of drugs of low SMR, medical devices, private amenities and the cost of any covered services not included in the SHI benefit package. An increasing number of VHI firms offer tailor-made contracts, allowing individuals to choose the rate of coverage for each type of care.

VHI premiums generally are not income-related, unlike SHI contributions. As a result, wealthier individuals spend a lower proportion of their income on health care than do poorer people. Moreover, while the SHI premium is not related to age or risk, VHI premiums are variable (Jusot, Perraudin & Wittwer, 2012). Premiums have dramatically increased: in 1998, the average annual premium of an individual contract was €340 per capita, compared with €530 in 2006 (Allonier, Guillaume & Rochereau, 2013).

Efforts to contain premium costs have focused on increased transparency to facilitate comparisons of the scope and depth of coverage. The 2012 Social Security Finance Act required VHI firms to report the amount and composition of their administrative costs as a percentage of premiums as of 2014.

3.5.4 Public policy

To address the economic barriers faced by poorer people in accessing complementary coverage, particularly those just over the CMU income ceiling, the ACS voucher scheme was created in 2004. Financial assistance in the form of a "health check" (*cheque santé*) is offered to people whose incomes fall below a defined ceiling (135% of the CMU-C ceiling as of January 2012) for the purchase of VHI. The amount offered depends on the age of the individuals in the household, ranging from €100 per year for individuals under age 16 to €550 for those over age 60, and may not exceed the contract amount. However, fewer than half of those eligible participate in this scheme (CMU, 2012). Recent reforms include selection of a limited range of contracts to facilitate choice and to ensure the quality of the offers.

To increase the population covered by group contracts, employers providing such contracts to their employees receive fiscal rebates, while employees may deduct the premium cost from taxable income. Under the National Interprofessional Agreement (*l'accord national interprofessionnel*) signed by representatives of employers and employees in 2013, all employers regardless of size will be required to offer group VHI contracts to their employees by 2016.

3.6 Other financing

Most additional sources of financing relate to health and social care sector services for elderly and disabled persons, including individuals with long-term mental illnesses.

Financing long-term care for the elderly

Following the heat-wave crisis in the summer of 2003, the CNSA was created to improve provision and funding of long-term care services, such as SSIAD and nursing homes.

There are currently three sources of funding for long-term health and social care for the frail elderly in France:

At the national level. The CNSA pools SHI funds allocated to health and social services for elderly persons: the national ONDAM for elderly (see section 3.3.3); the "solidarity and autonomy contribution", which is generated from the revenue of an unpaid working day for the French working population; and the additional solidarity and autonomy contribution (*contribution additionnelle de solidarité pour l'autonomie;* CASA), which is 0.3% tax applies to retirement and disability pension income. It funds a share of the personal autonomy allowance (*Allocation Personnalisée d'Autonomie;* APA) that is used to finance domiciliary staff, home care devices or residential care for frail elderly people.

At the local level. Local authorities (departments) finance a large share of long-term care allowances for the frail elderly. The APA is managed by general councils and is means-tested and adjusted in relation to the individual's dependence level, living conditions and needs, as assessed by a joint health and social care team. It is also funded by CNSA funds (see section 3.6). In 2012, departments contributed €4 billion to APA, supplemented with €1.7 billion from the CNSA (Sécurité sociale, 2013b). Many other local actors undertake social actions to support the frail elderly.

Households. The OOP payment for care in residential care services made by households is currently €1500 per month on average. The constant increase of this figure is a major concern for the government as it challenges equity in access to long-term care. The government has, therefore, searched for solutions in financing long-term care for over a decade, but new sources of resources have been difficult, and reforms have never been issued (see section 6.1.4).

Financing care for the disabled

There are currently five sources of funding for health and social care for the disabled (all causes of disability) (see also section 2.4).

At the national level. There are three funding pathways:

- the CNSA receives resources from SHI (ONDAM for the disabled; see section 3.3.3) from the solidarity day, which finances domiciliary staff or devices in organizations caring for disabled people as well as a share of the two allowances for the disabled: the disability compensation allowance (*prestation de Compensation du Handicap;* PCH), and a small share of the special education allowance for children (allocation d'éducation de l'enfant handicapé; AEEH);
- the Family Allowance Fund (*Caisse d'allocations familiales*), which is a branch of the social security system, finances most of the AEEH; and

- direct state financing for certain services, for example sheltered workshops (*établissements et services d'aide par le travail*) and adapted enterprises.

At the local level. The general councils (departments) also finance social and health services for the disabled and contribute to the PCH.

Households. The OOP co-payment for care financed by SHI in residential homes for disabled adults was €18 per day in 2010 (there is no OOP payment for children). OOP payment for this type of care financed by general councils varies across departments (however, it is estimated to be approximately the same). Funders of each category of services are outlined in section 5.8.2 and Tables 5.1 and 5.2.

Financing mental health care

Mental health care is provided by private practice health professionals, private psychiatric hospitals or the public mental health care areas (*soins de santé mentale secteurs*) (see section 5.11). Care provided for mental illness by GPs and psychiatrists in private practice is covered by SHI at the usual rate. However, people presenting an ALD-23 (long-term psychiatric condition) are fully covered (see section 3.2). Care provided by psychotherapists or psychoanalysts is fully financed by patients.

Care provided in public mental health care areas and in private psychiatric hospitals for adults and children is financed by SHI. As in the general hospital sector, patient co-payment (*ticket modérateur*) is 20% of a daily tariff that varies across hospitals. The hospital flat-rate fee for accommodation is lower than in the general hospital sector, at €13.5 per day in 2010 (see Table 3.8). Both the patient co-payment and the hospital flat-rate fee for accommodation can be fully covered by VHI.

People with mental disabilities also receive care and services from the health and social care sector for the disabled (Tables 5.3 and 5.4 in section 5.11 list the institutions that provide services for mentally ill patients); the financing sources for these services are described above.

The expenditure on mental health services was estimated to be €16.6 billion in 2007, divided into €13.4 billion for health care services (8.3% of total health care expenditure on services and goods) and €3.2 billion for the health and social health care sector for the disabled (Chevreul et al., 2013).

3.7 Payment mechanisms

Payment mechanisms in the French health care system have long been based on FFS for health professionals working on a private basis and on prospective budgeting methods for health services. However, since the mid-2000s there has been a move towards the implementation of activity-based payment methods for health services, starting with the implementation of DRG tariffs in hospitals and the introduction of P4P for doctors, without impairing the FFS principle (Table 3.9).

Table 3.9
Provider payment mechanisms

Provider/payers	Local health authority	Central SHI institution	Private/VHI
GPs	–	FFS, T2A, P4P	FFS
Public hospitals	–	T2A	T2A
Private hospitals	–	T2A, FFS	T2A, FFS
Dentists	–	FFS	FFS
Pharmacies	–	Mark-ups on regulated prices + dispensing fees + P4P	Mark-ups on regulated prices + dispensing fees + P4P
Social care	Capitation, T2A	–	–

3.7.1 Paying for health services

Payment for outpatient services

Generally, patients in the ambulatory care sector are expected to pay health care providers themselves and then claim reimbursement of a share of their expenses from their health insurance fund. However, there are situations in which the patient is exempt from making the initial direct payment. This system of direct payment by the health insurance fund to the provider is known as "third-party payment" (*tiers payant*) and is becoming increasingly common in ambulatory care. It currently applies to CMU beneficiaries and victims of occupational accidents, but under the planned 2015 Health Reform Law, it is expected to be extended to a larger part of the population. It may also be used in laboratories, pharmacies (for generic drugs only), hospital consultations and outpatient clinics, and by some doctors for expensive examinations and treatments.

Payment of hospitals

All hospitals, except for long-term care and psychiatry, are funded using T2A, based on GHSs. Using data from the PMSI, each patient stay is classified in one of the approximately 2200 DRGs, and an associated GHS. Each GHS is subject to a lump-sum tariff that is set annually. GHS tariffs are calculated differently for public and private hospitals and do not include the same services (see below).

Within the T2A, there are two primary categories of hospital reimbursement: medical activity-based payment and non "activity"-based payment.

The medical activity-based category covers three areas:

- GHS tariffs per hospital stay, which have no cost weights other than regional weights to account for regional level variations in production costs;
- additional fees for outpatient consultations, emergency ward visits and all hospital activities other than inpatient care; and
- additional payments for expensive technologies and interventions include a defined list of expensive drugs and medical devices and intensive care activities; to avoid discouraging the use of expensive and innovative medical technologies, these are first allocated an additional payment and then over time integrated into the GHS tariffs.

Block grants and non "activity"-based financing cover three main areas:

- block grants provide annual lump sum funding, such as for emergency care, organ retrieval and transplants;
- public utility missions, also referred to as missions for general interest and contracting (*missions d'intérêt général et d'aide à la contractualisation*), serve to fund coordination of care, plus epidemiological surveillance and expertise; two separate lump sums are defined by the regional health agencies on a contractual basis: one for education, research-related activities and innovation in teaching hospitals (*missions d'enseignement, de recherche, de référence et d'innovation*); and the other for activities to meet national or regional priorities or specific public missions; and
- innovative medical technologies and procedures, especially those awaiting registration on a positive list, are financed through two research programmes: the hospital clinical research programme (*programme hospitalier de recherche clinique*), the main source of public funding for clinical research projects assessing the effectiveness of the new treatment strategy; and the programme supporting funds for economic evaluation (*Programme de recherche medico-économique*), assessing the efficiency of the innovation.

In private profit-making hospitals, doctors' procedures and services are not included in GHS tariffs and are paid separately, while they are included in the GHS tariffs for the public hospitals. Specific GHS tariffs are calculated for the private sector, together with an individual "transition coefficient" that aims to avoid large changes in hospital budgets from year to year and takes into account each hospital's own historical costs/prices. Regional weights, similar to those of the public sector, are also used in the private sector, as well as a technical coefficient that applies to hospitals offering high-technology services.

Finally, special financing rules apply to hospitals in low-density, geographically remote areas that would otherwise be subject to consolidation because of low volume of use.

Payment for mental health care

Psychiatric areas provide integrated inpatient and outpatient public mental health care, generally coordinated by a hospital specialized in mental health and paid on an annual prospective global budget basis, as are private psychiatric hospitals (see section 5.11). An information system, "summary of medical information for psychiatry" (*recueil d'informations médicalisées en psychiatrie*), has been implemented, but the payment mechanism (*valorisation de l'activité en psychiatrie*) is still being developed.

Outpatient care provided by self-employed GPs or psychiatrists is paid for on a FFS basis. Consultations for psychotherapy provided by other self-employed professionals are also paid on a FFS basis, but tariffs are freely set by providers because there is no coverage by SHI.

Payment for pharmaceutical care

Outpatient pharmaceutical care is paid according to the official tariffs defined by CEPS (see section 2.8.4). Prices and payments for drugs are made on a package basis, and distribution of partial packages is prohibited even if it exceeds the number of units prescribed. However, under the 2014 Social Security Finance Act, a three-year voluntary project will test delivery of antibiotics on a unitary basis in retail pharmacies.

Drugs with marketing authorization that are not contained in the list of reimbursable drugs or for special drugs for inpatient care (see section 2.8.4) may be sold over the counter, with patients paying the full price, which is not regulated. Previously, VHI did not cover drugs not covered by SHI.

Inpatient pharmaceutical care is included in the GHS tariffs paid by SHI to the hospitals, with the exception of innovative expensive drugs, which are paid for on top of the GHS tariffs if listed on the special agreed products list.

3.7.2 Paying health workers

Methods for paying health care professionals vary according to whether the professionals are self-employed in private practice or employed by institutions. However, some professionals such as doctors have mixed activities, and so their total remuneration may be a composite sum.

Health professionals working in the private sector

Self-employed professionals (GPs, specialists, dentists, nurses, physiotherapists, midwives, ambulance personnel, speech therapists, orthoptists and laboratory technicians) provide the vast majority of outpatient services and a large proportion of services in private hospitals and are paid directly on a FFS basis. Their gross income, therefore, reflects the number, type and price of the services they provide, minus their professional costs. Recently, new payment methods for particular tasks have been introduced. For example, a capitation system is used to pay for doctors' management of patients with ALDs (€40 per patient per year), and currently there is experimentation regarding payment of health professionals involved in multidisciplinary provider networks.

Most health professionals are required to apply the statutory tariffs set out in the national agreements (conventions) (see section 3.3.4). However, there are exceptions, particularly for doctors with the permanent right to exceed the official tariffs (extra-billing). These are mainly doctors who have opted to work in Sector 2, as opposed to Sector 1 where the doctors are prohibited from extra-billing. In 2010, a quarter of doctors practised in Sector 2, although the proportion varies greatly among specialties (CNAMTS, 2011). Sector 2 doctors relinquish some of the social and fiscal advantages normally accorded by doctors under the agreements. Patients consulting a Sector 2 doctor are covered for the statutory tariff regardless of the level of extra-billing. Because extra-billing raises equity of access issues, access to Sector 2 is tightly controlled by SHI, and currently only doctors with certain full-time public hospital positions may request to access this sector. Because extra-billing can be very significant for certain specialties and in certain areas, impairing patients' access to care, measures have been implemented to contain extra-billing (see section 6.1.2).

In 2009, SHI began to offer individual contracts on a voluntary basis to GPs that provided incentives for practice improvement. In 2011, this P4P scheme based on public health objectives (*rémunération sur objectifs de santé publique;* ROSP) was incorporated into the physicians' collective bargaining agreement with an expanded list of objectives and extended to additional specialties. GPs participating in ROSP receive additional remuneration on top of their normal FFS income, which takes into account the size of the population treated by the

doctor and 29 quality indicators with intermediate and final targets. Overall, the amount earned may exceed €7000 per year for a doctor achieving over 85% of the targets and treating more than 1200 patients. There is no penalty for the GPs who do not achieve the targets. In 2012, more than 89 000 physicians participated in the programme, receiving an average annual remuneration of €4215.

Physicians employed in public hospitals

Doctors working in public hospitals are state employees who benefit from conditions of employment similar to civil servants. The method and amount of payment vary according to category:

- university hospital doctors are categorized as state employees because of their teaching responsibilities; their pay is composed of a university salary for their teaching responsibilities and hospital fees that correspond to their treatment responsibilities; levels of pay correspond to grades on a national seniority scale;
- full- or part-time hospital doctors with tenure or on contract are paid on a monthly basis according to their grade (seniority) and the time worked; they also receive various allowances for being on call; and
- external practitioners working in hospitals on an intermittent basis (*attachés*) are paid on a monthly basis in proportion to the number of sessions they undertake, with allowances for being on call.

University hospital doctors are authorized to devote a part of their working time to private practice within the hospital. Their fees are received by the hospital administration, which transfers them to the practitioner after withholding their own fees for use of facilities.

Pharmacists

Since January 2000, pharmacists have been paid based on a mixed system linking a fixed-sum component (€0.53 per item) and a digressive sliding-scale margin; however, remuneration of pharmacists is evolving towards a fee-based system (*honoraire de dispensation*). Starting in January 2015, pharmacists will be paid a fixed sum of €0.80 per drug package (increasing to €1 in 2016), in exchange for a reduction in the price-based margins. Since 2013, pharmacists are paid for consultations with asthmatic patients and those treated with anticoagulants (€40/patient).

Pharmacists' remuneration has also been used to support the development of the generic drug market. Since 1999, pharmacists have been authorized to substitute another drug from the same generic group for the one prescribed unless the doctor has noted "non-substitutable" on the prescription. The absolute mark-up paid for generics are the same as for brand-name drugs and higher manufacturer rebates for generics are allowed (maximum 50% of manufacturer's list price versus 2.5% for brand name drugs). This policy has allowed for rapid expansion of the generic drug market, which in 2011 represented 24% of the reimbursable drug market in value and 13% in volume (IGAS, 2012a). In addition, a P4P scheme for pharmacists was initiated in 2013 with an initial focus on generics. Pharmacists are eligible for an annual bonus of up to €3000 depending on the share of generics delivered as well as the increase in this measure.

4. Physical and human resources

In France, there is a high level of facilities, equipment and other physical resources. However, there are strong disparities in their geographic distribution.

Hospitals are in four main categories: regional hospitals, general hospitals, local hospitals and psychiatric hospitals. Capital investment is either covered by reimbursements for services delivery or funded through specific programmes. Two nationwide investment plans have been launched since the early 2000s in order to attain quality and safety standards. The ARSs are responsible for the control of capital investment and purchasing major medical equipment.

Following the general trend in European countries, the number of full time acute beds per 1000 inhabitants has been steadily declining over the last 20 years. In 2013, it was 3.45. Reduction in acute care capacity was accompanied by the transformation of acute beds into rehabilitation and long-term care units and the development of day surgery and HAD.

About 5.3% of the French population works in the health care sector. Nurses and nursing aides form the largest group of professionals, accounting for approximately half of the health care workforce. Registered health professionals also include physicians, dentists, midwives, pharmacists, professionals involved in rehabilitation (physiotherapists, speech therapists, vision therapists, psychomotor therapists, occupational therapists and chiropodists) and technical paramedical professions (hearing aid specialists, orthoptists and radiographers). Other professions usually identified as contributing to health care include clerical and technical staff working in hospitals, laboratory technicians, paediatric auxiliaries, dieticians, psychologists and ambulance drivers.

Workforce forecasting and planning of educational capacity is mostly made at the national level using a *numerus clausus* for medical professionals seeking to prevent shortages or oversupply. However, it does not control

for the geographical distribution of medical professionals, as self-employed professionals are free to choose where they practise. In order to solve the resulting great disparities in the distribution of medical professionals, there has been increasing transfer of tasks from medical to other professionals such as nurses and the development of incentives for attracting health professionals to underserved areas.

4.1 Physical resources

4.1.1 Capital stock and investments

Current capital stock

At the end of 2011, there were 2694 hospitals in France. Non-profit-making institutions accounted for 61% (35% public and 26% private sector) and 39% were private hospitals operated for profit (DREES, 2013c).

The 947 public hospitals account for nearly two-thirds of inpatient beds (258 156 out of 414 395). There are three main types of public hospitals:

- 33 regional hospitals (*centres hospitaliers régionaux*), with the highest level of specialization and the technical capacity to treat more complex cases; most are linked to universities and operate as teaching hospitals;
- 802 general hospitals (*centres hospitaliers*), which account for the majority of short-term inpatient stays; among the general hospitals are ex-local hospitals, small community-level structures that fulfil a health and social care function, offering acute medical care, follow-up care and rehabilitation, and long-term care; and
- 88 hospitals specializing in psychiatric care (*centres hospitaliers spécialisés*).

There are also 24 other public establishments, primarily imaging and radiotherapy centres.

Private hospitals fall into two categories: non-profit-making or profit-making. Non-profit-making hospitals are owned by foundations, religious organizations or mutual insurance associations. In 2011, they accounted for 26% of hospitals (700) and 14% of inpatient beds (11 778). Two-thirds of private non-profit-making hospitals perform public service duties such as emergency care, teaching and social programmes for deprived populations; they are known

as "participants in public hospital service" (*participant au service public hospitalier*). Nineteen of them specialize in cancer treatment, with a broad remit that includes prevention, screening, treatment, teaching and research.

The private profit-making sector plays an important role in the French health care system. The share of hospitals that are operated for profit is higher than in most developed countries: private profit-making hospitals accounted for 39% of all hospitals (1047) and 24% of all inpatient beds (98 522) in 2011. They also accounted for 22% of part-time hospitalization places and tend to specialize in areas with higher profit opportunities (see section 5.4).

The market for hospital care is becoming increasingly concentrated. The number of hospitals has been declining since 1990, mainly because of hospital closures and mergers within the private sector. Nonetheless, new modes of cooperation may result in an increase in the number of hospitals over the next few years.

The overall area of the property assets of public hospitals is estimated at 60 million square metres, a scale comparable to the rest of the state's property holdings. However, to date, record keeping has not been standardized among hospitals, and consequently the Ministry in charge of Health has lacked reliable data in this regard (Cour des comptes, 2013a). In 2014, a new tool called OPHELIE was launched to remedy this problem by standardizing the inventory control and facilitating management of hospital property assets. Focusing initially on hospitals with investment projects, those undergoing audits as well as hospitals volunteering to participate, it will be rolled out to all public hospitals by 2017.

Investment funding

Depending on the specific sector and public health priorities, capital investments in the health care sector are either covered by reimbursements for service delivery or funded by specific national or regional programmes. Between 1983 and 2003, the public and private non-profit-making sectors suffered from a lack of investment because of the financial constraints imposed by the global budget payment system in place at that time. Since then, two nationwide investment programmes have been launched to support improvements to meet current quality and safety standards: Hospital Plan 2007 (*Plan Hôpital 2007*) and Hospital Plan 2012 (*Plan Hôpital 2012*).

Hospital Plan 2007 was launched in 2003 as part of an ambitious reform of the hospital sector; €6 billion was invested over five years for select projects proposed by public and private hospitals. The plan was to be entirely funded

by SHI, in part by direct funding of the investments (€1.5 billion) and in part by underwriting 20-year loans to the hospitals (€4.5 billion). The Hospital Plan 2007 also provided for public–private partnerships (*partenariat public–privé*), and each of the regional hospital agencies (*Agences régionale de l'hospitalisation*, predecessors to the ARSs) was to propose at least one public–private partnership investment project. The French Accounts Commission (*Cour des comptes*) criticized the realization of these partnerships as being insufficiently planned and executed (Cour des comptes, 2014a). Since 2012, national oversight of investments undertaken by the ARSs and valued at over €50 million is provided by the Interministerial Committee for Performance and Modernization of the Health Care Supply (*Comité Interministériel de Performance et de la Modernisation de l'Offre de Soins*).

The second investment plan, Hospital Plan 2012, was introduced in 2007 in order to extend the previous investment cycle. This new plan involved an initial endowment of €7 billion, again financed by SHI through direct funding (€5 billion) and through access to public lending at preferential interest rates (€2 billion). This plan has three major priorities: hospital information technology systems, restructuring of hospital facilities at the regional level (e.g. collaborations and mergers between hospitals) and improvement of compliance with safety standards (e.g. seismic compliance and asbestos removal).

In 2013, the strategy to support investment in health was reinforced with the goals of ensuring that investments were aligned with patient pathways, that they conformed to the strictest standards, that they integrated digital programmes and that they ensure financial sustainability. Regional schemes for investment in health (*schémas régionaux de l'investissement en santé*) were put into place in 2013, with the objective of ensuring coherence of investments at the regional level. Part of the focus of the regional schemes involves examining investments undertaken within the previous 10 years and identifying existing capacity available to meet the needs identified by the ARSs. This effort will be aided by the data compiled by the OPHELIE tool, which will enable consideration of future investment projects in light of existing property assets.

In December 2013, the French Government signed an accord with the European Investment Bank, which will finance public and private hospital construction and renovation projects under the Hospital of the Future Programme, amounting to €1.5 billion over three years.

4.1.2 Infrastructure

In 2011, France had an average of 6.3 full-time hospital beds and 1 part-time hospital bed[1] (referred to as places) per 1000 inhabitants, with more than half the beds and 42% of the places dedicated to acute care (Table 4.1). In addition, 0.02 places per 1000 inhabitants were available for home hospitalization services, 97.6% of which were dedicated to acute care.

Table 4.1

Mix of beds in acute hospitals, psychiatric hospitals and long-term care hospitals in France, per 1000 population, 1990–2011, selected years

	1990	1995	2000	2005	2010	2011
Total number of hospital beds	9.8	8.9	8.2	7.4	6.6	6.4
Acute care beds	5.2	4.6	4.2	3.8	3.5	3.4
Psychiatric hospital beds	1.7	1.3	1.1	1.0	0.9	0.9
Long-term care beds	1.2	1.4	1.4	1.2	0.6	0.5
Rehabilitation hospital beds	1.7	1.5	1.5	1.5	1.6	1.6

Source: Eco-Santé, 2014.

Consistent with the general trend among European countries, the total number of hospital beds in France has declined since 1990. Between 2003 and 2011, the number of full-time hospital beds fell from 468 000 to 414 000. The number of acute care beds has been steadily declining since the late 1980s (Fig. 4.1a). Average length of stay in acute hospitals also has diminished, being lower than in comparable European countries, with an average length of stay of five days in 2011 (Fig. 4.1b). Bed occupancy rates have remained fairly stable (Fig. 4.1c).

[1] Part-time hospital beds encompass beds for outpatient procedures and ambulatory care, including day or night care, provided in the mental health sector.

Fig. 4.1a

Use of hospital beds in acute care hospitals in France and selected countries, 1990–2013. (a) Acute care hospital beds per 100 000 population.[a] (b) Average length of stay. (c) Bed occupancy rate.

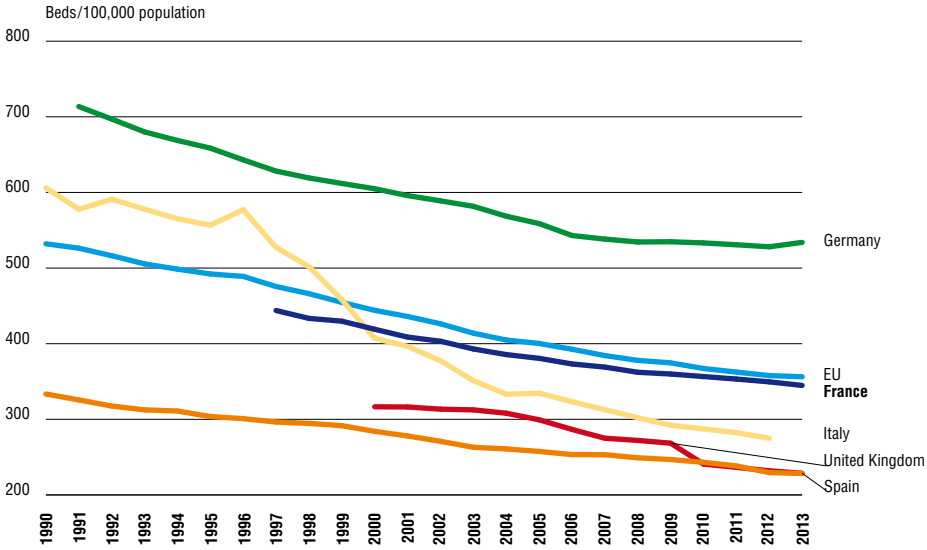


Fig. 4.1b

Use of hospital beds in acute care hospitals in France and selected countries, 1990–2013. (a) Acute care hospital beds per 100 000 population.[a] (b) Average length of stay. (c) Bed occupancy rate.

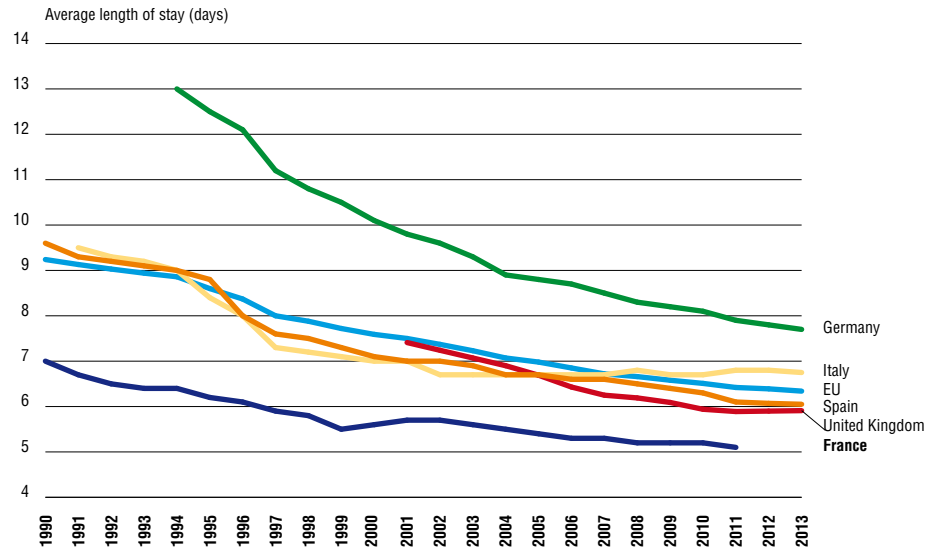
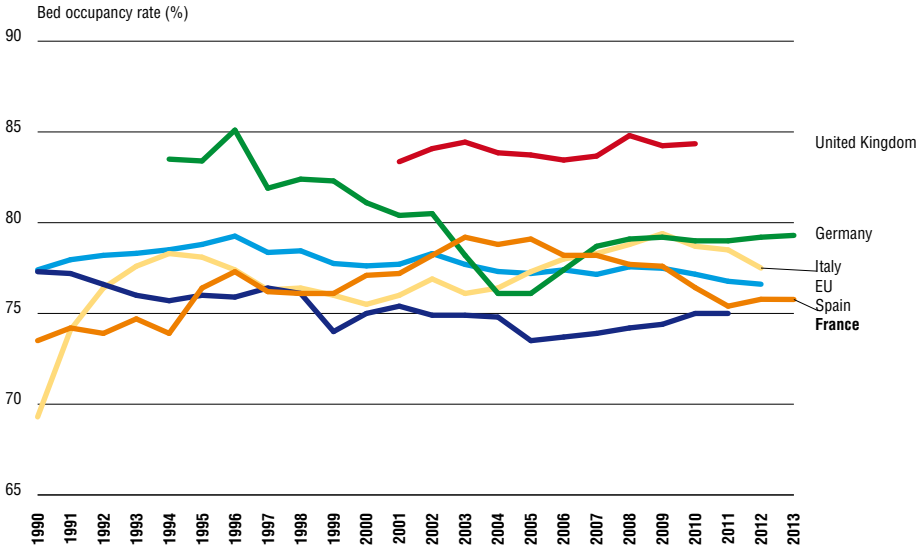


Fig. 4.1c

Use of hospital beds in acute care hospitals in France and selected countries, 1990–2013. (a) Acute care hospital beds per 100 000 population.[a] (b) Average length of stay. (c) Bed occupancy rate.



Source: WHO Regional Office for Europe, 2015.
Note: In Fig 4.1a the data for France not available for 1990–1996.

The reduction in hospital capacity was most significant with respect to long-term care beds, which decreased by 40% between 2003 and 2011 through the transformation of certain units into nursing homes. Full-time psychiatric hospitalization capacity also has diminished significantly since the mid-1980s as a result of the French de-institutionalization policy (see section 5.11), accounting for approximately 58 000 hospital beds in 2011. Between 2003 and 2011, the number of part-time places increased by 2000, reaching 14 243.

4.1.3 Medical equipment

Purchase of major medical equipment is subject to authorization by the relevant ARS (see section 2.8.6). Two-thirds of CT and MRI units are found in public hospitals, although the number of MRI units is rapidly growing in private hospitals because of advantageous SHI tariffs. PET scanners are less profitable and so are less likely to be found in private hospitals. In 2011, the number of major medical imaging technologies was lower relative to population size than

the OECD average (Table 4.2). The availability of MRI units, in particular, has been questioned, in terms of both waiting times and geographic dispersion (Cour des comptes, 2010).

Table 4.2
Items of functioning diagnostic imaging technologies (MRI, CT, PET) in France and OECD average in 2011

	France (per million population)	OECD average (per million population)
MRI units	7.51	10.5
CT scanners	12.53	22.3
PET units	1.1	1.6

Source: OECD, 2014.

4.1.4 Information technology

In France, the development of the Internet has been rather slow compared with other European countries but has improved in recent years. By June 2012, 81% of people aged 12 years or over had access to the Internet at home, reflecting a 3% increase over 12 months (CREDOC, 2012). In addition, the Internet was often used for health-related purposes: in the same study, 37% of French population reported having looked for health information for themselves or one of their relatives on the Internet (Bigot & Croutte, 2011). The government has taken the initiative in establishing health care information web sites for the general public, including a searchable drug database (*Base de données publique des médicaments;* http://base-donnees-publique.medicaments.gouv.fr/) and Scope Santé (http://www.scopesante.fr/), which provides information on hospital quality indicators.

Since the late 1980s, the French health care sector has seen a slow but continuous development of its information technology infrastructure (see section 2.7.1). Recently, development of information technology systems has become a priority on the political agenda, mainly because it is seen as a way to improve the efficiency of the sector. Moreover, in its 2013 National Health Strategy, the government underscored the need to ensure compatibility and interoperability among the information technology systems in the ambulatory, hospital and medicosocial sectors (Ministry in charge of Health, 2013).

