Health Systems in Transition

United Kingdom

Health system review

Jonathan Cylus • Erica Richardson Lisa Findley • Marcus Longley Ciaran O'Neill • David Steel



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Jonathan Cylus, *European Observatory on Health Systems and Policies*

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Lisa Findley, Editorial Consultant

Marcus Longley, *Welsh Institute for Health and Social Care, University of South Wales*

Ciaran O'Neill, NUI Galway and Queen's University Belfast

David Steel, University of Aberdeen, (formerly Chief Executive, NHS Quality Improvement Scotland)

United Kingdom:

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Preface

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

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

- learn in detail about different approaches to the organization, financing and delivery of health services and the role of the main actors in health systems;
- 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).

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The Observatory team working on HiTs is led by Josep Figueras, Director, Elias Mossialos, Martin McKee, Reinhard Busse, 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, Sarah Cook (copy-editing) and Steve Still (design and layout).

List of abbreviations

Abbreviation	
AQP	Any Qualified Provider
BDA	British Dental Association
BMA	British Medical Association
BPT	Best Practice Tariffs
BSA	British Social Attitudes (survey)
CAM	Complementary and Alternative Medicines
CCG	Clinical Commissioning Group
CHC	Community Health Council
CHP	Community Health Partnerships
СМА	Competition and Markets Authority
COPD	Chronic Obstructive Pulmonary Disease
CPD	Continuing Professional Development
CQC	Care Quality Commission
CQUIN	Commissioning for Quality and Innovation
CSU	Commissioning Support Unit
DALY	Disability Adjusted Life Years
DDRB	Doctors' and Dentists' Remuneration Review Body
DH	Department of Health
DHSSPS	Department of Health, Social Services and Public Safety (NI)
ECT	Electroconvulsive Therapy
EEA	European Economic Area
EMA	European Medicines Agency
EPS	Electronic Prescription Service
EU	European Union
FOI	Freedom of Information
FT	Foundation Trust
GDC	General Dental Council
GDP	Gross Domestic Product
GMC	General Medical Council

Abbreviation	
GMS	General Medical Services
GP	General Practitioner
GPhC	General Pharmaceutical Council
HEAT	Health improvement, Efficiency, Access, Treatment
HIS	Healthcare Improvement Scotland
HIW	Healthcare Inspectorate Wales
HLY	Healthy Life Expectancy
HMRC	Her Majesty's Revenue and Customs
HRG	Healthcare Resource Group
HSCA	Health and Social Care Act (2012)
HSCIC	Health and Social Care Information Centre
HTA	Health Technology Assessment
itapp	Innovative Technology Adoption Procurement Programme
LCG	Local Commissioning Group
LHB	Local Health Board
MFF	Market Forces Factor
MHRA	Medicines and Healthcare products Regulatory Agency
MP	Member of Parliament
MPIG	Minimum Practice Income Guarantee
NHS	National Health Service
NIC	National Insurance Contributions
NICE	National Institute for Health and Care (formerly Clinical) Excellence
NPfIT	National Programme for Information Technology
NSC	National Screening Committee
NSUE	National Service User Experience
OECD	Organisation for Economic Co-operation and Development
ONS	Office for National Statistics
00H	Out-of-hours
OTC	Over the Counter
P4P	Pay for Performance
PACS	Picture Archiving and Communications Systems
PALS	Patient Advice and Liaison Service
PaLS	Procurement and Logistics Service
PbR	Payment by Results
PCT	Primary Care Trust
PDC	Public Dividend Capital
PFI	Private Finance Initiative
PMS	Personal Medical Services
POM	Prescription Only Medicines
PPI	Personal and Public Involvement

Abbreviation	
PPIE	Public & Patient Involvement & Experience
PPP	Public Private Partnership
PPRS	Pharmaceutical Price Regulation Scheme
PSA	Public Service Agreements
PSB	Public Services Boards
RCN	Royal College of Nursing
RQIA	Regulation and Quality Improvement Authority
RTT	Referral to Treatment
SHA	Strategic Health Authority
SIB	Strategic Investment Board
SMC	Scottish Medicines Consortium
ТВ	Tuberculosis
TDA	Trust Development Authority (NHS)
UDA	Units of Dental Activity
UN	United Nations
VHI	Voluntary Health Insurance
WHO	World Health Organization
WT0	World Trade Organization
YLL	Years of Life Lost

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Abstract

This analysis of the United Kingdom health system reviews recent developments in organization and governance, health financing, health care provision, health reforms and health system performance. It provides an overview of how the national health services operate in the four nations that make up the United Kingdom, as responsibility for organizing health financing and services was devolved from 1997.

With devolution, the health systems in the United Kingdom have diverged in the details of how services are organized and paid for, but all have maintained national health services which provide universal access to a comprehensive package of services that are mostly free at the point of use. These health services are predominantly financed from general taxation and 83.5% of total health expenditure in the United Kingdom came from public sources in 2013.

Life expectancy has increased steadily across the United Kingdom, but health inequalities have proved stubbornly resistant to improvement, and the gap between the most deprived and the most privileged continues to widen, rather than close. The United Kingdom faces challenges going forward, including how to cope with the needs of an ageing population, how to manage populations with poor health behaviours and associated chronic conditions, how to meet patient expectations of access to the latest available medicines and technologies, and how to adapt a system that has limited resources to expand its workforce and infrastructural capacity so it can rise to these challenges.

Executive summary

This report on the United Kingdom health system provides an overview of how the national health services operate in England, Northern Ireland, Scotland and Wales. It does not seek to compare the performance of health services in the four nations that make up the United Kingdom; instead it reviews key features and recent developments in service organization, governance, financing and delivery within the four nations and across the United Kingdom as a whole.

Introduction

he United Kingdom, located off the northwest coast of the European mainland, comprises Great Britain (England, Scotland and Wales) and Northern Ireland. It has a population of around 64 million, 80% of whom live in England. The economy of the United Kingdom was particularly hard hit by the global financial crisis of the late 2000s, with the highest fall in GDP per head of any EU country between 2007 and 2009 (24.3%, compared with the EU average of 5.8%). This contributed to an increase in the unemployment rate that remained at 6.1% in 2014 (although this remains well below the EU average of 10.2%).

Despite the description as a "national" health service (NHS), in practice the health system has never been the same across the four nations. This variation has increased with the transfer of powers for health care and public health to Northern Ireland, Scotland and Wales from 1997 onwards, in a process termed "devolution". Scotland, Wales and Northern Ireland have pursued an approach emphasising partnership between purchasers and providers in the health system, while market forces play a greater role in the English health system.

United Kingdom

For the United Kingdom as a whole, life expectancy increased between 1980 and 2013 from 73.7 to 81 years (slightly above the EU average of 79.9 years), and mortality rates from most cancers and circulatory diseases decreased. However, chronic disease and disability have not declined as much as in other western European countries; thus while individuals live, on average, longer, they do so in relatively poor health. These averages across the United Kingdom also mask considerable variation, both geographically (Scotland has poorer health than the rest of the United Kingdom) and between socio-economic groups. While tobacco use has declined, it remains the leading risk factor for poor health.

Organization and governance

The United Kingdom's health care system was established in 1948 as a national system available to all residents, funded through taxation, provided using publicly owned hospitals and free at the point of use. The United Kingdom government allocates money for health care in England directly, and allocates block grants to Scotland, Wales and Northern Ireland which in turn decide their own policy for health care. Each nation funds organizations which arrange services on behalf of patients. In England and Northern Ireland there is a split between the purchasers and providers of services, which was introduced in 1990; this split has been abolished in Scotland and Wales. Throughout the United Kingdom (except in Northern Ireland) there is a division between health care (provided by the NHS) and social care, which is funded through local government and mostly provided privately.

England, Scotland, Wales and Northern Ireland each have their own advisory, planning and monitoring framework for their health care system. Unlike other European countries, devolution of health powers in the United Kingdom was not accompanied by a common data or monitoring system, and so comparisons between nations within the United Kingdom are not easy to make. A key body is the National Institute for Health and Care Excellence (NICE), which advises on the cost-effectiveness of interventions, though its guidance does not automatically mean funding for a recommended treatment is available. NICE is an executive non-departmental public body working with the English NHS, but its services are also used in varying ways in Scotland, Wales and Northern Ireland.

There is also a range of regulators for the health system; some regulators oversee all of the United Kingdom (such as health professional groups), and others are individual to one health system (such as quality of care providers). There is a United Kingdom-wide "Pharmaceutical Price Regulation Scheme" controlling the pricing of non-generic drugs purchased by the NHS throughout the United Kingdom, with profit limits for companies and an overall cap on expenditure. Several patient empowerment strategies are in place, including specific rights for patients.

Financing

The health system is mainly funded through general taxation, with the remainder coming from private medical insurance and out-of-pocket payments. In the early 2000s the government committed to increasing health care spending as a share of GDP to a level that corresponded with the average of the EU members at that time. Health expenditure as a share of GDP grew from 6.9% in 2000 to 9.4% in 2010, which was similar to the EU average, though still below the average for the EU-15 countries. The imposition of austerity measures in 2010 following the financial crisis of 2007–2008 has meant a cut in total health expenditure in real terms in 2010 and 2011; in 2013 health spending was 9.1% of GDP, compared to the EU average of 9.5%. However, the proportion of health funding coming from public sources is relatively high in the United Kingdom at 83.5%; this is similar to the Scandinavian countries and higher than in France, Germany and the EU average of 76%.

Although in principle the NHS provides comprehensive health services, in practice coverage for specific services varies across the United Kingdom. Most services are provided free of charge at the point of use, but there are some that can involve cost-sharing (like dental care and pharmaceuticals) or direct payments (like most social care); only England has prescription drug charges. In 2013 out-of-pocket payments comprised 9.3% of total health expenditure, while private medical insurance made up 2.8%, with less than 5% coming from other forms of private expenditure.

Purchasing of health services varies. In England the Department of Health allocates funds to NHS England, which distributes funds using weighted capitation to general practitioner-led clinical commissioning groups as well as to specialist and primary care services. England also uses payment systems intended to create incentives for quality and efficiency, in particular the Payment by Results system for most hospital care (this uses a version of diagnosis-related groups to determine payments based on national average costs) and Pay for Performance linking a small proportion of provider income to certain goals. In Northern Ireland the Health and Social Care Board negotiates contracts with

United Kingdom

Health and Social Care trusts. Wales uses a capitation-based funding method, and local health boards manage the funds they use in delivering services. Boards and community health partnerships manage their own funds in Scotland and use a capitation-based allocation system.

Physical and human resources

Similarly to the rest of Europe, the number of hospitals across the United Kingdom has declined since the start of the NHS, due to shifting care from smaller hospitals to larger ones, and to shifting health services away from hospitals and into the community. The number of acute hospital beds is one of the lowest in the EU at 229 per 100 000 in 2013 (well below the EU average of 356 per 100 000). The average length of stay has also been declining. Taken together, these trends may indicate increasing efficiency in hospital care and an ambition to shift more care into the community. However, high bed occupancy rates (consistently above the EU average) suggest little spare capacity to deal with demand shocks.

The English NHS made a concerted effort in the mid-2000s to purchase more MRI and CT machines, in a push to come closer to the EU average; for both, the United Kingdom remains at one of the lowest levels within the EU but these machines are used much more intensively than elsewhere.

The NHS has sought to adjust to the explosion of public use of computers and information technology, with varied success. The English National Programme for Information Technology was abandoned in 2013 after being plagued by accusations of being inefficient and not cost–effective – it went considerably over its (very large) budget, costing £9.8 billion (€13.3 billion), but failed to deliver on what had been promised. Scotland took a more unified approach and has seen improvements, in particular in telehealth and telemedicine, topics deemed especially important in a country with large remote rural areas.

The NHS is the largest employer in the United Kingdom. In 2013 there were more nurses per person in the United Kingdom than the EU average, with 870 per 100 000 (above the EU average of 850), despite a sharp fall in nursing numbers since the financial crisis. The number of doctors remains below the EU average of 347 per 100 000, however, at 278 per 100 000, despite steady increases in recent decades. Historically, the United Kingdom has employed health workers from Commonwealth countries and the EU and at times there has been intensive international recruitment.