Inpatient classification system
Data from the PMSI (see section 2.7.1), which was first developed in the 1980s and became exhaustive with respect to acute care in 1996, formed the backbone of the T2A (see section 3.7.2), which has been in use since 2004.

Electronic billing
An electronic billing system has been gradually developed and implemented in the ambulatory care sector since the mid-1990s. An individual health insurance electronic card (*Sesam-Vitale carte*) is provided to all individuals enrolled in SHI. On the provider side, the billing system relies on an electronic identification card for health care workers (*Carte de Professionnel de Santé*). By 2012, 98% of doctors had such a card (Asip Santé, 2012).

DMPs
DMPs were instituted by the 2004 Health Insurance Act (*Loi No. 2004–810 du 13 août 2004 relative à l'assurance maladie*), with the aim of grouping medical information gathered in ambulatory and hospital settings. After a long and costly phase of development and testing, the DMP was finally rolled out on a national basis in 2011. The decision to create a DMP is made by the patient on a voluntary basis, and participation has been very low: as of November 2013, only 5291 ambulatory health professionals and 378 health care facilities had incorporated the use of DMPs and 397 714 had been created.

Since January 2009, a system of patient pharmaceutical files (*dossiers pharmaceutiques*) has been progressively rolled out nationally. The file is created and accessed with the patient's consent and allows pharmacists to check patients' prescriptions within the previous four months, with the goal of preventing unnecessary prescriptions and contraindicated drug combinations. By December 2012, 98.4% of all pharmacies in France had installed the necessary equipment.

Electronic appointment booking systems
Certain hospitals, both public and private, offer the option of making appointments for consultations online. However, such systems are far from being generalized in France.

Incentives to expand use of information technologies
Because of the low professional interest in adopting electronic records, incentives have been put into place. The P4P provisions under ROSP (see section 3.7.2) include incentives for physicians to increase the use of information technologies in ambulatory care, including the electronic transmission of reimbursement claims by SHI and software for following patients and managing prescriptions.

4.2 Human resources

In December 2010, there were about 1.5 million health care professionals in France, accounting for approximately 5.3% of the working population. The health care workforce has been steadily increasing since the late 1980s (Table 4.3). Registered health professions in France include medical care professionals (physicians, nurses, dentists, midwives), pharmacists, professionals involved in rehabilitation (physiotherapists, speech therapists, vision therapists, psychomotor therapists, occupational therapists and chiropodists) and technical paramedical professions (hearing aid specialists, orthoptists and radiographers).

Table 4.3
Health workers in France per 100 000 population, 1990–2011, selected years

	1990	1995	2000	2005	2010	2011
Physicians	306	323	330	338	331	329
Primary care doctors	162	164	161	165	161	159
Specialist physicians	144	160	169	173	170	170
Nurses	538	591	651	742	822	844
Midwives	19	21	24	27	61	29
Dentists	67	69	69	67	65	64
Optometrists	na	na	30	34	47	50
Pharmacists	na	93	99	111	118	113
Psychologists	na	na	na	na	58	66
Radiographers	12	13	14	14	14	14
Occupational therapists	na	na	7	9	11	12

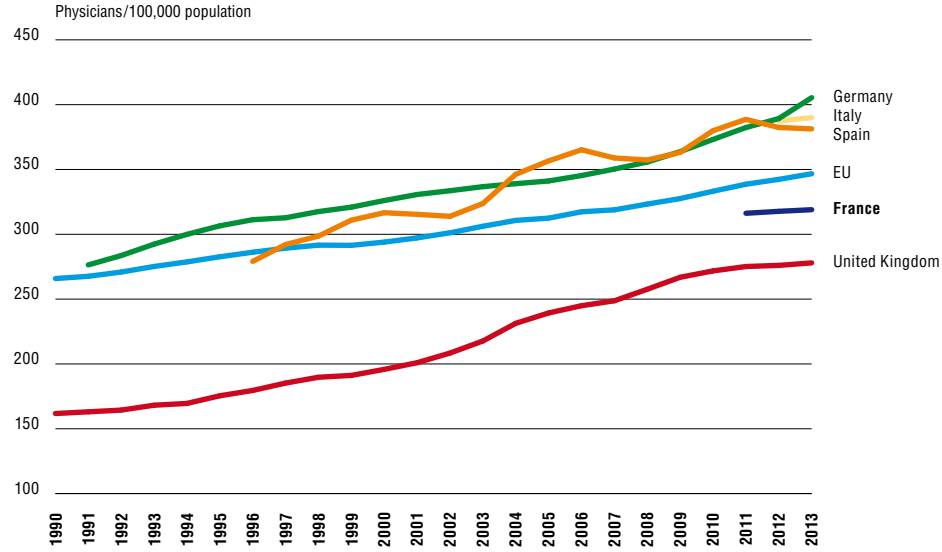
Source: Eco-Santé, 2014.
Note: na: Not available.

4.2.1 Health workforce trends

The density of physicians and nurses in France is currently very close to the European average (Figs 4.2 and 4.3). This density is mainly the consequence of the relative youth of the health care workforce, resulting in a low retirement rate. However, with large waves of professionals now beginning to retire, the health care sector may be confronted in the next decade with a reduction in the number of professionals, which may create or exacerbate difficulties in access to some categories of professionals, particularly in underserved regions.

Fig. 4.2

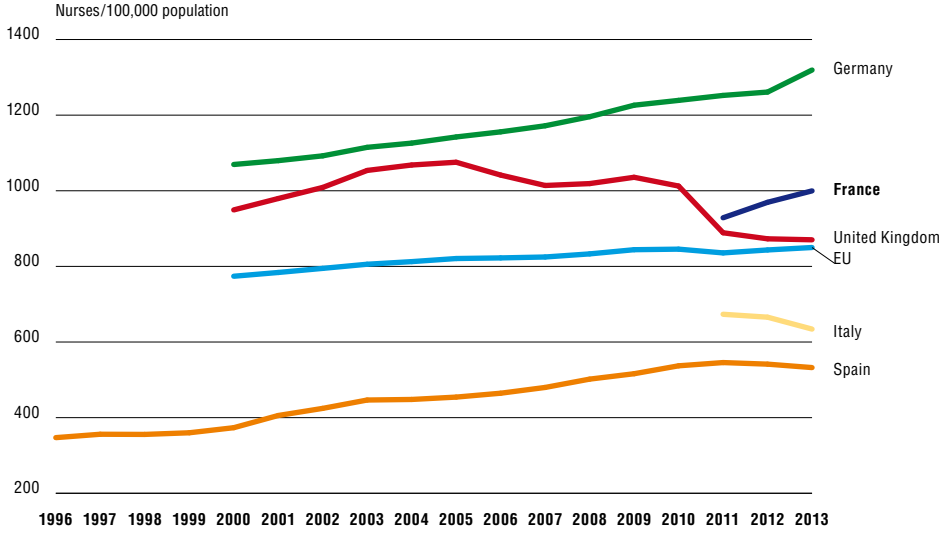
Number of physicians per 100 000 population in France and selected countries, 1990–2013



Source: WHO Regional Office for Europe, 2015.
Note: Data for France not available for 1990–2010.

Fig. 4.3

Number of nurses per 100 000 population in France and selected countries, 1996–2013



Source: WHO Regional Office for Europe, 2015.
Note: Data for France not available for 1990–2010.

At the regional level, the density of health care professionals is characterized by wide disparities that are roughly similar across the different health care professions, although of differing magnitude. The Parisian and the southeastern regions (Île-de-France and Provence–Alpes–Côte-d'Azur) have the highest density of health care personnel, followed by the other southern regions, while the northern and eastern regions suffer from a lack of such professionals. These regional disparities are not related to population needs and consequently raise equity issues that are likely to be exacerbated by anticipated demographic trends (HCAAM, 2011) (see section 6.1.3).

Physicians

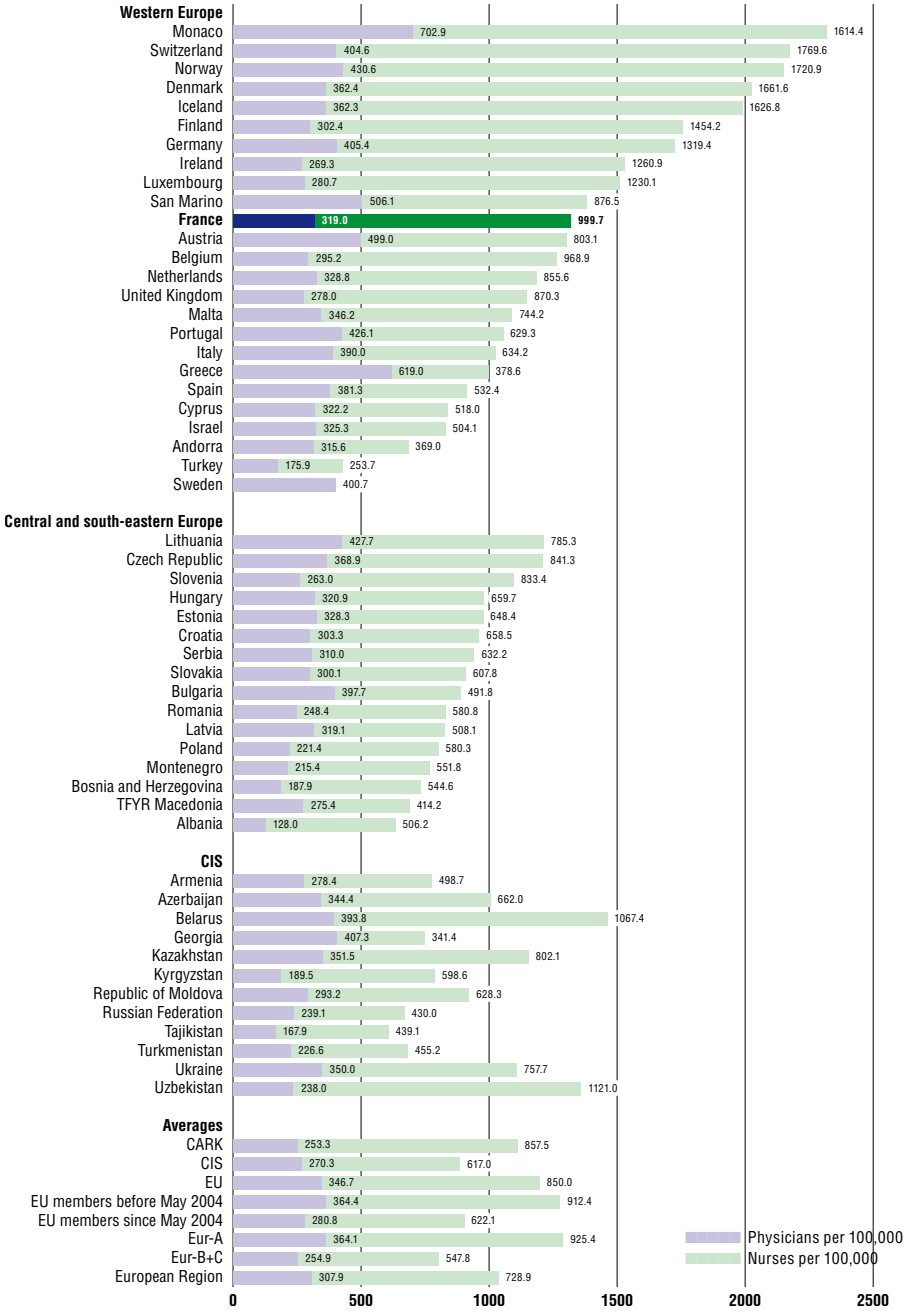
In 2013, there were a total of 218 296 doctors in France, almost equally divided between GPs (47%) and specialists (53%). International comparisons suggest there is currently no perceived shortage of physicians in France: with a density of 319 physicians per 100 000 inhabitants, the number of doctors is close to the EU28 average, lower than neighbouring countries such as Germany and Italy and higher than other EU countries such as the United Kingdom (Fig. 4.4).

In the longer term, the picture is mixed. The retirement of large cohorts of physicians who began working before the advent of the *numerus clausus* in the early 1970s was expected to decrease significantly the number of active physicians (Attal-Toubert & Vanderschelden, 2009). However, this decrease may be offset by other trends. Since 2003, retired doctors have been permitted to continue working in private practice, with earnings up to a fixed ceiling, while still drawing their pensions. In 2009, the Social Security Finance Act removed the ceiling, and subsequently the number of retirement-age physicians who continued to practise medicine increased by 300% (CNOM, 2013). In addition, the number of active physicians with foreign diplomas (European and other foreign countries) has increased to 17835 (7.8% of registered physicians) (see section 4.2.2).

Despite the fact that the overall number of physicians in France is currently at an all-time high, geographic inequalities remain, and certain areas are underserved, particularly isolated rural communities and disadvantaged communities. The problem is particularly acute with respect to specialists, for which an eight-fold difference between lowest and highest density departments is seen. French doctors have long enjoyed the right to set up their practices where they wish, and attempts to restrict freedom of settlement have faced strong opposition from professional associations. Policies to address the problem of so-called "medical deserts" have primarily focused on voluntary incentives and have had limited effects, although the issue remains a political priority (see section 6.1.3).

Fig. 4.4

Number of physicians and nurses per 100 000 population in the WHO European Region, 2013



Source: WHO Regional Office for Europe, 2015.
Notes: CARK: Central Asian Republics and Kazakhstan; CIS: Commonwealth of Independent States; Eur-A,B,C: Regions as in the WHO list of Member States, last available year; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Nurses

Nurses and nursing aides form the two largest groups of health professionals in France. In 2013, there were 595 594 nurses in France. With 1000 nurses per 100 000 inhabitants in 2013, the density of nurses in France is relatively low compared with neighbouring European countries such as Germany, but higher than the EU28 average (Fig. 4.4). However, this fact is difficult to interpret given the differences in the scope of tasks performed by nurses and nursing aides in different countries.

The number of nurses steadily increased between 1991 and 2013 at an average growth rate of 3.0% per year (Eco-Santé, 2014), following a progressive increase in the *numerus clausus* since 1993. However, this increase in the workforce has not been sufficient to meet the rapidly increasing demand. Moreover, there are large persisting geographical disparities in the density of self-employed nurses, which parallel those observed for physicians (Sicart, 2013b).

Incentives to control the geographical distribution of nurses' settlement of a new practice have been set up under the 2007 agreement. Limits have been established in areas with high density, and financial and material incentives are offered to encourage new practices in underserved areas.

Nurses may specialize in various fields, including paediatrics, anaesthesia and surgery.

Between 2009 and 2011, an average of 513 000 nursing aides were employed in health care institutions, providing routine nursing care such as maintaining personal hygiene and assistance with essential bodily functions. Their involvement remains marginal in outpatient settings, where they mainly work in SSIAD (see section 5.8.1) under the auspices of specific services that employ them.

Midwives

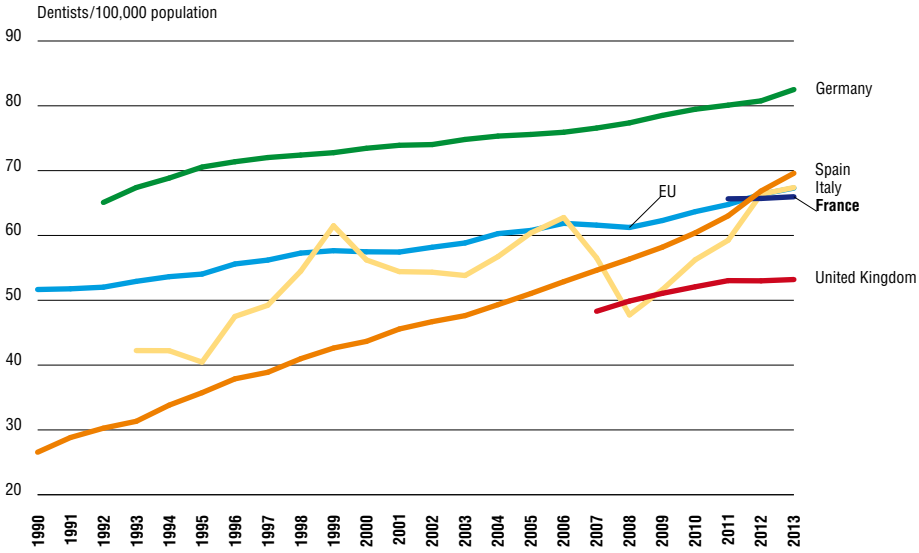
Midwifery is a distinct medical profession, with field of practice restricted to non-pathological situations. There were 20 035 midwives practising in France in 2013. While recent years have seen an increase in the share of self-employed midwives, geographic disparities are less of an issue than among physicians and nurses, because the majority of midwives are hospital based. Midwives in the ambulatory sector play a key role in facilitating shorter stays in maternity hospitals.

Dentists and dental auxiliaries

There were 40 833 dentists in France in 2013. The number of dentists has been relatively stable over recent years compared with other medical professions: between 1991 and 2013, the number of dentists in France rose by 7.0%, corresponding to an annual increase of 0.3% (Eco-Santé, 2014). The resulting density of dentists is high compared with other European countries (Fig. 4.5); nevertheless, this profession is subject to the same geographical disparities as other health care professions.

Fig. 4.5

Number of dentists per 100000 population in France and selected countries, 1990–2013



Source: WHO Regional Office for Europe, 2015.
Note: Data for France not available for 1990–2010.

Some procedures carried out by dentists – notably orthodontic processes and the fitting of prostheses – are also performed by stomatologists (specialist doctors). The area of expertise of the stomatologist is more extensive, however, also covering surgery of the mouth and teeth. In 2011, 85% of the 1246 stomatologists in France were self-employed.

There is no recognized profession of dental hygienist in France; dental assistants perform administrative activities in the practices of dentists and stomatologists.

Pharmacists

Compared with other European countries, France has a relatively dense network of pharmacies. In January 2013, there were 21 939 pharmacies, corresponding to a density of 35 pharmacies per 100 000 population, whereas the density in Germany and the United Kingdom was 26 and 18 per 100 000, respectively. However, because of its vast territory, France has a lower density per 1000 km^2 (33.83) than the EU average (60.49) and its closest neighbours. Nonetheless, strict regulation has ensured that there are no significant geographic disparities in the distribution of pharmacies, unlike in other health professions.

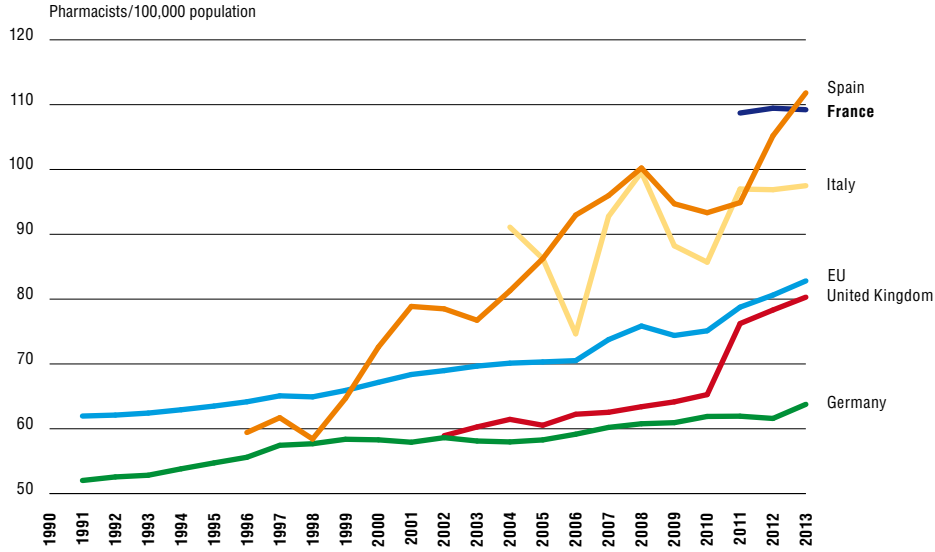
Ownership of pharmacies is restricted to pharmacists. The government has tried to reduce barriers to restructuring and mergers of pharmacies, and the number of pharmacies has been diminishing at a rate of approximately 0.3% per year since 2002 (INSEE, 2013b).

In 2012, there were 73 892 practising pharmacists, corresponding to a density that is considerably higher than the EU average (Fig. 4.6). More than two-thirds of pharmacists work in pharmacies, while one-tenth work in biological test laboratories. The number of pharmacists has been steadily increasing since 1975, at a rate of roughly 4% per year before 1985, and 1.5–2.0% since then, with the lower growth rate being the result of the *numerus clausus* introduced in 1980. As with other health care professions, the adoption of a *numerus clausus* to limit workforce growth has led to a progressive ageing of the pharmacist population. In 2013, the average age of pharmacists was 46.4 years.

Public health professionals

In France, public health professionals do not form a clearly recognizable professional group (Cassou, 2006). The consensus is that France is facing a shortage in public health specialists, but data are lacking and no centralized planning is conducted at the national level. Most public health specialists are physicians who have specialized in public health either at the end of their initial training (as a medical specialty) or later in their career by becoming civil servants or medical inspectors in public health (*médecins inspecteurs de santé publique*). Apart from these two training paths, French universities offer a number of postgraduate public health diplomas, mostly focusing on epidemiology and biostatistics.

Fig. 4.6
Number of pharmacists per 100 000 population in France and selected countries, 1990–2013



Source: WHO Regional Office for Europe, 2015.
Note: Data for France not available for 1990–2010.

France's first public health academic school, the School of Higher Education in Public Health (*Ecole des Hautes Études en Santé Publique*), was created in 2004. It is also responsible for training public health civil servants including hospital directors.

Managerial staff

Public sector hospital directors are civil servants recruited mostly among students of public administration, after an initial training of four years. Successful applicants undergo a compulsory two-year additional training at the School of Higher Education in Public Health before starting official duties.

In 2013, there were 3100 qualified hospital directors in France, one-fifth of whom work as directors of a hospital. Others have administrative responsibilities either within a hospital or within the Ministry in charge of Health or related agencies. Although not very large, this professional group is well organized and forms an influential group within the health care system.

4.2.2 Professional mobility of health workers

France is a net receiving country for foreign-trained health professionals. Emigration of French-trained professionals is low, while 7.4% of doctors practising in France obtained their diplomas in another country (compared with 30% in the UK). Fewer than 2% of nurses and pharmacists have foreign diplomas. Nonetheless, the number of health professionals trained abroad and practising in France has increased in recent years, particularly in rural and underserved areas and in disciplines facing cyclical personnel shortages.

French law distinguishes professionals with European diplomas, who are entitled to the same rights as French-trained professionals, and those with diplomas from outside the EU, who are subject to stricter standards. Paramedical professionals with non-EU diplomas must resume their studies and obtain a French diploma. Doctors with non-EU diplomas may be authorized to practise on a case-by-case basis, following an examination or competition validating their professional mastery.

Between 2007 and 2010, the number of foreign-trained doctors increased by 20%. Most doctors with foreign diplomas are from the EU (45%); countries with the highest representation in France are Algeria, Romania and Belgium. Among nurses, diplomas from Spain and Belgium are most frequent.

A growing number of French students who do not make the first-year cut-off to pursue medical studies choose to go abroad for their studies, with the intention of returning to do an internship and practise in France. Belgium and Romania are the top two destinations. Concerned about the effect that this trend could have on its management of the physicians supply, France put into place new rules to limit the possibility of students returning for internships following medical studies abroad. Under a 2011 decree (*décret n° 2011-954 du 10 août 2011*), students who twice failed to make the first-year cut-off were prohibited from pursuing internships in France and required to complete their specialization abroad. However, in early 2013, this decree was overturned.

4.2.3 Training of health workers

Any student who has the qualifications to register with a university may enrol for the first year of medical studies, which is common to students of medicine, midwifery, dentistry and pharmacy. Every year, ministerial decrees specify the number of places available (*numerus clausus*) for training in these four professions within each of the 38 education and research units. Education standards are set at the national level.

Medical training of physicians is divided into three phases. The first phase takes place over two years, and a competitive examination at the end of the common first year limits access to the second year of medical studies. The second phase of medical training takes four years and includes both theoretical and practical training. Since 2004, all students after these six years participate in the ECN and subsequently choose a third-phase specialty training programme according to their ranking. Prior to 2004, general medicine was not subject to the competitive entrance examination for medical specialists and thus was viewed as a default option. The ECN has also been used as a tool to attempt to address regional disparities in allocating internship posts by specialty and locality.

Midwives undergo four years of training and the practitioner's licence is granted by the National Midwives Association (*Ordre des sages femmes*). Dentists undergo five years of training and the practitioner's licence is granted by the National Dentists Association (*Ordre national des dentistes*).

Training of pharmacists takes six to nine years, depending on the specialty. At the end of the fourth year, students must choose among three available specialization areas: pharmaceutical industry, retail pharmacy and hospital activities. Students choosing pharmaceutical industry or retail pharmacy then follow a two-year course of specialty training. Students wishing to specialize in hospital activities participate in a competitive examination in the fifth year of study to enter four-year hospital pharmacy or biomedical residency programmes. Both pharmacists and physicians may specialize in medical biology, and 75% of biologists are pharmacists. Pharmacists must be registered by the National Pharmacists Association (*Ordre national des pharmaciens*) in order to deliver controlled drugs.

Access to nursing schools is regulated by a competitive examination and is subject to a regional *numerus clausus*. The basic training takes three years with subsequent optional specializations in theatre nursing, paediatric nursing and anaesthesia. In addition to the initial training, nurses must have two years of clinical experience in a hospital setting in order to qualify for self-employed status. Registration by the National Nurses Association (Ordre national des infirmiers) is granted after graduation and is valid for life.

Other registered paramedical professionals generally undergo three years of training, often in educational institutions under the authority of the Ministry in charge of Health. Exceptions to this are: speech therapists (five years of

training), orthoptists (three years of training), hearing aid specialists and dieticians (two years of training) and nursing aides and paediatric auxiliaries (one year of training).

Most health professionals, including doctors, midwives, dentists, pharmacists, biologists, nurses, physiotherapists and podiatrists, must undergo DPC. For doctors, there is no formal recertification or relicensing process. Accreditation is optional and concerns physicians practising in hospitals and in high-risk specialties, such as surgery, interventional cardiology or radiology (see section 2.8.3).

4.2.4 Doctors' career paths

Once their training is completed, doctors can either work as salaried staff or establish their own practices as self-employed doctors. Half of all active doctors are self-employed; self-employment is more frequent for GPs (62.5%) than for specialists (39.8%). More than half of all salaried GPs work in hospitals (53.2%); 19.4% work in preventive services; other GPs are employed in health centres, in social services or in the pharmaceutical industry.

Among specialists, 39% are self-employed, working in private practice or private clinics. An additional 13% of specialists have mixed practices, seeing patients in their private offices and working shifts in hospitals. Salaried specialists mainly work in public and private hospitals (80.5%); others work in preventive services (9.2%) or for a wide range of other public and private entities, including the pharmaceutical industry and biological test laboratories (Sicart, 2013a).

In order to pursue a career within public hospitals, doctors participate in a competitive examination to become a hospital practitioner (*praticien hospitalier*). Alternatively, at the end of the internship cycle, interns may become assistant clinical chiefs (*chef de clinique des universités-assistant des hôpitaux*), which includes both medical and university teaching responsibilities. Thereafter, the career progression may include becoming an assistant professor (*maître de conference*) or professor (*professeur des universités-praticien hospitalier*). These civil service positions are highly competitive and are created by the university management committee upon the recommendation of the hospital's medical commission (*Commission médicale d'établissement*) and with approval of the Ministry in charge of Health, which publishes a list of the open positions. Before applying for an open position, a candidate must have his

or her professional and scientific qualifications validated for his/her medical specialty by the National University Council for Health Care (*Conseil national des universitiés*).

4.2.5 Other health workers' career paths

Most other health professionals may work either as self-employed practitioners or as salaried employees, although health aides may only be employed.

The majority of nurses are employed as salaried staff, mainly by hospitals (67.9%), while 16.4% are self-employed and provide ambulatory care. Other institutions employing nurses include long-term care institutions, regional and local authorities, schools, temporary recruitment agencies and private firms.

Around 71.6% of midwives work in hospitals with childbirth facilities, where a large proportion of antenatal care takes place; 22.0% of midwives opt for self-employment, while 6.3% work for regional and local authorities or for PMIs.

Almost all dentists (90.4%) are self-employed, while most of those in salaried posts worked in health centres or as advisers for SHI regimes.

The vast majority of pharmacists (73.8%) work in retail pharmacies, either as the qualified title-holder or as an assistant. Other pharmacists work in management of biological test laboratories (10.3%), in hospitals and other health care institutions (8%) or within the pharmaceutical industry (4.6%).

5. Provision of services

Both public and private providers deliver health care to the French population. Primary care is mostly delivered in the ambulatory care sector by self-employed professionals, while secondary care can be delivered both in the ambulatory and the hospital setting. From the late 1990s, GPs have gained a major role in the coordination of care, with the implementation of a semi-gatekeeping system that provides incentives to people to visit their GP prior to consulting a specialist. Drugs are dispensed by self-employed pharmacists, while the price of drugs, as in most countries in the OECD, is set administratively for all drugs covered by SHI. France is the third largest market for pharmaceutical drugs in the world. Hospital care is delivered by public, private non-profit-making and private profit-making hospitals. Long-term care for the elderly and disabled is provided through both residential care and home care. Mental health care is delivered by both the health sector and the social and health care sector. As in many other European countries, mental health care policy in France during the second half of the 20th century was influenced by a general movement towards community-based organization of mental health care services – the so-called "deinstitutionalization" process.

5.1 Public health

Public health policy and practice in France have historically been difficult to describe because they involve numerous actors and sources of funding. Further, large discrepancies exist between legislative texts and actual practice, which relies on the initiative of local actors. Nevertheless, reforms starting in 2004 have resulted in a more clearly structured organization of the field.

At the national level, the current system involves a number of institutions that provide multidisciplinary expertise in the field of health safety, two of which have broad remits covering many aspects of health safety: InVS, which is involved in surveillance, and INPES, which is involved in managing health crises and informing the population. Other specialized agencies provide expertise regarding specific types of risk and may exert policy enforcement duties (see section 2.3.3).

At the local level, municipalities are legally responsible for monitoring and purifying the water supply, controlling air and noise pollution, waste disposal, protection against radiation, hygiene in residential areas, food hygiene and industrial hygiene. Municipalities lacking the resources to carry out these functions are supported by the ARSs and their territorial delegations.

5.1.1 Surveillance of environmental and communicable disease threats

At the national level, the current system for the management of health risks involves a number of institutions that provide multidisciplinary and intersectoral expertise in the field of health safety (see sections 2.3.3, 2.5.5 and 2.6). On the one hand, there are specialized agencies that provide expertise regarding specific types of risk and may exert policy enforcement duties; on the other hand, two agencies have a broad remit that covers many aspects of health safety.

The specialist agencies include ANSM, EPRUS, ANSES, IRSN and the French Biomedicine Agency.

The two agencies with a broad remit are InVS and INPES. InVS has a mandate to monitor threats to population health, including infectious and chronic diseases and environmental and occupational health, as well as emerging threats of unknown origin that require continuous monitoring of health outcomes. InVS gathers surveillance data from various sources, including national monitoring systems that rely on networks of professionals, as well as a network of regional epidemiology units (*cellules interregionales d'épidémiologie*). It reports all new epidemiological threats to the Ministry in charge of Health. INPES plays a major role in all issues related to communication and health, including strategies for dissemination of health alerts to population groups. In order to increase effectiveness, the planned 2015 Health Reform Law (see section 6.2) intends to merge these two institutions into a single agency.

The General Directorate of Health of the Ministry in charge of Health supervises the activity of the health agencies on a regular basis, issues regulations based on the advice provided by the agencies and deals with all emergencies regarding health safety. Moreover, the General Directorate of Health leads the Health Agency Networking Committee (*Comité d'animation du système d'agences*), a forum that brings together the directors of the major agencies involved in prevention and health security policy in order to develop a cohesive approach and strong leadership with respect to these policies. The Health Agency Networking Committee also includes HAS, HCSP, the National Institute for Medical Research (*Institut national de la santé et de la recherche médicale*) and the ARSs.

5.1.2 Occupational health

Employers are responsible for ensuring compliance with hygiene and safety standards through a Committee for Hygiene, Safety and Working Conditions (*Comité d'hygiène et de sécurité des conditions de travail*) and occupational health services (*Services de santé au travail*; SSTs) in companies. The Committee for Hygiene, Safety and Working Conditions represents the company's employees in all issues regarding work conditions and safety; it verifies that regulations are correctly applied and makes proposals to improve working conditions.

The SSTs are run by occupational physicians and have a general remit to ensure that employees' health is not altered by their work by confirming their ability to do their jobs, monitoring their health and ensuring that the exposure to risks in the workplace is within regulatory standards. There must be at least one occupational physician per 3300 workers. Large firms finance and host their own occupational medical services, whereas smaller firms are affiliated with external non-profit-making SSTs. Nationally, there are 953 occupational physicians working directly for firms and 4594 physicians working for external services covering multiple firms. The number of occupational physicians has diminished in recent years, with a nearly 10% decline from 2010 to 2011, largely through retirement, despite an increase in the number of internships offered for this discipline (IGAS, 2013a).

At the national level, the ANSES is responsible for oversight of workplace safety. The 848 SSTs are subject to regional oversight.

Two successive national plans for occupational health have focused on security, prevention and protection of workers' health. The first (2005–2009) resulted in structural reforms, including the fusion of two antecedent agencies

to create ANSES and reinforced oversight of the SSTs to ensure financial transparency and better regional coverage of SST services. The second (2010–2014) has focused on developing occupational health research and prevention measures, while reinforcing support for employers' prevention efforts and coordination among the various national and regional partners.

5.1.3 Preventive services

Historically, the French health care system has been more oriented towards curative than preventive medicine. Moreover, certain prevention activities are hampered by fragmentation of responsibilities among the various actors involved, as is the case for alcohol and drug abuse prevention. Nonetheless, other key prevention services, such as immunization and perinatal care, are well organized.

Immunization

Each year, the national immunization programme is determined by the General Directorate of Health of the Ministry in charge of Health on the basis of proposals made by the Technical Committee on Immunization of the HCSP (see section 2.3.7) (Ministry in charge of Health, 2014a).

There are only three obligatory immunizations for the general population: tetanus, diphtheria and poliomyelitis. Municipalities offer free immunization sessions and are responsible for controlling the immunization status of all children within their jurisdictions. Immunization is also controlled at entrance into day nurseries and schools. Recommended vaccinations include immunization against whooping cough, rubella, measles, mumps, chickenpox, *Haemophilus influenzae* type b, *Streptococcus pneumoniae* (pneumococcal vaccine), group C *Neisseria meningitidis* (meningococcal C vaccine) and hepatitis B. Immunization against human papillomaviruses is recommended for girls aged 11 to 14 years, and immunization against seasonal influenza is recommended for all people aged over 65 as well as individuals with certain health conditions. Finally, there are a number of additional mandatory and recommended immunizations for health care workers, depending on their specific exposure risks. Most of the immunizations are performed by self-employed GPs. Mandatory and recommended immunizations are covered by SHI.

Perinatal care

Antenatal and postnatal care for mothers and infants is fully covered by SHI and can be provided by self-employed doctors or institutions. In addition, departmental PMIs, managed by the local assemblies, offer free consultations

for children up to the age of six years, with particular attention on families in difficulty and run preventive health and social care interventions for children. Health services are funded by SHI pursuant to partnership agreements with the departmental PMIs. In 2012, the model agreement was expanded to include home visits by midwives in the case of pathological pregnancies and coverage of vaccinations provided by the PMIs to pregnant women and new mothers.

5.1.4 Health promotion and education programmes

INPES runs large-scale health education programmes and provides resources for committees at the regional and departmental levels that carry out field activities. The 2004 Public Health Act introduced objectives related to health education and created regional public health plans that incorporate health education activities.

5.1.5 National screening programmes

National screening programmes in France are centred upon cancer. The Ministry in charge of Health decides which programmes will be implemented and shares responsibility for implementation with the National Cancer Institute. The 2004 Public Health Act created 90 local structures, mainly at the departmental level, to carry out mass screening programmes; 90% of these structures are private non-profit-making associations, and around 50% are funded by general councils, while the rest are funded directly by either the state or SHI. Tests and related physician visits are funded by SHI. InVS is responsible for evaluating these screening programmes.

Two mass national screening programmes have been deployed in France: one for breast cancer and the other for colorectal cancer. Breast cancer screening is targeted at all women aged between 50 and 74, who are invited by mail to undergo a clinical examination and mammography every two years. Colorectal cancer screening is aimed at all people aged between 50 and 74, who are invited by mail every two years to go to their GP for free screening material, a faecal occult blood test and explanations on the programme and on the process to use the test. If people do not go to their GP in the next three months, they receive a second letter of invitation. After two letters of invitation, the centre sends them the test material at home expecting that people will do it and mail it back for interpretation.

Organized screening programmes for cervical cancer have been piloted in a number of departments. The 2014–2019 Cancer Plan called for a national screening programme for cervical cancer for all women aged 25 to 65 years

(INCa, 2014). However, the HAS recommends opportunistic screening because of the difficulties in targeting the populations of women who have not adhered to the recommended screening regimen (HAS, 2013).

Public health programmes in France are often targeted either by population (PMI services for women and children) or by disease (mass screening programmes for breast cancer and colorectal cancer). Providing such services free reduces financial barriers to access but does not ensure participation. Breast cancer and colorectal cancer together account for 16% of cancer deaths in France (Table 1.4), underscoring the need for efforts to ensure early diagnosis and treatment. In 2012, participation in the mass breast cancer-screening programme was just over 50%, lower than the 70% participation rate considered the minimum acceptable level according to European guidelines. Nonetheless, 30% of the breast cancer cases in France each year were detected through the screening programme (INCa, 2013). Participation in the mass colorectal cancer screening programme was even lower (30%), and a study of factors influencing patient participation recommended actions targeted at patients under 60 years, men and individuals living in deprived areas (Le Breton et al., 2012).

5.2 Patient pathways

This section describes a typical patient pathway for a patient needing a hip replacement.

In France, a 70 year-old woman requiring a hip replacement due to arthritis would typically first visit her GP, who would prescribe radiography of the hip in order to confirm the diagnosis. The radiograph would typically be performed in a private ambulatory radiology practice but could also be performed as an outpatient examination in a hospital. The GP would then send the patient to an orthopaedic surgeon working either in the public or in the private sector. Both visits would be covered by SHI with a co-insurance rate of 30%, most often covered by VHI.

Alternatively, the patient could visit an orthopaedic surgeon directly, thus bypassing the gatekeeping procedure. For a surgeon who follows the Sector 1 agreement (see section 3.7.2), the co-insurance rate would then be increased from 30% to 70% (see section 3.3.1), and the surgeon would be allowed to charge up to €8 on top of the official tariff, both leading to a maximum overall increase of €18 in the patient's OOP expenditures. That additional expense would not be covered by the patient's VHI, since insurers have strong financial incentives not to cover these fees.

The patient is free to take an appointment with any orthopaedic surgeon she wishes, even if the GP has referred her to a specific one. The patient may have to pay in excess of the SHI tariff if she goes to a surgeon working under the Sector 2 agreement (see section 3.7.2) or if she wishes to improve comfort during her stay (e.g. a private room). The additional fee may be completely or partially covered by VHI depending on the patient's contract. The patient would only stay for a few days in the surgical department before being either transferred to a rehabilitation hospital or discharged home, where she would receive home visits by a physiotherapist. HAS recommends home discharge in uncomplicated cases and when the patient is not socially isolated at home. In the rehabilitation centre, improvements over standard amenities, such as a private room, would again typically be charged over the SHI tariff and may be covered by the patient's VHI.

Finally, all information regarding the acute and follow-up stays would be transmitted to the GP, who would be responsible for further care.

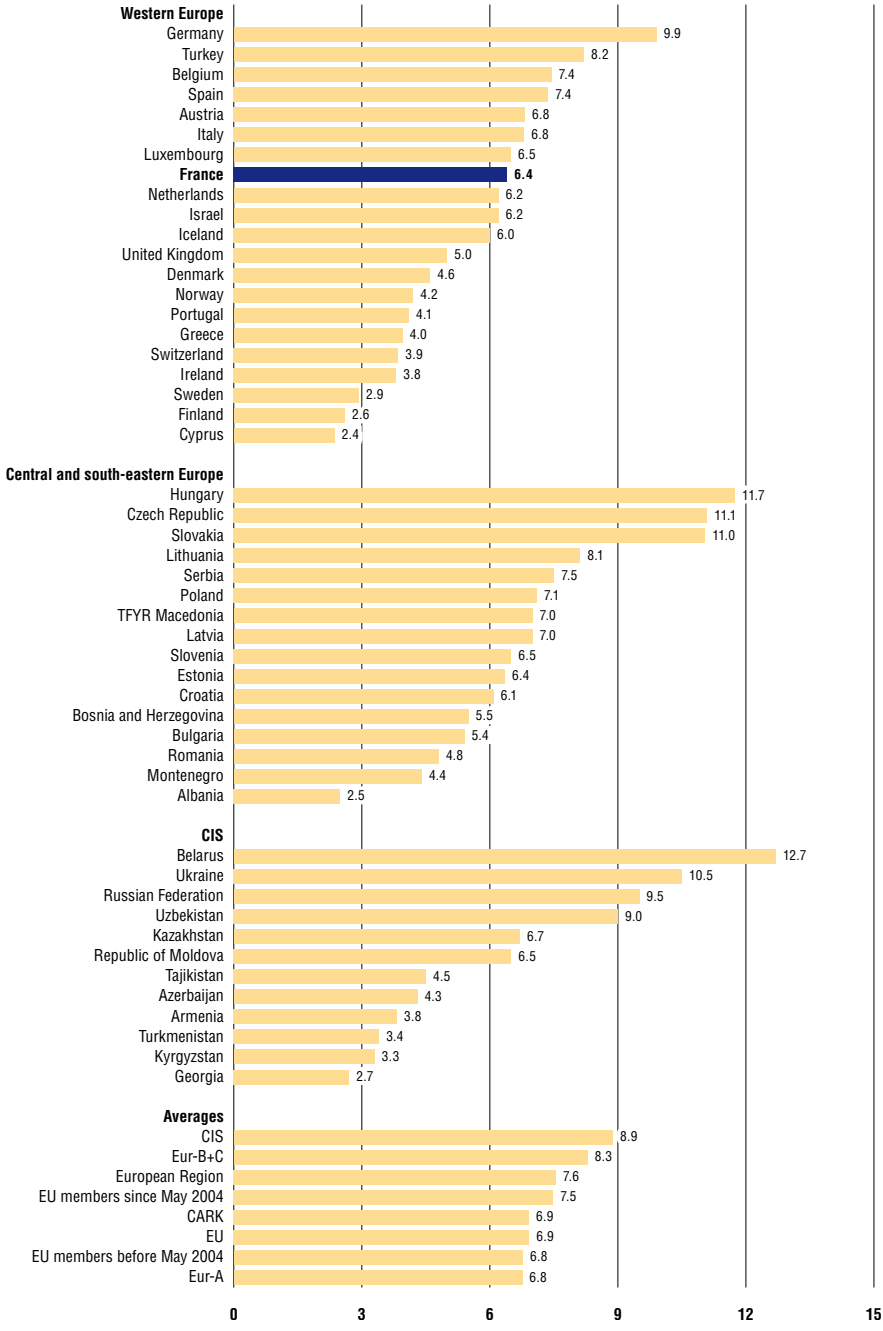
5.3 Primary and secondary ambulatory care

Primary and secondary health care that does not require hospitalization is delivered by self-employed doctors, dentists and medical auxiliaries (including nurses and physiotherapists) working in their own practices, and, to a lesser extent, by salaried staff in hospitals and health centres. The range of services available in ambulatory care is large, covering the majority of medical and auxiliary services that can be provided in such settings, including biological and radiological examinations.

Outpatient medical care is largely provided by self-employed doctors (both generalists and specialists) in their own private practices. Office-based consultations form the basis of GPs' work, but home visits are also significant, representing about 15% of their work. A doctor in private practice undertakes on average 3500 consultations and visits per year, although this may vary significantly, particularly among specialists. Consultations account for 55% of specialists' work, with the rest consisting of diagnostic and treatment procedures (notably surgery in private profit-making hospitals). In 2013, French people had an average of 6.4 outpatient contacts, which is close to the EU28 average (6.9 in 2013) (see Fig. 5.1).

Fig. 5.1

Outpatient contacts per person per year in the WHO European Region, 2013



Source: WHO Regional Office for Europe, 2015.
Notes: CARK: Central Asian Republics and Kazakhstan; CIS: Commonwealth of Independent States; Eur-A,B,C: Regions as in the WHO list of Member States, last available year; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

A small part of outpatient care is provided by salaried professionals working in public sector hospitals or health centres. Outpatient care and examinations in hospitals represent about 15% of all outpatient consultations. Around 1700 health centres, usually run by local authorities or mutual insurance associations, along with some organizations offering free treatment to disadvantaged groups, are also active in the delivery of outpatient care, albeit on a marginal basis. These centres are either specialized centres involved in nursing (40%), dental care (25%) or general practice (about 5%) activities, or integrated centres providing all kinds of ambulatory care (about 30%).

Patients are free to choose their health care providers, although the level of SHI coverage for physician visits depends upon whether the rules of the gatekeeping structure are followed (see section 2.9.2). Access to physician care, both in terms of proximity and finance, is an issue in some areas and with respect to certain specialties. Doctors are free to choose where they wish to practise, and geographical disparities in the distribution of doctors have long existed (see section 4.2). Moreover, certain doctors practise in Sector 2 and, therefore, may engage in extra-billing beyond the official SHI tariffs, which has implications with respect to financial access to care.

Nursing care is mainly provided by self-employed nurses. Nursing and home care of patients makes up two-thirds of their work, with another third devoted to technical activities such as performing injections or intravascular perfusions. Since 1981, SSIAD units have been developed in the health and social care sector for disabled and frail elderly people. They are mainly staffed by salaried nursing auxiliaries, with nurses participating in the delivery of care to a lesser extent. Substantial geographical inequities of access to nursing care exist (see section 4.2.1).

Almost all dentists are self-employed in ambulatory practices, as are the majority of physiotherapists, speech therapists and orthoptists. Regarding diagnostic procedures, these are mainly performed within private laboratories owned by specialized physicians or pharmacists or in imaging centres owned by specialized physicians. About 3600 privately owned laboratories carry out biological testing procedures. These procedures may also be carried out in hospitals. Finally, there are some 22 000 pharmacies, which provide advice and health information in addition to dispensing drugs, small medical devices and bandages. Under the 2009 HPST Act, the role of pharmacists within the primary care system was acknowledged and formalized. While geographic disparities exist for most health services, this is not the case for pharmacies, which are readily accessible by the entire population and often constitute the first contact with the health care system.

Quality improvement initiatives in primary and secondary ambulatory care, already implemented, include DPC for most medical professions (see section 4.2.3); the development of practice guidelines, which currently number nearly 350, including more than 120 for ALDs; and the role of the SHI medical representatives (*délégué de l'assurance maladie*) in counterbalancing the influence of pharmaceutical representatives by providing doctors with their individual prescribing profiles so that they can compare their own practices with the average profile of local doctors.

Lack of coordination and continuity of care is a weakness of the French health care system, and various initiatives have sought to address this problem. These include the gatekeeping structure developed under the 2004 Health Insurance Act, which introduced the concept of the "preferred doctor" to coordinate care as the patient's point of contact within the health system (see section 3.3.1); the DMP, designed to centralize patient information to facilitate care by multiple health professionals across different settings (see section 4.1.4); and provider networks to provide multidisciplinary care to patients with complex needs (see section 3.7.2). Most recently, attention has been focused on the development of care pathways for patients over age 75 years who are at risk of dependency (see section 6.1.4).

5.4 Specialized ambulatory care/inpatient care

Acute medical, surgical and obstetric care is provided by public as well as private hospitals, with different areas of specialization.

Acute medical care is mainly provided by public hospitals, which account for nearly two-thirds of acute medical care capacity (67% of medical beds and 50% of day-care beds) and are responsible for 65% of full-time episodes and 42% of day-care episodes. Private profit-making hospitals account for 25% of full-time beds and 40% of day-care beds, and they provide 27% of full-time episodes and 50% of day-care episodes; they specialize in a small number of technical procedures for which there are profit opportunities, such as invasive diagnostic procedures (e.g. endoscopy or coronary angiography). The balance of acute medical activity is performed by the private non-profit-making sector, which are the main providers in the area of cancer treatment (see section 4.1.1).

Delivery of surgical care is divided fairly even between public and private profit-making hospitals, although the latter performs 67% of the surgical episodes in day-care settings. Surgical care accordingly represents more than

half of the acute care activity of the private profit-making sector. These hospitals tend to specialize in procedures that can be performed routinely within a short stay with a predictable length. Public hospitals perform a much wider range of surgeries than profit-making hospitals, including the most complex procedures. Surgical procedures performed in the private non-profit-making sector are mostly related to cancer treatment, as for medical stays. Finally, two-thirds of obstetric procedures are performed within public hospitals, while the private sector accounts for the remaining third, mainly within profit-making hospitals (one-quarter of all obstetrical stays).

Since 2008, policies to encourage ambulatory surgery have been successfully implemented, resulting in growth in all three hospital sectors: +17% in the public sector, +22% in the non-profit-making sector and +11% in the private sector. The last accounts for the largest share, with 70% of ambulatory surgeries taking place in private hospitals in 2011. Nonetheless, at nearly 40%, the overall rate of ambulatory surgery in France remains lower than in neighbouring countries; for example, the share of ambulatory procedures was 52% in Germany and 74% in Denmark in 2009 (Toftgaard, 2011). The French Government has set a target with the ARSs for ambulatory surgeries to exceed 50% by 2016 (DGOS, 2012).

Reforms of the hospital sector have consistently supported greater managerial autonomy of public hospitals. The 2009 HPST Act has increased the autonomy of public hospitals and their organizational flexibility and clarified their internal decision rules. Executive responsibilities, which were previously held by the administrative board (*conseil d'administration*) of the hospital (comprising representatives of the state, local authorities, hospital staff, patients and qualified personalities), are now held by the hospital director; accordingly, the remit of the administrative board, which has been renamed the monitoring board (*conseil de surveillance*), has been reduced to defining hospital strategy and controlling its implementation. Decisions directly relevant to the quality and safety of patient care are jointly taken by the director and the president of the hospital's board of physicians (*commission médicale d'établissement*).

While regional disparities in acute care capacity have significantly diminished in recent years, disparities regarding human resources in acute care remain. Moreover, continuity of care between the hospital and ambulatory sectors is a particular challenge. Lack of coordination between inpatient and outpatient care may result in unnecessary rehospitalization. To address this problem among frail elderly persons, the Ministry in charge of Health has launched regional pilot projects to develop and test tools for improving coordination of care in this population (see section 6.1.4).

5.4.1 Day care and other alternatives to full-time inpatient care

Alternatives to full-time inpatient care have been promoted since the late 1980s and encompass: part-time care provided in hospitals (either day or night, including psychiatric care); ambulatory surgery (see above); ambulatory treatments (*séances*) such as chemotherapy, dialysis, radiation therapy and blood transfusions; HAD; and palliative care.

Of the 26 million hospital stays in 2011, more than half were for less than a day, not including outpatient consultations (DREES, 2013c). Nearly 40% of part-time hospitalizations are for psychiatric care, for which alternatives to full-time inpatient care have been developed since the 1970s. Between 2000 and 2011, the number of part-time places increased by more than 50%, from 16 000 to 36 000, and the density increased from seven to 10 places per 10 000 inhabitants.

Ambulatory treatments, such as chemotherapy and dialysis, are included among the alternatives to full-time hospitalization, although they are not counted as part-time hospitalizations. The vast majority of radiation therapy treatments (96%) are performed in ambulatory care, mostly in private hospitals. The public sector delivers the largest share (51%) of chemotherapy treatments, although the 19 non-profit-making cancer centres (see section 4.1.1) provide significant shares of both chemotherapy (13%) and radiation therapy (21%).

HAD units send medical or paramedical staff to the patient's home on a daily basis in order to provide continuous and coordinated care in situations where a hospital stay otherwise would have been necessary. This form of intermediate care is targeted at patients with serious, acute or chronic, progressive or unstable disease requiring technical medical care of a certain degree of complexity and/or intensity.

In 2014, HAD units provided a small share (1%) of full-time hospitalizations and 0.5% of SHI expenditure. In 2014, there were 309 HAD units covering all departments, accounting for 4 million days of treatment for 156 000 stays. The government anticipates that this level of activity will double by 2018 (Cour des comptes, 2013b). In 2013, the global cost was €859 million, and an average HAD day costs SHI €196.8 (ATIH, 2014). Nearly one-fifth of HAD places are located in the Paris region (DREES, 2013c). Administratively, HAD units are generally either public hospital departments (42%) or private non-profit-making associations (39%). Each unit is led by a coordinating physician, who is responsible for the overall coordination of medical care, while a coordinating nurse organizes nurse's rounds for individual treatments. Actual care is provided

by salaried staff from the HAD structure or by self-employed professionals. In 2014, HAD care was mainly provided in the areas of complex wound dressings (25.2% of days), palliative care (23.6%), heavy nursing care (11.3%), perinatal care (5.6%) (see section 5.10) and cancer treatment (6.0%), although it included all domains of hospital care, including rehabilitation and psychiatric care. In addition, HAD care has been extended beyond patient homes and since 2007 may be provided in long-term care facilities and other residential facilities, including those for disabled individuals since 2012.

5.5 Emergency care

The scope of French health policy for emergency care encompasses the regulation of pre-hospital emergency care, the organization of hospital emergency departments, as well as the availability of appropriate hospital beds for patients admitted by emergency departments. Emergency care was reorganized following the 2003 heat-wave under the Emergency Care Plan 2003–2008 (*Plan urgences* 2003–2008).

Pre-hospital emergency care is handled by medical emergency call centres (*services d'aide médicale urgente*) and the continuity of care system (*permanence des soins*). The medical emergency call centres are freely accessible nationwide from any phone by dialling 15. The centres share information with the emergency call centres of the police (17) and fire brigade (18), so that medical emergencies are appropriately addressed. Likewise, either the medical or the fire brigade call centres respond to the European emergency number 112.

Emergency calls that reach the medical call centre are treated by specialized receptionists who are supervised and supported by physicians. The actions taken depend on the level of emergency. If on-site first aid is needed, the medical emergency call centres can send a mobile intensive care unit (*services mobiles d'urgence et de reanimation*), a first-aid team from the fire brigade or an on-call primary care physician. Otherwise, the patient would be advised to go to the nearest emergency hospital by ambulance if necessary. Finally, the patient may be advised to call back after a few hours in order to confirm the symptoms or to schedule a GP consultation.

The continuity of care system is designed to provide a timely and appropriate response to patient needs at night and on weekends or public holidays when ambulatory practices are closed. The system, which now falls under the remit of the ARSs, relies on GPs who are on-call on a voluntary basis and are paid allowances.

The 750 emergency care structures (*structure des urgences*) situated in 655 hospitals (76% public, 6% non-profit-making and 18% private) are the cornerstone of the French emergency care system. Certain hospitals have several emergency structures, and overall 85% are general units and 15% paediatric units. They are subject to authorization by the ARSs.

Concerns regarding the system of emergency care centre upon the increasing workload for hospital emergency departments, particularly because of the ageing population and the growing number of visits by patients who could be treated more efficiently in other settings. The number of doctors volunteering to be on-call in the continuity of care system has diminished, thereby weakening coverage and shifting a growing share of the burden to hospital emergency services (Cour des comptes, 2013c). Because of these trends, there is an increasing emphasis on alternatives to traditional emergency care settings. For example, the number of urgent ambulatory care centres (*maisons médicales de garde*) providing after-hours care without an appointment has increased over the past 10 years, from 98 in 2003 to 369 in 2013, through expanded public financial incentives. Box 5.1 illustrates the typical pathway for someone needing to seek care, here a person experiencing typical symptoms of a heart attack.

5.6 Pharmaceutical care

France is the third largest European producer of pharmaceutical products and one of the principal exporters worldwide. The French population is among the largest consumers of pharmaceutical drugs. While the growth rate of the pharmaceutical market has slowed in recent years and showed a slight decrease in 2012, sales of certain classes of drug continue to grow. Recent reforms targeting consumption include de-listing drugs with insufficient or low SMR, incentives for prescription of generic drugs and efforts to reduce the inappropriate prescription and overuse of antibiotics.

Box 5.1

Patient pathway after a heart attack

In France, someone experiencing chest pain and shortness of breath (i.e. typical symptoms of a heart attack) and wishing to seek care would take one of the following steps:

- call the emergency regulation center (SAMU, Centre 15)
- call the fire brigade (dialing 18)
- call his or her GP
- call a cardiologist
- go directly to a general emergency unit.

While the majority of patients would first call their GP, the most appropriate action would be to dial 15. Given the nature of the symptoms, the specifically trained receptionist would immediately transfer the call to a physician at the call centre. The physician would ask a few specific questions to explore further the symptoms. Given the likelihood of a heart attack, a mobile medical unit would be sent to take care of the patient; a first-aid team from the local fire brigade may also be sent to precede the medical unit.

The first-aid team would check the patient's vital signs and start cardiopulmonary resuscitation if necessary. Once the mobile medical unit arrives, the health professionals will start monitoring the patient's heart rate and perform electrocardiography to confirm the diagnosis of myocardial infarction. The unit's physician would then call the emergency regulation centre to confirm the diagnosis and ask for instructions regarding to which hospital the patient should be taken. The call centre will check available places among the regional cardiology emergency centres, choose the most appropriate place for hospitalization, inform the centre of the imminent arrival of the patient and inform the mobile unit of the hospital chosen. In the meantime, the mobile unit's nurse would give the patient necessary drugs according to the heart attack treatment protocol.

The mobile unit would then transport the patient to the designated centre. Based on current protocols, the expected time to reach the hospital and the availability of a catheterization and angioplasty ward, the patient may receive a curative pharmacological treatment (thrombolysis) during transport.

Upon arrival at the hospital, the mobile unit would take the patient directly to the designated unit and ensure continuity of care in the transfer.

5.6.1 Organization, distribution and dispensing of pharmaceuticals to the public

In 2012, the pharmaceutical industry in France included 254 companies, 13 of which account for more than half of the market. French firms are well positioned with respect to vaccines and medicines but have a weaker market presence with respect to biotechnologies and generic drugs. Turnover reached €50 billion in 2012, with 48% attributable to exports. Sales of drugs in France amounted to €27.2 billion, including €21.1 billion in retail pharmacies and €6.1 billion in hospitals. Reimbursable drugs accounted for 75.8% of turnover (Ferrante, 2014).

In terms of distribution, 64% of the industry's turnover for drugs is distributed by wholesalers; 16.9% is sold directly to retail pharmacies and 19.1% to public and private hospitals by industry subsidiaries or contractors. Wholesalers form a very concentrated sector, with only seven firms supplying a distribution network of nearly 200 sites across the territory. Wholesalers have a public service mission and are highly regulated in terms of the range of drugs supplied, level of stock, delivery time within defined territories as well as their profit margins. They supply the 22 000 pharmacies with drug orders within a few hours, with deliveries three times per day on average.

The French pharmaceutical market has three distinct components: medicines subject to mandatory prescription (*prescription médicale obligatoire*) and prescription-optional drugs (*prescription médicale facultative*), both of which are dispensed primarily through retail pharmacies, and drugs reserved for hospitals (see section 5.6.3).

Before 2008, patients had no direct access to non-prescription medicines. Under a 2008 decree, patients may have direct access to a specified list of non-prescription drugs at the discretion of the pharmacist. Many pharmacists were opposed to this measure because they feared it was a step towards ending their monopoly, thereby allowing non-prescription drug sales by other retailers, such as supermarkets, which are currently prohibited.

Internet sales of non-prescription drugs have been authorized in France since 2013, but uptake has been very limited. Only pharmacists are eligible to engage in this activity, which must be directly linked to a physical pharmacy and authorized by the ARS. By mid-2014, only 129 pharmacies had established web sites, a quarter of which were not operational.

5.6.2 Accessibility, adequacy and quality

Most prescription drugs are covered by SHI, although to differing degrees depending on the assessed SMR. SHI reimbursement rates for most covered drugs ranges from 15% to 100% (see section 2.8.4). Over 97% of the French population is covered by a VHI contract, which generally covers the most important drugs up to 100%. Under the ALD programme, patients with certain diseases are covered 100% for treatments related to the disease, including drugs. Minors aged 15 and older are eligible for 100% coverage for certain contraceptives. Among the prescription drugs that are not covered by SHI are certain contraceptives, drugs for erectile dysfunction and some vaccines and eye drops.

5.6.3 Levels of consumption

Pharmaceutical expenditure per capita reached €525 in 2012 (DREES, 2013a), with each person consuming on average 48 packages of drugs (ANSM, 2013). For the first time ever, pharmaceutical expenditure decreased in 2012 (by 0.9%), which was the result of both a decrease in drug price and a slowdown in the increase in the volume of drug uptake. However, drug consumption per capita remains 22% above neighbouring countries (Sénat, 2013).

General prescriptions must include certain standard information (patient's name, name of the drug, dosage, treatment duration, number of renewals, etc.), as well as the notation NR if the drug is prescribed for an indication that is not reimbursable. Most prescriptions are for a month's supply (three months for certain drugs packaged for longer-term therapy) and renewable for a maximum of 12 months. For patients with long-term conditions that qualify for coverage under the ALD programme, a bi-zone prescription form must be used to distinguish drugs that are reimbursed 100% under ALD from those that are subject to the usual reimbursement rules.

Prescription of certain drugs is subject to restrictions or conditions, depending on their classification:

- drugs classified as limited to hospitals (*réserve hospitalière*) may only be prescribed or administered in the course of a hospitalization;
- drugs requiring a hospital prescription (*prescription hospitalière*) may not be prescribed in the ambulatory sector although they may be filled in retail pharmacies;
- drugs requiring an initial hospital prescription (*prescription initiale hospitalière*) may be prescribed in the ambulatory sector only as a renewal after an initial hospital prescription within the period of validity specified in that prescription;
- drugs for which the initial prescription is limited to certain specialists (*prescription réservée à des médecins spécialistes*) may be renewed by any doctor within the period of validity specified in the original prescription;
- drugs requiring particular monitoring during treatment (*surveillance particulière*) may only be prescribed if a certain number of biological tests specified in the marketing authorization are undertaken;

- exception drugs (*médicaments d'exception*) are not covered by SHI unless they are prescribed for the indications set out in the therapeutic information sheet (*fiche d'information thérapeutique*), and if the indication is not included, the prescribing doctor must inform the patient that the drug will not be covered; and
- narcotics and related drugs must be prescribed using a secure prescription form and must be filled within three days of the date of prescription.

5.6.4 Reforms

Reforms have primarily focused on reducing system costs for drugs, including de-listing drugs assessed by the Transparency Commission as having low SMR (see section 6.1.2).

Patients and pharmacists have been given strong incentives to accept generic drug substitution. Since 1999, generic substitution has been promoted: pharmacists receive financial incentives and if patients refuse to accept the generic drug, they must pay the full price and claim reimbursement afterwards. The 2014 Social Security Finance Law included a provision promoting biosimilar drugs, but with certain restrictions, including the express authorization of the prescribing doctor.

From April 2014, experimentation started in 78 pharmacies on unit dispensing, which authorizes pharmacists to sell a given list of antibiotics and drugs by unit and not by box, with the aim of diminishing waste and, therefore, cost. Currently, almost all medications are sold in fixed quantities in boxes that are pre-packaged by the manufacturers.

Improper use of antibiotics has been a particular focus of policies as well as education campaigns targeted at patients. The P4P provisions of ROSP include targets related to prescription of antibiotics (see section 3.7.2).

5.7 Rehabilitation/intermediate care

Depending on a patient's condition after acute treatment, rehabilitation care may be delivered in an inpatient or an outpatient setting.