Provision of services

Public Health England, Health Protection Scotland, Public Health Wales and the Public Health Agency for Northern Ireland work to strengthen and coordinate health protection. The key elements of public health in the United Kingdom are: health protection programmes, health improvement programmes and reducing health inequalities. In England the responsibility for commissioning public health has been moved (back) to local authorities since 2012. Scotland has been at the forefront of policies to tackle alcohol consumption through the suggested introduction of minimum prices per unit; this was agreed to in principle in 2012 but has not yet been implemented due to a legal challenge which is before the Court of Justice of the EU at time of writing.

Primary care in the United Kingdom serves three main roles: it is the first point of contact when a person has a health concern; it provides ongoing care for common conditions and injuries; and it serves as a gatekeeper to more specialized care, which is generally provided in hospitals. Primary care is mainly provided by practice-based general practitioners, with practices increasingly including other health care professionals such as nurses. Most secondary care is provided by salaried specialist doctors and others who work in state-owned hospitals. Tertiary services offer more specialized care, and are often linked to medical schools or teaching hospitals. Tertiary care services often focus on the most complex cases and rarer diseases and treatments. Across the United Kingdom there has been a move to concentrate specialized care in fewer centres in order to improve quality.

Patient pathways are the same across the United Kingdom, with comparatively more emphasis on choice of provider in England. Recent policies have focused on reducing demand for emergency care through public information campaigning and broadening other access to urgent care services. It is hoped that improving the integration of health and social care should also reduce demand for emergency care services and unnecessary hospitalizations.

Reducing waiting times has been a long-standing issue in the United Kingdom, both for emergency care and for elective procedures. Waiting times for most of the main inpatient procedures substantially decreased from 2005/2006 to 2009/2010 throughout the United Kingdom, though there have been some increases since then.

Palliative care has historically been provided through the voluntary sector, although in the 1990s the NHS started to create palliative care strategies.

Principal health reforms

Since devolution, England, Scotland, Wales and Northern Ireland have taken their own distinctive approach to health care. The main approach in England has been towards decentralization, reinforcement of the internal market, and more localized decision-making. Scotland and Wales have moved in the other direction, dissolving the internal market and keeping more power centralized. Scotland is in starkest contrast to England, seeing itself as maintaining a strong tradition of publicly provided health care for all in a high-quality environment maintained by rigorous performance standards, whereas policy-makers in England hope private partnerships and internal competition, along with rigorous performance standards, will drive forward higher quality health care.

One of the main goals across the United Kingdom at the moment is to better integrate health and social care, in order to be more cost-effective and efficient, and to provide higher quality services to patients.

Assessment of the health system

While the commitment to universal access to health care financed on the basis of solidarity is a shared European one, the NHS has been a reference point as a strongly integrated model of public purchasing and provision with most care free at the point of use. Some significant changes were made in recent years that distinguish England somewhat from that original model, though Scotland, Wales and Northern Ireland have remained closer to the original NHS vision in their approach.

Overall, the national health services are able to function remarkably well given their relatively low levels of funding (in comparison to other leading European systems). Although there have been substantial improvements in major health indicators such as amenable mortality over the past decades, there remains considerable scope for further improvement. Important health disparities remain between socioeconomic groups, and the gap between the most deprived and the most privileged continues to widen, rather than close.

The United Kingdom has a number of challenges going forward, including how to cope with the needs of an ageing population, how to manage populations with poor health behaviours and associated chronic conditions, how to meet patient expectations of access to the latest available medicines and technologies, and how to adapt a system that has limited resources to expand its workforce and infrastructural capacity so it can rise to these challenges.

1. Introduction

The United Kingdom, located off the northwest coast of the European mainland, comprises the three nations of Great Britain (England, Scotland and Wales) and Northern Ireland. It has a population of around 64 million, mostly concentrated in urban areas. It is a high-income country and one of the largest economies in the European Union (EU). However, the economy was adversely affected by the global financial crisis of the late 2000s, contributing to an increase in the unemployment rate that remained at 6.1% in 2014.

The United Kingdom is a constitutional monarchy, with two houses of parliament for the United Kingdom, a Scottish Parliament and National Assemblies in Wales and Northern Ireland; there is no separate administration for England. From 1997, many powers have been devolved from the central United Kingdom Government to separate administrations in Northern Ireland, Scotland and Wales, including responsibility for health care.

Life expectancy in the United Kingdom increased between 1980 and 2013 from 73.7 to 81 years, with major declines in mortality rates from most cancers and circulatory diseases. At the same time, the importance of chronic disability has been rising between 1990 and 2010, mainly as a result of falling death rates combined with a lack of improvement in burden of disability over time. While tobacco use has declined, it remains the leading health risk factor.

1.1 Geography and sociodemography

The United Kingdom of Great Britain and Northern Ireland, commonly referred to as the United Kingdom, consists of the isle of Great Britain and the northeastern section of the isle of Ireland (Figure 1.1). These islands are separated from Scandinavia to the east by the North Sea, and from the European continent to the south by the English Channel; to the west is the Atlantic Ocean. Great Britain comprises England, Scotland and Wales; these three plus Northern Ireland make up the United Kingdom.

Fig. 1.1 Map of the United Kingdom



Source: http://www.map-of-uk.com/.

Wales was united with England in 1536 and 1542, and Great Britain was formed when Scotland was united with them in 1707, although the Act of Union allowed Scotland a greater degree of independence. Ireland was joined to Great Britain in 1801 to form the United Kingdom. After the Government of Ireland Act 1920, only Northern Ireland remained part of the United Kingdom, while the southern part of the island formed the Republic of Ireland after the Irish War of Independence and the Irish Civil War. Northern Ireland, Scotland and Wales had more limited levels of involvement with their own national governance until the late 1990s. Local administrations and in some cases different systems – such as the legal system in Scotland – remained in place. In 1997 a referendum paved the way for the devolution of Scotland and Wales, and in 1999 certain powers devolved to the newly created National Assembly for Wales and the Scottish Parliament. The Belfast Agreement, or the Good Friday Agreement, formally devolved certain powers to Northern Ireland in 1998, although direct rule was reinstated from 2002 to 2007 following a political crisis.

Table 1.1

Trends in population/demographic indicators, selected years

	1980	1990	1995	2000	2005	2010	2011	2012	2013	2014
Population, total	56.3	57.2	58.0	58.9	60.4	62.8	63.3	63.7	64.1	64.5
Population, female (% of total)	51.4	51.4	51.4	51.3	51.0	50.8	50.8	50.8	50.7	50.7
Population growth (annual %)	0.1	0.3	0.3	0.4	0.7	0.8	0.8	0.7	0.6	0.6
Population aged 0–14 (% of total)	21.0	19.0	19.5	19.0	17.9	17.6	17.5	17.5	17.6	17.6
Population aged 65 and above (% of total)	14.9	15.7	15.8	15.8	16.0	16.6	16.9	17.2	17.5	17.8
Age dependency ratio (% of working- age population)	56.1	53.2	54.5	53.4	51.3	51.9	52.4	53.1	54.0	54.8
Birth rate, crude (per 1 000 people)	13.4	13.9	12.6	11.5	12.0	12.9	12.8	12.8	12.2	-
Death rate, crude (per 1 000 people)	11.7	11.2	11.1	10.3	9.6	8.9	8.7	8.9	9.0	-
Population density (people per sq. km of land area)	232.8	236.6	239.8	243.4	249.7	259.4	261.5	263.3	265.0	266.6
Urban population (% of total)	78.5	78.1	78.4	78.7	79.9	81.3	81.6	81.8	82.1	82.3

Source: World Bank, 2015.

From 1980 to 2014 the population of the United Kingdom increased by 14.3%, rising from 56.3 million to 64.5 million (Table 1.1). This increase was driven by: a higher level of immigration that exceeds levels of emigration combined with a birth rate that, while falling since the 1990s, continues to outweigh the crude death rate. The share of the population over the age of 65 has increased, reaching 17.8% in 2014, nearly converging with the share of the population aged 0-14 years (17.6%), which has fallen over time.

United Kingdom

Over 80% of the United Kingdom's population lives in England, followed in size by Scotland, Wales and Northern Ireland (ONS, 2012). Although there are parts of the United Kingdom that are sparsely populated, especially much of Scotland, the urban centres are so densely populated that the population density for the United Kingdom as a whole is 266.6 people per square kilometre, which is relatively high in European terms. More than half of the population lives in densely populated areas.

1.2 Economic context

Gross domestic product (GDP) in current prices increased from \$565 billion in 1980 to \$2.9 trillion in 2014, or equivalently, \$45 603 per person (in current US\$) (Table 1.2). GDP in current prices decreased during the global financial crisis of 2007–8, falling 4.3% in 2009 and returning to only weak positive growth from 2010 through to 2013 (European Commission, 2015). According to data from Eurostat, the United Kingdom experienced the highest fall in GDP per head of any EU country between 2007 and 2009 (24.3%, compared with the EU average of 5.8%). The unemployment rate fell between the mid-1990s and the mid-2000s, reaching a low of 4.7% in 2004. Unemployment increased during the financial crisis and reached a peak of 8.0% in 2012, before decreasing and reaching 6.1% in 2014 according to data from Eurostat (well below the EU average of 10.2%).

The financial crisis has had important implications for public finances. While government revenues as a share of GDP have remained relatively stable, government spending during the financial crisis has generally not kept up with GDP growth. As a result, the public deficit decreased from 9.5% of GDP in 2010 to 5.5% in 2012. According to Eurostat, the United Kingdom still had the 4th largest deficit relative to GDP in the EU in 2013, at 5.8% (European Commission, 2015).

Income inequality as measured by the Gini coefficient has remained steady since at least the mid-1990s, at a value in the low 30s (see Table 1.2). In global terms, this level indicates relatively low income inequality, although it is relatively high for a western European country. The at-risk of poverty rate has also remained largely unchanged in recent years, at around one quarter of the population in 2013.

Macroeconomic indicators, selected years

	1980	1990	1995	2000	2005	2010	2011	2012	2013	2014
GDP (current US\$, billions)	565	1 093	1 236	1 549	2 412	2 408	2 592	2 615	2 678	2 942
GDP, PPP (current international \$, billions)	-	1 030	1 223	1 610	2 085	2 255	2 312	2 381	2 452	2 525
GDP per capita (current US\$)	10 032	19 095	21 296	26 296	39 935	38 362	40 975	41 051	41 777	45 603
GDP per capita, PPP (current international \$)	-	17 985	21 073	27 340	34 525	35 920	36 549	37 386	38 255	39 137
GDP growth (annual %)	-2.2	0.5	2.5	3.8	2.8	1.9	1.6	0.7	1.7	2.6
General government final consumption expenditure (% of GDP)	20.7	18.0	18.1	17.5	20.2	21.6	20.9	20.8	20.1	19.7
Cash surplus/deficit (% of GDP)	-	-	-5.2	3.7	-2.9	-9.5	-7.2	-5.5	-	-
Tax revenue (% of GDP)	-	-	24.7	27.1	25.8	25.2	25.8	25.3	-	-
Central government debt, total (% of GDP)	-	-	47.7	43.3	43.9	81.2	94.6	97.2	_	-
Industry, value added (% of GDP)	-	31.4	29.9	26.9	23.0	20.6	21.0	20.5	20.1	19.8
Agriculture, value added (% of GDP)	-	1.4	1.5	0.9	0.6	0.7	0.6	0.7	0.7	0.6
Services, etc., value added (% of GDP)	-	67.1	68.6	72.2	76.3	78.7	78.4	78.9	79.2	79.6
Labour force, total (millions)	-	29.3	28.6	29.5	30.7	32.0	32.3	32.6	32.8	-
Unemployment, total (% of total labour force) (modelled ILO estimate)	-	-	8.7	5.6	4.8	7.9	7.8	8.0	7.5	-
Per cent at risk of poverty or social exclusion (% total population)*	-	-	-	-	24.8	23.2	22.7	24.1	24.8	-
GINI coefficient*	-	-	32.0	32.0	34.6	32.9	33	31.3	30.2	-
Real interest rate (%)	-3.1	6.2	4.1	3.5	1.8	-2.6	-1.6	-1.1	-1.3	-1.2
Official exchange rate (LCU per US\$, period average)	0.4	0.6	0.6	0.7	0.5	0.6	0.6	0.6	0.6	0.6

Sources: World Bank, 2015; *European Commission, 2015.