Following a hospital stay for acute care, a patient would typically be transferred to an inpatient follow-up and SSR unit as soon as daily monitoring by acute care specialists is no longer necessary. The SSR unit might be a general rehabilitation unit or a specialized unit, depending on patient needs. The SSR

unit then would discharge the patient home when she/he is able to perform daily life activities. Subsequent rehabilitation care would be performed by a physiotherapist working in an ambulatory setting and coordinated by the GP.

More than half of SSR stays are for rehabilitation, although the type of care offered in terms of pathologies, population and setting varies by sector. Public units account for 40% of SSR capacity, most of which are integrated within general hospitals. Public SSR units are dominant with respect to mental illnesses and nervous system disorders. The private profit-making sector has the smallest share of total SSR capacity (just over 25%), with 40% of care devoted to orthopaedic, cardiology and post-trauma rehabilitation, often in dedicated clinics. One-third of SSR capacity is found in private non-profit-making units, which provide follow-up care for a broader spectrum of pathologies, with a particular focus on children and adolescents.

The burden and complexity of SSR stays has increased in recent years because of the ageing of the population and also the shorter length of stays in acute care hospitals, which diminished by 17% between 2001 and 2009. In the same period, there was only a 3% decrease in the lengths of stay in SSR units because of the increase in the number of very long stays (more than three months), mostly the result of difficulties in discharging patients to other, more appropriate care settings because of a lack of capacity. SSR units are also challenged by unsuitable admissions, estimated at 10–20%, including patients admitted from acute care before being sufficiently stabilized, as well as those who may not require inpatient rehabilitation services but are awaiting admission into long-term care facilities or the availability of SSIAD places (Cour des comptes, 2012b).

The organization of SSR was reformed in 2008 and since that time capacity has expanded rapidly, although geographic disparities remain. Moreover, regions with SSR capacity below the national average also have low density of physiotherapists in the ambulatory sector, thereby compounding the lack of access to rehabilitation care (DREES, 2011b).

The ARSs are responsible for planning and optimizing the organization of rehabilitation services. The most recent SROSs have focused on improving coordination between the health sector and the medicosocial sector, as well as developing alternatives to inpatient SSR, including rehabilitation services in the context of day hospitalization, HAD and mobile rehabilitation teams.

5.8 Long-term care

In France, long-term care for the elderly and disabled belongs to a specific sector of the social system that combines elements of medical and social care, and which is referred to as the "health and social care sector" or "third sector". The health and social care sector is split into two subsectors that encompass care for the elderly as well as for disabled people. Care may be provided at home or in residences. In addition, intermediate care services provide temporary care to dependent patients and respite services for their caregivers.

5.8.1 Long-term care for elderly

Home care is mainly provided by self-employed physicians and nurses and, to a lesser extent, by SSIAD. The SSIAD delivers nursing care at home for both disabled and elderly people mainly using employed auxiliary nurses and, to a lesser extent, nurses, who are mostly self-employed. In 2010, there were 2130 SSIAD units, corresponding to a capacity of around 106 000 patients (places). The vast majority of SSIAD places are dedicated to the elderly and only a small share (5%) is reserved for disabled people. Nearly two-thirds of SSIAD units are private, mostly non-profit-making institutions; the remaining units are run by public institutions in the health and social care sector. The SSIAD is entirely financed by SHI funds that are managed by CNSA (see section 3.6).

Residential care for elderly people is provided by many types of institution offering different levels of service. These include:

Collective housing facilities (*foyers logements*). These offer a range of nonmedical facilities (such as catering and laundry) and almost no medical care. In 2010, there were 2800 such establishments, offering 147 000 places.

Retirement homes (*établissements d'hébergement pour personnes agées dépendantes*). These accommodate the elderly but also offer medical care. In 2010, there were 7530 establishments with a total of 588 000 beds.

Long-term care units. These accommodate people whose care requires constant medical monitoring. These units are provided in autonomous nursing homes or in hospital wards for very sick and dependent people. In 2011, around 32 000 beds were available in these institutions. These units belong to the health care sector, not the health and social care sector for the elderly and disabled.

There are great disparities in the distribution of these institutions. Some departments are also far better equipped than others, where capacity does not match population need.

Moreover, in the early 2000s, intermediary services were created to accommodate for short periods frail elderly people not living in residential services. Care is provided on a daily basis (*accueil de jour*) or on a temporary basis (*accueil temporaire*), with the main goals of offering respite care for families and day care for patients with Alzheimer's disease and other dementias. Following strong political support from the government, their capacities have reached 7500 for a daily care basis and 3600 for temporary care (out of which 1250 places are reserved for those with Alzheimer's disease) in January 2009. However, this is insufficient for the growing size of the population with Alzheimer's disease.

Funding of residential institutions for frail elderly people is currently shared by the CNSA (through SHI funds) (see section 3.6), which covers the cost of medical care; general councils, which covers the cost of personal care for loss of autonomy; and users, who mostly cover the cost of housing and feeding.

Current challenges for the frail elderly sector are to provide sufficient services to meet the forecasted needs of an ageing population without building excessive capacity and still ensuring equity of access. Therefore, recent reforms and future development have focused on three areas:

- increasing the capacity of institutions to meet growing demand and to develop new services;
- supporting the "maintaining at home" policy (*la politique du maintien à domicile*), which is based on "lighter" forms of care (such as family placements and assistance with care in the home) through promoting the development of home services, such as nursing home services and HAD services, and the creation of intermediate care services promoting better integration and autonomy between home and residential care services; and
- financing such services and care and diminishing the economic burden of disability for frail elderly patients and their families (see section 6.1.4).

Additionally, with the ageing of the population, a growing number of patients with dementia are expected. In order to face this challenge, an Alzheimer's Disease Plan was issued in 2008 for a four-year period. It has three goals: improving the quality of life of patients and their relatives by developing appropriate treatment, care services and respite care for the relatives; improving knowledge of the disease by developing research; and informing the public about the disease. It has been renewed, although the name has changed and scope broadened to neurodegenerative diseases (http://www.gouvernement.fr/action/le-plan-maladies-neuro-degeneratives-2014-2019).

5.8.2 Long-term care for disabled

About 3.2 million people are registered as disabled in France, of whom 1.8 million are affected by a severe disability that limits their functional autonomy. Disability is measured in terms of an incapacity level, which takes into account the degree of difficulty with daily living. Specific committees for children and for adults at the department level evaluate the degree of incapacity and determine the right to certain benefits. They also have the authority to refer the disabled person to a specialized institution.

Adults

Around 200 000 disabled adults are accommodated in 4800 dedicated facilities. Various institutions provide services for disabled adults with different levels of functional autonomy, 90% of which are private non-profit-making and 10% public. Broadly, speaking, residential centres are linked to sheltered workshops and support people with disabilities who are capable of working during the day. Occupational centres take care of disabled adults who are not capable of working, with various service levels depending on the severity of the disability and the need for care. There are four sources of funding for dedicated facilities for disabled adults (see section 3.3.4); the health care part is paid by the CNSA on SHI funds while the costs of residential care are charged to the patient and/or to the general councils of the department. Institutions for the most heavily dependent people are financed entirely by the CNSA. Additionally, the state finances sheltered workshops (Table 5.1).

Table 5.1
Institutions of the health and social sector that provide services to disabled adults

Institution	Purpose	Financing agenta
Specialized reception centres (maisons d'accueil spécialisé)	Cater to disabled adults who permanently need health care services	SHI
Medical reception centres (foyers d'accueil médicalisé)	Cater for severely disabled people who cannot work	SHI, general councils
Sheltered workshops (etablissements et services d'aide par le travail)	Offer activities and help to disabled adults who have a below-average capacity to work	The state
Occupational rehabilitation centres (centres de rééducation professionnelle)	Offer professional training to disabled adult	SHI
Pre-orientation centres (centres de pré-orientation)	Used when a diagnosis is needed for further orientation in the system	SHI
Social support services for disabled adults (services d'accompagnement médico-sociaux pour adultes handicapés)	Devoted to severely disabled people, offering them care and support for professional and social integration	SHI, general councils
Companies for disabled people (entreprises adaptées)	Specific companies that are set up for disabled people but are included in the free market economy	The state
Respite care health beds (lits halte soins santé)	Temporarily offering care and social support to the homeless	SHI
Temporary reception centres for disabled adults (etablissements d'accueil temporaire pour adultes handicapés)	Respond to specific needs and support families	SHI
Experimental centres for disabled adults (etablissements expérimentaux pour adultes handicapés)	Develop new forms of housing and care	SHI
Mutual aid groups (groupes d'entraide mutuelle)	Devoted to people with mental health-related disabilities and aim to bring new answers to their support needs	CNSA
Residential care homes (foyers d'hébergement)	Cater to disabled workers coming from the "helping through work services" or from companies for disabled people	General councils
Assisted living centres (foyers de vie)	Devoted to disabled people who are not able to work but who have some functional autonomy	General councils
Multipurpose reception centres (foyers d'accueil polyvalent)	Offer housing, care and activities to disabled people	General councils
Social life support services (services d'accompagnement à la vie sociale)	Facilitate access to community services	General councils

Note: [a]The SHI funds presented in this table are managed by CNSA.

Children

Nearly 130 000 disabled children are cared for in 2500 facilities. A large number of institutions offer treatment, special education and vocational training to children affected by motor, cerebral or intellectual disabilities. These institutions are mainly funded by the CNSA from SHI funds (see Table 5.2).

Table 5.2
Institutions of the health and social sector that provide services to disabled children

Institution	Purpose	Financing agenta
Educational centres for children suffering from mental disabilities (instituts médico-éducatifse)	Aim to contribute to blossoming and social and professional autonomy	SHI
Institutions for children with multiple disabilities (etablissements pour enfants et adolescents polyhandicapés)	Offer adapted care and education to allow disabled children to become self-sufficient	SHI
Institutions for children with physical disabilities (instituts d'éducation motrice)	Offer care, education and general or professional training	SHI
Sensory training centres (instituts d'éducation sensorielle)	Offer care and education to children with visual or auditory disabilities	SHI
Medico-psycho-educational centres (centres médico-psycho-pédagogiques)	Perform check-ups, diagnosis, screening for signs of potential disorders and provide care for children with mental health-related disabilities	SHI
Therapeutic and educational centres (instituts thérapeutiques, educatifs et pédagogiques)	Offer therapeutic and educational support specifically adapted to each child or adolescent suffering from behavioural disorders	SHI
Home care and education services (services d'éducation spéciale et de soins à domicile)	Services delivered in disabled children's home environment	SHI
Early social activity centres (centres d'action médico-sociale précoce)	Offer early screening for motor, sensory and mental disabilities	SHI, general councils
Temporary reception centres for disabled children (etablissements d'accueil temporaire d'enfants handicapés)	Respond to specific needs and support families with disabled children	SHI
Experimental centres for disabled children (etablissements expérimentaux pour l'enfance handicapée)	Develop new forms of housing and care	SHI

Note: [a]The SHI funds presented in this table are managed by CNSA.

Disabled people may be eligible for monetary allowances to finance domiciliary staff or aid devices. The PCH is an allowance that aims to finance the wages of people employed to provide assistance to disabled people or their families, or the necessary technical aids (see section 3.3.4). In 2012, 147 000 people received PCHs.

The AEEH is a special allowance funded by the Family Allowance Fund that partly covers the costs of the child's education. Finally, expenses related to the disability can be partly or completely covered by the local authority once they have been agreed upon.

In the early 2000s, challenges for the disabled sector were to provide sufficient capacity for residential care, to diminish OOP payments and to develop incapacity benefits that compensated the absence of income of disabled

people who could demonstrate an inability to work. These were partly addressed by the 2005 Act for Equal Rights, Access, Participation and Citizenship for Handicapped Persons.

Current challenges are to tackle the problem of financing transportation to care services and to improve further access to services for the disabled. Indeed, in 2005 in each department, a one-stop shop was created to inform disabled people on services and allowances available and to help them with administrative matters: departmental homes for disabled persons (*maisons départementales pour les personnes handicapées*). However, these are reported to be performing poorly and improvement is required (IGAS, 2010).

5.9 Services for informal carers

Rules governing the activity of informal carers must be understood within the overall legal framework for family support. Although support within families is usually performed on a voluntary basis, France, as in other European countries, has a set of regulations that define the basic level of transfers among members of a family, such as regulations governing inheritance.

In terms of informal care, the legal support obligation (*obligation alimentaire*) stipulates that basic support for daily living is expected between members of a couple and for all ascendants and descendants (but not between siblings). This law has a subsidiary function and is usually enforced by court when assistance is not provided voluntarily, upon request by the person in need.

In contrast with this traditional perspective, concern about the growing burden of informal care for frail elderly people (especially those with Alzheimer's disease) has triggered the development of laws giving specific rights to the informal carers of dependent or disabled people. Eligibility for financial assistance in order to pay a salary to the carer depends on his/her relationship with the person in need. Financial assistance cannot be used to pay a carer who is the spouse (or common law husband or wife) of the elderly person receiving APA or when it is the spouse, parent or child of the disabled person receiving PCH.

Finally, dedicated institutions at the city or local level (departments) or non-profit-making associations provide help to informal carers, such as information and counselling, psychological support and training.

An estimated 7% of the French population meets the definition of "principal caregiver" for a person needing care as the result of illness, handicap or age (Jaeger, 2012). The planned law to address dependency (see section 6.1.4) includes provisions to support caregivers.

5.10 Palliative care

Several types of inpatient and outpatient entities contribute to palliative care in France.

Within hospitals, palliative care may be delivered within dedicated units, in dedicated beds in a given department or by a mobile palliative care team. Palliative care units are specialized departments with at least five beds that provide continuous monitoring of the patient. They usually employ a multidisciplinary team with physicians, nurses and psychologists, as well as other paramedical staff. Some departments may develop their own palliative care capacity under the responsibility of a referral physician and referral nurse trained in palliative care. Mobile palliative care teams include at least one physician and one nurse, both with a palliative care degree, as well as one psychologist and one personal assistant. The team may intervene in any hospital department as well as in nearby hospitals in assisting and training personnel in palliative care issues.

Palliative care networks are local associations that bring together physicians, nurses, psychologists and other professionals to assist GPs with palliative care. They visit patients at home upon the GP's request and help to coordinate patient care.

Volunteers trained to support patients and their families may be involved in palliative activities, in conjunction with the palliative care structure charged with the patient's care. Such volunteers are present in most palliative care units as well as in certain other settings.

In addition to these dedicated organizations, HAD units (see section 5.4.1) contribute substantially to palliative care, with roughly one-quarter of days (for less than 20% of stays) in such units undergoing palliative care.

Palliative care capacity has steadily grown since the late 1980s. In 2011, French hospitals included 6500 beds dedicated to palliative care; there were 420 mobile palliative care teams in activity and 110 active palliative care networks. Nevertheless, palliative care capacity is still lower than the demand for these services and is very heterogeneous across regions.

5.11 Mental health care

In France, services for mentally ill people are provided by both the health sector and the social and health care sector for the disabled, with an emphasis on community-based organization of mental health care services.

Services provided by the health sector

Services provided by the health sector take the form of both public and private outpatient and inpatient care. Public mental health care is provided within geographical areas of theoretically equivalent population size, called mental health care areas. Care is organized separately for adults and children. For each of these populations, care within each area is coordinated by a hospital (a public hospital in more than 90% of the cases) and includes a wide range of preventive, diagnostic and therapeutic services, which are provided in both inpatient and outpatient settings. Psychiatric ambulatory care centres (*centres médico-psychologiques*) are present in almost every mental health care area, providing primary ambulatory mental health care, including home visits, and directing patients towards appropriate services. In 2010, there were 857 adult mental health care areas and 375 mental health care areas for children (Cour des comptes, 2011a). The size and resources of mental health care areas are quite heterogeneous.

Overall, mental health care areas account for 40% of psychiatric hospitals and 80% of psychiatric beds. With 11 000 hospital beds, the private profit-making sector accounts for 70% of the remaining full-time hospitalization capacity and is, therefore, an important actor in the field of mental health care. Private profit-making hospitals are only marginally involved in outpatient treatment, but they account for 20% of cases involving inpatient care. They accept patients with psychiatric disorders on the same basis as public hospitals.

A large number of psychological disorders are also dealt with on an outpatient basis by GPs or private psychiatrists or psychologists, some of them practising psychotherapy and, occasionally, psychoanalysis. In 2012, there were 12 400 psychiatrists in activity, the majority of whom (57%) were salaried

doctors in hospitals and the rest in private and mixed practices. The density of psychiatrists was 22 per 100 000 inhabitants in 2012. However, geographical heterogeneity is high. Although no reliable figures are available, it is estimated that about 35 000 psychologists work in France, either as salaried employees or in private practice. Besides the psychotherapies mentioned above, they also offer psychological support and follow-up in the context of schools or as part of social welfare provisions.

As a result of the de-institutionalization policy that started in France more than four decades ago in the 1980s, the vast majority of care in the psychiatric sector is ambulatory, with 77% of patients over the course of a year treated exclusively on an outpatient basis (DREES, 2013c). In terms of hospital care, part-time stays accounted for 89% of hospitalizations in 2011.

Services provided by the health and social care sector for the disabled

People disabled by severe mental illnesses may also receive services from the health and social care sector for the disabled. Many organizations for the disabled offer a wide range of services to mentally ill patients, including housing, health care treatment, professional training, schooling for children, professional education and sheltered workshops. However, only a few are fully dedicated to the population with mental illness.

Tables 5.3 and 5.4 show institutions of the health and social sector that provide services to adults and children with mental health-related disabilities and the share of the affected population for whom they provide services.

Table 5.3

Institutions of the health and social sector that provide services to adults with mental health-related disabilities: overall capacity and share of the affected population served

Institution	Overall capacity (2010 or last year available)	Percentage of adults with mental health-related disabilities served (2010 or last year available)
Specialized reception centres (maisons d'accueil spécialisé)	23 968[a]	12.4[a]
Medical reception centres (foyers d'accueil médicalisé)	20 448[a]	24.3[a]
Sheltered workshops (etablissements et services d'aide par le travail)	116 016[a]	21.5[a]
Occupational rehabilitation centres (centres de rééducation professionnelle)	9 765[a]	12.7[a]
Pre-orientation centres (centres de pre-orientation)	1 250[a]	32.3 (2009)[b]
Social support services for disabled adults (services d'accompagnement médico-sociaux pour adultes handicapés)	7 282[a]	40.1[a]
Companies for disabled people (entreprises adaptées)	–	4.5 (2001)[c]
Respite care health beds (lits halte soins santé)	501 (beds; 2007)[d]	29.1 (1995)[e]
Temporary reception centres for disabled adults (etablissements d'accueil temporaire pour adultes handicapés)	517[a]	15.6[a]
Experimental centres for disabled adults (etablissements expérimentaux pour adultes handicapés)	4 399[a]	25.9[a]
Mutual aid groups (groupes d'entraide mutuelle)	–	100.0[a]
Residential care homes (foyers d'hebergement)	39 494[a]	17.4[a]
Assisted living centres (foyers de vie)	46 798[a]	19.20[a]
Multipurpose reception centres (foyers d'accueil polyvalent)	4 658[a]	16.40[a]
Social life support services (services d'accompagnement à la vie sociale)	38 165[a]	23.70[a]

Sources: [a] DREES, 2013c; [b] FINESS, 2014; [c] DREES, 2001; [d] FNARS, 2008; [e] Marpsat, 2002.

Table 5.4

Institutions of the health and social sector that provide services to children with mental health-related disabilities: overall capacity and share of affected population served

Institution	Overall capacity (2010 or last year available)	Percentage of children with mental health-related disabilities served (2010 or last year available)
Educational centres for children suffering from mental disabilities (instituts médico-éducatifse)	69 592[a]	18.9[a]
Institutions for children with multiple disabilities (etablissements pour enfants et adolescents polyhandicapés)	5 637[a]	4.1[a]
Institutions for children with physical disabilities (instituts d'éducation motrice)	7 505[a]	2.7[a]
Sensory training centres (instituts d'éducation sensorielle)	8 409[a]	1.9[a]
Medico-psycho-educational centres (centres médico-psycho-pédagogiques)	2 779 080 (consultations) 175 160 (active files)[a]	100.0 (2003)[b]
Therapeutic and educational centres (instituts thérapeutiques, educatifs et pédagogiques)	14 984[a]	93.7[a]
Home care and education services (services d'éducation spéciale et de soins à domicile)	43 556[a]	4.6[a]
Early social activity centres (centres d'action médico-sociale précoce)	1 238 710 (consultations) 65 010 (active files)	20.0 (2008)[c]
Temporary reception centres for disabled children (etablissements d'accueil temporaire d'enfants handicapés)	284[d]	6.0[d]
Experimental centres for disabled children (etablissements expérimentaux pour l'enfance handicapée)	1 155[a]	26.50[a]

Sources: [a]DREES, 2013d; [b]Coldefy, 2005; [c]CNSA, 2008; [d]DREES, 2008.

Critics of the mental health care system cite the lack of coordination among the health and social care sector, self-employed medical professionals and specialists and the private profit-making sector; the significant geographical inequalities regarding available resources; and the excess capacity for full-time hospitalization. These problems stem in part from the nature of psychiatric research in France, which traditionally has been monodisciplinary. In recent years, policy-makers have begun to recognize the need to develop a multidisciplinary research approach, with a particular focus on social sciences and health services, to better coordinate the different mental health actors and to develop smoother patient care pathways (Couty, 2009).

5.12 Dental care

Dental care in France is provided mainly by self-employed dentists, who represented 90% of the roughly 41 000 practitioners in activity in 2011. The remaining 10% were salaried staff within specialized dental care centres, often managed by mutual VHI entities, or in hospitals.

National strategies to improve dental care have focused on children and adolescents. The government set an objective in the 2004 Public Health Act to reduce the tooth decay index by 30% among children aged 6 to 12 within five years. While this objective was met, dental problems remain frequent, particularly among children from low-income families or without good access to care. Since 2007, a free oral care examination programme called M'T Dents, has been offered to children aged 6, 9, 12, 15 and 18, with follow-up care (other than prosthetics, orthodontics or dental appliances) fully covered by SHI. In addition, hour-long oral health prevention sessions are provided to all children in primary school. While the HAS recommends an annual dental check-up for children and adults, a nationwide survey found that 30% of children aged 5 to 15 had not had a check-up within the preceding 12 months. Moreover, significant disparities were evident depending on the family's socioeconomic status. Unfamiliarity with the free programme, as well as fear of dental visits, may explain the differences in recourse to care (Calvet et al., 2013).

In 2012, dental care represented 5.72% of personal health care consumption but only 2.39% of SHI expenditure because of extra-billing, which accounted for 53% of dental care fees, primarily for dental prosthetics and orthodontics. Unlike doctors, all dentists may engage in extra-billing, but not for all services. Extra-billing for conservative dentistry (tartar removal, fillings, root canals) is prohibited. While VHI covers the largest share of dental care expenditure, a substantial part is financed by OOP payments, giving rise to inequalities in access. A survey of patients' failure to seek treatment found that 47% of the forgone treatments were for dental care (Célant, Guillaume & Rochereau, 2014).

Access to dental care also varies by region. There are 63 dentists per 100 000 inhabitants on average, with wide variations in their geographic distribution: half work in areas with more than 200 000 inhabitants, while only 6% practice in rural zones.

5.13 Complementary and alternative medicine

There is no general regulation and very few data regarding complementary and alternative medicines in France. Some of the drugs and practices that may fall under this category, such as homeopathy, acupuncture and, to a lesser extent, osteopathy, play a significant role in the French health care system. Recent debates have emphasized the need to monitor the development of diverse and mostly uncontrolled health-related practices in order to limit fraudulent activities.

France is the largest national market for homeopathic products. These products are regulated by the public health code, which provides a definition for homeopathic drugs and distinguishes between two types of homeopathic substance, which fall under different regulatory frameworks. First, products that are extremely diluted (so that they are considered innocuous), which are administered orally or by external application and which are commercialized without any pre-specified therapeutic purpose, need only to be declared to the ANSM before commercialization. They may be covered by SHI at 30% and, in that case, their price is regulated. These represent the vast majority of homeopathic products. Second, all other homeopathic products (notably those that are being sold with a specific therapeutic indication) must follow the AMM process for new drugs before entering the market and are not covered by SHI. Distribution of homeopathic products is subject to the same restrictions as conventional drugs.

Acupuncture has been recognized as a medical activity in the common classification of medical activities for more than 20 years and is covered by SHI with a tariff that is currently half the tariff for a standard GP visit. Finally, osteopathy sessions, while not recognized as a medical activity, are covered by a number of VHI contracts, often on an annual lump sum basis and only when referred by a physician.

5.14 Health care for specific populations

In addition to the health care delivery structures outlined above, specific structures provide care for certain populations.

Since 1994, the public health care sector is responsible for delivering care to prisoners. Each prison contracts with a public acute care referral hospital that runs an ambulatory care department within the prison walls. In

addition, the hospital provides inpatient care for prisoners as needed. The transfer of responsibilities for the delivery of health care from the penitentiary administration to the health care administration has improved the quality of care delivered to prisoners. However, current concerns are related to access to mental health care in prison.

Hospitals in the military health care system are run by the Ministry of Defence. Although their primary aim is to provide care to military personnel, the general population also has access to these hospitals on the same coverage terms as other hospitals.

Undocumented immigrants, refugees and asylum seekers usually receive emergency care in the mainstream health care system. In addition, they may be allowed temporary stay and working permits if they are facing a serious medical condition that cannot be treated effectively in their own country. Finally, a few private non-profit-making associations provide care to undocumented immigrants, refugees and asylum seekers, regardless of their administrative status.

6. Principal health care reforms

The main objectives of the reforms to the health care system since 2010 were to increase the governance and transparency of the system, to contain SHI expenditure without damaging equity in financial access, to increase geographic equity in access to care and to meet the needs of vulnerable populations, particularly by ensuring access to care of the frail elderly people and by decreasing social health inequities.

One of the major changes since 2010 has been a move towards more transparency in the system, particularly with respect to conflicts of interest of experts that came to light in the Mediator scandal. The main objectives of the enacted reform legislation were to restore confidence in the administrative decision-making process for health products, particularly drugs; to provide greater transparency; to reduce the influence of the pharmaceutical industry on experts and treating physicians; and to strengthen drug safety and surveillance.

Cost-containment measures have focused particularly on drug expenditure, with a continuous trend of de-listing drugs with insufficient SMR. However, despite an announcement by the Minister in charge of Health that all drugs with an insufficient SMR would be de-listed or subject to a systematically motivated decision if coverage were to be maintained, the measure has not been put into practice. Tight control of drug prices also continued with the adoption of economic evaluation as a new tool. However, formal assessment of how this has affected prices is not yet available. In order to preserve equity, controlling the level of OOP payments has been a major issue in recent year, based on two main tools: expansion of more homogenous complementary coverage to a larger share of the population and control of the level of extra-billing by doctors. The development of the P4P scheme for doctors was also aimed at increasing the efficiency of the system.

To improve geographical access to care, a move towards qualitative incentives for doctors has been progressively undertaken. Because negative as well as positive financial incentives developed by the government proved to be ineffective, initiatives focusing on improving the workplace quality of life of doctors have flourished at the local level. In addition, new methods of health care organization through task transfer and the use of information technologies such as tele-health have been encouraged.

The increasing demand for long-term care remains a major concern in the government's plan. However, despite strong government support, public coverage of long-term care for the elderly in order to provide greater equity in access remains one of the main challenges of the system.

6.1 Analysis of recent reforms

France's mixed system of organization (see section 2.1) attempts to balance competing values such as equity, patient choice and efficiency. The resulting structural challenges have provided the impetus for health care reforms.

The objectives of the health care system reforms since the late 1990s have been:

- to improve health system governance and transparency;
- to control the growth of SHI expenditure while ensuring financial equity in access to care;
- to address geographic disparities in access to care;
- to meet the needs of vulnerable populations, particularly the growing number of frail elderly people, and to decrease social health inequities.

Box 6.1 presents the major reforms since 2009. For previous reforms, please see Chapters 2 and 7 of Chevreul et al. (2010).

Box 6.1
Major health care reforms and policy measures, 2009–2014

2009

- The HPST created the ARSs, which merged and replaced other regional state and SHI institutions, with the goals of improving local access and quality of care, encouraging preventive medicine and modernizing hospital organization.
- SHI began to offer individual contracts for professional practice quality improvement (*contrat d'amélioration des pratiques individuelles*) to GPs on a voluntary basis.

2010

- The coverage rate for drugs with insufficient relative medical benefit was decreased from 35% to 15%.

2011

- The coverage rate for drugs with moderate relative medical benefit was decreased from 35% to 30%.
- Concerns regarding conflicts of interests following the Mediator (benfluorex) scandal led to stronger disclosure requirements under the Health Security Law enacted in December 2011 (*Loi No. 2011–2012 du 29 décembre 2011 relative au renforcement de la sécurité sanitaire du médicament et des produits de santé*). The renamed and reformed ANSM was given expanded authority, including the ability to require drug manufacturers to undertake comparative trials to measure the increased benefit of a new drug over an existing one and the power to impose criminal sanctions.
- Following the success of the voluntary individual contracts for professional practice quality improvement, a P4P was incorporated into the physicians' 2011 collective bargaining agreement, with an expanded list of objectives and extended to additional specialties (ROSP). GPs participating in ROSP receive additional remuneration on top of their normal FFS income, which takes into account the size of the population treated by the doctor and 29 quality indicators with intermediate and final targets.

2012

- An agreement with physicians' unions to address excessive extra-billing was reached in October 2012. The provisions included incentives for Sector 2 doctors, who may sign a voluntary three-year "access to health care contract" that restrains extra-billing practices (effective 1 December 2013), and outlines procedures potentially leading to sanctions for doctors whose extra-billing practices are found to be abusive.
- The national convention with pharmacists signed in April 2012 included P4P incentives. The indicators upon which the remuneration is based include increasing the rate of generic substitution for a list of 30 drugs, with an overall goal of 85%.
- The 2012 Social Security Finance Act expanded the scope for economic evaluations by HAS, effective from 2 October 2013. The CEESP evaluates drugs with improvement of medical benefit (ASMR) ratings of 1, 2 or 3 that are likely to have a significant impact on SHI expenditures (annual sales of €20 million or more). The goal of the evaluation is to measure the interest to society of a new drug compared with existing treatments based on its cost–effectiveness. The advice of the CEESP should then be used by the CEPS in its price negotiations with the manufacturer.

2013

- Under a provision of the National Interprofessional Agreement enacted as part of the Employment Protection Law (*loi sur la sécurisation de l'emploi*), all employers must provide group VHI coverage for their employees (effective 1 January 2016).
- The 2013 Social Security Finance Act created the CASA, a 0.3% tax on retirement and disability pensions, for the purpose of financing a planned Aging and Dependency Law (see section 6.2). Consideration of the proposed law was postponed until late 2015 and will not be implemented until 2016.
- The revenue ceilings for access to CMU-C and financial assistance to purchase a private VHI contract (ACS) (section 3.5.1) were exceptionally increased by 7%, pursuant to the recommendation of an interministerial committee to combat exclusion. While the ceilings are adjusted annually for inflation, this additional increase was undertaken to improve financial access to care by expanding VHI coverage for the less well-off population.

2014

- The 2014 Social Security Finance Act included a programme of regional pilot projects aimed at improving care coordination for frail elderly people and finding alternatives to the existing fragmented care organization.

6.1.1 Improving health system governance and transparency

The institutional complexity of the French health care system and the conflicts of power and legitimacy associated with it are major issues, particularly with respect to the relationship between the state and SHI. Reforms, therefore, tend to search for institutional equilibrium. Since the late 1980s, health care governance has been substantially reorganized, with a process of decentralization at the regional level, an increase in the role of parliament and an attempt to clarify the respective roles of the state and SHI.

In the French context, decentralization was mainly a form of deconcentration, where policies and frameworks are defined at the central level and implemented at the local level, adapted to local situations. The Ministry in charge of Health and the government remain the main decision-makers in health care in France. The last major step forward in decentralization was made through the 2009 HPST Act, which created the ARSs (see section 2.4). However, while creation of the ARSs, which are autonomous bodies, can be seen as a step towards devolution, the Ministry in charge of Health retains the power to nominate each ARS director. Moreover, the planned 2015 health reform will likely increase state control of ARS governance (see section 6.2). Indeed, power at the national level remains significant even when compared with other countries such as England, which is considered to be highly centralized (Ettelt et al., 2010) (for more details, see section 7.1.2 in Chevreul et al., 2010).