1.3 Political context

The United Kingdom is a constitutional monarchy with a parliamentary system, with two houses of parliament. Members of the House of Commons (the lower house) are democratically elected, while members of the House of Lords (the upper house) are mostly appointed, although some are "hereditary peers" in that they inherit their seats in the house along with their aristocratic titles. The head of state is a hereditary monarch (since 1952, Queen Elizabeth II). The head of government in the United Kingdom is the prime minister, who is the leader of the party that can command a majority in the House of Commons. In the last general election of May 2015 the Conservatives won a majority, and David Cameron continued as prime minister after serving in a coalition government for the previous term. All four nations are represented in the United Kingdom parliament; in addition, Scotland, Wales and Northern Ireland hold their own elections to their respective assembly or parliament. The governments of Scotland and Wales are made up of a combination of constituency and regional members, while members of the legislative assembly in Northern Ireland are elected by constituencies. The United Kingdom government reserved some matters to itself, such as constitutional issues, foreign policy, defence, immigration, energy and some health issues. Other matters are taken up by the devolved administrations in Scotland, Wales and Northern Ireland and in England's case, by the United Kingdom parliament. England, Scotland, Wales and Northern Ireland also all have their own local authorities or councils, which make decisions on local matters.

In September 2014 a referendum was held on whether Scotland would become an independent country and leave the United Kingdom. The referendum, which had a turnout of 85%, resulted in a "no" vote, with 55.3% against and 44.7% for independence (BBC, 2014b). The election raised the issue of who is permitted to vote on which issues in the United Kingdom government, and there is some discussion of allowing only Members of Parliament (MPs) for constituencies in England to vote on English matters (Stamp, 2014). There has also been some discussion of how powers might be devolved to England from the United Kingdom.

The United Kingdom is a member of various international organizations, including the Organisation for Economic Co-operation and Development (OECD), the United Nations (UN), the World Health Organization (WHO) and the World Trade Organization (WTO). The government signed the European Convention on Human Rights into law in 1998, and has also signed international treaties that affect health. The United Kingdom is also a member of the EU, but is set to have a referendum by the end of 2017 on whether or not to remain a member.

Policy-making in the United Kingdom does not formally involve trade unions or interest groups, although some may have a strong influence, such as the British Medical Association (BMA) and the royal colleges (two groups of many concerning health workers).

1.4 Health status

Average life expectancy at birth in the United Kingdom increased from 73.7 to 81 years between 1980 and 2013 (Table 1.3) (slightly above the EU average of 79.9 years in 2013). Healthy life years at birth (the number of years of life lived in good health) have remained fairly stable for the past 10 years, with some fluctuation for age 65 and over, especially among women (Table 1.4). In a recent study it was shown that the United Kingdom came only 12th out of 19 comparable high-income countries in terms of the number of years individuals spend in good health (Murray et al., 2013).

Table 1.3

	1980	1990	1995	2000	2005	2010	2011	2012	2013
Life expectancy at birth, female (years)	76.8	78.8	79.5	80.2	81.2	82.4	83	82.8	82.8
Life expectancy at birth, male (years)	70.7	73.1	74.3	75.4	77	78.5	79	79.1	79.2
Life expectancy at birth, total (years)	73.7	75.9	76.8	77.7	79.0	80.4	81.0	80.9	81.0
Mortality rate, adult, female (per 1 000 female adults)	96.5	78.1		67.5	61.6	57.5	55.8	-	-
Mortality rate, adult, male (per 1 000 male adults)	161.8	129.3	118.8	108.4	97.5	91.2	87.5	-	-

Mortality and health indicators, selected years

Source: World Bank, 2015.

Healthy years of life

	2005	2006	2007	2008	2009	2010	2011	2012
Females								
At birth	65.5	64.9	66.0	66.3	66.1	65.6	65.2	64.5
At age 65	11.4	11.1	11.7	11.8	11.4	11.8	11.9	10.5
Males								
At birth	64.2	64.8	64.6	65.0	65.0	65.0	65.2	64.6
At age 65	10.4	10.3	10.4	10.7	10.9	10.9	11.0	10.5

Source: European Commission, 2015.

Overall increases in life expectancy mask considerable variation, both across and within the United Kingdom. For example, across the United Kingdom in 2011, life expectancy in England was the longest for both men and women (78.9 and 82.9 years respectively), followed by Wales, Northern Ireland and Scotland (Bevan et al., 2014). There is considerable variation within nations. For example, life expectancy in the north east of England is closer to levels seen in Scotland. Other examples include the city of Glasgow, where people living in more affluent areas are expected to live nearly 30 years longer than those living in the poorest areas; this phenomenon is commonly termed the "Glasgow effect" (Reid, 2011). Scotland has historically had poorer health compared with the rest of the United Kingdom, as well as compared to many other EU countries.

Similar to other high-income countries, the main causes of death in the United Kingdom are circulatory diseases (ischaemic heart diseases and cerebrovascular diseases); malignant neoplasms (most commonly lung, colorectal, breast and cervical cancer); and respiratory diseases (Table 1.5). Deaths from respiratory and circulatory diseases, as well as from cancers, have fallen since 1990.

Although tobacco use has fallen, tobacco remains the leading health risk factor, contributing to poor performance for some cancers and chronic obstructive pulmonary disease (COPD). Alcohol consumption and high blood pressure, as well as overweight and obesity, are other important health risk factors (Table 1.6). Nearly two-thirds of the burden of cardiovascular diseases in the United Kingdom has been attributed to poor diet and a lack of exercise; these risk factors were estimated to have accounted for nearly 15% of disability adjusted life years (DALYs) in 2010 (Murray et al., 2013). Additionally, air pollution has been found to be responsible for approximately 1 in 20 deaths across the United Kingdom (Committee on the Medical Effects of Air Pollutants, 2010).

Standardized death rates, selected years

Indicators	1980	1990	1995	2000	2005	2010
Communicable diseases	••••••	•	•••••	•	•••••	
SDR, infectious and parasitic diseases, all ages, per 100 000	4.23	3.99	4.91	5.59	7.54	6.05
SDR, tuberculosis, all ages, per 100 000	1.67	0.89	0.76	0.67	0.53	0.38
Noncommunicable diseases						
SDR, diseases of circulatory system, all ages, per 100 000	475.04	365.17	319.90	260.23	211.28	164.19
SDR, malignant neoplasms, all ages, per 100 000	218.08	220.49	207.19	193.79	180.74	170.44
SDR, disease of genitourinary system, all ages, per 100 000	12.52	9.82	9.10	8.87	10.87	11.63
SDR, trachea/bronchus/lung cancer, all ages, per 100 000	58.91	54.19	48.62	43.09	40.14	38.68
SDR, malignant neoplasm female breast, all ages, per 100 000	39.69	40.22	36.07	31.06	28.34	24.43
SDR, cancer of the cervix uteri, all ages, per 100 000	6.97	5.71	4.16	3.33	2.64	2.34
SDR, diabetes, all ages, per 100 000	7.78	10.43	8.11	7.79	6.97	5.86
SDR, mental disorders, diseases of nervous system and sense organs, all ages, per 100 000	17.04	32.92	25.42	28.72	35.32	39.73
SDR, ischaemic heart disease, all ages, per 100 000	256.07	215.73	182.14	140.41	106.17	77.25
SDR, cerebrovascular diseases, all ages, per 100 000	115.77	89.15	75.31	62.54	54.99	42.11
SDR, diseases of respiratory system, all ages, per 100 000	131.5	84.96	110.62	105.94	79.33	67.59
SDR, diseases of digestive system, all ages, per 100 000	27.57	27.04	27.64	32.14	33.65	31.81
External causes	•••••		•••••			
SDR, transport accidents, all ages, per 100 000	12.06	10.02	6.31	5.97	5.49	3.37
SDR, suicide and self-inflicted injury, all ages, per 100 000	8.68	7.81	7.17	7.17	6.42	6.43
SDR, symptoms, signs and ill defined conditions, all ages, per 100 000	3.29	3.84	2.53	2.46	2.83	2.90

Source: WHO Regional Office for Europe, 2015. Health for All, http://data.euro.who.int/hfadb/

Morbidity and factors affecting	health status, selected years
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	1990	1995	2000	2005	2010	2011	2012	2013
Hospital discharges, all neoplasms per 100 000	-	-	1 026.6	988.4	901.3	-	-	-
Incidence of cancer per 100 000	480.5	520.7	461.6	482.2	523.3	526.8	534.3	-
Incidence of trachea, bronchus and lung cancer per 100 000	73.7	69.9	65.7	64.5	67.9	69.0	70.3	-
Incidence of female breast cancer per 100 000	111.7	120.8	134.7	148.8	156.9	155.8	157.2	-
Incidence of cervix uteri cancer per 100 000	16.6	11.6	9.9	9.1	9.0	9.6	9.5	-
Prevalence of diabetes mellitus (%)	_	_	-	3.5	4.5	4.7	4.8	5.1
% of regular daily smokers in the population, aged 15+	30	27	27	24	20	20	20	19
Pure alcohol consumption, litres per capita, aged 15+	10.0	9.7	10.5	11.5	10.5	10.3	9.7	-

Source: WHO Regional Office for Europe, 2015.

Deaths due to communicable diseases such as tuberculosis (TB) and sexually transmitted infections (including HIV) have fallen substantially over the last thirty years. However, the United Kingdom continues to have one of the highest TB incidence rates in the EU (Public Health England, 2014).

The mortality rate for children under the age of 5, including infants and newborns, has fallen steadily in the last thirty years. The infant mortality rate has nearly halved since 1990, from 7.9 deaths per 1000 births in 1990 to 3.5 in 2015 (see Table 1.7). In 2013 there were 3065 infant deaths (under 1 year of age), which is nearly a 60% reduction since 1983 (ONS, 2014b). In a study of 18 countries in the EU, the United Kingdom performed 5th best at reducing regional inequalities in infant mortality in the 2000s (European Commission, 2013). However, the United Kingdom still has a relatively high infant mortality rate compared to other countries of the EU. A recent analysis of the Global Burden of Disease study found that, in 2013, the United Kingdom had the second highest level of mortality for children under 5 among 22 western European countries, at 4.9 deaths per 1000 live births compared to an international average of 3.9/1000 (Wang et al., 2014).

Maternal, child and adolescent health indicators, selected years

	1980	1990	1995	2000	2005	2010	2011	2012	2013	2014	2015
Adolescent fertility rate (births per 1 000 women aged 15–19)	27.8	31.4	31.0	28.6	26.3	25.8	25.8	25.8	25.7	-	-
Maternal mortality rate (national estimate, per 100 000 live births)	-	10	11	11	12	11	-	-	8	-	-
Mortality rate, infant (per 1 000 live births)	12.0	7.9	6.1	5.6	5.1	4.4	4.2	4.1	3.9	3.7	3.5
Mortality rate, neonatal (per 1 000 live births)	-	4.5	4.1	3.8	3.5	3.0	2.9	2.8	2.7	2.5	2.4
Mortality rate, under–5 (per 1 000 live births)	14.1	9.3	7.2	6.6	6.0	5.2	5.0	4.8	4.6	4.4	4.2

Source: World Bank, 2015.

2. Organization and governance

The United Kingdom's health care system is largely funded by taxes and is mostly free at point of access. Legal residents of the United Kingdom may use the services of the National Health Service (NHS), and they are also free to purchase private health insurance if they wish. Health care in the United Kingdom is mainly a devolved matter, meaning that Scotland, Wales and Northern Ireland make their own decisions about the way in which health services are organized. The United Kingdom government allocates a budget for health care in England, and allocates block grants to Scotland, Wales and Northern Ireland which in turn decide their own policies for health care. The health ministers of Scotland, Wales and Northern Ireland are responsible for public health and health services in their nation.

Each health department funds organizations which arrange services on behalf of patients. In England and Northern Ireland there is a split between the purchasers and providers of services, whereas in Scotland and Wales this split has been abolished.

England, Scotland, Wales and Northern Ireland each have their own performance framework for the health care system. One of the main goals at the moment is to better integrate health and social care, in order to be more cost-effective and efficient, and to provide higher quality services to patients.