One of the major changes since 2010 has been a move towards more transparency in the system, particularly with respect to conflicts of interest of experts. In 2011, weaknesses in the French regulatory system for health products were underscored in the wake of the scandal over Mediator (benfluorex), an anti-diabetes drug that remained on the French market until 2009 despite mounting evidence of serious side-effects that led other countries to ban it as early as 1997. In a report on the investigation into Mediator, the Inspector General of Social Affairs (*Inspection générale des affaires sociales*; IGAS) identified multiple weaknesses in the regulatory system for drugs, including what it termed a structural and cultural conflict of interest on the part of the French Health Products Safety Agency because of its institutional cooperation with the pharmaceutical industry, as well as the reluctance by the Ministry in charge of Health to de-list drugs found to have an insufficient SMR for fear of opposition by prescribing doctors and patients (IGAS, 2011). The scandal led to fast-track reform legislation.

The main objectives of the reform legislation were to:

- restore confidence in the administrative decision-making process for health products, particularly drugs;
- provide greater transparency and reduce the influence of the pharmaceutical industry on experts and treating physicians; and
- strengthen drug safety and surveillance.

Enacted in December 2011, the Health Security Act (*Loi No. 2011–2012 du 29 décembre 2011 relative au renforcement de la sécurité sanitaire du médicament et du produits du santé*) established a new national agency, the ANSM, to evaluate the benefits/risks of all human health products and provide ongoing surveillance. ANSM, which replaced the French Health Products Safety Agency, has expanded authority, including the ability to require drug manufacturers to undertake comparative trials to measure the increased benefit of a new drug over an existing one and the power to impose criminal sanctions.

To address the issue of conflicts of interest raised by the Mediator affair, the Health Security Law requires experts providing input into the decision-making process (e.g. members of commissions reporting to the ministries in charge of health and social security) to disclose their direct and indirect interests for the five preceding years in a declaration available to the public and kept up to date by the expert.

To shed further light on the ties between health professionals and the pharmaceutical industry, drug companies are required to disclose the agreements and other benefits provided to a wide range of individuals and organizations participating in the health system. In 2014, the government initiated a new web site that identifies health professionals' ties to businesses that market health products or cosmetics (www.transparence.sante.gouv.fr). In addition, limits have been placed on visits by pharmaceutical representatives in hospitals, and advertisements aimed at health professionals are subject to prior approval by ANSM.

The Health Security Law also includes new pharmacovigilance requirements designed to strengthen the surveillance of drugs on the market. Manufacturers must register, declare and monitor adverse side-effects, which may also have implications for post-authorization studies of safety and efficacy. Actions taken in other countries with respect to drugs authorized in France must also be reported. Any suspension, withdrawal or notification regarding a drug must be made public immediately at the expense of the manufacturer. Certain health professionals (physicians, dental surgeons, midwives and pharmacists) are also required to report adverse side-effects. A whistle-blower provision protects from discriminatory employment actions all those who report adverse effects in good faith. Doctors prescribing a medication outside of its authorized indications must explain orally the reasons to the patient, as well as noting it within the medical file and on the prescription.

Given the context of the Mediator scandal and the need to restore public confidence in the system of drug regulation in France, passage of this Law was relatively consensual among the stakeholders, including the pharmaceutical industry.

6.1.2 Containing SHI expenditure while striving for equity in financial access

The organizational structure of the French health care system makes the goal of cost-containment difficult to achieve. Indeed, controlling expenditure is a complicated task when consumption by patients and provision of care by providers are unrestricted, where care is largely publicly funded and retrospectively reimbursed, and where local SHI funds reimburse care without information regarding its appropriateness and efficiency. Certain expenditure categories, particularly drugs, have been the target of numerous cost-containment measures.

Cost containment measures fall into two broad categories: strict accounting cost-containment policies (*maitrise comptable des dépenses de santé*), which have been implemented since the late 1970s and focus on controlling provider tariffs and the volume of care provided and on decreasing SHI expenditure, and medically based cost-containment policies (*maîtrise médicalisée des dépenses de santé*), which were developed later in the 1990s and aimed to reduce the financial and equity losses linked to medical practice variations while improving medical practice. The strict accounting cost-containment policies were strongly opposed by physicians (see section 3.5 in Chevreul et al., 2010). However, both types of policy continue to be used in France. The following subsections highlight measures taken since 2010 (for additional details and earlier cost-containment reforms, see section 7.1.3 in Chevreul et al., 2010), as well as measures to mitigate the impact of shifting costs from SHI to private expenditure.

Strict accounting cost-containment measures

Decreasing the benefit package

Decreasing the benefit package is one means of decreasing the financial burden on SHI. Of all health care goods and services, drugs were the most affected by this type of measure. Between 1990 and 2009, prescription drug sales in France multiplied 2.5 times, with SHI covering approximately 75% of the total (Cour des comptes, 2011b). The steady increase in pharmaceutical expenditure has led to a series of measures aimed at limiting the usage of certain drugs and/or reducing the cost for SHI. Cost-containment measures have included increasing patient contributions (often covered by VHI), either by de-listing the drugs completely or reducing the rate of SHI coverage, reducing drug prices and encouraging generic substitution. Economic evaluation is the newest tool in the cost-containment policies.

De-listing drugs has proven to be politically sensitive, as revealed by the history of de-listing since the late 1990s. In certain cases, drugs with insufficient SMR were subject to lower prices or reimbursement rates or even left at a 65% rate rather than being de-listed. A provisional coverage rate of 15% was instituted for certain drugs as an interim step towards de-listing in 2008. In 2010, the coverage rate for drugs with weak relative SMR decreased from 35% to 15%, and in 2011, the rate for drugs with moderate SMR was reduced from 35% to 30%. An additional 26 drugs were de-listed in 2011, including 17 that had been covered at 15%. The Minister in charge of Health announced in January 2011 that all drugs with an insufficient SMR would be de-listed or subject to a systematically motivated decision if coverage was to

be maintained. However, to date there has been no decree authorizing this alternative coverage procedure, and the left-wing government elected in 2012 has not put this measure forward since then.

While this cost-containment strategy may be effective in reducing costs in the short term, the long-term effect is less clear. The French Accounts Commission has noted that de-listing drugs in a particular therapeutic class can have effects on prescription of drugs in other covered classes that may reduce or eliminate the cost savings. For example, when the class of expectorants was de-listed, savings of €45 million were anticipated. However, prescriptions were shifted to cough suppressants and bronchodilators, resulting in additional expenditure of €40 million for these drugs (Cour des comptes, 2011b) and highlighting the strong culture in French medical practice of offering prescriptions for every symptom. This underscores the need to address medical practice through, for example, changes in initial training and DPC (see section 4.2.3).

Price control

Strict control of tariffs was applied, notably to the price of drugs but also to other type of service such hospital remuneration, medical devices and professional tariffs. As a result of tight control of doctors' tariffs, extra-billing, which is not covered by SHI, was permitted starting in the 1980s for certain categories of doctor (see Sector 2 doctors; section 3.7.2). However, extra-billing in some specialties has significantly increased OOP payments, thereby impairing access in some areas where extra-billing is the rule (e.g. gynaecologists in Paris). For this reason, policies to reduce extra-billing were developed starting in 2013.

Drug price control

The CEPS (see section 2.7.2) is authorized to reduce previously negotiated drug prices under four circumstances: at the time of renewal of the agreement, particularly if there has been a significant increase in volume following extensions of indications; when the drug's patent expires and the first generics enter the positive list (generally 85% of the price of the brand name drug); when the evolution of drug expenditure threatens ONDAM targets (see section 3.3.3); or when studies of the drug once it is on the market reveal differences in efficacy or side-effects compared with the clinical trial data that were considered at the time the pricing agreement was made. Drug price reductions, both in the ambulatory and hospital sectors, constitute a significant source of savings in the annual health budget, with a target of €960 million in 2014 (Sécurité sociale, 2013c).

Economic evaluation is the newest cost-containment tool. Until recently, coverage and pricing decisions were made following HTA evaluations that were principally based upon clinical efficacy, not on cost–effectiveness or value to broader society. However, since October 2013, economic evaluation has been required for drugs meeting two conditions: having been evaluated as innovative (ASMR level 1, 2 or 3) and likely to have a significant impact on SHI expenditure (annual sales of €20 million or more in the first two years). The CEESP undertakes its assessment simultaneously with the Transparency Commission's evaluation of the SMR and ASMR of the drug (see section 2.8.4) to avoid undue delay before a drug may be marketed. Based on a file prepared by the manufacturer that includes the data and methodology underlying the modelling of the new drug's anticipated cost–effectiveness, the CEESP issues an opinion on the drug relative to existing therapeutic strategies, including the benefits expected or observed for patient health and quality of life. Unlike other countries, there is no fixed threshold for cost–utility or cost–effectiveness. The advice of the CEESP should be used by the CEPS in its price negotiations with the manufacturer. The first CEESP opinions were issued in early 2014, and so it is too soon to evaluate the effectiveness and appropriateness of its use.

An additional element in the reduction of drug expenditure has been the governmental pressure to expand the generic drug market, starting with the authorization of generic substitution under the 1999 Social Security Finance Act. For a pharmacist to substitute a generic for the brand name drug, the drug must appear on a list of drugs for which substitution is authorized. This list does not include all off-patent medicines. For example, paracetamol is not in this list. Doliprane, the brand name for paracetamol manufactured in northern France by Sanofi-Aventis, was the fourth most reimbursed drug in France in 2013, accounting for €315 million and leading to suspicion of protectionism. While the possibility of generic substitution of paracetamol has been invoked since 2002 and most recently in December 2013 by the ANSM, for the moment the government has chosen instead to reduce the price of the brand name drug (Cour des comptes, 2014b).

In terms of market share, generic drugs in France represent a much lower proportion of reimbursable drugs than in other European countries. The generic market's volume share (drug packages sold) grew from 3.4% in 1999 to 23% in 2011. However, in terms of value, it only accounted for 10.9% of the market. According to IGAS, the list of substitutable drugs in France is much more restrictive than in countries such as the Netherlands and Germany, which have

similar health systems. For example, in Germany, the market share of generic drugs among all covered drugs was 72.4% of volume and 34.7% of value (IGAS, 2012a).

Pharmacists have been the key players in expanding the use of generic drugs, largely because of financial incentives to encourage generic substitution, including higher manufacturer rebates compared with brand name drugs. Since the 2007 Social Security Finance Act, annual objectives for generic substitution have been set and a new incentive for patients was instituted in departments with low levels of generic substitution. Patients refusing generic substitution must pay for the prescription and then claim reimbursement from SHI rather than benefiting from third-party payment as is usually the case. Nonetheless, the rate of generic substitution strongly decreased between 2008 and 2012, falling from 82% to 72% of substitutable drugs, in part through public reluctance to accept certain generic drugs because of concerns about their efficacy and safety and partly from an increase in prescriptions marked as "non-substitutable" by doctors. To counter this trend, the SHI expanded the patient incentive for generics nationally to all SHI beneficiaries. In addition, a new P4P scheme for pharmacists was established in 2014, and the indicators upon which the remuneration is based include increasing the rate of generic substitution for a list of drugs newly included in the repertoire, with an overall goal of 85%. The government is also considering instituting penalties for doctors who abuse the designation "non-substitutable" in prescribing drugs.

The 2014 Social Security Finance Act authorized the substitution of off-patent biosimilar drugs (*biosimilaires*) at the pharmacy level, but only at the initiation of treatment. As in other European countries, France hopes to reduce drug expenditure through expanded use of biosimilar drugs.

Finally, the 2014 Social Security Finance Act also authorized a three-year trial that allows pharmacists in selected regions to dispense certain antibiotics in the exact prescribed number of units rather than by the box, with a fixed number of tablets in order to reduce waste and the risk of microbial resistance. The programme will be evaluated in terms of its effect on expenditure and also on the proper use of antibiotics.

Controlling the level of extra-billing by doctors

Extra-billing is permitted for doctors practising in Sector 2, which includes 42% of specialists and 11% of GPs. In an effort to discourage excessive extra-billing, a "carrot and stick" approach was taken in a 2012 amendment to the collective bargaining agreement between SHI and physician unions. Since 2013, Sector 2 doctors may be subject to sanctions for excessive extra-billing, defined as fees

in excess of 150% of official SHI tariffs. In addition, a voluntary three-year "Access to Health Care" contract (*contrat d'accès aux soins*) provides Sector 2 doctors with incentives to freeze their fees and average rate of excess billing at 2012 levels and to perform a share of their services at statutory tariff levels. The incentives include social and fiscal advantages and access for Sector 2 specialists to the €2 higher statutory tariffs of Sector 1 doctors. Patients consulting doctors who have signed the agreement also benefit from improved coverage of the services by SHI. However, from April 2015, patients of non-signatory doctors may be exposed to increased OOP costs under a decree that places a ceiling on the amount of extra-billing that may be covered by VHI contracts (125% of official SHI tariffs in 2015–2016 and 100% thereafter).

The average rate of extra-billing by doctors practising in Sector 2 decreased from 56.9% in 2011 to 56.3% in 2013, marking the end of nearly uninterrupted increases in extra-billing since the 1980s. One explanation is fear of sanctions for excessive extra-billing. The financial crisis may also been a contributing factor, as doctors responded to the reduced purchasing power of their patients.

Decreasing the impact on equity of shifting costs from SHI to private payers

Certain cost-containment measures, particularly reductions in coverage rates, have resulted in a shift towards private expenditure (VHI and OOP payments), which has the potential to affect equity in financing and raises concerns about equity in access. Measures have, therefore, been put into place to increase the level of VHI coverage as well as equity in VHI contracts.

For the less well-off, who were more significantly affected by decreases in SHI coverage, these measures include free public complementary VHI (CMU-C) and a voucher scheme (ACS) to facilitate purchase of private VHI contracts by individuals with low income who are not eligible for CMU-C (see section 3.3). In 2013, the revenue ceilings for access to CMU-C and ACS, which are adjusted annually for inflation, were increased by an additional 7% to afford broader access to these programmes. Nonetheless, many people who are eligible for these programmes fail to take advantage of them (CMU, 2013).

Only a share of the working population benefit from group contracts paid by employers (see section 3.5.2), which generally offer better coverage at lower cost. In order to increase equity in coverage, all employers will be required to offer group contracts for VHI to their employees by January 2016, pursuant to the January 2013 National Interprofessional Agreement between representatives of employers and employees and enacted under the Employment Protection Law (*Loi No. 2013–504 du 14 juin 2013 relative à la sécurisation de l'emploi*).

While this measure should result in greater equality in complementary coverage among employees, it has a number of shortcomings. Changes to the individual market for VHI, including a potentially less healthy population, may result in premium increases for those contracts.

In addition, the rules for "responsible contracts" (see section 3.5.3) are also being used as a tool to ensure greater equity in the extent of coverage by contract. The current reform, effective from April 2015, aims to reduce OOP payments by expanding the minimum coverage requirements to include 100% of the co-insurance amounts for official tariffs for all forms of care, except for thermal treatments, homeopathic drugs and drugs reimbursed at 15% or 30%. In addition, responsible contracts will be required to fully cover the daily hospital catering fee (see section 3.3.1), regardless of the length of hospitalization, and must provide at least minimum coverage of optical care. Moreover, this reform also involves group contracts. Employer-provided group VHI contracts will be required to cover dental prosthetics up to 125% of the official tariffs as well as a higher minimum level of optical care.

Medically based cost-containment

The concept of medically based cost-containment focuses on prescribers' behaviour; it aims to decrease medical practice variations by improving physicians' knowledge and rewarding good practice although financial incentives (see section 7.1.2 in Chevreul et al., 2010), which recently has included P4P mechanisms.

In recent years, lifelong learning through continuing medical education (*formation médicale continue*) has been subject to major changes (see Chevreul et al., 2010). From 2010, a new DPC (model 22) for health professions in the ambulatory sector was developed with a centralized managing body (*Organisme gestionnaire du développement professionnel continu*). It was designed to ensure quality and independence from the pharmaceutical industry and to evaluate and facilitate registration for training programmes. To date, implementation of the DPC has been problematic, with the continuing education obligation undefined in terms of content, number of hours and sanctions and the financing mechanism insufficient (IGAS, 2014a). However, a growing number of doctors are fulfilling this obligation.

On the financial mechanism side, a voluntary P4P scheme was introduced in 2009, consisting initially of voluntary contracts between SHI and GPs to improve individual practice (*Contrats d'amélioration des pratiques individuelles*) (see section 3.6.2 in Chevreul et al., 2010); GPs agreed to meet specific goals including chronic disease management, preventive health care and targets for

prescription of certain drugs and generics. Following its success with GPs, this scheme was incorporated into the physicians' collective bargaining agreement effective in 2012, with an expanded list of 29 quality indicators and extended to additional specialties with public health objectives (ROSP). By 2013, nearly 60% of physicians participated in ROSP. However, the 2013 results for ROSP revealed modest improvements in most of the targeted objectives, except for prevention, where rates of breast cancer screening and influenza vaccination were particularly low compared with the objectives (Sécurité sociale, 2013a).

6.1.3 Improving geographical access

While the number of physicians in active practice in France is at an all-time high, geographic inequalities remain and certain areas are underserved, particularly isolated rural communities and disadvantaged suburbs. With an average density of 330 doctors per 100 000 inhabitants, France ranks 14th among OECD countries and above the OECD average of 310 doctors per 100 000 inhabitants (Maurey, 2013). Consequently, the problem of so-called "medical deserts" does not result from an insufficient number of doctors but rather to their distribution across the territory.

In the short term, the shortage of professionals in some regions has been alleviated by the recruitment of foreign professionals, mainly from Belgium, Algeria, Germany, Morocco and, since 2007, Romania (Le Breton-Lerouvillois, 2007). Indeed, foreign-trained doctors accounted for 25% of doctors newly registered with the French Medical Council (*Conseil national de l'Ordre des médecins*) in 2013 (CNOM, 2014). However, these doctors do not necessarily practise in the areas or within the specialties where the greatest needs exist.

Financial incentives

Since the early 1990s, successive governments have tried with little success to address geographical disparities via a variety of voluntary initiatives with positive financial incentives to attract doctors to underserved areas. In 2007, SHI implemented control over nurses' geographical settlement using negative financial incentives and hoped that it would be able to extend this control to other professions in the future, especially to doctors. However, negative financial incentives to control doctors' settlement (see section 5.2 in Chevreul et al., 2010) were abandoned from 2010.

These measures have been unsuccessful for two main reasons. First, sanctions were strongly opposed by doctors' representatives. Moreover, incentives for settlement in rural areas have mainly focused on positive financial incentives

that did not counterbalance the negative issues faced by doctors choosing to live in areas that may be less attractive in terms of schooling for children, job opportunities for spouses, and so on.

Alternatives to financial incentives: quality of life, new practice models and task transfer

Innovation in regard to addressing geographical disparities has come from local policy-makers, who face tremendous pressure to find solutions to this critical situation. Local initiatives focused on improving the workplace quality of life of doctors, rather than providing financial incentives, have flourished. Such initiatives include providing practice structures so that doctors are not faced with the high start up costs in establishing their practices; offering the opportunity to work in group practices connected with other health professionals and so eliminate the need to find replacement cover when they go on holiday, which is often a problem for solo practitioners; paying doctors fixed salaries in lieu of the traditional FFS arrangement; and covering their liability risk.

Other initiatives to address medical deserts focus on new methods of health care organization that redistribute the role of different health care professionals and improve their coordination or efficiency in order to decrease the need for some categories of professionals and thus ameliorate accessibility problems. Experimentation with task transfer between professionals was permitted from 2004 and some such transfers have already taken place (e.g. between ophthalmologists and vision therapists). In 2008, a recommendation regarding the professional skill mix between doctors and other health care professionals was issued by HAS and the National Observatory of Health Professions. The proposed changes included a transfer of certain tasks from physicians to other health care professionals, an improvement in the education and training of nurses and a regulatory and financial framework for developing cooperation. In 2009, the transfer of tasks and cooperation between categories of health professionals was further encouraged, with protocols of cooperation being provided under the supervision of the ARS. Health professionals may design their own protocol or join an existing protocol that defines the nature of the cooperation, the services involved and the place and scope of the professionals' interventions. Task transfer has developed more slowly than expected for two main reasons. First, there is opposition to task transfer because physicians are paid on a FFS basis and so a reduction in the tasks for which they have a monopoly reduces their revenue potential. Second, this approach also raises a question of logistics: in the same zones in which an insufficient supply of physicians is found, there are also fewer nurses and other health professionals to perform the transferred tasks.

The use of information technologies was also perceived as a tool to reduce the need for health professionals, and the implementation of tele-health has been encouraged since 2010. Tele-health solutions have been developed mainly by the ARSs with the strong support of the Ministry in charge of Health, which announced a national strategy for telemedicine, including a methodological guide and recommendations on developing telemedicine projects (Ministry in charge of Health, 2012). The ARSs have a specific budget to develop these projects (€15 million in 2013), and since 2012, eight pilot projects have been financed and monitored in order to better understand the factors facilitating or limiting the development of telemedicine, to test financing models and to produce practice guideline. By the end of 2011, there were 256 telemedicine projects in France. While there is great enthusiasm for the possibilities of telemedicine to address access problems in underserved areas, it is too early to say whether it can live up to this promise. SHI is studying the financing options, with a particular focus on fixed-price reimbursements. The HAS has developed a framework for undertaking health economic evaluations of telemedicine projects.

Following the change of government in 2012, medical deserts once again became a priority on the political agenda, and in December 2012, the Minister in charge of Health presented the "Pact on Health Territories" (*Le Pacte Territoires-Santé*), which repackaged a number of previously announced measures rather than developing innovative measures. The 12 proposed measures focused on the training and practice establishment of young physicians, the development of alternative practice settings, and targeted goals and practice adaptations for isolated areas.

To date, several measures have been implemented:

- a designated person in each ARS to facilitate the establishment of practices by new doctors; and
- experimentation with new methods of remuneration for multidisciplinary teams of health professionals until 1 January 2015 as a precursor to a new agreement (subject to arbitration in the event no agreement can be reached).

Finally, the proposed Health Law (see section 6.2) includes measures to reduce geographic disparities, including interim medical personnel and a corps of substitute professionals and new modes of cooperation between health professionals.

6.1.4 Coping with the growing demand for long-term care for the elderly

The 2003 heat-wave was a shock for French society, given that 15 000 elderly died during this very hot summer mainly because of a lack of timely reaction from the social and health care sectors. This national trauma, combined with the reality of an ageing population, has made care for vulnerable and frail elderly people a major concern for policy-makers in France.

The population aged over 75 years is expected to nearly double by 2050, representing 15.6% of the population compared with 8% in 2011 (Vasselle, 2011). Because the probability of becoming dependent greatly increases with age, the number of frail elderly persons is expected to grow 40% by 2030 and 60% by 2060, rising from 1.15 million in 2010 to 1.55 million in 2030 and 2.3 million by 2060, corresponding to an estimated 3% of the population. While life expectancy in good health is also increasing (63.5 years for women and 61.9 for men in 2010), the demand for health and social services for the population of elderly individuals is clearly growing as well.

To meet these needs, two types of measure have been proposed on the one hand developing more services and, on the other hand, improving coordination of health and social care services in light of this population's complex care needs, particularly for those with chronic diseases. Financing remains the most intractable part of the policy equation.

Since the mid 2000s, two plans have been put in place with the aim of developing capacity in both residential care and the home care setting in order to support the policy objective of "ageing in place" (*maintien à domicile*). However, despite the genuine political will to develop services to respond to the needs of the frail elderly, the implementation of policy solutions did not move as quickly as was hoped. One reason for this is the difficulty in finding property developers for residential care, particularly for intermediary services between the residential and home care services (see section 5.8). A second reason is the heavy financial burden of residential care on general councils. A third reason is the difficulty in attracting skilled professionals to this sector because of the heavy burden of working with disabled frail elderly people, the relatively low salaries and the poor prospects for career development (see section 7.1.5 in Chevreul et al., 2010).

The current government has broadened the scope of the policy focus to include identification of risk factors in order to delay the loss of autonomy; to address the ways in which society must adapt to meet the needs of an ageing

population in terms of urban planning, lodging, transport and civil engagement; and to improve assistance to those who have become dependent – with the ongoing priority on ageing in place – along with measures to reduce the financial and care burdens on families (Aquino, 2013; Broussy, 2013; Pinville, 2013). A proposed law on the adaptation of society to an ageing population encompassing measures to address these priorities was introduced in 2014 as part of a two-step approach (see section 6.2).

Beyond providing and improving long-term care services, there is a growing recognition of the need for better care coordination for elderly patients moving through the system, both to improve the quality of care and as a source of cost savings, particularly those arising from avoidable hospitalizations as well as, in the longer perspective, those incurred in residential care by allowing people to remain at home longer. In order to develop and test tools and strategies to improve care coordination, the Ministry in charge of Health launched nine regional pilot projects in 2013 and 2014 aimed at optimizing the care pathways across the health, the social and health and the social sectors for frail people over 75 years. Under regional pilot projects designed to improve care for frail elderly individuals, each participating ARS can set the priorities for their local area based on an analysis of population needs and existing services, while benefiting from a common set of tools:

- personalized health plan (*plan personnel de santé*), which is an action plan developed by the preferred doctor (see section 3.3.1) and incorporating the objectives and expectations of the patient, to be implemented by a multidisciplinary team that includes the preferred doctor and at least two other health professionals; the €100 consultation fee is covered by SHI and shared among the health professionals involved in the care process;
- information-sharing platform at the local level for health professionals and families; and
- secure messaging tool to allow patient information to be shared among treating health professionals.

The lessons learned from this pilot programme will serve to facilitate expansion into other regions as well as other target populations.

The second and more politically and financially difficult step will be to address financing for residential long-term care. Financing long-term care for frail elderly persons is a long-standing concern for policy-makers. In 2010, French long-term care spending was estimated at €34 billion, or 1.73%

of GDP, of which 70% was publicly funded (Charpin & Tlili, 2011; Comité interministériel sur la dépendance, 2011). Nonetheless, public coverage does not provide adequate and equitable financial protection for the growing number of frail elderly individuals, who are expected to constitute 3% of the population by the year 2060. Since 2005, various financing reform proposals have been debated, ranging from a newly covered risk under the social security system to targeted subsidies for private long-term care insurance. However, to date no reform measure has been enacted.

While the social security system was the main funding source for long-term care after its creation, since the 1970s, local authorities' responsibility for funding long-term care has grown following the creation of a universal allowance with a means-tested co-insurance (APA; see section 3.6). Overall, this can be regarded as a shift from national solidarity-based financial protection to local tax-based financial protection. Despite the attempt to compensate for disparities among local authorities through a national funding source allocated based on needs and wealth criteria, this shift has increased geographical inequity. Moreover, it is more regressive, particularly because a share of local taxes is not income based. This situation will worsen if no action is taken to reinforce national solidarity (Chevreul & Berg Brigham, 2014).

Two major questions are, therefore, at the heart of the debate: how to ensure the sustainability of APA funding given the rapidly increasing financial burden on local authorities and how to decrease the burden of user charges that exceed the average revenue of elderly persons because of the cost of lodging and catering fees in nursing homes (€2892 per month on average in 2012; ATIH, 2014). An estimated additional €400 million will be required annually for the next 20 years to finance the anticipated care needs of the elderly and dependent population.

While long-term care taxes are higher for the salaried population than for self-employed people and retirees, increasing equity in financing by equalizing the long-term care tax treatment of the entire population would be a logical first step. The previous right-wing government did not do so in order to cater to its electorate. The left-wing government elected in 2012 partly did so by implementing the additional contribution, CASA, on retiree pensions in order to finance its planned reform to address loss of autonomy (see section 6.2). However, increasing self-employed and retiree taxes up to the general population level will not be sufficient to finance the anticipated demand in the medium to the long run, and additional revenue sources will have to be found.

To achieve this aim, a genuine political and societal choice is needed in order to strike the right balance between increasing the ability of elderly people to use their own assets to pay for care and increasing solidarity, which is link to increase contributions for the long-term care system. Details about the second phase of the reform to address loss of autonomy, in particular the financing mechanism, have not been announced (see section 6.2). Unlike the 2007–2011 period, when the long-term care financing reform was announced by the president and entrusted to powerful ministers, this reform was announced by a delegate minister, who has little power in the government and is unknown to the general population. Given the significant level of political support necessary to achieve the financing reform, these developments do not offer much reason for optimism in the short term.

6.2 Future developments

The National Strategy for Health and the 2015 Health Reform Law
Following the instalment of the newly elected left-wing government in 2012, the Ministry in charge of Health launched a National Strategy for Health (*Stratégie nationale de santé*) for guiding public policy for the coming year. This is the starting point for the planned 2015 Health Reform Law, which is expected to be enacted by the end of 2015.

The Strategy focuses on decreasing social and geographic health inequalities. While the French health care system currently focuses on acute care, the reform stresses, on the one hand, the importance of developing prevention and care for chronic diseases, and, on the other hand, the importance of improving efficiency and equity in financing by decreasing OOP payments.

This guidance was translated into the planned 2015 Health Reform Law, focusing on developing prevention measures aimed at young people, defining patient care pathways, improving geographical access to care in underserved areas and ensuring financial access to care.

However, many measures are not dedicated to addressing health inequalities, and the reform legislation may be viewed as a rather inhomogeneous group of measures addressing various health system issues. Some are dedicated to changes in the management of the system by improving coordination of the policies of the state, SHI and ARSs, which could be seen as a step backwards in the decentralization process. The reform also proposes a series of measures to increase patient rights and patient input, such as increasing user participation

in designing health policy and in the management of health agencies and other institutions. Overall, this reform, while addressing important issues in the system, mostly draws upon previously proposed measures and mechanisms with very little innovation.

Coping with the growing demand for long-term care for the elderly: reform to prevent and provide for loss of autonomy

The first part of a two-step plan to address loss of autonomy (*projet de loi relatif à l'adaptation de la société au vieillissement*) is expected to be enacted by the end of 2015 and to be operational by mid-2016. The first step focuses on measures designed to facilitate ageing in place, with the key measure consisting of increased ceilings and reduced individual financial participation under the APA (see section 3.6) to pay for assistance at home for an estimated 700 000 dependent frail elderly individuals. Other provisions of the proposed law include financing of measures to prevent and delay the loss of autonomy; adaptation of housing options, from new technologies for automation in private homes to modernization of nonmedical collective housing facilities, renamed autonomy residences (*résidences autonomie;* see section 5.8.1); and respite assistance for caregivers. These measures will be financed by CASA (enacted in 2013 as described above), which is estimated to raise €645 million per year. However, most of the 2013 and 2014 revenues raised were not kept for the reform but channelled to cover deficits in an unrelated social security programme. Starting in 2015, the CASA revenues should be fully dedicated to financing the autonomy reform.

The second step of the reform will focus on institutional care, in particular reducing OOP payments for nursing home residents. Once more, the most significant challenge will be finding the revenues to finance expanded public coverage of institutional care. There is actually no political declaration on suggested mechanisms and one can wonder if this will remain a "ghost reform" after more than a decade of promised long-term care financing reforms that were repeatedly delayed and ultimately not acted upon.

7. Assessment of the health system

The French health care system has long enjoyed the reputation of being one of the best in the world. It combines universal health coverage with a generous supply of health services. This reputation comes in large part from success in meeting its goals of full coverage, access without waiting lists, patient choice and satisfaction. The combination of a basic universal public health insurance system and voluntary complementary private insurance, which provides reimbursement for co-payments required by the public system as well as coverage for medical goods and services that are poorly covered by the public system, results in low OOP costs by international standards, and high medical care utilization. France's average life expectancy of over 80 years is in part testament to the strong combination of good health care and good public health policies in France. Despite these positives, there are also some shortcomings, particularly when considering efficiency and socioeconomic inequalities in health outcomes and inequities in access to health care. Major problems include lack of coordination between the hospital sector, the ambulatory care sector and the health and social care sector, in particular in caring for patients with chronic diseases but also in developing preventive care and intersectoral policies. However, major efforts have been undertaken since 2009 to address these issues.