There are various health technology assessment and information gathering systems in place. A range of regulators monitors the NHS and associated organizations; some regulators oversee all of the United Kingdom (such as health professional groups), while others are specific to one nation (such as quality of care providers). Several patient empowerment strategies are in place, including specific rights for patients.

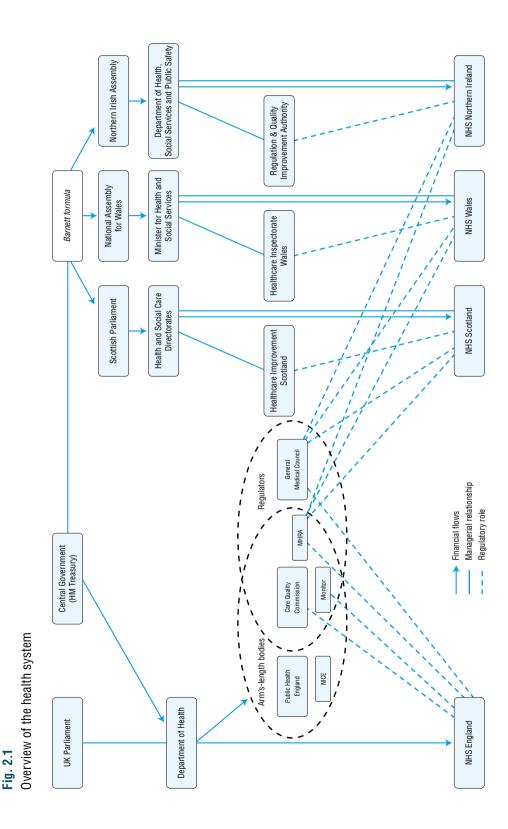
2.1 Overview of the health system

The United Kingdom government collects funds, which are pooled at the United Kingdom level. The Department of Health allocates health funds in England, while block grants are given to Northern Ireland, Scotland and Wales for their administrations to allocate separately (see Section 3.3.3). The devolved administrations set health policy for Northern Ireland, Scotland and Wales, while health policy for NHS England is decided by the United Kingdom government directly. These policy-makers distribute funds and oversee delivery of services, generally via regional organizations that vary by nation, though some services, such as very specialized health services, are organized at the national level in England, Scotland, Wales and Northern Ireland. The principal organizational structure of the health system in the United Kingdom is set out in Figure 2.1 and described in further detail below.

2.2 Historical background

The National Health Service of the United Kingdom was established in 1948, with the goal of being a national system, locally delivered. The NHS served England, Scotland and Wales in a similar manner, while Northern Ireland's health system operated semi-autonomously. The focus through the 1950s and 1960s was on the modernization of facilities and technologies.

Several important changes occurred in the early 1970s. In 1972 Northern Ireland came under direct rule from the United Kingdom government, and the Secretary of State and Minister for Health for Northern Ireland answered to the United Kingdom parliament. In 1974 the NHS in England and Wales was reorganized according to the National Health Service Reorganization Act 1973, resulting in the creation of regional health authorities, area health authorities and Family Practitioner Committees. The aim was to create organizations with defined responsibilities for populations (rather than hospitals), and to tackle the tripartite division between hospitals, primary care and community health services that had been a feature of the system since 1948. These authorities were established in order to integrate different types of services – acute, community and preventive – but by the 1980s they were seen as barriers to efficiency, and health authorities were reshuffled from area to district health authorities in 1980.



In 1990 the then Conservative government passed the National Health Service and Community Care Act, introducing the "internal market", which separated the purchasing ("commissioning") and provision of health care services across the United Kingdom. The goal was to increase the efficiency and quality of services by drawing on the principles of a competitive market. It introduced GP fundholding, which means that general practitioner (GP) practices with 11 000 or more patients could apply for their own NHS budgets to cover their staff costs, prescribing, outpatient care, and a defined range of hospital services, largely elective surgery. These GP fundholders thus became, together with district health authorities, "purchasers" of health services on behalf of their patients. Hospitals and community and mental health services, the providers in this new arrangement, were organized into semi-independent, so-called NHS trusts.

The election of a Labour government in 1997 resulted in further reorganization of the health service in the United Kingdom, with the devolution of political power from the United Kingdom parliament to the national administrations in Scotland, Wales and Northern Ireland, which has led to increasingly diverse health systems across the United Kingdom. In England, GP fundholding was abolished, although the purchaser-provider split was retained. Primary care groups, which became primary care trusts (PCTs), replaced district health authorities, and were made responsible for organizing and providing primary and community health care through direct provision or commissioning care within geographical boundaries. Strategic health authorities (SHAs) replaced regional health authorities and were tasked with providing local strategic leadership. This was accompanied by the introduction of national standards and targets and the strengthening of inspection and regulation, which was to be supported by newly created national bodies such as the National Institute for Health and Clinical Excellence (National Institute for Health and Care Excellence (NICE) from 2012) and the Commission for Health Improvement (Care Quality Commission (CQC) from 2009). In 2002 policy efforts to address long waiting times for elective care encouraged the development of private sector capacity, which also had the effect of enhancing competition between providers.

More recent developments in England include the introduction of the Health and Social Care Act in 2012. It removed some of the barriers for commissioners to purchase services from NHS trusts, the private sector, or the voluntary sector to provide NHS-funded services. This Act and its implications are discussed in more detail in Chapter 6. Following devolution, Scotland phased out GP fundholding and encouraged cooperation and integration. It reduced the number of Scottish trusts through mergers, which, from 2004, were eventually absorbed by newly established health boards. Similarly, post-devolution Wales abolished GP fundholding, and instead introduced local health boards (LHBs) in 2004. Local health boards collaborated with NHS trusts to provide secondary and community care; they also managed primary care. A continuing purchaser-provider split was eliminated in 2009 through the creation of a smaller number of larger local health boards that were made responsible for planning and delivering all services based on geographical boundaries.

Northern Ireland, from 1972 to devolution in 2007, had a slightly different structure in its health care system. Similar to other parts of the United Kingdom at the time, purchasing took place according to geographical boundaries, as a consequence of United Kingdom-wide changes in the 1970s. Purchasing bodies included health and social care trusts, the Ambulance Trust, four commissioning boards, and four Health and Social Care councils. A purchaser-provider split has therefore been maintained in Northern Ireland. The Health and Social Care (Reform) Act (NI) 2009 sought to streamline this organizational structure, and to shift more funding away from health care administration to health care services. As part of a general revision of administrative structures in the public sector in Northern Ireland, the Reform Act reorganized the many small trusts into fewer large trusts.

2.3 Organization

While care has never been delivered the same way across the United Kingdom, the health care system is now perhaps more divided than ever, as health policy decisions are made at the level of individual nations. Nevertheless, despite this diversity in the way the systems are organized, some aspects of the regulatory framework continue to operate on a United Kingdom-wide basis in line with European standards.

United Kingdom Government

The United Kingdom Treasury (i.e. ministry of finance) determines the budget for health and other social services in England, and Scotland, Wales and Northern Ireland receive a proportionally similar budget according to the Barnett formula (discussed in Section 3.3.3), based on the Cabinet's decisions for England. The United Kingdom Department of Health (i.e. ministry of health) is responsible for the health system in England, some United Kingdom-wide

regulatory matters and international collaboration where the Department of Health represents not just England, but the whole United Kingdom in dealings with the EU or UN agencies, for example. The Department of Health regularly meets with counterparts in the devolved administrations in Scotland, Wales and Northern Ireland.

NHS in England

The Secretary of State (i.e. minister) for Health has overall financial control and oversight of all NHS delivery and performance. The Department of Health is the central government body principally responsible for setting policy for the health and social care system in England. Following the 2012 Health and Social Care Act, the specific roles and responsibilities of the Department have changed, away from direct responsibility for the delivery of the NHS to one that provides strategic direction and acts as steward for the health and care system, develops national policies and provides leadership. Responsibility for the delivery of the NHS and care services has shifted to a newly established organization, NHS England (known as the NHS Commissioning Board until March 2013).

NHS England is an executive non-departmental body; it has a wide range of statutory duties and is accountable to the Secretary of State and the public. It oversees the delivery of NHS services and is responsible for the contracting and purchasing of primary care health services, as well as some nationallybased functions previously undertaken by the Department of Health. The main responsibilities of NHS England are: to provide national leadership for improving outcomes and enhancing the quality of care; to oversee the operation of clinical commissioning groups (CCGs) (see below); to allocate resources to clinical commissioning groups; and to purchase primary care and directly commissioned services such as specialized services, offender health care and some services for the armed forces (NHS England, 2014d).

Following the Health and Social Care Act 2012, primary care trusts were replaced by 221 clinical commissioning groups, led by general practitioners, while strategic health authorities were abolished. The idea behind the creation of the clinical commissioning groups was that GPs should have more control over decisions about spending as GPs see patients more regularly than other health care providers and so theoretically have a better understanding of their needs (The King's Fund, 2013a). Clinical commissioning groups commission urgent and emergency care, elective hospital care, community health services, mental health services, maternity, newborn, and children's healthcare services, among others. They commission these services from a range of providers such as public hospitals (NHS trusts and foundation trusts, which are semi-autonomous organizational units within the NHS; see Sections 2.8.2 and 5.4) and community and mental health providers, including from the voluntary and private sectors, provided these are registered with a regulating body. To avoid conflict of interest, where clinical commissioning groups commission primary care services, they do so with NHS England as local GPs are both purchasers and providers. Clinical commissioning groups are supported in their purchasing services by commissioning support units, strategic clinical networks and multiprofessional advisory groups ("clinical senates").

In 2013 the Health Protection Agency became part of Public Health England, whose remit is the protection of public health. Public Health England is an executive agency of the Department of Health. It serves an important advisory role to the government and it runs the national health protection service. It also supports the public in improving their own health, conducts research on public health problems and shares its expertise with the NHS, local authorities and industry so they can contribute to improve population health (see Section 5.1).

The Care Quality Commission is the independent regulator of health and adult social care providers in England. It was established in 2009 as a merger of the Healthcare Commission, the Commission for Social Care Inspection and the Mental Health Act Commission. It has a specific duty to protect the rights of vulnerable people, including those with mental illnesses. The Care Quality Commission licenses, monitors and inspects health and social care organizations, and enforces national legal requirements for the organizations in its purview. These organizations include hospitals, care homes, dentists, home services and, as of 2014, GPs.

Monitor is the economic regulator in the health sector in England. It sets and enforces the regulatory framework for providers and commissioners, as well as licensing NHS providers (see Section 2.8.2). Monitor and the Care Quality Commission are both non-departmental bodies which are accountable to parliament. The NHS Trust Development Authority monitors the performance of NHS Trusts and supports them in improving the quality and sustainability of their services.

Healthwatch England, "the consumer champion in health and care", has statutory powers to advise the major health-related organizations of England on how to improve health and social care. Although it does not have enforcement powers, it can demand written, public justifications for why a group did not act according to Healthwatch's advice. Healthwatch has representatives in each of the local authorities in England, on the Health and Wellbeing Boards, and on the Care Quality Commission.

The Health and Social Care Act 2012 established Health and Wellbeing Boards as a forum with a focus on improving the health of the local population. Local authorities form the Boards, including representatives from the NHS, public health, adult social care, children's services and Healthwatch. The idea is that local groups can best know how to address inequalities in health and how to meet the needs of the local population.

NHS in Scotland

The Scottish Parliament sets the legislative framework for the NHS in Scotland. The Scottish government decides on the level of resources to be devoted to the NHS. The system is overseen by the Scottish Cabinet Secretary for Health and Wellbeing who is also the Chief Executive of NHS Scotland. The Cabinet Secretary is supported by the Scottish government Health and Social Care Directorates, which provide strategic leadership for public health, the NHS and social care.

Planning and delivery functions are delegated to 14 regional NHS Boards; they plan and commission hospital and community health services. In addition, seven national ("special") NHS Boards provide national services. Boards work together regionally and nationally to plan and commission specialist health care services such as heart and lung surgery, neurosurgery and forensic psychiatric care. Healthcare Improvement Scotland provides scrutiny and public assurance of health services.

At local level, there are community health partnerships or community health and social care partnerships covering all areas of Scotland. These are committees of NHS Boards and have formal structures that ensure close involvement of local authorities, patients and the public.