Health expenditure per capita is higher than the OECD average and France ranks usually among the top four countries depending on the indicator used and year. The high level of health expenditure has become increasingly important at a time when the public system is facing chronic deficits, and improving allocative and technical efficiency is a major concern in order to ensure the financial viability of the system. Measures developed since 2010 have been particularly effective in achieving SHI cost-containment and financing equity,

as shown by the fact that the national ceiling for SHI expenditure has been underspent since that time, while the percentage of OOP expenditure has remained stable over the same period.

7.1 Stated objectives of the health system

Under the 1946 Constitution, the French State guarantees health protection to all, a right that dates back to the 1789 Declaration of the Rights of Man and of the Citizen. The 2004 Health Insurance Act sets out the stated objectives of the French health system:

- universal coverage, independent of age or health status;
- equitable access to health care;
- equitable contribution to the costs of the health care system; every person is expected to contribute, to the extent of his/her capacity, to the appropriate use of the resources endowed by the nation to SHI; and
- continuity, coordination, and effectiveness of care.

France's average life expectancy of over 80 years is in part a testament to the combination of broad access to health care and strong public health policies. Despite these positives, weaknesses remain. Major problems include lack of coordination between hospital and ambulatory services, geographic disparities in health care resources and financial barriers to some specialists because of extra-billing and certain services and devices having poor SHI coverage. In the broader economic context, high levels of health expenditure and chronic deficits have raised questions about the financial sustainability of the system, particularly in light of the growing demand for health services by an ageing population.

In terms of governance, increased responsibility for coordination and planning of the French health care system has devolved to the regional level over the last decades and in particular from 2010. However, the National Health Conference, an advisory body to the Ministry in charge of Health, has criticized the governance at the national level as fractured and bureaucratic, thereby impeding progress in organization and coordination at the regional level (National Health Conference, 2013). Such structural impediments may also hinder development of Health in All policies at the national level (Leppo et al., 2013). Political commitment to intersectoral approaches, while strong in certain areas such as emergency response, nutrition and the fight against illegal

drugs, has not otherwise appeared to be a priority. However, following the 2012 National Strategy for Health goals, a new interministerial committee (*Comité interministériel de la santé*), comprising all ministers as well as the secretary of state for the budget, was created in June 2014 to ensure improvement in population health and reduction of health inequalities through improved coordination on all matters affecting health determinants (socioeconomic, geographic, environmental, educational, etc.; see section 6.2).

7.2 Financial protection and equity in financing

7.2.1 Financial protection

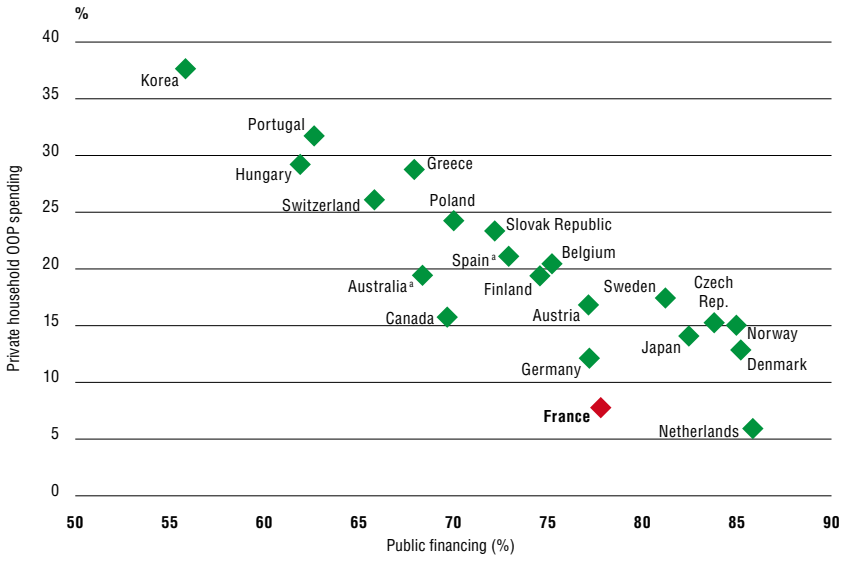
Overall, financial protection of the French population is good. France is among the OECD countries for which public financing of health care expenditure is the highest and OOP spending is the lowest. In 2011, the Netherlands, the Czech Republic, Japan, Denmark, Norway and Sweden were the only countries with a higher share of publicly funded health expenditure. This is achieved through a strong commitment by the French to their public SHI (93% of the French population declare that the SHI system should remain publicly funded) and the 1999 Universal Health Coverage Act, which provided universal health care coverage for all people living in France (see section 3.2). In 2013, 77.4% of personal health expenditure was publicly funded, with the remainder financed by a combination of VHI (13.8%) and OOP payments (8.8%). Reduction of financial barriers for groups at greatest financial risk was partly achieved through the 1999 Universal Health Coverage Act by the provision of CMU-C and through the implementation of the ACS, which provides means-tested vouchers for VHI, thus reducing exposure to OOP expenditure (see section 3.3).

However, the proportion of the population covered by complementary health insurance does not fully reflect the degree to which financial risk is covered. Indeed, there are large discrepancies within the covered population in terms of the cost of contracts and level of coverage (see section 7.2.2). While 94% of the population had complementary health insurance in 2012 (either VHI or CMU-C), among those covered by VHI, 70% say that hospitalization is well covered by their contracts, as opposed to vision correction (52%), extra-billing by specialists (48.5%) and dental prosthetics (46.4%) (Célant, Guillaume & Rochereau, 2014).

In 2011, OOP expenditure in France as a share of household consumption was the lowest of OECD countries after the Netherlands, and well below the OECD average (OECD, 2013) (Fig. 7.1). OOP spending is mostly for gaps in depth of coverage, including poorly covered goods and services (optical, dental, devices); extra-billing, particularly by specialists; and flat-rate deductibles designed to moderate consumer behaviour (capped at €50/year) (see section 3.3.1). Reductions in the scope of coverage, as a result of de-reimbursement of certain drugs and decisions by some VHI firms to no longer cover certain drugs with low SHI reimbursement contribute to OOP expenditure. OOP spending on drugs increased 4.2 percentage points between 2005 and 2008, growing from 13% to 17.2% of personal health expenditure and reaching 18.3% in 2012 (DREES, 2013a). However, in 2013, OOP spending decreased for the second year as a result of reductions in drug expenditure, most notably a decrease in non-covered drugs for the first time, as well as a decrease in the cost of optical devices, and a slowdown in the rise of extra-billing fees (DREES, 2014).

Fig. 7.1

International comparison of public financing and OOP spending (2012 current health expenditures)



Source: DREES, 2014.
Note: [a] 2011 data.

7.2.2 Equity in financing

Overall, the financing of the health system results in a redistribution of resources both horizontally from the well to the sick and vertically from people with higher incomes to those with lower incomes, through taxes on revenues (HCAAM, 2013b). SHI has facilitated a 19% reduction of inequalities in standards of living (four-fifths from the method of financing and one-fifth from services) (Duval & Lardellier, 2012).

The financing of SHI is considered progressive because of the tax relief provided to individuals with low salaries as well as the different CSG contribution rates depending on the type of revenue (HCAAM, 2013). However, private expenditure through VHI and OOP is regressive, and the transfer of expenditure not covered by SHI towards VHI, for which the functioning and financing principles are not solidarity based as they are for SHI, has exacerbated inequalities in the financial access to care (HCAAM, 2013b). Moreover, people with lower incomes spend a greater share of their disposable income on private health care expenditure than the wealthier (Duval & Lardellier, 2012). Under the Kakwani index, which measures vertical equity, OOP financing would be considered progressive if the annual share borne by the lowest revenue deciles is lower than their share of total revenues. In France, the poorest 20% account for 7.1% of total revenues but for 14.7% of OOP spending, resulting in a Kakwani index of 0.25, demonstrating that OOP expenditure is vertically inequitable and regressive (Geoffard & de Lagasnerie, 2012).

Patients with the highest levels of OOP spending are on average older (60 years or more), with one or more chronic diseases covered by the ALD programme (see section 3.3.1) and are three times more likely to have been hospitalized than the general population (HCAAM, 2013c). While patients who benefit from the ALD programme are covered 100% for care related to their chronic condition, they still may face high OOP expenditure for other health care, as well as for hospitalization (the daily hospital catering fee is not covered by ALD, even for hospitalization related to the covered disease) and extra-billing in excess of official tariffs that is not covered by SHI.

Individuals do not pay for private VHI contracts according to their incomes but rather based on an estimate of their needs determined by age in the case of mutual firms or often by health questionnaires for commercial insurers or potentially in optional group contracts offered by provident institutions (see section 3.5.2). Moreover, group VHI contracts generally provide better coverage than individual contracts. Indeed, employees covered by group VHI contracts have a double financial advantage over those with individual

contracts: employer contributions reduce the cost of the contract and employee contributions are subject to income tax exemptions, which are more beneficial to those with higher incomes and are thus regressive (HCAAM, 2013a). Starting in 2016, all private employers will be required to provide group VHI contracts to their employees and finance half of the expense (see section 6.1.2).

However, given the increasing importance of private financing in the French financing scheme, reforms have focused on ensuring financial access to complementary health insurance for those with the lowest revenues as well as on improving the content of VHI contracts for the population in general. In January 2013, the multiyear plan to fight poverty and support social inclusion comprised initiatives to expand access to free or subsidized complementary health insurance (CMU-C and ACS) and to ensure better coverage of certain items (such as vision care and hearing aids) under CMU-C (see section 6.1.2). The ceilings for CMU-C and ACS were increased in July 2013, expanding access to as many as 500 000 and 850 000 new beneficiaries, respectively (CMU, 2013). However, these figures assume a higher rate of participation in the programmes than is currently the case (80% for CMU-C and 40% for ACS). Indeed, the take up of ACS has fallen over the period 2010–2012 (CMU, 2013; IGAS, 2014b). In order to further reduce the financial burden of purchasing VHI contracts, ACS beneficiaries may also be eligible for supplementary financial assistance (*aides supplémentaires à ACS*) from the SHI funds. The number of beneficiaries of this type of assistance increased by 61% from 2011 to 2012.

In 2012, a €30 flat charge to access AME, the programme covering certain undocumented residents (see section 3.3.1), was eliminated. However, a very strong increase in expenditure for this programme in 2013 has led the Minister in charge of Health to reconsider financial incentives to hospitals providing care to AME beneficiaries and to evaluate the practices of regional SHI funds in granting or refusing AME coverage. The Paris region accounts for 70% of care financed through the AME. The policy challenge will be on how to remove financial barriers that prevent people from accessing care while also guarding against fraud.

Additional measures to ensure financial access for patients with low incomes are targeted at health care providers, who are prohibited from engaging in extra-billing for individuals covered by CMU-C and ACS. Beneficiaries of CMU-C and AME are also entitled to third-party payment and so do not need to advance the funds for their treatment and then seek reimbursement. Third-party payment will be extended to ACS beneficiaries starting in 2015, and the

Minister in charge of Health plans to generalize third-party payment for the entire population by 2017 (Ministry in charge of Health, 2013) (see section 6.1.2). However, self-employed physicians strong oppose this measure.

Officially authorized extra-billing (billing in excess of official tariffs) for doctors practising in Sector 2 is another challenge to equity in financing, especially when it comes to financing care provided by self-employed specialist physicians. However, the government has developed measures to restrain excessive extra-billing (exceeding 150% of the SHI tariff), and the average rate of extra-billing by doctors practising in Sector 2 decreased from 56.9% in 2011 to 56.3% in 2013, marking the end of nearly uninterrupted increases in extra-billing since the late 1970s (see section 6.1.2).

7.3 User experience and equity of access to health care

7.3.1 User experience

The French population has a relatively high level of satisfaction with the provision of health care, with 88% rating the overall quality of the health care system as good or very good, compared with 71% of the EU28 (European Commission, 2014).

Freedom of choice of health care provider is a traditional feature in France. Despite disincentives for patients to directly access secondary care without prior approval from their "preferred doctor" (see section 3.3.1), freedom of choice of doctors has not effectively been restricted, as patients are still able to choose the doctors they want to visit (whether referred or not) and they can very easily switch preferred doctors by completing a form with the doctor of their choice.

The number of physicians in France also gives patients greater options in their choice of provider. While not particularly high compared with some other European countries (about 330 physicians per 100 000 population in 2011), physician density is just over the OECD average (320) and higher than in several other developed countries, including the United Kingdom (280), the United States (250) and Canada (240). Despite the fact that this covers a relatively unequal picture within the countries, the relatively high numbers of physicians, in particular in urban areas, plus a high level of choice, have resulted in good access to health care in terms of availability of services.

In terms of patient participation in health system governance, there have been mixed results for the initiatives already in place. Major improvements have been made since the 2002 Act on Patients' Rights and Quality of Care (see section 2.9), which introduced the concept of health democracy. First, representation of health system users was implemented in hospitals by creating a commission of user relations and quality of care to ensure respect for patient rights and provide advice on patient admissions and treatment. After 2009, it was expanded to the health and social care sector and provided for participation by patients and their representatives in the CRSAs (see section 2.9.5) that are used to define health priorities at the regional level. However, this is still considered to be insufficient (Compagnon & Ghadi, 2014), and the National Strategy for Health has emphasized the need to involved and accommodate patients and their representatives within the organization, functioning and evolution of the health system, which has been included as part of the planned 2015 Health Reform Law forecasted for the end of 2015 (see section 6.2).

Waiting times are not a significant issue in the French health care system. Indeed, patients in France are three times less likely to report forgoing care because of long waits than the EU27 average (Eurostat, 2012). However, waiting times for some diagnostic procedures, particularly MRI, have raised questions about the availability and geographic distribution of high-technology medical equipment and also for some specialists, such as ophthalmologists.

7.3.2 Equity of access to health care

High levels of accessibility and choice combined with low OOP expenditure have resulted in overall high system utilization. SHI benefits are the same across the population, although the level of coverage varies under certain circumstances (e.g. 100% coverage for chronic diseases under the ALD programme; see section 3.3.1). However, VHI has become an integral part of the financing system, and the benefits covered under VHI contracts may vary significantly, with group contracts generally providing better coverage than individual contracts (see section 3.5.2).

As a result, despite universal coverage and relatively low OOP payments, inequities are seen in health care utilization. For the same level of need, individuals with high incomes are more likely to have specialist visits than those with lower incomes. This disparity is particularly true for specialist visits. A study of income-related inequities in utilization in OECD countries found that France and Spain were the most inequitable in the needs-adjusted probability and frequency of specialist visits (Devaux & de Looper, 2012).

In addition to the differences in utilization levels by income, population surveys report financial constraints as a barrier to seeking care. Nearly 26% of the population declared that they had forgone at least one health treatment for financial reasons (Célant, Guillaume & Rochereau, 2014). While France falls below the EU27 average for unmet health needs for financial reasons, it is just above average for those in the lowest income quartile (Eurostat, 2012). The largest income gaps for unmet need are evident with respect to care that is poorly reimbursed. For example, individuals in the lowest income quintiles are four times more likely to report an unmet need for optical care for financial reasons than people in the highest income quintile.

In addition to the financial burden of certain poorly reimbursed care and devices, there is also concern that the deductibles for doctors' visits, ancillary care, transportation and drug prescriptions (not covered by VHI) increase access problems. However, because deductibles fall most heavily on a vulnerable population (sick people), an annual ceiling for deductibles has been set at €50 per person per year (see section 3.2).

Additional explanations for unmet care needs may be found on the demand and/or the supply side. On the demand side, one could hypothesize that lack of familiarity with the system, time costs or level of income inhibits treatment seeking. On the supply side, ensuring geographical access has been an ongoing concern of French policy-makers. While the average physician density of 330 doctors per 100,000 inhabitants should provide adequate coverage, their distribution across the territory has left some areas underserved. French doctors' freedom of settlement has made efforts to address this issue challenging. Financial incentives have been unsuccessful in addressing geographical disparities, and current reform efforts have focused on alternatives, including new practice models and task transfer (see section 6.1.3). Moreover, the absence of physicians who do not practise extra-billing in certain areas is likely to play a role. More alarming is the refusal of some physicians to treat patients benefiting from CMU-C, ACS or AME coverage; some doctors appear to be prejudiced against these patients for whom a third-party payment system applies (physicians are directly paid by insurance rather than the patient) and there is no possibility of charging over the official tariffs (extra-billing) (Défenseur des droits, 2014).

7.4 Health outcomes, health service outcomes and quality of care

7.4.1 Population health

Overall, the health status of the French population is good, as reflected by life expectancy and healthy life-years (see Fig. 1.2). Infant and maternal mortality rates have decreased significantly since the late 1970s, as has the adolescent birth rate (see Table 1.7). However, mortality from all cancers and from diabetes has increased over the same period (see Table 1.4). There are marked health disparities between men and women and between regions. Moreover, social inequalities in health status persist (see Table 1.6). These differences reflect the combined effect of differences in health risk behaviours, level of exposure to environmental risks and work conditions.

Morbidity

Major improvements in morbidity linked to cardiovascular diseases have been seen in recent years (see Table 1.5). Nonetheless, the growing incidence of diabetes remains a major concern.

Several risk factors contribute to the burden of noncommunicable diseases in France. The number of adults who are overweight or obese has grown significantly since the 1990s. A 2009 survey found that 13.9% of men and 15.1% of women were obese (DREES, 2011a). Excessive alcohol consumption underlies a large share of morbidity, including cancers, chronic liver disease, psychiatric problems and consequences from accidents. However, alcohol and tobacco consumption per inhabitant has decreased since 2000, the latter due in part to the emergence of electronic cigarettes. Nonetheless, France still has one of the highest alcohol consumption rates in the EU.

Infectious diseases are responsible for a large share of morbidity. While most often banal, especially in children, infectious diseases pose greater risks for those already in fragile health, including the elderly and those with chronic illnesses. Public health surveillance is concerned not only with the level of vaccination coverage but also monitors four infectious diseases: legionellosis, tuberculosis, AIDS and sexually transmitted infections. The growth in antibiotic-resistant strains of bacteria is also a major public health concern.

Mortality

Within Europe, France's overall mortality rate is among the lowest. Since 2004, cancer is overall the primary cause of mortality in France, followed by heart disease and violent deaths (accidents, suicide and other external causes)

(see Table 1.4). However, gender differences are apparent, with cancer being the leading cause for men and heart disease the leading cause for women. Excess mortality for both heart disease and cancer is found in men linked to alcohol and tobacco use as well as to environmental exposures in the workplace. Nonetheless, between 2000 and 2010, an increase in certain cancers in women is linked to increases over the same period in smoking behaviour (larynx, trachea, bronchial and lung) and alcohol consumption (pancreas, liver and bladder). Excess mortality among men remains high with respect to traffic accidents (3.9 times higher than in women) and suicides (3.1 times higher). The suicide rate in France is among the highest in Europe for both men and women.

A 2003 study of mortality amenable to health care found that France ranked favourably compared with other European countries on all classifications: excluding ischaemic cardiopathies, only Sweden and Norway had lower rates of avoidable mortality; when 50% of ischaemic cardiopathies were included, France had the lowest rate of avoidable mortality. For life expectancy adjusted for incapacity, France ranked first among the 14 countries studied (HCSP, 2013). The periodic report on the health state of the French population (*L'état de santé de la population en France*), which reports on the indicators identified in the 2004 Public Health Act, did not include mortality amenable to health care among its indicators because of definitional problems (DREES, 2011a).

The five-year survival rates for breast cancer and colorectal cancer have improved since the 1990s. For breast cancer, five-year survival for patients diagnosed in 2001–2004 was 89%, compared with 81% for those diagnosed in 1989–1991. This trend is seen in most western countries, reflecting improvements in therapeutic treatments since the early 2000s as well as early diagnosis from screening. Five-year survival for colorectal cancer increased from 53% to 58% for patients diagnoses in the same period. For cervical cancer, the five-year survival rate is 65%, reflecting a slight decrease over time that paradoxically may be linked to screening, which permits early detection of invasive lesions that have a poorer prognosis (Grosclaude et al., 2013).

One-third of deaths before age 65 were for causes considered avoidable through risk reduction (tobacco, alcohol, dangerous driving and suicide). Between 2000 and 2008, the greatest reductions in avoidable mortality were seen for traffic accidents, AIDS and alcohol-related deaths (DREES, 2011a). In 2013, mortality from traffic accidents reached its lowest level since 1948 and was 10.5% lower than in 2012 (Ministry of the Interior, 2014). Policies imposing lower speed limits and lower thresholds for blood alcohol of drivers have unquestionably been key factors.

7.4.2 Health service outcomes and quality of care

There have been many recent initiatives to improve health care quality and its measurement in France. Over the past decade, a French project team has collaborated to develop and validate a series of patient safety indicators. Since 2008, the HAS has undertaken national campaigns to collect data on quality and security indicators for hospitals, which are now required not only to collect the data but also publish it (see Scope Santé, section 2.9.1). The National Programme for Patient Security 2013–2014 (*Programme national pour la sécurité des patients*) is a key element in the 2012 National Strategy for Health.

Preventive care

The development of prevention policies within a system built upon a curative focus has been fairly recent, starting in 2002 and increasing in emphasis after 2010 when a framework for actions to support prevention, health promotion and therapeutic education was designed. It is currently the major aim of the National Strategy for Health and the planned 2015 Health Reform Law (see section 6.2). A wide range of actors is involved in prevention policy at the national level, which has complicated coordination and led to interministerial governance of this issue.

Immunization services are well organized in France (see section 5.1.3), and child vaccination rates are high: at age 2, 98% of children were vaccinated for diphtheria, tetanus, polio and pertussis (DTPCoq in French) in 2010 and 90% for measles in 2011 (Fontenau, Guthmann & Lévy-Bruhl, 2013). Influenza vaccinations for individuals age 65 and older are covered 100% by SHI. During the 2010–2011 influenza season, the vaccination rate for persons of this age group suffering from chronic illnesses (most frequently cardiac disease and diabetes) was 71%, while it fell to 57.8% among those who were not chronically ill (Guthmann, Fonteneau & Lévy-Bruhl, 2012).

Care for patients with chronic conditions

The French health care system is oriented to curative care as opposed to managing long-term chronic diseases, which are complex and require the involvement and coordination of various professionals belonging to the hospital, ambulatory and health and social care sectors. Given that the number of people with chronic conditions has increased alongside longer life expectancy and medical progress, increasing attention has been paid to improving coordination of care and developing care models that are better equipped to meet the needs and improve the quality of life of the chronically ill population. Some of these initiatives come from the SHI, which has developed disease management

programmes: first, one focusing on patients with diabetes and, since late 2014, one focusing on patients with asthma. Moreover, indicators of good follow-up of chronic diseases have been introduced in ROSP (see section 3.7.2).

The HAS has also developed guidance for pathways for patients with the following chronic conditions: chronic obstructive pulmonary disease, Parkinson's disease, chronic kidney disease, congestive heart failure, bronchopulmonary cancer and malignant pleural mesothelioma, Hodgkin's lymphoma (adult), type 2 diabetes (adult) and atrial fibrillation. These guides aim to help physicians better deal with acute episodes and to retard the progression of the disease to the extent possible by improving care practice and coordination as well as by fostering patient involvement and participation in care, particularly through therapeutic patient education. Moreover, tools for patients and health professionals are provided.

However, one of the limitations of such programmes is that while doctors have a high level of awareness of practice guidelines published by HAS, the recommendations may not be assimilated because they are too long and sometimes confusing. For example, a 2013 report of the National Academy of Medicine (*Académie nationale de médecine*) identified a number of areas of overprovision of care, including excessive biological testing and high-technology imaging and overprescription of drugs (Mornex, 2013). For cancer screening, a large number of mammographies are undertaken over age 75, despite the recommended age cut-off, resulting in overdiagnosis of small lesions of limited medical interest that do not change the life expectancy of the patient and may expose her to needless anxiety, additional testing and even surgery.

Moreover, the management of acute episodes and disease-related complications is a key element in ensuring high quality care for patients with chronic conditions and avoiding unnecessary hospitalizations. For avoidable hospital admissions for adults with asthma and chronic obstructive pulmonary disease, France has much lower rates than the OECD26 averages (OECD, 2013). Nonetheless, regional variations in the rate of hospitalizations for exacerbations of chronic obstructive pulmonary disease, ranging from 0.1 to 2.0 per 1000 in 2010, have led the Ministry in charge of Health and the largest SHI fund to request a study by the HAS regarding the appropriateness of hospitalizations during such acute episodes (HAS, 2012). Better data are needed for certain conditions. For example, avoidable hospital admission rates are not available for diabetes because it is not necessarily included as secondary diagnosis in the PMSI database, which also does not include the patient's ALD status.

Improvements have been observed in in-hospital mortality rates (deaths within 30 days of admission) following acute myocardial infarction and ischaemic stroke. Between 1995 and 2010, 30-day mortality for all patients with acute myocardial infarction fell from 12.9% to 3.9% (Hanssen et al., 2012), while for ischaemic stroke in adults aged 45 and over the 30-day mortality deaths fell from 10.6% to 8.5% between 2005 and 2010 (OECD, 2013).

Finally, the Eurobarometer survey showed a major increase in the proportion of adverse events reported (+61 percentage points) (European Commission, 2014). This may reflect better awareness by patients of the recourse available to them. A 2009 national survey of serious adverse events (*événements indésirables graves*) in hospitals found a frequency of 6.2 per 1000 days of hospitalization (9.2 in surgery and 4.7 in medicine), with more than 40% classified as avoidable (Table 7.1) (DREES, 2011c). Since January 2010, the surgical checklist has become part of the hospital certification process.

Table 7.1
Number of adverse patient safety events identified in 2007

Adverse events	ENCC	ENCC	PMSI	PMSI
	Number of hospital stays	*Number of hospital stays*	*Population at risk*	*Prevalence rate (%)*
PSI 5: foreign body left during procedure	75	173	7 639 056	0.08
PSI 7: infections caused by IV lines or catheters	915	4 274	6 248 132	0.68
PSI 12: postoperative pulmonary embolism	3 003	18 968	2 829 610	6.70
PSI 13: postoperative sepsis	1 852	8 368	1 190 606	7.03
PSI 15: laceration or accidental puncture	1 149	6 887	7 725 975	0.89
PSI 18/19: obstetric trauma for vaginal delivery	415	2 933	640 967	4.58
Total	**15 107**	**98 288**	–	–

Source: Nestrigue & Or, 2011.
Note: ENCC: National hospital cost scale for the acute care sector.

7.4.3 Equity of outcomes

While France has achieved a good level of equality in access, particularly with respect to primary care, there is concern that the universal coverage policies introduced in the 1990s have not reduced other persisting areas of inequality. For example, the seven-year gap in life expectancy at age 35 between working class men and managers persists (Danet, 2012). Individuals in the lowest income quintile are three times more likely to report very poor health

than those in the highest income quintile (Célant, Guillaume & Rochereau, 2014). In terms of mortality, regional (see Fig. 1.3) and gender (see Table 1.3) differences are apparent. Indeed, adult male mortality is more than double adult female mortality.

An integrated and comprehensive policy has been argued to be the appropriate response for addressing interdependent health determinants. However, previous attempts to establish a broad intersectoral approach to health policy have faltered (see section 2.6). The Ministry in charge of Health's 2012 National Strategy for Health emphasized the need to prioritize addressing the determinants of poor health (Ministry in charge of Health, 2013) and established a new interministerial health committee for addressing health inequalities.

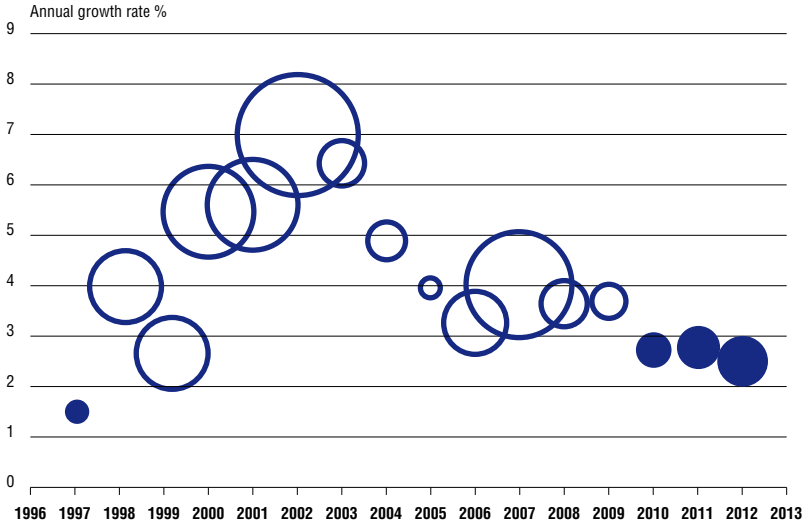
7.5 Health system efficiency

If the French population is willing to keep the SHI system public, the share of the population that is ready to spend more of their income on health has decreased, falling from 70% in 2010 to 55% in 2013. Indeed, improving the efficiency of the health care system to ensure the financial viability of the system is important in order to avoid the growth of the deficit and its related burden on future generations, or alternatives such increasing statutory contributions or reducing the services provided, which would adversely affect both the economy and access to care (HCAAM, 2013c).

7.5.1 Allocative efficiency

In France, there is no formal mechanism of resource allocation for the overall health care system and across sectors of care as there is in the United Kingdom. The main resource allocation mechanism in place is the ONDAM, which sets the overall level of SHI expenditure and its distribution across six subsectors of care (ambulatory care, health care in hospitals paid on DRG basis, health care in other hospitals, health and social care for the elderly, health and social care for disabled people, and other types of care; see section 3.3.3). However, the ONDAM subsector targets are not necessarily based solely on population. Fig. 7.2 shows the ONDAM annual growth rate approved by the parliament and the size of the overrun or underspending for the period 1997–2012. The establishment of an Alert Committee in 2004 (see section 3.3.3) has insured greater credibility of this system and, since 2010, the overall ONDAM targets have been underspent, suggesting that the implemented SHI cost-containment measures have been successful.

Fig. 7.2
Annual growth rate in ONDAM and size of overrun or underspending of targets



Source: DREES, 2013a (provisional results for 2011 and 2012).
Note: The size of the bubbles shows the relative size of the overrun (white bubbles) or underspending (black bubbles) compared with the established targets.

Coordination of planning and financing in different sectors of care and public health policies

There is a need for improved efficiency in resource allocation in France, in particular in the coordination of public health policies and the planning of health services and professionals. This is evidenced, for example, by OECD health indicators, which point to the poor results of the French system with regards to avoidable mortality in males (see Fig. 1.2). Improvements in coordination between the different sectors have gradually been attained through initiatives led by the state at the general policy level and also by the Ministry in charge of Health in the field of health and social services (see sections 2.4 and 2.8.2).

Budget forecasting by programmes integrated across ministries at the national level

There has been a move towards broader integration of health care and public health policies through two organic laws (a type of law that supplements constitutional provisions for purposes of implementation) that dramatically changed the paths of resource allocation for both the State Finance Act (in 2003) and the Social Security Finance Act (in 2005). These laws required budgets to follow policy objectives cutting across traditional administrative boundaries.

Solidarity and integration and response to health threats, for example, became state objectives with dedicated budgets across ministries and administrations. Cross-cutting missions are solidarity and integration, health, health safety and social benefits and pensions.

Within the social security budget, baseline figures and trends are used to define the specific objectives of the Social Security Finance Act, not only for SHI programmes but also for other programmes of the social security branches (such as workplace safety and environmental safety). These programmes for quality and efficiency (*programmes qualité efficience*) establish precise objectives (targets) and indicators. For SHI, the focus is on five key areas: equal access to care, prevention, improved quality of care, efficiency in the provision of care, and financial sustainability of the system (Sécurité sociale, 2014). These targets and indicators represent an endeavour to improve the fairness and efficiency of the system and financial sustainability while avoiding negative effects on health gains and health equity. A budget is set for each programme followed by a report on spending and achievement of targets based on the established indicators. The 2014 report on the SHI programmes for quality and efficiency emphasized the need to strengthen efficiency in order to control the expenses associated with a high level of access to care (Sécurité sociale, 2014).