In 2014 the Scottish Parliament passed the Public Bodies (Joint Working) Act, which puts in place the framework for integrating health and social care in Scotland (Scottish Government, 2015). It requires health boards and local authorities to establish integrated partnership arrangements. Integrated Joint Boards are being established, which will hold an integrated budget for both health and social care; from April 2016 these boards should have overall responsibility for the planning, resourcing and delivery of all integrated health and social care services.

NHS in Wales

The Welsh government, through its Department for Health and Social Services, funds the NHS in Wales. It leads on the development of policy and strategy for improving health, social care and public health. The Minister for Health and Social Services holds overall responsibility for health and social services, and is accountable for the performance of the NHS in Wales to the National Assembly for Wales. The Director General, Health & Social Services within the Welsh government is also Chief Executive of the NHS in Wales; s/he is accountable to the Minister for Health and Social Services, and is responsible for providing the minister with policy advice and exercising strategic leadership and management of the NHS. The planning and delivery of health care services is delegated to seven Local Health Boards (LHBs), and their chief executives are directly accountable to the Chief Executive. In addition, there are three NHS Trusts with an all-Wales focus offering emergency services and specialist services in cancer care, as well as the newly established Public Health Wales. The interests of patients and the wider public are represented by seven statutory Community Health Councils, which provide an independent "watchdog" function on all aspects of NHS care and treatment.

NHS Wales is supported by the NHS Wales Shared Services Partnership (NWSSP), which was launched in 2011 and which seeks to support the statutory bodies such as LHBs and NHS Trusts through the standardization and streamlining of processes, use of technology and enhancing supply chain and procurement functions. The Healthcare Inspectorate Wales (HIW) is the independent inspectorate and regulator of all health care in Wales.

Health and Social Care in Northern Ireland

The Minister of Health oversees the Department of Health, Social Services and Public Safety of Northern Ireland (DHSSPS), which is responsible for policy, public health and public safety. The Health and Social Care Board (after consulting the Public Health Agency) commissions care along with the local commissioning groups (LCGs), although the small size of the local commissioning groups means that the Health and Social Care Board and Health and Social Care trusts end up taking on a lot of the responsibility of commissioning and delivering care.

National Institute for Health and Care Excellence (NICE)

NICE was created as a special health authority in 1999, and in 2013, following the Health and Social Care Act 2012, it became an executive non-departmental public body, and its name was changed from the National Institute for Health and Clinical Excellence to the National Institute for Health and Care Excellence, reflecting its additional responsibility for developing guidance and quality standards in social care. NICE is accountable to the Department of Health while operationally independent of government. NICE guidance and other recommendations are made by independent committees. While NICE-issued

guidance is officially England-only, there are agreements in place to provide certain products and services to Northern Ireland, Scotland and Wales as well, and the respective administrations decide how NICE guidance should be used (see Section 2.7.2). Scotland has established its own agency, the Scottish Medicines Consortium, which provides advice to NHS Boards Scotland on medicines, while Wales established the All Wales Medicines Strategy Group in 2002 to provide advice on medicines management and prescribing to the Welsh government's Minister for Health and Social Services. NICE has no regulatory standard enforcement powers as such, as its responsibility involves describing the standards in particular areas, rather than implementing them.

The main responsibilities of NICE are to assess new medicines and treatments, based primarily on evaluations of efficacy and cost–effectiveness, to provide clinical guidelines on how conditions should be treated using the best available evidence and on how public health and social care services can be more effective, and to act as advisers for those managing and providing health and social care services. Since 2009 NICE has also set quality standards and determined indicators for the Quality and Outcomes Framework used in England (see Section 3.7.2).

Medicines and Healthcare products Regulatory Agency (MHRA)

The MHRA is responsible for regulating all medicines and medical devices in the United Kingdom by ensuring they work and are acceptably safe. It also supports innovation and research that will benefit public health. The MHRA and the European Medicines Agency (EMA) work together as the EMA evaluates medicinal products and determines what marketing is permitted across the EU as a whole.

Trade unions

The British Medical Association (BMA) was founded in 1832 and is a voluntary organization that represents doctors from all branches of medicine. Over two-thirds of practising doctors are members, and it has a total membership of over 154 600 in the United Kingdom and overseas, as of 2014 (BMA, 2015a). The BMA is an independent trade union and aims to protect individual members and the collective interests of its members. It does not register or discipline doctors: this is the responsibility of the General Medical Council (GMC) (see Section 4.2.3).

Other important trade unions representing NHS staff include UNISON, the British Dental Association (BDA), Unite the Union, GMB, the Hospital Consultants and Specialists Association, the Royal College of Midwives and the Royal College of Nursing.

Royal colleges

Many medical and surgical specialties and some other health professions have professional bodies, some of which are known as royal colleges, which are responsible for maintenance of standards, representation of their members and other matters relating to the particular specialty. Royal colleges include the Royal College of Physicians, the Royal College of Surgeons (in Glasgow, Edinburgh and England), and the Royal College of General Practitioners, the Royal College of Midwives and the Royal College of Nursing (RCN) (which are also trade unions for their professions), as well as some national royal colleges that include members drawn from across the United Kingdom and internationally. Most health care professional regulation is at the United Kingdom level (see Section 4.2.3), although for new professions it is a devolved matter (see Section 2.8.3).

The private and not-for-profit sectors

Charities are the main providers of palliative care services across the United Kingdom (see Section 5.10), although they receive most of their funding from the NHS. Private companies are the main providers of nursing care for older people, but there are also a number of private hospitals and clinics that provide services for patients paying fees directly or those with private medical insurance. Under the Health and Social Care Act 2012, private providers can also be contracted in to provide a wide range of services under NHS contracts in England. In Scotland private providers are generally only used by the NHS to ease waiting-time pressures. Some NHS hospitals also provide services to paying patients through private wards, although the income they can obtain from this activity is capped. General dental and ophthalmic services are also largely provided privately. All health care providers (whatever their legal status) are subject to the same national regulatory framework and health workers in both the private and public sectors are subject to the same licensing and registration.

2.4 Decentralization and centralization

The United Kingdom health system was never a singular whole (see Section 2.2); however, since powers have been devolved from the United Kingdom parliament to administrations in Scotland, Wales and Northern Ireland from 1997, the systems have diverged further and the level of decentralization varies from one nation to another. Devolution has meant that Scotland, Wales and Northern

Ireland can determine their own spending plans within allocations determined by the Barnett formula, although the financial responsibility for collecting revenues has remained the domain of the central United Kingdom government.

In England the commissioning of most services has been at a local level since the 1990s, although the size of population covered by the commissioning bodies has varied; on the other hand, health policy and the commissioning of specialized services have been determined centrally. In Scotland NHS boards are responsible for setting strategy and delivering services.

Wales and Northern Ireland, as very small countries (in terms of both population and geography), have a shorter distance between national politicians and service delivery, and a higher number of national politicians per capita than in England, which further contributes to the close scrutiny of health matters. This ambiguity in what is centralized and decentralized is compounded by the emphasis on cooperation and consensus discussed earlier, but a key issue is that England has a much larger population than Scotland, Wales and Northern Ireland.

There has historically been a strong tradition of decentralization in the regulation of the health system; for example, the licensing and registration of professionals in the health workforce has been conducted by arm's-length agencies (see Section 2.8.3). Such bodies are responsible for quality control in the NHS and private sector health services and the decentralization of these responsibilities has been part of an on-going trend. Privatization has been less widely used thus far, but it has featured in, for example, procurement and logistics (see Section 4.1.3). The contracting of private service providers in England under the Health and Social Care Act 2012 could also be framed as a form of privatization, and although the volume of services provided in the private sector remains small relative to service provision by NHS providers, it is growing, mostly in community and mental health services.

2.5 Planning

There is no formal plan for the United Kingdom NHS, as England, Scotland, Wales and Northern Ireland have their own planning mechanisms in place. However, across the United Kingdom planning is based more on health needs than on inputs such as bed numbers or staffing levels.

NHS in England

The Department of Health provides a framework within which providers operate, and specifies targets that providers must strive to attain. It sets up the NHS Operating Framework, which sets out the planning, performance and financial requirements for NHS providers over a two-year period. The Operating Framework also details how providers will be held accountable for adhering to those requirements (see Section 2.8.2) (NHS, 2011).

The United Kingdom government issues an annual mandate to NHS England, and holds it accountable to working towards the mandate. The mandate, introduced as part of the Health and Social Care Act 2012, is the first instance of the government being legally bound to set objectives for the NHS.

The Mandate 2014/2015 (Department of Health, 2013c) says that by March 2015 NHS England should:

- 1. help people live well for longer;
- 2. manage on-going physical and mental health conditions;
- 3. help people to recover from episodes of ill health or following injury;
- 4. make sure people experience better care;
- 5. provide safe care;
- 6. free the NHS to innovate;
- 7. support the NHS to play a broader role in society; and
- 8. make better use of resources.

A Spending Review occurs biannually, setting a three-year planning cycle. During less frequent reviews known as Comprehensive Spending Reviews, targets for Public Service Agreements (PSAs) and Departmental Strategic Objectives are set. The Department of Health is responsible for Better Health for All and Better Care for All Public Service Agreements.

NHS in Scotland

Scotland has its own National Performance Framework, which is underpinned by five strategic objectives: a Scotland that is wealthier and fairer, healthier, safer and stronger, smarter, and greener. NHS boards create their own local plans for health and delivery in accordance with this framework, and the directorates give their approval. As part of this planning, boards must adhere to the national standards and guidance developed by the directorates.

The delivery plans of the NHS boards are produced annually, and they set out the HEAT (Health improvement, Efficiency, Access, Treatment) targets that they aim to meet over the next three-year period. HEAT targets are: Health improvement, including increasing healthy life expectancy; Efficiency and governance improvements; Access to services; and Treatment appropriate to individuals.

The Healthcare Quality Strategy for NHS Scotland provides the context for policy development, prioritizing three ambitions: mutually beneficial partnerships between patients, their families and health care workers; no avoidable injury or harm to people from their health care; and the most appropriate treatments and services provided when they are needed (NHS Scotland, 2010).

The National Planning Forum decides which planning issues to address on a national level, while regional planning groups emphasize coordinated service delivery in their areas. Local delivery plans are agreed by the government directorates, and must include a health improvement plan, a health care plan, a financial and resources plan, and a change and development plan.

NHS in Wales

The Welsh government develops a framework of policy and strategy, as well as annual requirements for NHS performance. Local health boards are responsible for planning for their local services. They put together a threeyear Integrated Medium Term Plan, which is reviewed annually, and where levels of reassurance are sufficient, Health Boards are rewarded with three-year financial allocations and a measure of freedom in expenditure within the threeyear period. The Welsh government is also in charge of emergency planning and business continuity for NHS organizations.

Beyond this, the Welsh government is looking to change the planning arrangements across public services. The Well-Being of Future Generations Act (passed by the Welsh Assembly in March 2015) places a statutory duty on public sector organizations to improve the economic, social and environmental well-being of Wales in accordance with the sustainable development principle. It will establish a Future Generations Commissioner for Wales, to monitor and assess the achievement of the well-being objectives set by the specified public authorities. Planning across public services (including health) will be carried out by Public Services Boards (PSBs), whose aim will be to improve the economic, social and environmental well-being of their area in accordance with the sustainable development principle. The Act places Public Services Boards and well-being plans on a statutory basis to create better alignment between national and local well-being goals. The well-being plan must include objectives designed to maximize each Health Board's contribution within its area to the achievement of the well-being goals. Each Public Services Board must also review and amend its local well-being plan and produce annual progress reports.

Health and Social Care in Northern Ireland

The Northern Ireland Executive creates spending plans for the health department, and the Department of Health, Social Services and Public Safety of Northern Ireland handles planning for personnel, estate management and emergency planning. The Strategic Investment Board (SIB) works with the Office of the First Minister and Deputy First Minister to create a ten-year funding envelope (budget). The health department helps the Strategic Investment Board in its investments and thus has a say in the envelope, which is what it uses to plan. The Health and Social Care Board and the Public Health Agency work together to determine what services are required. This is an example of the emphasis placed on intersectorality in the Northern Ireland health system (see Section 2.6).