The annual State Finance Act also establishes policy objectives across administrative boundaries. Annual performance reports (*rapports annuels de performances*) by programme area measure the actual versus expected results in meeting the objectives based on indicators and the associated costs (Mission Ministérielle Santé, 2013). For general government expenditure on health, there are programmes focusing on the two main areas financed by the state: one for prevention, health security and health resources and the other for the public mechanisms to ensure access to free care for the poorest residents (CMU-C and AME). For 2013, the government found mixed results in meeting its objectives, particularly with respect to the AME programme, which exceeded the projected budget.

The organic laws instituted a major shift from a spending model to an investment model. SHI had historically been labelled a "blind payer", reimbursing providers without assessing the effectiveness of interventions. The laws impose an obligation to make prospective decisions on the important issues in population health and to allocate resources accordingly.

Coordination of planning and financing of the different sectors of care and public health policies at the regional level

Since the 2000s, emphasis has been on the lack of coordination in the French health care system and the anticipated financial (and health) gains from improved information, development of joint care protocols and regional planning based on the public needs of the local populations. Efficiency gains were expected from the merger at the regional level of all institutions involved in the planning and financing of health services and public health policies in a one-stop shop: the ARS (see section 2.4). Improvement in capacity planning and allocation of health care resources were expected to result from the PSRS that would lead to a needs-based approach for planning the hospital, ambulatory and health and social care sectors (see section 4.2). However, the PSRSs have not demonstrated the anticipated results and they will be reformulated in the health care reform (see section 6.2).

Each ARS enters into a four-year contract for targets and resources with the Ministry in charge of Health, the SHI and the CNSA that establishes objectives and resources, which are approved and evaluated by the CNP. The ARSs are financed by general government funding (77%), SHI contributions (18%) and the CNSA (4%), and the CNP also oversees the distribution of financing among the ARSs based on a risk-adjusted allocation formula that accounts for the need to reduce health inequalities among the regions. Nonetheless, the real financial challenge with respect to the ARSs lies not in their operating budgets but in their ability to increase the overall efficiency of the health system to control health costs. However, none of the indicators included in the contract for targets and resources specifically measures the impact of the ARSs on SHI expenditure (Cour des comptes, 2012a).

7.5.2 Technical efficiency

According to the most recent projections of HCAAM, health expenditure will outpace growth of the economy until the middle of this century. If no corrective measures are taken, the SHI deficit will reach €14 billion in 2020, nearly double the €7.7 billion deficit recorded in 2013, and will reach €41 billion by 2040. The major drivers of the growth in health spending are the ageing of the population, the increased prevalence of chronic diseases, the cost of new technologies and the manner in which the health care system is organized. In light of these trends, HCAAM has underscored the urgent need to improve the efficiency of the system (HCAAM, 2013c).

The foremost target for efficiency efforts has been the hospital sector. The French health care system has long had a hospital-centric, curative orientation. The number of full-time beds in France is among the highest in Europe by population (see Fig. 4.1a), while the occupation rate is only 67%. Therefore, the challenge is to reduce hospital capacity while maintaining a network of hospitals that responds to regional needs for emergency services and overall access to care. However, the activity-based financing model (T2A; see section 3.7.2) may undermine efforts to improve efficiency because tariffs are established based on demand that already has been identified as suboptimal.

While average length of stay has steadily fallen since the mid-1990s (see Fig. 4.1b), the rate of ambulatory hospitalizations remains far below that of neighbouring countries. The estimated savings from a shift to ambulatory surgery could amount to €5 billion or 7% of the ONDAM target for hospital expenditure. Other efficiency measures include combining certain resources across hospitals and redeploying personnel based on actual rather than maximum capacity (IGAS, 2012b).

Reducing inefficiency in the hospital sector also involves better organization of primary care. For example, fewer patients should be sent directly to emergency care as part of the broader effort to avoid unnecessary hospitalizations, but this requires ready access to GPs and after-hours care. Multidisciplinary care models are seen as one answer to meeting these needs, although expansion has been hampered by lack of agreement regarding remuneration and task transfer. Moreover, in order to facilitate better coordination across sectors to improve both efficiency and quality of care, information technology systems must be interoperable and used on a widespread basis. However, this objective remains far from being met, particularly with respect to information technology systems in doctors' private offices (see section 4.1.4).

Increasing the market share of generics among prescribed drugs is a key efficiency goal. However, the list of substitutable drugs in France is relatively limited compared with other European countries (see section 6.1.2). In addition, consumer reluctance to embrace generics, compounded by doctors who indicate on the prescription that the drug may not be substituted, has further limited growth. Incentives aimed at both doctors and pharmacists have been used to spur growth of the generic market. For example, the prescription of generic statins has generally increased as new generic forms have entered the market. However, between 2006 and 2011, a downward trend emerged. Since 2012, prescription of generic statins has been among the efficiency indicators for the ROSP, and resulted in a 6.9 percentage point increase by March 2013.

7.6 Transparency and accountability

The transparency of the health system was called into question in the wake of the Mediator scandal and resulted in major changes to the regulatory agency for health products (now ANSM), including disclosure of direct and indirect interests by health professionals providing expert advice within the decision-making process (see section 6.1.1). Since 2014, a searchable public database (www.transparence.sante.gouv.fr) identifies health professionals' relationships with companies marketing drugs and other health products.

Nonetheless, accountability has improved in recent years through monitoring of spending and public health objectives under the Social Security Financing Laws, as well as through the development of information systems.

8. Conclusions

In France, the overall health status of the population is good as well as the degree of financial protection provided by the health system. Women live longer and older people remain in better health than in many European countries. Patients in France are three times less likely to report forgoing care because of long waits than the EU average. Public financing of health care expenditure is among the highest in Europe and OOP spending one of the lowest.

Nonetheless, major problems include social and geographical inequalities in health status and access to care; a relative underdevelopment of preventive care compared with acute care; and a lack of coordination between the hospital sector, the ambulatory care sectors and the health and social care sectors, in particular in caring for patients with chronic diseases but also in developing preventive care and intersectoral policies.

Social inequalities remain in terms of health status and access to care. Life expectancy at age 35 is seven years lower for working class men and three years lower for working class women compared with managers. These social health inequalities result not only from risk factors such as alcohol and tobacco consumption but also from differences in access to health care, which have increased over time. Indeed income-related inequalities in health care utilization remain despite universal coverage and relatively low OOP payments. This inequity in access is predominant in goods and services for which patients' OOP expenditure is the highest, such as dental care and consultations with specialists engaging in extra-billing. Geographical disparities in the density of health professionals also affect access to care in some areas of France. While the average physician density should provide adequate nationwide coverage, certain areas are underserved.

The significant burden of chronic diseases exacerbated by an ageing population and the increasing level of obesity have underscored the need for ongoing monitoring and treatment as well as preventive strategies to reduce the incidence and burden of chronic diseases such as diabetes. However, the focus of the health system has been on acute care rather than long-term chronic care and prevention.

In light of these issues, the health care system in France has undergone a series of reforms since 2010 to increase equity in access to care for socially disadvantaged individuals, those living in underserved geographic areas and the most vulnerable populations.

Recent reforms have focused on addressing access barriers to health care and improving chronic and long-term care to better meet population needs. The level of equity in access has improved for individuals with the lowest revenues thanks to expanded eligibility for CMU-C and financial assistance to purchase ACS. Third-party payment for beneficiaries of these programmes has further reduced the financial barriers to accessing care, although extension of third-party payment to all SHI beneficiaries has drawn strong opposition by physicians. In addition, the quality of VHI contracts has been an ongoing concern, given the importance of VHI in financing health care. A new mandate will require all employers to offer and partially finance group VHI contracts for employees from 2016.

The so-called medical deserts have been a priority on the political agenda for over two decades. However, because French physicians have freedom of settlement, it is challenging to address this issue. Coercive measures were considered but abandoned because of the significant political power of doctors, and financial incentives have been generally unsuccessful. Government reform efforts have shifted to multidisciplinary practice models, task transfer and the use of information technologies such as tele-health as means of compensating for lower physician density, particularly in rural areas. Moreover, promising initiatives focusing on improving the workplace quality of life of doctors have flourished at the local level.

Measures to improve chronic and preventive care have been implemented, and early results show some practice improvements. Physicians have embraced P4P, despite initial resistance from their unions, and better monitoring of patients with chronic diseases such as diabetes has been documented. However, objectives related to prevention, including vaccination and cancer screening, have shown mixed results. Financial incentives to improve care coordination by GPs are also being tested as part of regional pilot projects designed to improve care for frail elderly individuals.

Indeed, the long-term care reform has been repeatedly delayed by intense political and institutional resistance to certain provisions because of the financial impact of measures to address financing of care in nursing homes. Indeed, while the increasing demand for long-term care remains a major concern in the government's plan, the current government has broadened the scope of the policy focus to include identification of risk factors to delay the loss of autonomy, to address the ways in which society must adapt to meet the needs of an ageing population and to improve support to those who have become dependent. However, measures to reduce the financial and care burdens on families through public coverage of long-term care for the elderly in order to achieve greater equity in access have not been voted upon, despite the fact that these issues constitute some of the most pressing challenges to the system.

The future challenges facing the French health care system are underscored by the measures planned for the 2015 Health Reform Law: on the one hand, improvements in the organization of care to meet the needs of an ageing, increasingly chronically ill population while combating inequalities through improved efficiency and equity in financing and geographic access; and on the other hand, the reform of long-term care to preserve the autonomy of elderly individuals and facilitate ageing at home while reducing the financial and care burdens on families.

9. Appendices

9.1 References

Allonier C, Guillaume S, Rochereau T (2013). *Enquête sante et protection sociale 2004: premiers résultats.* Paris, Institut de recherche et documentation en économie de la santé (Questions d'économie de la santé, No. 110) (http://www.irdes.fr/Publications/Qes/Qes110.pdf, accessed 7 November 2015).

ANSM (2013). *Analyse des ventes de médicaments en France en 2012*. Paris, Agence nationale de sécurité du médicament et des produits de santé (http://ansm.sante.fr/var/ansm_site/storage/original/application/3df7b99f8f4c9ee634a6a9b094624341.pdf, accessed 7 November 2015).

Antona D et al. (2011). L'infection par le virus de l'hepatite B: une maladie sexuellement. *Bulletin Épidémiologique Hebdomadaire,* 26–28:307–310 (http://opac.invs.sante.fr/doc_num.php?explnum_id=7151, accessed 7 November 2015).

Aquino JP (2013). *Anticiper pour une autonomie préservée: un enjeu de société*. Paris, Ministère de la santé, Comité Avancée en âge, prévention et qualité de vie (http://www.social-sante.gouv.fr/IMG/pdf/Rapport_Aquino.pdf, accessed 7 November 2015).

Asip Santé (2012). *Rapport d'activité*. Paris, Agence des systèmes d'information partagés de santé (http://esante.gouv.fr/sites/default/files/ASIP%20SANTE_RA%202012_BD_0.pdf, accessed 7 November 2015).

ATIH (2014). *Enquête de coûts en EPHAD: données 2012*. Lyon, Agence Technique de l'Information sur l'Hospitalisation (http://www.atih.sante.fr/sites/default/files/public/content/2450/dpresse_enquete_couts_ehpad.pdf, accessed 7 November 2015).

Attal-Toubert K, Vanderschelden M (2009). *La démographie médicale à l'horizon 2030: de nouvelles projections nationales et régionales*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Études et résultats No. 679) (http://www.drees.sante.gouv.fr/la-demographie-medicale-a-l-horizon-2030-de-nouvelles-projections-nationales-et-regionales,4230.html, accessed 7 November 2015).

Beck F et al. (2010). *Premiers résultats du baromètre santé 2010: évolutions recentes du tabagisme en France*. Saint-Denis, France, Institut national de prévention et d'éducation pour la santé (http://www.inpes.sante.fr/30000/pdf/Evolutions-recentes-tabagisme-barometre-sante2010.pdf, accessed 7 November 2015).

Berchet C, Jusot F (2011). *Immigration and health care utilization in france: new evidences from the Health, Health Care and Insurance Survey.* Villejuif, France, Collège des economistes de la sante.

Berchet C, Jusot F (2012). État de sante et recours aux soins des immigres en France: une revue de la litterature. *Bulletin Épidémiologique Hebdomadaire,* 2–4:17–21 (http://opac.invs.sante.fr/doc_num.php?explnum_id=7829, accessed 7 November 2015).

Bigot R, Croutte P (2011). *La diffusion des technologies de l'information et de la communication dans la société française*. Paris, Centre de recherche pour l'étude et l'obsevation des conditions de vie (Collection des rapports) (http://www.credoc.fr/pdf/Rapp/R278.pdf, accessed 7 November 2015).

Binder-Foucard F et al. (2013). *Estimation nationale de l'incidence et de la mortalite par cancer en France entre 1980 et 2012. Partie I: tumeurs solides*. Saint-Maurice, France, Institut de veille sanitaire.

Blanpain N (2011). *L'espérance de vie s'accroit, les inegalites sociales face à la mort demeurent*. Paris, Institut national de la statistique et des etudes economiques (http://www.insee.fr/fr/ffc/ipweb/ip1372/ip1372.pdf, accessed 7 November 2015).

Borgetto M (2008). La représentativité des syndicats en droits de l'assurance maladie. *Sève, Les Tribunes de la Santé*, 18:39–45.

Bouyssou A et al. (2011). La syphilis en France: analyse des donnees de surveillance sur 10 ans, 2000–2009. *Bulletin Épidémiologique Hebdomadaire,* 26–28:295–298 http://opac.invs.sante.fr/doc_num.php?explnum_id=7146; accessed 9 November 2015).

Broussy L (2013). *L'adaptation de la société au vieillissement de sa population. FRANCE: ANNEE ZERO!* Paris, Mission Interministérielle sur l'adaptation de la société française au vieillissement de sa population (http://www.social-sante.gouv.fr/IMG/pdf/Rapport_Broussy.pdf, accessed 7 November 2015).

Brutel C, Levy D (2012). *Le nouveau zonage en bassins de vie en 2012*. Paris: Institut national de la statistique et des etudes economiques (http://www.insee.fr/fr/ffc/ipweb/ip1425/ip1425.pdf, accessed 7 November 2015).

CADA (2012). *Rapport d'activite 2012*. Paris, Commission d'accès aux documents administratifs (http://www.cada.fr/IMG/pdf/rapport_2012_complet_a4.pdf, accessed 7 November 2015).

Calvet L et al. (2013). *Santé bucco-dentaire des enfants: des inegalites des le plus jeune âge*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Études et résultats No. 847) (http://www.drees.sante.gouv.fr/sante-bucco-dentaire-des-enfants-des-inegalites-des-le-plus,11172.html, accessed 7 November 2015).

Cassou B (2006). La formation en santé publique, un domaine en mutation. (Haut conseil de santé publique édition).*Actualité et Dossier en Santé Publique*, 55:15–65.

Cazein F et al. (2014). Découvertes de séropositivité VIH et sida – France, 2003–2012. *Bulletin Epidémiologique Hebdomadaire*, 9–10:154–162 (http://opac.invs.sante.fr/doc_num.php?explnum_id=9417, accessed 16 November 2015).

Célant N, Guillaume S, Rochereau T (2014). *Enquête sur la santé et la protection sociale 2012*. Paris, Institut de recherche et documentation en economie de la sante (Irdes Rapport 556) (www.irdes.fr/recherche/rapports/556-enquete-sur-la-sante-et-la-protection-sociale-2012.pdf, accessed 7 November 2015).

Centre for European and International Liaisons for Social Security (2012). *Rapport statistique. Partie 1: soins de santé maladie AT-MP.* Paris, Centre des liaisons européens et internationals de sécurité sociale (http://www.cleiss.fr/docs/stats/rapport_stat_2012_partie1.pdf, accessed 7 November 2015).

Charpin J-M, Tlili C (2011). *Perspectives démographiques et financières de la dépendance*. Paris, Ministère de la santé (Rapport du Groupe de travail, Comité interministériel sur la dépendance) (http://www.social-sante.gouv.fr/IMG/pdf/rapport_g2_def-2.pdf, accessed 7 November 2015).

Chevreul K, Berg Brigham K (2014). Financing long-term care for frail elderly in France: the ghost reform. *Health Policy*, 111:213–120.

Chevreul K et al. (2010). France: health system review. *Health Systems in Transition*, 12(6):1–291.

Chevreul K et al. (2013). The cost of mental disorders in France. *European Neuropsychopharmacology,* 23(8):879–886.

CIA (2009). *The world factbook*. Washington, DC, Directorate of Intelligence.

CMU (2012). *Rapport d'activité 2012 du fonds CMU*. Paris, Fonds de financement de la protection complémentaire de la couverture universelle du risque de maladie (http://www.cmu.fr/fichier-utilisateur/fichiers/Rapport_activite_2012.pdf, accessed 7 November 2015).

CMU (2013). *Rapport d'activité 2013 du fonds CMU*. Paris, Fonds de financement de la protection complémentaire de la couverture universelle du risque de maladie (http://www.cmu.fr/fichier-utilisateur/fichiers/Rapport_activite_2013, accessed 7 November 2015).

CNAMTS (2011). *Médecins exerçant en secteur 2: une progression continue des dépassements d'honoraires, la nécessité d'une réforme structurelle du système*. *Point d'information du 17 mai 2011*. Paris, Caisse nationale d'assurance maladie (http://www.ameli.fr/fileadmin/user_upload/documents/DP_medecins_en_secteur_2_-_vdef.pdf, accessed 7 November 2015).

CNOM (2013). *Atlas de la démographie médicale en France, situation au 1er janvier 2013*. Paris, Conseil national de l'Ordre des médecins (http://www.conseil-national.medecin.fr/sites/default/files/atlas_national_2013.pdf, accessed 10 November 2015).

CNOM (2014). *Atlas de la démographie médicale en France, situation au 1er janvier 2014*. Paris, Conseil national de l'Ordre des médecins (http://www.conseil-national.medecin.fr/sites/default/files/atlas_2014.pdf, accessed 7 November 2015).

CNSA (2008). *Centres d'Action Médico-Sociale Précoce: résultats de l'enquête quantitative menée en 2008*. Paris, Caisse Nationale de Solidarité pour l'Autonomie (http://www.cnsa.fr/documentation/Rapport_CAMSP_Sept_2008(1).pdf, accessed 7 November 2015).

Coldefy M (2005). *Les enfants et adolescents pris en charge dans les centres médico-psycho-pédagogiques*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (http://www.drees.sante.gouv.fr/les-enfants-et-adolescents-pris-en-charge-dans-les-centres-medico-psycho-pedagogiques,4524.html, accessed 7 November 2015).

Collectif Inter-associatif sur la Santé (2014). *Le baromètre des droits des malades*. Paris, Collectif Inter-associatif sur la Santé (http://www.leciss.org/sites/default/files/140319_Barometre-Droits-Malades-2014-CISS-Lh2_Rapport.pdf, accessed 7 November 2015).

Comité interministériel sur la dépendance (2011). *Stratégie pour la couverture de la dépendance des personnes âgées*. Paris, Ministère des affaires sociales, de la santé et des droits des femmes (Rapport du Groupe de travail No. 4) (http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/114000335/0000.pdf, accessed 7 November 2015).

Compagnon C, Ghadi V (2014). *Pour l'an II de la démocratie sanitaire*. Paris, Ministère de la santé (http://www.sante.gouv.fr/IMG/pdf/Rapport_DEF-version17-02-14.pdf, accessed 7 November 2015).

Cour des comptes (2010). *La politique d'équipement en imagerie médicale*. Paris, Cour des comptes (http://www.ccomptes.fr/content/download/1470/14541/version/1/file/Rapport_securite_sociale_2010_septembre_2010_chapitre12.pdf, accessed 7 November 2015).

Cour des comptes (2011a). *L'organisation des soins psychiatriques: les effets du plan les effets du plan «Psychiatrie et sante mentale» (2005–2010)*. Paris, Cour des comptes (http://www.ccomptes.fr/content/download/1778/17803/version/3/file/Rapport_public_thematique_soins_psychiatrie.pdf, accessed 7 November 2015).

Cour des comptes (2011b). *Sécurité sociale 2011*. Paris, Cour des comptes (http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/114000546/0000.pdf, accessed 7 November 2015).

Cour des comptes (2012a). *La mise en place des agences régionales de santé*. Paris, Cour des comptes (http://www.ccomptes.fr/content/download/48303/1346445/file/rapport_securite_sociale_2012_mise_en_place_agences_regionales_sante.pdf, accessed 16 November 2015).

Cour des comptes (2012b). *Les activités de soins de suite et de réadaptation*. Paris, Cour des comptes (http://www.ccomptes.fr/content/download/48307/1346485/version/1/file/rapport_securite_sociale_2012_soins_de_suite_readaptation.pdf, accessed 7 November 2015).

Cour des comptes (2012c). *Sécurité sociale 2012*. Paris, Cour des comptes (http://www.ccomptes.fr/Publications/Publications/Securite-sociale-2012, accessed 11 February 2014).

Cour des comptes (2013a). *La gestion du patrimoine immobilier des CHU affecté aux soins*. Paris, Cour des comptes (http://www.ccomptes.fr/Publications/Publications/La-gestion-du-patrimoine-immobilier-des-CHU-affecte-aux-soins, accessed 7 November 2015).

Cour des comptes (2013b). *L'hospitalisation à domicile. Sécurité sociale 2013*. Paris, Cour des comptes (http://www.ccomptes.fr/content/download/60180/1493544/version/2/file/rapport_securite_sociale_2013_hospitalisation_domicile.pdf?bcsi_scan_43167910db6ab4d9=1, accessed 7 November 2015).

Cour des comptes (2013c). *Sécurité sociale 2013*. Paris, Cour des comptes (http://www.ccomptes.fr/content/download/60184/1493582/version/1/file/rapport_securite_sociale_2013_permanence_des_soins.pdf, accessed 7 November 2015).

Cour des comptes (2014a). *Rapport public annuel 2014: les partenariats public–privé du plan Hôpital 2007: une procédure mal maîtrisée*. Paris, Cour des comptes (http://www.ccomptes.fr/Actualites/A-la-une/Rapport-public-annuel-2014-les-partenariats-public-prive-du-plan-Hopital-2007-une-procedure-mal-maitrisee, accessed 7 November 2015).

Cour des comptes (2014b). *Rapport sur l'application des lois de financement de la sécurité sociale*. Paris, Cour des comptes (https://www.ccomptes.fr/content/download/73450/1911527/version/3/file/20140917_rapport_securite_sociale_2014.pdf, accessed 7 November 2015).

Couty E (2009). *Missions et organisation de la santé mentale et de la psychiatrie*.Paris, Ministère de la santé et des sports (http://www.sante.gouv.fr/IMG/pdf/Rapport_Missions_et_organisation_de_la_sante_mentale_et_de_la_psychiatrie-2.pdf, accessed 7 November 2015).

CREDOC (2012). *La diffusion des technologies de l'nformation et de la communication dans la société française*. Paris, Centre de recherce pour l'étude et l'obsevation des conditions de vie (http://www.credoc.fr/pdf/Sou/Credoc_DiffusiondesTIC_2012.pdf, accessed 7 November 2015).

Danet S (2012). *L'état de sante de la population en France 2011*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Etudes et résultats No. 805) (http://www.drees.sante.gouv.fr/IMG/pdf/er805.pdf, accessed 7 November 2015).

Défenseur des droits (2014). Les refus de soins opposés aux bénéficiaires de la CMU-C, DE L'ACS et de L'AME. Paris, Défenseur des droits (http://www.defenseurdesdroits.fr/sites/default/files/atoms/files/ddd_r_20140301_refus_soins.pdf, accessed 7 November 2015).

de Peretti C et al. (2012a). Personnes hospitalisees pour accident vasculaire cerebral en France: tendances 2002–2008. *Bulletin Epidémiologique Hebdomadaire,* 41:125–130 (http://www.invs.sante.fr/Publications-et-outils/BEH-Bulletin-epidemiologique-hebdomadaire/Archives/2012/BEH-n-10-11-2012, accessed 7 November 2015).

de Peretti C et al. (2012b). Personnes hospitalisees pour infarctus du myocarde en France: tendances 2002–2008. *Bulletin Epidémiologique Hebdomadaire,* 41:459–465.(http://opac.invs.sante.fr/index.php?lvl=notice_display&id=11070; accessed 7 November 2015).

Deuffic-Burban S, Costagliola D (2006). Including pre-AIDS mortality in back-calculation model to estimate HIV prevalence in France, 2000. *European Journal of Epidemiology*, 21:389–396.

Devaux M, de Looper M (2012). *Income-related inequalities in health service utilisation in 19 OECD countries, 2008–2009*. Paris, Organisation for Economic Co-operation and Development (Working Papers No. 58) (http://www.oecd-ilibrary.org/docserver/download/5k95xd6stnxt.pdf?expires=1446996262&id=id&accname=guest&checksum=EADEF8E31BCB1B1BE3440FE6E96A5D75, accessed 7 November 2015).

DGOS (2012). *Guide méthodologique pour l'élaboration des CPOM.* Paris, Ministère du Travail, de l'Emploi et de la santé (http://www.sante.gouv.fr/IMG/pdf/Guide_CPOM_2012.pdf, accessed 7 November 2015).

Dourgnon P, Guillaume S, Rochereau T (2012). *Enquête sur la santé et la protection sociale 2010*. Paris, Institut de recherche et documentation en economie de la sante (Irdes Rapport No. 553) (http://www.irdes.fr/Publications/Rapports2012/rap1886.pdf; accessed 7 November 2015).

DREES (2001). *Les établissements médico-sociaux pour adultes handicapés activité, clientèle et personnel au 31 Décembre 2001*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (http://www.drees.sante.gouv.fr/IMG/pdf/seriestat64.pdf, accessed 7 November 2015).

DREES (2008). *Les structures pour enfants handicapés en 2006: un développement croissant des services à domicile. Résultats de l'enquête ES 2006*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (http://www.drees.sante.gouv.fr/IMG/pdf/er669.pdf, accessed 7 November 2015).

DREES (2011a). *L'état de santé de la population en France: suivi des objectifs annexés à la loi de santé publique. Rapport 2011*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (http://www.drees.sante.gouv.fr/IMG/pdf/etat_sante_2011.pdf, accessed 7 November 2015).

DREES (2011b). *Les soins de suite et de réadaptation en 2008: patientèle traitée et offre de soins*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Dossiers solidarité et santé No. 23) (http://www.drees.sante.gouv.fr/IMG/pdf/article201123-3.pdf, accessed 7 November 2015).

DREES (2011c). *Sécurité du patient*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Dossiers solidarité et santé No. 24) (http://www.drees.sante.gouv.fr/IMG/pdf/dossier24.pdf, accessed 7 November 2015).

DREES (2012). *La situation financière des organismes complémentaires assurant une couverture santé*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (http://www.drees.sante.gouv.fr/la-situation-financiere-des-organismes-complementaires,11062.html, accessed 7 November 2015).

DREES (2013a). *Comptes nationaux de la santé 2012*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Série statistiques No. 185) (http://www.drees.sante.gouv.fr/comptes-nationaux-de-la-sante-2012,11188.html, accessed 7 November 2015).

DREES (2013b). *Établissements et services pour enfants et adolescents handicapés: résultats de l'enquête ES 2010*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Série statistiques No. 177) (http://www.drees.sante.gouv.fr/IMG/pdf/seriestat177.pdf, accessed 7 November 2015).

DREES (2013c). *Le panorama des établissements de santé,*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Collection Études et statistique, édition 2012).

DREES (2013d). *Les établissements et services pour adultes handicapés: résultats de l'enquête ES 2010*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Série statistiques No. 180) (http://www.drees.sante.gouv.fr/IMG/pdf/seriestat180.pdf, accessed 7 November 2015).

DREES (2014). *Comptes nationaux de la santé 2013*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (http://www.drees.sante.gouv.fr/comptes-nationaux-de-la-sante-2013,11347.html, accessed 7 November 2015).

Duval J, Lardellier R (2012). *La redistribution verticale opérée par l'assurance maladie*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Études et résultats No. 815) (http://www.drees.sante.gouv.fr/IMG/pdf/er815.pdf, accessed 7 November 2015).

Eco-Santé (2013). *France 2013*. Paris: Institut de recherche et de documentation en économie de la santé pour Éco-Santé.

Eco-Santé (2014). *Eco-Santé* [online database]. Paris, Eco-Santé (http://www.ecosante.fr/, accessed 7 November 2015).

Epidemiology Centre on the Medical Causes of Death (2013). *Indicateurs de mortalité*. Le Vésinet, France, Centre d'épidémiologie sur les causes médicales de décès.

Ettelt S et al. (2010). Involvement of ministries of health in health service coverage decisions: is England an aberrant case? *Social Policy & Administration*, 44:225–243.

European Central Bank (2013). *Average annual exchange rate for the period 2000–2012 (euro)*. Frankfurt, European Central Bank (http://sdw.ecb.europa.eu/browseTable.do?node=2018794&FREQ=A&CURRENCY=USD&sfl1=4&DATASET=0&sfl3=4&SERIES_KEY=120.EXR.A.USD.EUR.SP00.A, accessed 9 November 2015).

European Commission (2014). *Special eurobarometer 411: patient safety and quality of care*. Brussels, European Commission (http://ec.europa.eu/health/patient_safety/eurobarometers/ebs_411_en.htm, accessed 7 November 2015).

Eurostat (2012). *European Union statistics on income and living conditions (EU-SILC)*. Luxembourg, European Commission (http://www.eui.eu/Research/Library/ResearchGuides/Economics/Statistics/DataPortal/EU-SILC.aspx, accessed 7 November 2015).

Eurostat (2013). *Gini coefficient of equivalised disposable income*. Luxebourg, European Commission (http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tessi190, accessed 7 November 2015).

Eurostat (2015). *Healthy life year and life expectancy at birth, by sex*. Luxebourg, European Commission (http://ec.europa.eu/eurostat/en/web/products-datasets/-/TSDPH100, accessed 7 November 2015).

Fagot-Campagna A et al. (2010). *Prévalence et incidence du diabète, et mortalité liée au diabète en France: synthèse épidémiologique*. Saint-Maurice, France, Institut de veille sanitaire (http://www.invs.sante.fr/publications/2010/plaquette_diabete/plaquette_diabete.pdf, accessed 7 November 2015).

Fenina A, Le Garrec M-A, Koubi M (2011). *Les Comptes nationaux de la santé en 2010*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (http://www.drees.sante.gouv.fr/IMG/pdf/er773-2.pdf, accessed 10 November 2015).

Ferrante A (2014). *Les pharmacies depuis 2000*. Paris, Institut national de la statistique et des etudes economiques (Insee Premiere No. 1525) (http://www.insee.fr/fr/ffc/ipweb/ip1525/ip1525.pdf, accessed 7 November 2015).

FINESS (2014). Fichier national des établissements sanitaires et sociaux [online database]. Paris, Fichier National des Établissements Sanitaires et Sociaux (http://finess.sante.gouv.fr/jsp/index.jsp, accessed 7 November 2015).

FNARS (2008). *Lits halte soins santé: ce qu'il faut savoir*. Paris, Fédération nationale des associations d'accueil et de réinsertion sociale (Supplément de la Gazette No. 62) (http://www.fnars.org/images/stories/migration/2217_supplement_n_62_-_lits_halte_soins_sante.pdf, accessed 7 November 2015).

Fontenau L, Guthmann J-P, Lévy-Bruhl D (2013). Estimation des couvertures vaccinales en France à partir de l'Echantillon généraliste des bénéficiaires (EGB): exemples de la rougeole, de l'hépatite B et de la vaccination HPV. *Bulletin Épidémiologique Hebdomadaire,* 8–9: 72–76 (http://opac.invs.sante.fr/doc_num.php?explnum_id=8818, accessed 7 November 2015).

Garnero M, Le Palud V (2013). *Les contrats les plus souscrits auprès des complémentaires santé en 2010*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Études et résultats No. 837). (http://www.drees.sante.gouv.fr/les-contrats-les-plus-souscrits-aupres-des-complementaires,11117.html, accessed 7 November 2015).