2.6 Intersectorality

In recent years there has been a marked increase in the emphasis on cooperation among different branches of government and across sectors. In Northern Ireland, Scotland and Wales, where populations are smaller, cross-sector cooperation has been a major principle since devolution.

In England the introduction of Health and Wellbeing Boards is specifically aimed at closing the gap between health and social care, and at addressing issues of health inequality across the nation. The Better Care Fund was established as a national fund, allocated by NHS England and the government to local areas, for clinical commissioning groups and local authorities to spend jointly on social and community care (see Section 5.8). This has meant a significant redirection of funds away from acute care services to community care, but it is not clear that savings will be made from the hoped-for reduction in emergency care admissions (McKeon, 2014).

Initiatives across the United Kingdom exist that require intersectoral work, from healthy eating in schools programmes to poverty-reduction initiatives. In Wales the Social Services and Well-Being Act 2014 gives the Minister for the first time the power to require measures such as the pooling of NHS and

local government budgets for joint health and social care provision. Moving responsibility for public health to the local level was also seen as a way of tackling the wider social determinants of health across sectors.

2.7 Health information management

2.7.1 Information systems

Providers of care in England collect data to feed back to the Department of Health. Data are often used for financial planning purposes, such as for Payment by Results in England and for Quality and Outcomes Framework programmes across the United Kingdom (see Section 3.7). Data were collected and collated through the National Programme for Information Technology (NPfIT) system in England before its dismantling in 2013 (see Section 4.1). IT systems in the devolved administrations of Scotland, Wales and Northern Ireland collect and collate data as well. The Health and Social Care Information Centre (HSCIC) replaced Connecting for Health in 2013. It provides information, data and IT systems for the health and social care field in England; in Wales this is provided by NHS Wales Informatics Service (NWIS). The Office for National Statistics (ONS) similarly provides statistics and analysis on health and the health system in the United Kingdom. The Information and Statistics Division of NHS National Services Scotland and the Health & Social Care Board, Information Standards Service provide a similar service in Scotland and Northern Ireland, respectively.

After the Health and Social Care Act 2012, providers in England must also collect data on the "friends and family test" to capture patient feedback. In 2014 the NHS England medical director announced that surgeons might be expected to publish their mortality rates, possibly as part of the revalidation process. Health and Wellbeing Boards will likely use data from other sources, as part of their remit is collecting evidence and providing advice to the health care system on patient voice.

People may access certain information under the Freedom of Information Act 2000 in England, Northern Ireland and Wales, and under the Freedom of Information Act 2002 in Scotland. There are many exceptions, especially related to personal information about staff, commercial sensitivity and the costs of providing information. The Department of Health has made an effort to explain what information people can find publicly, without needing to submit Freedom of Information requests.

2.7.2 Health technology assessment

Health technology assessment is the systematic evaluation of the effectiveness, costs and impact of health care technology with the aim of informing health policy-making. The key body involved in evaluating the cost-effectiveness of interventions and producing guidelines on the basis of available evidence is NICE (see Section 2.3). Across the United Kingdom purchasing decisions are made at the local level and purchasers are not duty bound to include medicines or other interventions which have been shown to be cost-effective in the package of benefits locally. Similarly they are also free to cover interventions shown to not be cost effective. NICE is a Non Departmental Public Body whose guidelines are used across the United Kingdom with some adaptation to reflect local differences. While NICE gives guidance on most medicines in the United Kingdom, there are additional advisory bodies in Scotland, Wales and Northern Ireland that offer guidance on best practice in prescribing, and clinical effectiveness and cost-effectiveness for medicines not covered by NICE. In Scotland it is the Scottish Medicines Consortium (SMC), while in Wales it is the All Wales Medicines Strategy Group (see Section 2.3). If the SMC gives advice, Scottish NHS boards are expected to follow it; the SMC also has some crossover with NICE in the medicines it appraises.

2.8 Regulation

Regulatory bodies set standards, monitor organizations to ensure compliance with those standards, and enforce consequences for providers that fail to meet standards.

Any health care profession that was regulated prior to 1998 remains under United Kingdom regulation, but any new professions which have developed since then, or any regulatory bodies created since then, are devolved. The major arm's-length bodies of the Department of Health which have a regulatory role are the Care Quality Commission (CQC) and Monitor in England, the National Institute for Health and Clinical Excellence (NICE), and the Medicines and Healthcare products Regulatory Agency (MHRA) (see Section 2.3).

2.8.1 Regulation and governance of third party payers

In England the third party payers are the clinical commissioning groups (CCGs), which negotiate contracts to purchase mental health and community health services from public and private service providers, and NHS England, which

negotiates contracts for most primary care services and specialist services. In Wales and Scotland the health boards are essentially integrated purchasers and service providers and are answerable to the national administration. Audit Scotland and the Wales Audit Office are the main regulators ensuring services deliver value-for-money.

2.8.2 Regulation and governance of providers

England, Scotland, Wales and Northern Ireland each has its own regulatory bodies, including the Care Quality Commission and Monitor in England, the Regulation and Quality Improvement Authority in Northern Ireland, Healthcare Improvement Scotland in Scotland, and Healthcare Inspectorate Wales in Wales.

England

The Care Quality Commission registers, monitors, inspects and regulates both NHS and private services in England to ensure they meet fundamental standards of quality and safety (see Section 2.3). Its findings are published, including performance ratings which are designed to help patients make choices about care providers. The Care Quality Commission sets the minimum standards of care, as well as determining what constitutes good and outstanding care. If services fall below the minimum standards, the Care Quality Commission has the power to define what providers need to do to improve the quality of care or, if necessary, can limit a provider's activities until the necessary changes have been made. Its regulatory powers include issuing cautions and fines, and where patients have been harmed or put at risk, they can also prosecute.

Monitor was established in 2004 to authorize and regulate foundation trusts (FTs), but as of 2013 it is also the economic sector regulator for all providers, including private and not-for-profit groups that provide NHS-funded care. It ensures that if a provider runs into serious problems, essential services are maintained for patients. Monitor works with the Care Quality Commission, NHS England and other bodies to make sure that the procurement, choice and competition elements of provision work in the best interests of patients. Monitor is one of the agencies involved in setting prices.

Monitor assists in preparing hospital trusts to transition into becoming foundation trusts. Foundation trusts must meet the licensing rules set by Monitor, which include how they are governed, what services they provide, the amount of money that the trust is permitted to borrow from private sources, and the number of assets the trust is allowed to sell. Monitor works with the Competition and Markets Authority (CMA) to make sure foundation trust mergers and acquisitions are not anti-competitive, in keeping with the regulations passed following the Health and Social Care Act 2012, although this means Monitor is responsible for both mergers and competition.

The NHS Trust Development Authority (TDA) was established in 2012 in order to assist trusts in reaching foundation trust status. If a trust will not be able to meet Monitor's standards for foundation trusts, the Trust Development Authority will help the trust find a different organizational form. The Trust Development Authority ensures safe, quality services from trusts by overseeing planning, clinical quality, performance and finance. The Trust Development Authority especially helps trusts make sustainable improvements in order to reach standards. It also approves capital investments. This top-down management style is meant to bring trusts to foundation trust status more quickly. The Trust Development Authority will be dissolved once it has achieved its goal of making all trusts either foundation trusts or some other sustainable form of trust.

The NHS Outcomes Framework provides an overview of how well the NHS is performing, gives the Secretary of State (i.e. minister) for Health a mechanism by which to hold NHS England accountable for its use of public funds, and promotes increased quality throughout the NHS by encouraging a culture change.

The five domains of the Outcomes Framework, which were enshrined in the Health and Social Care Act 2012, are:

- to prevent people from dying prematurely;
- to enhance quality of life for people with long-term conditions;
- to help people recover from episodes of ill health or following injury;
- to ensure that people have a positive experience of care; and
- to treat and care for people in a safe environment and protect them from avoidable harm.

Indicators are purposely not changed too much from year to year, to ensure continuity. They may change when outcomes become more reliably measurable.

Charges of neglect and mismanagement at the Mid Staffordshire NHS Foundation Trust led to a high-profile inquiry, the final results of which were published in 2013 as the Francis Report, named after Robert Francis, lead investigator and author of the report. The main conclusions were that the health care system required more effective regulation and a culture of care. This pushed quality regulation to the top of the government's agenda, and one

noticeable result was the inclusion of ratings for specific services in the Care Quality Commission's reports. The Commission has developed five quality domains – safety, effectiveness, caring, responsiveness and well led.

Scotland

Healthcare Improvement Scotland (HIS), formed in 2011, oversees quality of care delivered by both the NHS and the independent sector. It took on this role from NHS Quality Improvement Scotland, which was established in 2003. Healthcare Improvement Scotland drives health care practice improvements, scrutinizes care to ensure quality and safety, and develops guidelines, advice and standards for effective clinical practice. NHS boards are expected to adhere to Scotland) guidelines, and Healthcare Improvement Scotland conducts performance reviews to ensure this. Healthcare Improvement Scotland does not have enforcement powers against NHS boards, although it does have such powers against independent health care providers. Healthcare Improvement Scotland includes several sub-groups that work on specific projects, such as the Healthcare Environment Inspectorate and the Scotlish Health Technologies Group. Healthcare Improvement Scotland works according to the Healthcare Quality Strategy (2010) (see Section 2.5).

Wales

Healthcare Inspectorate Wales (HIW), like its counterpart in Scotland, monitors NHS and private health care organizations, in order to ensure safety and quality. HIW focuses on improving patient experience and strengthening the voice of the public in reviewing health services. A new Social Services Regulation and Inspection Bill will change the regulatory regime for care and support services, and will seek to harmonize links with the health sector, in line with the intentions of the 2014 Social Services and Well-Being Act.

Northern Ireland

The Regulation and Quality Improvement Authority (RQIA) monitors the availability and quality of health and social care services in Northern Ireland, ensuring that services meet standards and are easy to access. RQIA was established in 2003, in the same law that created a statutory duty of quality for health and social care organizations, and required the Department of Health, Social Services and Public Safety of Northern Ireland to set quality standards. RQIA inspects services ranging from children's homes to nursing agencies, as well as Health and Social Care trusts and agencies. As of 2009, RQIA's duties were expanded to include regulating care of those with mental health problems and learning disabilities.

2.8.3 Regulation and planning of human resources

Regulation of most of the health care professions is reserved at United Kingdom level. The majority of health care professionals are regulated by professionally led statutory bodies. These regulators protect and promote the safety of the public by setting standards of behaviour, education and ethics that health professionals must meet, and by dealing with concerns about professionals who are unfit to practise owing to poor health, misconduct or poor performance. Regulators register health care professionals who are fit to practise in the United Kingdom and can remove professionals from the register and prevent them from practising where they consider this to be in the best interests of public safety.

The regulators maintain a register of individuals who meet standards of training and who are, therefore, permitted to use a protected professional title; they set standards of training and education, including in many cases requirements for continuing professional development (CPD) and revalidation. They also establish standards of practice or codes of conduct and they monitor and enforce standards of practice by taking action against professionals who are not fit to practise. The key health workforce regulators in the health system are:

- General Medical Council, which was established in 1858 and regulates doctors;
- Nursing and Midwifery Council (formerly the United Kingdom Central Council for Nursing, Midwifery and Health Visiting), regulating nurses, midwives and health visitors;
- General Dental Council, regulating dentists, dental nurses, dental technicians, dental hygienists, dental therapists, clinical dental technicians and orthodontic therapists;
- General Optical Council, regulating optometrists, dispensing opticians, student opticians and optical businesses;
- Health Professions Council, regulating the members of 13 health professions: art therapists, biomedical scientists, chiropodists/podiatrists, clinical scientists, dieticians, occupational therapists, operating department practitioners, orthoptists, paramedics, physiotherapists, prosthetists/orthotists, radiographers, and speech and language therapists;
- General Pharmaceutical Council, regulating pharmacists and pharmacy technicians, and registering pharmacy premises in England, Wales and Scotland. The Pharmaceutical Society of Northern Ireland is the regulatory and professional body for pharmacists in Northern Ireland;

- General Osteopathic Council, regulating the practice of osteopathy in the United Kingdom; and
- General Chiropractic Council, regulating chiropractors in the United Kingdom.