Geoffard PY, de Lagasnerie G (2012). *Réformer le système de remboursement pour les soins de ville, une analyse par microsimulation*. Paris, Institut national de la statistique et des etudes economiques (http://www.insee.fr/fr/ffc/docs_ffc/es455f.pdf?bcsi_scan_43167910db6ab4d9=0&bcsi_scan_filename=es455f.pdf, accessed 7 November 2015).

Goulet V et al. (2011). Enquête nationale de prévalence de l'infection à *Chlamydia trachomatis* (volet NatChla de l'enquête CSF 2006). À quelles personnes proposer un dépistage? *Bulletin Epidémiologique Hebdomadaire*, 12:160–164 (http://opac.invs.sante.fr/doc_num.php?explnum_id=6966, accessed 7 November 2015).

Grosclaude P et al. (2013). *Survie des personnes atteintes de cancer en France 1989–2007*. Paris, Institut National du Cancer (http://opac.invs.sante.fr/doc_num.php?explnum_id=8758, accessed 7 November 2015).

Guérin S et al. (2013). Alcohol-attributable mortality in France. *European Journal of Public Health*, 23(4):588–293.

Guthmann J-P, Fonteneau L, Lévy-Bruhl D (2012). *Mesures de la couverture vaccinale en France: sources de donnees et donnees actuelles*. Saint-Maurice, France, Institut de veille sanitaire (http://www.invs.sante.fr/Publications-et-outils/Rapports-et-syntheses/Maladies-infectieuses/2012/Mesure-de-la-couverture-vaccinale-en-France, accessed 7 November 2015).

Hanssen et al. (2012). French Registry on acute ST-elevation and non ST-elevation myocardial infarction 2010. FAST-MI 2010. *Heart*, 98:699–705.

HAS (2010). *Evaluation des nouveaux médicaments par la Commission de la transparence en 2009, mission et fonctionnement*. *Résultats de l'évaluation des nouveaux médicaments en 2009*. Saint-Denis La Plaine, Haute Autorité de Santé (http://www.has-sante.fr/portail/upload/docs/application/pdf/2010-05/dossier_de_presse__complete_le_22_04_2010.pdf, accessed 7 November 2015).

HAS (2012). *Pertinence du recours à l'hospitalisation pour bronchopneumopathie chronique surinfectée GHM 04M20*. Saint-Denis La Plaine, Haute Autorité de Santé (http://www.has-sante.fr/portail/upload/docs/application/pdf/2013-04/pertinence_du_recours_a_lhospitalisation_pour_bronchopneumopathie_chronique_surinfectee.pdf, accessed 7 November 2015).

HAS (2013). *Dépistage et prévention du cancer du col de l'utérus: actualisation du référentiel de pratiques de l'examen périodique de santé (EPS)*. Saint-Denis La Plaine, Haute Autorité de Santé (http://www.has-sante.fr/portail/upload/docs/application/pdf/2013-08/referentieleps_format2clic_kc_col_uterus_2013-30-08__vf_mel.pdf, accessed 7 November 2015).

HCAAM (2011). *Rapport annuel du Haut conseil pour l'avenir de l'assurance maladie*. Paris, Haut conseil pour l'avenir de l'assurance maladie (http://www.securite-sociale.fr/IMG/pdf/rapport_annuel_hcaam_version_definitive_2011-2.pdf, accessed 7 November 2015).

HCAAM (2013a). *La généralisation de la couverture complémentaire en santé*. Paris, Haut conseil pour l'avenir de l'assurance maladie (http://www.securite-sociale.fr/IMG/pdf/generalisation_couverture_complementaire_sante_rapporthcaam2013.pdf, accessed 7 November 2015).

HCAAM (2013b). *Les principes de solidarité de l'assurance maladie. Note, 24 January 2013*. Paris, Haut conseil pour l'avenir de l'assurance maladie (http://www.securite-sociale.fr/IMG/pdf/hcaam_note_solidarite_assurance_maladie_2013.pdf, accessed 7 November 2015).

HCCAM (2013c). *Rapport annuel du Haut conseil pour l'avenir de l'assurance maladie*. Paris, Haut conseil pour l'avenir de l'assurance maladie (http://www.securite-sociale.fr/IMG/pdf/rapport_annuel_2013.pdf, accessed 7 November 2015).

HCSP (2010). *Objectifs de santé publique: évaluation des objectifs de la loi du 9 août 2001 et propositions*. Paris, Haut conseil de la santé publique (http://www.hcsp.fr/explore.cgi/hcspr20100317ObjectifsSP.pdf, accessed 7 November 2015).

HCSP (2013). *Indicateurs de mortalité "prématurée" et "évitable"*. Paris, Haut conseil de la santé publique (http://www.hcsp.fr/explore.cgi/avisrapportsdomaine?clefr=357, accessed 7 November 2015).

Hill C (2012). Epidémiologie du tabagisme. *La Revue du Praticien,* 2(3):327–329.

Houssin D (2010). Le calendrier des vaccinations et les recommandations vaccinales 2010 selon l'avis du Haut conseil de la santé publique. *Bulletin Epidémiologique Hebdomadaire*, 14–15:121–172 (http://www.invs.sante.fr/beh/2010/14_15/beh_14_15.pdf, accessed 16 November 2015).

IGAS (2010). *Bilan du fonctionnement et du rôle des Maisons départementales des personnes handicapées (MDPH)*. Paris, Inspection générale des affaires sociales (http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/114000024/0000.pdf, accessed 7 November 2015).

IGAS (2011). *Rapport sur la pharmacovigilance et gouvernance de la chaîne du médicament*. Paris, Inspection générale des affaires sociales (http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/114000331/0000.pdf, accessed 7 November 2015).

IGAS (2012a). *Evaluation de la politique française des médicaments génériques*. Paris, Inspection générale des affaires sociales (http://www.igas.gouv.fr/IMG/pdf/RM2012-115P_-_DEF_sans_sign.pdf, accessed 7 November 2015).

IGAS (2012b). *Management et efficience hospitalière: une évaluation des déterminants*. Paris, Inspection générale des affaires sociales (http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/124000345/0000.pdf, accessed 7 November 2015).

IGAS (2013a). *Articulation entre santé au travail et santé publique: une illustration au travers des maladies cardiovasculaires*. Paris, Inspection générale des affaires sociales (http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/144000287/0000.pdf, accessed 7 November 2015).

IGAS (2013b). *Rapport sur le tiers payant pour les consultations de médecine de ville*. Paris, Inspection générale des affaires sociales (http://www.igas.gouv.fr/spip.php?article360, accessed 7 November 2015).

IGAS (2014a). *Contrôle de l'Organisme gestionnaire du développement professionnel continu et évaluation du développement professionnel continu des professionnels de santé*. Paris, Inspection générale des affaires sociales (http://www.igas.gouv.fr/spip.php?article371, accessed 7 November 2015).

IGAS (2014b). *Evaluation de la 1ère année de mise en œuvre du plan pluriannuel contre la pauvreté et pour l'inclusion sociale*. Paris, Inspection générale des affaires sociales (http://www.igas.gouv.fr/IMG/pdf/2013-024R_Tome_I.pdf, accessed 7 November 2015).

INCa (2013). *Bénéfices et limites du programme de dépistage organisé du cancer du sein: quels éléments en 2013?* Paris, Institut National du Cancer (http://www.e-cancer.fr/content/download/64036/575100/file/Benefices-limites-du-programme-de-depistage-cancer-sein2013.pdf, accessed 9 November 2015).

INCa (2014). *Plan cancer 2014–2019*. Paris, Institut National du Cancer (http://www.e-cancer.fr/Expertises-et-publications/Catalogue-des-publications/Plan-cancer-2014-2019, accessed 9 November 2015).

INED (2010). *Trajectoires et origines: enquete sur la diversite des populations en France*. Paris, Institut national d'études démographiques (Document de travail 168) (http://www.ined.fr/fichier/t_publication/1516/publi_pdf1_dt168_teo.pdf, accessed 7 November 2015).

INPES (2013). *Alcool, tabac et drogues illicites: géographie des pratiques addictives en France*. Paris, Institut national de prevention et d'education pour la sante (http://www.inpes.sante.fr/70000/dp/13/dp131107.pdf, acessed 11 July 2014).

INSEE (2012a). *Espérance de vie en 2012: comparaisons régionales*. Paris, Institut national de la statistique et des etudes economiques (http://www.insee.fr/fr/themes/tableau.asp?reg_id=99&ref_id=t_0503R, accessed 7 November 2015).

INSEE (2012b). *Fiche thématique: Population immigrée*. Paris, Institut national de la statistique et des etudes economiques (http://www.insee.fr/fr/themes/document.asp?reg_id=0&id=3713, accessed 7 November 2015).

INSEE (2013a). *La France en bref*. Paris, Institut national de la statistique et des etudes economiques (http://www.insee.fr/fr/pdf/france-en-bref-2013.pdf, accessed 7 November 2015).

INSEE (2013b). *Pharmacies et laboratoires d'analyses médicales, en 2014*. Paris, Institut national de la statistique et des etudes economiques (http://www.insee.fr/fr/themes/tableau.asp?reg_id=0&ref_id=NATTEF06113, accessed 7 November 2015).

INSEE (2015a). *Indice de Gini des niveaux de vie*. Paris, Institut national de la statistique et des etudes economiques (http://www.insee.fr/fr/themes/series-longues.asp?indicateur=gini-niveaux-vie, accessed 7 November 2015).

INSEE (2015b). *La France en bref*. Paris, Institut national de la statistique et des etudes economiques (http://www.insee.fr/fr/pdf/france-en-bref-2015.pdf, accessed 7 November 2015).

Jaeger M (2012). Les aidants informels. *Vie Sociale*, 4:7–9 (http://www.cedias.org/sites/cedias.org/files/intro_vs_4_2012.pdf, accessed 16 November 2015).

Jusot F, Perraudin C, Wittwer J (2012). *L'accessibilité financière à la complémentaire santé en France: les résultats de l'enquête Budget de Famille 2006*. Paris, Institut national de la statistique et des etudes economiques (Economie et Statistique No. 450) (http://www.insee.fr/fr/themes/document.asp?reg_id=0&ref_id=ECO450B, accessed 7 November 2015).

Lardellier R et al.(2012). *Dépenses de santé et restes à charge des ménages: le modèle de microsimulation Omar*. Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Document du travail No. 34) (http://www.drees.sante.gouv.fr/IMG/pdf/seriesource_method34.pdf, accessed 16 November 2015).

Le Breton J et al. (2012). Improving participation in colorectal cancer screening: targets for action. *Preventive Medicine,* 55(5):488–492.

Le Breton-Lerouvillois G (2007). *Les médecins de nationalité européenne et extra-européenne en France*. Paris, Conseil national de l'Ordre des médecins (http://www.conseil-national.medecin.fr/sites/default/files/etude40-1_0.pdf, accessed 7 November 2015).

Leppo K et al. (2013). *Health in all policies: seizing opportunities, implementing policies*. Finland, Ministry of Social Affairs and Health (http://www.euro.who.int/__data/assets/pdf_file/0007/188809/Health-in-All-Policies-final.pdf?ua=1, accessed 7 November 2015).

Malvezzi M et al. (2013). European cancer mortality predictions for the year 2013. *Annals of Oncology,* 24(3):792–800.

Marpsat (2002). *Les personnes sans domicile à Paris: les résultats du programme de recherche de l'INED*. Strasbourg, Council of Europe (European Population Papers Series No. 3).

Maurey H (2013). *Conclusion des travaux du groupe de travail sur la présence médicale sur l'ensemble du territoire*. Paris, Sénat (Sénat Rapport d'information No. 335) (http://www.senat.fr/rap/r12-335/r12-3351.pdf, accessed 7 November 2015).

MILDECA (2015) [web site]. Paris, Mission interministèrielle de lute contre les drogues et les conduites addictives (http://www.drogues.gouv.fr, accessed 9 November 2015).

Ministry in charge of Health (2011). *La perception des droits des patients par les professionnels de santé*. Paris, Ministère de la santé (http://www.sante.gouv.fr/IMG/pdf/Sondage_-_Perception_des_droits_des_patients.pdf, accessed 7 November 2015).

Ministry in charge of Health (2012). *Recommandations pour la mise en oeuvre d'un projet de télémédecine*. Paris, Ministère de la santé (http://www.sante.gouv.fr/IMG/pdf/Recommandations_mise_en_oeuvre_projet_telemedecine.pdf, accessed 7 November 2015).

Ministry in charge of Health (2013). *Stratégie nationale de sante, feuille de route*. Paris, Ministère de la santé (http://www.social-sante.gouv.fr/IMG/pdf/SNS-version-longue.pdf, accessed 7 November 2015).

Ministry in charge of Health (2014a). *Calendrier des vaccinations et recommandations vaccinales 2014*. Paris, Ministère de la santé (http://www.sante.gouv.fr/IMG/pdf/Calendrier_vaccinal_2015.pdf, accessed 7 November 2015).

Ministry in charge of Health (2014b). *Usagers, votre santé, vos droits*. Paris, Ministère des Affaires sociales et de la Sante and Défenseur des droits (http://www.sante.gouv.fr/le-guide-pratique.html, accessed 7 November 2015).

Ministry of the Interior (2014). *Bilan définitif de l'accidentalité routière 2013*. Paris, L'Observatoire national interministériel de la sécurité routière (http://www.securite-routiere.gouv.fr/medias/espace-presse/publications-presse/bilan-definitif-de-l-accidentalite-routiere-2013, accessed 9 November 2015).

Mission Ministérielle Santé (2013). *Budget general mission ministerielle. Rapports annuels de performances: annexe au projet de loi de règlement du budget et d'approbation des comptes pour 2013 (santé)*. Paris, Ministère de la santé (http://www.performance-publique.budget.gouv.fr/sites/performance_publique/files/farandole/ressources/2013/rap/pdf/RAP_2013_BG_Sante.pdf, accessed 7 November 2015).

Mornex R (2013). *Améliorer la pertinence des stratégies médicales*. Paris, Académie Nationale de Médecine (Rapport) (http://www.academie-medecine.fr/wp-content/uploads/2013/07/2-Rapport-Pertinence-des-strat%C3%A9gies-m%C3%A9dicales-27-mars1.pdf, accessed 7 November 2015).

National Health Conference (2013). *Rapport 2013 sur les droits des usagers*. Paris, Ministère de la santé Conférence nationale de santé (http://www.sante.gouv.fr/IMG/pdf/rapp_droits_usagers_cns_2013_jol_250214.pdf, accessed 7 November 2015).

Ndawinz JD, Costagliola D, Supervie V (2011). New method for estimating HIV incidence and time from infection to diagnosis using HIV surveillance data: results for France. *AIDS*, 25:1905–1913.

Nestrigue C, Or Z (2011). *Excess costs of adverse events in hospitals in france: first estimations using nine patient safety indicators*. Paris, Institut de recherche et documentation en economie de la sante (Questions d'économie de la santé No. 171) (http://www.irdes.fr/EspaceAnglais/Publications/IrdesPublications/QES171.pdf, accessed 7 November 2015).

Nguyen E et al. (2011). Progression importante des infections à gonocoques en France: donnees des reseaux renago et resist au 31 Decembre 2009. *Bulletin Epidemiologique Hebdomadaire,* 26–28: 301–304 (http://opac.invs.sante.fr/doc_num.php?explnum_id=7148, accessed 7 November 2015).

OECD (2009). *Health at a glance 2009*. Paris, Organisation for Economic Co-operation and Development (http://www.oecd-ilibrary.org/docserver/download/8109111ec012.pdf?expires=1405105554&id=id&accname=guest&checksum=FCBE7320C29EC23D5C06C1821FE52932, accessed 7 November 2015).

OECD (2013). *Health at a glance 2013*. Paris, Organisation for Economic Co-operation and Development (http://www.oecd.org/els/health-systems/Health-at-a-Glance-2013.pdf, accessed 7 November 2015).

OECD (2014). OECD stat extracts [online database]. Paris, Organisation for Economic Co-operation and Development (http://stats.oecd.org/index.aspx?DataSetCode=HEALTH_STAT, accessed 7 November 2015).

OFDT (2011). *Les niveaux d'usage des drogues en France en 2010*. Paris, Observatoire français des drogues et toxicomanies (http://www.ofdt.fr/BDD/publications/docs/eftxfbr6.pdf, accessed 10 November 2015).

OFDT (2014). *Résultats de l'enquête ETINCEL OFDT sur la cigarette électronique*. Paris, Observatoire français des drogues et toxicomanies (http://www.ofdt.fr/BDD/publications/docs/eisxalu2.pdf, accessed 7 November 2015).

Perronnin M, Pierre A, Rochereau T (2011). *La complémentaire santé en France en 2008: une large diffusion mais des inégalités d'accès*. Paris, Institut de recherche et documentation en economie de la sante (Questions d'économie de la santé No. 161) (http://www.irdes.fr/Publications/2011/Qes161.pdf, accessed 7 November 2015).

Perronnin M, Pierre A, Rochereau T (2012). *Panorama de la complémentaire santé collective en France en 2009 et opinions des salariés sur le dispositif*. Paris, Institut de recherche et documentation en economie de la sante (Questions d'économie de la santé No. 181) (http://www.irdes.fr/Publications/2012/Qes181.pdf, accessed 7 November 2015).

Pinville M (2013). *Reveler le defi politique de l'avancee en âge: perspectives internationales*. Paris, Ministère de la santé (http://www.social-sante.gouv.fr/IMG/pdf/Rapport_Pinville.pdf, accessed 7 November 2015).

Safon M-O (2013). *La protection sociale complémentaire en France*. Paris, Institut de recherche et documentation en économie de la santé (http://www.irdes.fr/documentation/syntheses/la-protection-sociale-complementaire-en-france.pdf, accessed 7 November 2015).

Sécurité sociale (2013a). *Les comptes de la Sécurité sociale. Résultats 2012, Prévisions 2013 et 2014*. Paris, Sécurité sociale (http://www.securite-sociale.fr/IMG/pdf/ccss_9-2013_vdef_15-11-2013.pdf) (http://www.securite-sociale.fr/Les-comptes-de-la-Securite-sociale-Resultats-2012-previsions-2013-et-2014, accessed 7 November 2015).

Sécurité sociale (2013b). *Projet de loi de financement de la Sécurité sociale (PLFSS 2014). Annexe 1: programmes de qualité et d'efficience, invalidité et dispositifs gérés par la CNSA*. Paris, Ministère de l'Économie et des finances, ministère des Affaires sociales et de la santé.

Sécurité sociale (2013c). *Projet de loi de financement de la Sécurité sociale (PLFSS 2014). Annexe 7: ONDAM et dépense nationale de santé*. Paris, Sécurité sociale (http://www.securite-sociale.fr/IMG/pdf/plfss14-annexe7.pdf, accessed 7 November 2015).

Sécurité sociale (2014). *Projet de loi de financement de la Sécurité sociale (PLFSS). Annexe 1: programmes de qualité et d'efficience «maladie»*. Paris, Sécurité sociale (http://www.securite-sociale.fr/Article-publie-1-Annexe-1-du-PLFSS-2014-PQE-Maladie-Document-integral, accessed 7 November 2015).

Sénat (2013). *Projet de loi de financement de la sécurité sociale pour 2014: B. Les mesures relatives à la politique du médicament*. Paris, Sénat (http://www.senat.fr/rap/a13-127/a13-12717.html, accessed 7 November 2015).

Sicart D (2013a). *Les médecins au 1er janvier 2013.* Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Document de travail, Série statistique No. 179) (http://www.drees.sante.gouv.fr/IMG/pdf/seriestat179.pdf, accessed 7 November 2015).

Sicart D (2013b*). Les professions de santé au 1er janvier 2013.* Paris, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (Document de travail, Série statistique No. 183) (http://www.drees.sante.gouv.fr/IMG/pdf/seriestat183.pdf, accessed 7 November 2015).

Toftgaard C (2011). Day surgery activities 2009: international survey on ambulatory surgery conducted 2011. *International Association for Ambulatory Surgery Journal*, 17(3):53–63 (http://www.iaas-med.com/files/Journal/17.3/Toftgaard17.3.pdf, accessed 7 November 2015).

Vasselle A (2011). *Rapport d'information fait au nom de la mission commune d'information sur la prise en charge de la dépendance et la création du cinquième risque.* Paris, Sénat (Rapport No. 263) (http://www.senat.fr/rap/r10-263/r10-2631.pdf, accessed 7 November 2015).

WHO (2013). Global health expenditure database [online database]. Geneva, World Health Organization (http://apps.who.int/nha/database/, accessed 7 November 2015).

WHO (2015) *International statistical classification of diseases and related health problems,* 10th revision. Geneva, World Health Organization (http://apps.who.int/classifications/icd10/browse/2016/en, accessed 7 November 2015).

WHO Regional Office for Europe (2012). *HIV/AIDS surveillance in Europe*. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0018/235440/e96953.pdf, accessed 7 November 2015).

WHO Regional Office for Europe (2015). Health for All database [online/offline database]. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/hfadb, accessed 7 November 2015).

World Bank (2015). World development indicators [online database]. Washington, DC, World Bank (http://data.worldbank.org/products/wdi, accessed 7 November 2015).

9.2 Key legal acts

Act on Patients' Rights and Quality of Care 2002 (*Loi n° 2002–303 du 4 mars 2002 relative aux droits des malades et à la qualité du système de santé*): http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=374371674CC1D73032C7076155B256C9.tpdjo09v_1?cidTexte=JORFTEXT000000227015&categorieLien=id

Employment Protection Law 2013 (*Loi n° 2013–504 du 14 juin 2013 relative à la sécurisation de l'emploi*): http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000027546648&categorieLien=id

Health Insurance Act 2004 (*Loi n° 2004–810 du 13 août 2004 relative à l'assurance maladie*): http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=374371674CC1D73032C7076155B256C9.tpdjo09v_1?cidTexte=JORFTEXT000000625158&categorieLien=id

Health Security Act 2011 (*Loi n° 2011–2012 du 29 décembre 2011 relative au renforcement de la sécurité sanitaire du médicament et des produits de santé*): http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000025053440&categorieLien=id

Hospital, Patients, Health and Territories Act (HPST Act) 2009 (*Loi n° 2009–879 du 21 juillet 2009 portant réforme de l'hôpital et relative aux patients, à la santé et aux territoires*): http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020879475&categorieLien=id

Public Health Act 2004 (*Loi n° 2004–806 du 9 août 2004 relative à la politique de santé publique*): http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000787078&dateTexte=&categorieLien=id

Social Security Finance Act 1999 (*Loi n° 98–1194 du 23 décembre 1998 de financement de la sécurité sociale pour 1999*): http://www.assemblee-nationale.fr/11/budget/plfss1999/sommaire.asp

Social Security Finance Act, annual (*Loi de financement de la sécurité sociale*): http://www.securite-sociale.fr/LFSS-2015

Universal Health Coverage Act 1999 (*Loi n° 99–641 du 27 juillet 1999 portant création d'une couverture maladie universelle*): http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=A3CCAE8203E5533B32065650ABF8F31E.tpdjo09v_1?cidTexte=JORFTEXT000000198392&categorieLien=id

9.3 Useful web sites

Agency for Information on Hospital Care (Agence technique de l'information hospitaliere)
http://www.atih.sante.fr/

French Agency for Food, Environmental and Occupational Health Safety (Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail; ANSES)
https://www.anses.fr/en

French Biomedicine Agency (Agence de la biomédecine)
http://www.agence-biomedecine.fr/About-us

French Blood Agency (Etablissement français du sang)
http://www.dondusang.net/rewrite/site/39/french-blood-service.htm?idRubrique=1092

French Chamber of Midwives (Conseil National de l'Ordre des sages-femmes)
http://www.ordre-sages-femmes.fr/NET/en/document//bkp/about_us/index.htm

French Health Products Safety Agency (Agence nationale de sécurité du médicament et des produits de santé; ANSM)
http://ansm.sante.fr/Mediatheque/Publications/Information-in-English

French Institute for Public Health Surveillance (Institut national de veille sanitaire)
http://www.invs.sante.fr/en

French Medical Council (Conseil national de l'Ordre des médecins; CNOM)
http://www.conseil-national.medecin.fr/
http://www.conseil-national.medecin.fr/node/1357

French Order of Dental Surgeons (Ordre national des chirurgiens dentistes)
http://www.ordre-chirurgiens-dentistes.fr/

French Order of Nurses (Ordre national des infirmiers)
http://www.ordre-infirmiers.fr/

Health Emergency Preparedness and Response Agency (L'Établissement de préparation et de réponse aux urgences sanitaires; EPRUS)
http://www.eprus.fr/

High Council for the Future of Health Insurance (Haut conseil pour l'avenir de l'assurance maladie; HCAAM)
http://www.securite-sociale.fr/L-actualite-du-HCAAM

High Council for Public Health (Haut conseil de la santé publique; HCSP)
http://www.hcsp.fr/Explore.cgi/Accueil

Institute for Research and Information in Health Economics (Institut de recherche et information en économie de la santé)
http://www.irdes.fr/english/home.html

Ministry in charge of Health
http://www.sante.gouv.fr/

National Agency for the Quality Assessment of Health and Social Care Organizations and Services (Agence nationale de l'evaluation de la qualite des établissements et services sociaux et medico-sociaux)
http://www.anesm.sante.gouv.fr/

National Agency to Support the Performance of Health and Health and Social Care (Agence nationale d'appui à la performance des établissements de santé et médico-sociaux; ANAP)
http://www.anap.fr/accueil/

National Chamber of Pharmacists (Ordre national des pharmaciens)
http://www.ordre-pharmacien.com/

National Health Authority (Haute Autorité de Santé; HAS)
http://www.has-sante.fr/portail/jcms/r_1455134/fr/about-has

National Health Conference (Conference nationale de santé)
http://www.sante.gouv.fr/notre-composition.html

National health strategy (Strategie nationale de santé)
http://www.sante.gouv.fr/planification-nationale-et-regionale-en-sante.html

National Institute for Cancer (Institut National du Cancer)
http://www.e-cancer.fr/en

National Institute for Prevention and Health Education (Institut national de prévention et d'éducation pour la santé; INPES)
http://www.inpes.sante.fr/

Radioprotection and Nuclear Safety Institute (Institut de Radioprotection et de Sécurité Nucleaire; IRSN)
http://www.irsn.fr/EN/Pages/home.aspx

Social health insurance
http://www.ameli.fr/#

Social security (La sécurité sociale)
http://www.securite-sociale.fr/Information?type=part

9.4 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 2007 edition, the Health for All database started to take account of the enlarged EU of 27 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 IT 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.

9.5 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.

9.6 About the authors

Karine Chevreul, is a medical doctor and Professor in Public Health, specializing in health policy and health economics. She conducted her PhD research in the Department of Social Policy at the London School of Economics. She holds two Master degrees, one in health services management from the London School of Hygiene & Tropical Medicine and one in public health in developing countries from Paris VI University. She has been a technical adviser to ministers of health and of social security, elderly, disabled and family. She is currently the head of health services research projects in the URC Eco Ile-de-France, the health economics and health services research unit of the Assistance Publique-Hôpitaux de Paris (AP-HP) and the deputy head of the

ECEVE team of INSERM and of the University of Paris 7 that is dedicated to provide evidence for decision-making for vulnerable groups of people. She is also the head of the ERASM team that is conducting research in mental health services and economics.

Karen Berg Brigham, JD/MPH, is a health policy analyst at URC Eco Ile-de-France. She obtained her law degree from the University of Miami School of Law, where she was Editor-in-Chief of the Law Review. Her masters in public health is from the École des Hautes Etudes en Santé Publique (EHESP), where she has also served as a lecturer on international comparisons of health systems. She began her health policy career in Washington, United States before moving to France. Her work at URC Eco has included European projects on rare diseases, financing of research on noncommunicable diseases and health technology assessment.

Isabelle Durand-Zaleski, is a medical doctor and Professor in Public Health. She conducted her PhD research in economics and management at Paris IX University. She holds a Masters in Public Health from Harvard University and a diploma from the Political Study Institute of Paris (Institut d'Etudes Politiques de Paris). She has been the head of the Evaluation Department in the National Health Authority. She is currently head of the Paris Health Economics and Health Services Research Units and of the Department of Public Health at Henri Mondor Hospital.

Cristina Hernández-Quevedo, is Technical Officer/Research Fellow at the European Observatory on Health Systems and Policies (WHO), LSE Health, London. She holds a PhD in Economics and an MSc in Health Economics from the University of York, United Kingdom. Research interests include inequalities in health and lifestyle factors, equity in access to health and social care services and socioeconomic determinants of health. She has published articles on these topics in internationally recognized scientific journals.

The Health Systems in Transition profiles

A series of the European Observatory on Health Systems and Policies

The Health Systems in Transition (HiT) country profiles provide an analytical description of each health care system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health systems and reforms in the countries of the WHO European Region and beyond. The HiT profiles are building blocks that can be used:

- to learn in detail about different approaches to the financing, organization and delivery of health services;
- to describe accurately the process, content and implementation of health reform programmes;
- to highlight common challenges and areas that require more in-depth analysis; and
- 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 countries of the WHO European Region.

How to obtain a HiT

All HiTs are available as PDF files at www.healthobservatory.eu, where you can also join our listserve for monthly updates of the activities of the European Observatory on Health Systems and Policies, including new HiTs, books in our co-published series with Open University Press, Policy briefs, Policy summaries, and the *Eurohealth* journal.

If you would like to order a paper copy of a HiT, please write to:

info@obs.euro.who.int

The publications of the European Observatory on Health Systems and Policies are available at *www.healthobservatory.eu*

HiT country profiles published to date:

Albania (1999, 2002[ag])
Andorra (2004)
Armenia (2001[g], 2006, 2013)
Australia (2002, 2006)
Austria (2001[e], 2006[e], 2013)
Azerbaijan (2004[g], 2010[g])
Belarus (2008[g], 2013)
Belgium (2000, 2007, 2010)
Bosnia and Herzegovina (2002[g])
Bulgaria (1999, 2003[b], 2007[g], 2012[b])
Canada (2005, 2013[c])
Croatia (1999, 2006, 2014)
Cyprus (2004, 2012)
Czech Republic (2000, 2005[g], 2009, 2015)
Denmark (2001, 2007[g], 2012)
Estonia (2000, 2004[gj], 2008, 2013)
Finland (2002, 2008)
France (2004[cg], 2010)
Georgia (2002[dg], 2009)
Germany (2000[e], 2004[eg], 2014[e])
Greece (2010)
Hungary (1999, 2004, 2011)
Iceland (2003, 2014)
Ireland (2009)
Israel (2003, 2009)
Italy (2001, 2009)
Japan (2009)
Kazakhstan (1999[g], 2007[g], 2012[g])
Kyrgyzstan (2000[g], 2005[g], 2011[g])
Latvia (2001, 2008, 2012)
Lithuania (2000, 2013)
Luxembourg (1999)
Malta (1999, 2014)
Mongolia (2007)
Netherlands (2004[g], 2010)
New Zealand (2001)
Norway (2000, 2006, 2013)
Poland (1999, 2005[k], 2012)
Portugal (1999, 2004, 2007, 2011)
Republic of Korea (2009)
Republic of Moldova (2002[g], 2008[g], 2012)
Romania (2000[f], 2008)
Russian Federation (2003[g], 2011[g])
Slovakia (2000, 2004, 2011)
Slovenia (2002, 2009)
Spain (2000[h], 2006, 2010)
Sweden (2001, 2005, 2012)
Switzerland (2000, 2015)
Tajikistan (2000, 2010[gl])
The former Yugoslav Republic of Macedonia (2000, 2006)
Turkey (2002[gi], 2011)
Turkmenistan (2000)
Ukraine (2004[g], 2010[g], 2015)
United Kingdom of Great Britain and Northern Ireland (1999[g])
United Kingdom (England) (2011)
United Kingdom (Northern Ireland) (2012)
United Kingdom (Scotland) (2012)
United Kingdom (Wales) (2012)
United States of America (2013)
Uzbekistan (2001[g], 2007[g], 2014)
Veneto Region, Italy (2012)

Key
All HiTs are available in English. When noted, they are also available in other languages:
[a] Albanian
[b] Bulgarian
[c] French
[d] Georgian
[e] German
[f] Romanian
[g] Russian
[h] Spanish
[i] Turkish
[j] Estonian
[k] Polish
[l] Tajik

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, Sweden, 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 Technical University of Berlin.

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.

ISSN 1817-6127