Since April 2013 Health Education England has been responsible for workforce planning, education commissioning (i.e. strategic purchasing) and education provision – and this is the first time that responsibility for all these functions has been within the same body. The aim is to improve national consistency and standards for health workforce planning and education.

2.8.4 Regulation and governance of pharmaceuticals

The manufacture, licensing and regulation of medicines and the control of pharmaceutical prices is all done at United Kingdom level. Pharmaceutical products are licensed by the Medicines and Healthcare products Regulatory Agency (MHRA). Licensing follows United Kingdom law but also conforms with EU legislation. The MHRA is an executive agency of the Department of Health; it authorizes clinical trials of drugs, assesses the results of trials, monitors the safety and quality of products, and can remove products from the supply chain if it finds sufficient evidence that they are substandard.

The Medicines Act 1968 lists three types of pharmaceutical products: those on the General Sale List, which do not need a pharmacist and can be sold over the counter (OTCs); those dispensed through pharmacists only; and prescription only medicines (POMs). All four nations (England, Scotland, Wales and Northern Ireland) must adhere to this legislation.

Under United Kingdom law the advertising of prescription drugs is not allowed and advertisements for non-prescription medicines are strictly regulated. Complementary and alternative medicines (CAM) must meet different standards or obtain a licence, unless they are herbal medicines made up and supplied on an individual patient basis. Homoeopathic medicines have their own standards and registration, and they must not be indicated for serious conditions. Internet suppliers are not reliably regulated.

All pharmacists, pharmacy technicians and pharmacy premises in the United Kingdom must register with the General Pharmaceutical Council (GPhC). They must renew their registration annually, and premises are inspected every five years. Inspections in Scotland, Wales and Northern Ireland are conducted by local bodies.

The Pharmaceutical Price Regulation Scheme (PPRS) is a voluntary, non-contractual agreement negotiated between the government and the Association of the British Pharmaceutical Industry. The agreement lasts five years, and controls the pricing of all licensed, branded drugs sold to the NHS throughout the United Kingdom. The aim of the scheme is to ensure that the NHS obtains drugs at fair prices, while promoting strong industry. The PPRS places a limit on the profits that individual companies can earn from supplying medicines to the NHS, while allowing a return on capital (ROC) within certain limits. The 2009 scheme put in place flexible pricing (which applies to medicines subject to NICE appraisal) and patient access schemes (which allows a company to adjust pricing for medicines NICE has not found to be cost-effective or clinically effective). The 2014 PPRS introduced, for the first time, a fixed limit on what the NHS spends on branded medicines. All additional expenditure above this level will be paid for by the pharmaceutical industry. In 2011-2012 the NHS spent more than £12 billion on branded medicines (Department of Health, 2013b).

Generic medicines are not subject to PPRS. Prices of generics can change over time to reflect the average market price of manufacturers or wholesalers after discounts, but they have to explain any changes to prices. OTC products are not price-regulated.

Pharmacies are reimbursed through the Prescription Pricing Authority at the manufacturer's list price for branded medicines, and at the Drug Tariff price for generics. A clawback level is set to ensure that some of any difference between the price paid for the drugs by the pharmacy and what is reimbursed goes back to the NHS. The average in England is 9.2%, adjusted monthly.

There is a Black List of pharmaceutical products that may not be prescribed, and a Grey List of pharmaceuticals that may be prescribed under certain circumstances, or for certain groups of patients or certain conditions only. Doctors can prescribe a medicine that is not on their local formulary of accepted licensed medicines, if they feel it is necessary.

Pharmaceuticals are part of a clinical commissioning group's overall budget, and the money is not ring-fenced, so there is an incentive to reduce costs. GPs are encouraged to prescribe generics, and since 1995 there has been an increase in generic prescriptions. NICE monitors the cost–effectiveness of drugs, and GPs are expected to follow NICE guidelines when prescribing, but they are not required to.

2.8.5 Regulation of medical devices and aids

The procurement of medical devices and aids in England is conducted through regional NHS bodies known as "collaborative procurement hubs". These hubs consist of NHS trusts (normally within the same regional boundary) and they work with the centralized NHS Supply Chain service which manages the procurement and delivery of a wide range of products. DHL Logistics (a private company) operates the NHS Supply Chain on behalf of the NHS Business Services Authority on a ten-year contract. The Innovative Technology Adoption Procurement Programme (iTAPP) under the Department of Health is responsible for the procurement process, with funding for purchases of medical equipment being provided through central government funding. Decisions on the purchase of equipment in England are made locally by NHS trusts and must follow the same financial governance framework as any investment decision (see below). Regulation of medical devices and aids occurs at United Kingdom level. Additional incident investigations in Northern Ireland are undertaken by the Northern Ireland Adverse Incident Centre, which is part of the DHSSPS.

In Scotland procurement is done by NHS National Services Scotland. The Procurement and Logistics Service (PaLS), part of the Business Services Organization, manages procurement in Northern Ireland. In Wales purchasing is done at a local level; major items are funded from capital on a bidding process.

2.8.6 Regulation of capital investment

For NHS England there is no longer a formal central prioritization process for large capital schemes. Instead, local providers are responsible for initiating local investments, with their decisions subject to a regulatory framework specified by HM Treasury and developed further by the Department of Health. This indicates when NHS bodies may initiate capital investment without reference to higher authorities, and provides rules for ensuring good business practice.

The majority of investment remains funded by central government. In the past, at an aggregate level, funds for capital investment in the NHS in England were allocated on a regional basis by the Department of Health from central government resources with the aim of delivering an equitable distribution of health care facilities. Capital investment by foundation trusts is financed locally, either through the reinvestment of cash generated by each foundation trust from income for activity or through interest-bearing loans. These loans may come from the private sector (commercial banks) or from government through the Foundation Trust Financing Facility. Monitor, the independent regulator, allocates a "prudential borrowing limit" to each foundation trust, basing its decision on the trust's ability to pay back the money it borrows. Loans drawn down from the Department of Health's loan facility are on commercial terms.

For large infrastructure projects, capital investment remains centralized in Scotland, Wales and Northern Ireland. As part of the annual spending round, the NHS in Scotland is allocated a capital budget, part of which is distributed to boards by formula, and the rest allocated to specific large projects whose value is in excess of board-delegated limits. In Wales the allocation of capital to the NHS is managed by the Welsh government via an All Wales Capital Programme, which was established in March 2007. In Northern Ireland there is a collaborative approach to capital investment planning in which all parties are involved in agreeing priorities and approving the business cases for capital investment programmes (see also Section 4.1.1).

2.9 Patient empowerment

2.9.1 Patient information

It is easier than ever before for patients to access information, both that pertaining to themselves and that related to the NHS in general. NHS Choices, SHOW Scotland, NHS Direct Wales, and NI Direct are sites that provide a range of information, such as the location and contact information for GP practices, public health programmes such as healthy eating, how to access social care, and symptom checkers.

2.9.2 Patient choice

Patients in the United Kingdom are free to register with a GP of their choice, and generally to choose any NHS hospital as long as their GP is willing to refer them. However, while choice is seen as a driver of quality and efficiency in England, choice is not emphasized in Scotland, Wales or Northern Ireland.

The Health and Social Care Act 2012 in England made patient choice a priority, especially focusing on allowing patients to choose where they can go for elective procedures. NHS England also uses personal health budgets in long-term care (see Section 5.8) as a mechanism of patient choice, as well as of independence.

2.9.3 Patient rights

Implementation of the WHO Declaration of Patients' Rights in Europe (1994) has been devolved from the United Kingdom level. The NHS Constitution, which was published in England in 2009 and updated in 2010, outlines the principles and values of the NHS, as well as the rights and responsibilities of patients and NHS staff in England. The Scottish Charter of Patient Rights and Responsibilities was published in 2012, after legislation required it. Wales introduced the idea of a charter for patient rights as early as 2007, but to date one has not been published. There is no charter in Northern Ireland.

2.9.4 Complaints procedures

In the United Kingdom complaints should be formally acknowledged within three working days, and they should be investigated promptly. Patients may request that they be apprised of the investigation's progress, and any actions taken at the end of the investigation. If the complaint is not resolved, the patient can bring the complaint to the appropriate ombudsman. Patients have the right to legal action and monetary recompense when treatment has been harmful. Registering a complaint does not affect a patient's future treatment.

In England the newly formed Healthwatch has issued guidelines on how to make complaints, and patients can also contact their local Healthwatch branch for assistance in making complaints (Healthwatch, 2015). There is a Patient Advice and Liaison Service (PALS) located in all hospitals in England which offers a similar service to help patients to complain to the service provider. Guidance was issued by the Scottish government in 2005, and assistance is available from Citizen's Advice Bureaux. The Patient Client Council in Northern Ireland offers advice and assistance to complainants. Community Health Councils in Wales provide support and advocacy services. Additionally, a 2010 Welsh measure provides a statutory right to advocacy support in mental health provision.

The NHS receives a large number of complaints every year (Health & Social Care Information Centre, 2012). For example, in England the NHS received 162 129 written complaints in 2011–2012, which was an 8% increase over the previous year. Many of these complaints were about how NHS staff had handled previous complaints poorly, either by refusing to acknowledge mistakes made or by dismissing patient concerns (NHS, 2012). Where a patient complaint cannot be resolved by the NHS or service providers, it is referred to the Parliamentary Health Service Ombudsman in England or to the Public Services Ombudsmen in Scotland, Wales and Northern Ireland.

2.9.5 Public participation

Public participation is considered important across the United Kingdom as a way for the NHS to be a responsive health system. There have been similar approaches to achieving public participation throughout the United Kingdom, with an emphasis on using participation as a way to further integrate health and social care.

The Health and Social Care Act 2012 put a statutory duty on clinical commissioning groups and commissioners in NHS England to include patients and carers in managing their own care and treatment in the services they commission, and to enable the public to effectively participate in the actual commissioning (i.e. strategic purchasing) process (NHS England, 2013b). The aim of this is to make sure that services address local needs. Some of the ways the public can participate is through online survey tools, consultations and via community organizations (NHS England, 2013c). On paper, public participation is sought through partnerships between Healthwatch, Health and Wellbeing Boards, clinical commissioning groups, local authorities' patient groups, patient leaders and the voluntary sector. In practice, it is hard to ensure public participation in decision-making.

In Scotland there are two different approaches to public participation – the formalized process that NHS boards follow, and the more scattered approach of local authorities (Scottish Health Council, 2015). The Scottish Health Council in particular plays a key role in advising and supporting boards in quality assurance, and assessing boards' involvement in planning and providing services (Steel & Cylus, 2012).

Wales uses a combination of groups and policies to include public participation in the health and social care system: the National Service User Experience (NSUE) Group, Community Health Councils (CHCs), Public & Patient Involvement & Experience (PPIE) networks, and the 1000 Lives improvement programme (NHS Wales, 2015).

Personal and Public Involvement (PPI) is a legislative requirement in Northern Ireland as of 2009 (Public Health Agency, 2012). Health and Social Care organizations send representatives to a regional Health and Social Care PPI Forum in order to train and develop staff, analyse engagement activity information, and evaluate the effectiveness of Personal and Public Involvement. All Health and Social Care organizations are responsible for Personal and Public Involvement, but the Public Health Agency leads the way, and produces an annual report on Personal and Public Involvement.

2.9.6 Patients and cross-border health care

United Kingdom residents may receive treatment anywhere in the United Kingdom. Patients along the north-eastern border of Wales often cross into England to access health services. Efforts are made in Northern Ireland to ease cross-border treatment with the Republic of Ireland, although due in part to the health care financing system of the Republic of Ireland being insurance-based, there cannot be full integration.

3. Financing

ealth services are mainly funded through general taxation, with the remainder coming from private medical insurance and out-of-pocket payments. In the early 2000s the United Kingdom government committed to increasing health care spending as a share of GDP to a level that corresponded with the average of the EU members at that time. Health expenditure as a share of GDP grew from 6.9% in 2000 to 9.4% in 2010, which was similar to the EU average, but below the average for the EU-15 countries. The implementation of austerity measures in 2010 following the financial crisis of 2007–2008 has meant a cut in total health expenditure in real terms in 2010 and 2011; in 2013 health spending accounted for 9.1% of GDP.

Once administrations in Scotland, Wales and Northern Ireland and the Department of Health have their health care allocation, they distribute to their commissioners (in England and Northern Ireland) or providers (in Scotland and Wales), and to public health organizations, according to their own formulas, which all include some form of weighted capitation.

Most services are provided free of charge at the point of use, but there are some that can involve cost-sharing (like dental care and pharmaceuticals) or direct payments (like most social care). Only England has prescription drug charges.

Purchasing of health services varies between Scotland, Wales and Northern Ireland. In Northern Ireland the Health and Social Care Board negotiates contracts with Health and Social Care trusts. Wales uses a capitation-based funding method, and local health boards manage the funds they use in delivering services. Boards and community health partnerships manage their own funds in Scotland and use a capitation-based allocation system. NHS Employers was

set up in 2004 and negotiates pay and conditions for NHS employees on a United Kingdom-wide basis, with some variations made in Scotland, Wales and Northern Ireland.

3.1 Health expenditure

Funding for total health expenditure in the United Kingdom comes from public funds: general taxation and National Insurance Contributions. A small share comes from private medical insurance, in addition to out-of-pocket payments: direct payments for goods and private services and some co-payments for pharmaceuticals, dental care and ophthalmic care. Public funds are collected by the Treasury; the Department of Health then allocates funds in England, while Scotland, Wales and Northern Ireland receive their funds in block grants according to the Barnett formula (Section 3.3.3).

From 2000 to 2010 there was a significant increase in health expenditure because of a political commitment to raising health care spending as a percentage of gross domestic product to a level that corresponded more closely with the EU average, which at the time was higher as EU membership had not yet expanded to include the lower-spending countries of central Europe. In real terms total health spending in the United Kingdom grew 5.7% per year on average between 2000 and 2009 (OECD, 2013).

The policy of austerity following the economic crisis of 2007–2008 has had repercussions across the economy of the United Kingdom. Health spending dropped by 1.9% in real terms between 2009 and 2010, and another 0.4% between 2010 and 2011 (OECD, 2013). England and Scotland sought to maintain health care spending, with no cuts, but Wales planned reductions in health care spending of almost 11% by 2013/2014. However, it did not prove to be possible, and in late 2013 Wales announced a slight increase in spending in order to avoid understaffing, closing hospitals or other measures that might affect quality or safety.

It is difficult to compare financing data between the four nations of the United Kingdom, because different definitions and factors have been used for years, but the Public Expenditure Statistical Analysis data produced by HM Treasury are a useful starting point. This shows that health expenditure per head in cash terms increased between 2000/2001 and 2012/2013 by 115% in England, 92% in Northern Ireland, 99% in Scotland and 98% in Wales. The

impact of austerity can be seen in the annual rates of change between 2010/2011 and 2012/2013; health expenditure grew by 1% in England and Scotland, and by 2% in Northern Ireland, but decreased by 1% in Wales (Bevan et al., 2014).

Table 3.1

Trends in health expenditure in the United Kingdom, 1995 to 2013

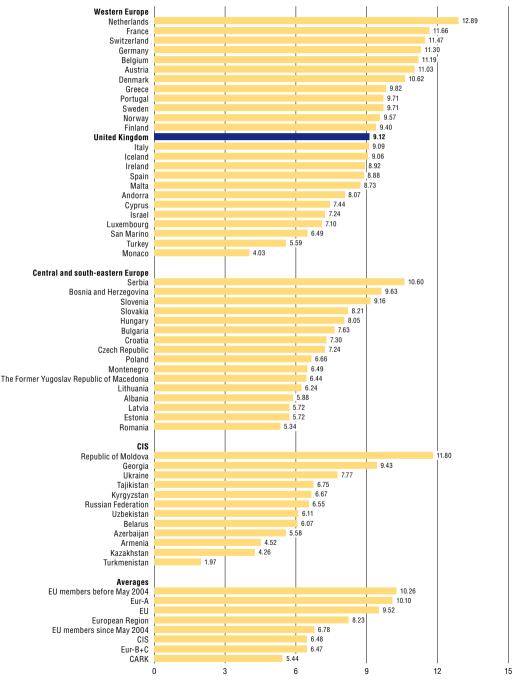
Indicators	1995	2000	2005	2010	2011	2012	2013
Total health expenditure (THE) % Gross Domestic Product (GDP)	6.7	6.9	8.1	9.4	9.2	9.3	9.1
Total expenditure on health / capita at Purchasing Power Parity (NCU per US\$)	1,347	1,833	2,711	3,223	3,224	3,235	3,311
Average annual growth rate in per capita expenditure	6.3%	8.1%	3.5%	0.0%	0.3%	2.3%	-
Private insurance as % of PvtHE	19.8	17.6	20.6	20.1	18.1	17.1	17.1
Private expenditure on health (PvtHE) as % of THE	16.1	20.9	18.7	16.0	16.6	16.0	16.5
Out of pocket expenditure as % of THE	10.9	11.1	9.6	8.8	9.3	9.0	9.3
Out of pocket expenditure as % of PvtHE	67.6	53.3	51.3	54.7	56.4	56.4	56.4
GGHE as % of General government expenditure	13.0	15.1	15.2	15.8	16.1	16.2	16.2
General government expenditure on health as % of GDP	5.6	5.5	6.6	7.9	7.7	7.8	7.6
General government expenditure on health / cap x-rate	1,144	1,394	2,549	2,890	3,009	3,019	3,006
General government expenditure on health / cap Purchasing Power Parity (NCU per US\$)	1,130	1,450	2,203	2,707	2,690	2,716	2,766
General government expenditure on health (GGHE) as % of THE	83.9	79.1	81.3	84.0	83.4	84.0	83.5

Source: WHO, 2014. WHO Global Health Expenditure Database.

As a result of the political commitment to matching the EU-15 average spend on health care in the early 2000s, according to WHO estimates, total health expenditure as a percentage of GDP rose from 6.9% in 2000 to 9.4% in 2010; however, this ratio has declined slightly in the years since (Table 3.1). The majority, 83.5%, of total expenditure came from public sources in 2013 and this share has remained fairly constant since at least 1995. It does not appear that private sources of funding have been used to substitute for slowdowns or decreases in public expenditure growth in recent years.

Fig. 3.1

Health expenditure as a share (%) of GDP in the WHO European Region, latest available year



In 2012 the United Kingdom spent just below the average for all current EU members on health care as a share of GDP (Figure 3.1). The United Kingdom spends less money as a percentage of GDP than comparable affluent EU nations like Germany and France, although it is fairly similar in spend to Sweden (Figure 3.2). Per capita expenditure is lower than the median western European country, but at over \$3300 per person (PPP USD), it is comparable to the EU average, despite the rate of increase slowing since 2010 following the financial crisis (Figure 3.3 and Table 3.1). There is some variation between the nations in the United Kingdom: in 2012/2013 per capita spending was highest in Scotland (£2115) and lowest in England (£1912), while in Northern Ireland and Wales spending per capita was £2109 and £1954 respectively, but there is also considerable variation across England, for example per capita spending in the north-east of England was £2028 (Bevan et al., 2014). The percentage of total health expenditure across the United Kingdom coming from public funds is high, similar to the Scandinavian nations and higher than in France, Germany and the EU average (Figure 3.4).

Fig. 3.2

Total health expenditure as % of GDP, WHO estimates

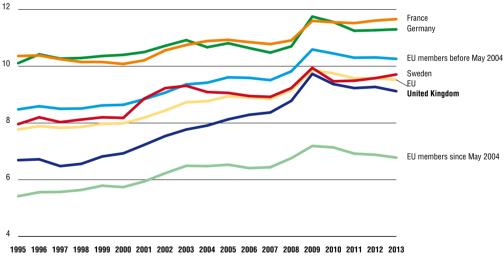


Fig. 3.3

Health expenditure in PPP per capita in the WHO European Region, latest available year

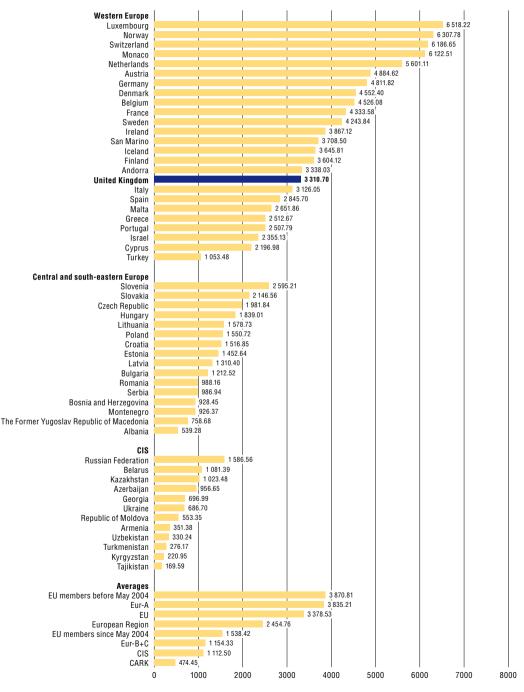
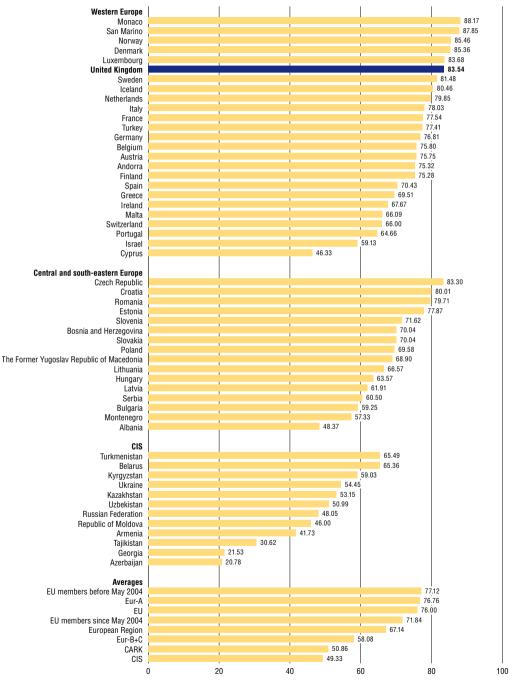


Fig. 3.4

Health expenditure from public sources as a percentage of total health expenditure in the WHO European Region, latest available year



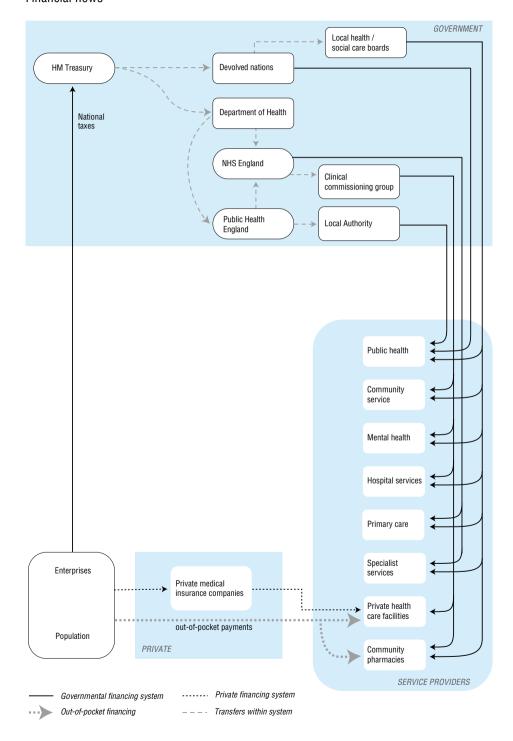
3.2 Sources of revenue and financial flows

Public expenditure is the primary source of funding for health in the United Kingdom. The rest of the funding for health care comes mostly from a combination of private medical insurance and out-of-pocket payments in the form of co-payments and direct payments. In 2013 out-of-pocket payments comprised 9.3% of total health expenditure while private medical insurance made up 2.8%, with less than 5% coming from other forms of private expenditure (WHO Global Health Expenditure Database, 2015).

Public funds come mostly from taxes, with a small amount from National Insurance Contributions (NICs). Collecting funds via general taxation means that the cost of collection is low, but so is the degree of transparency in how individual payments are linked to individual benefits (Boyle, 2011).

Private medical insurance or voluntary health insurance (VHI) can be purchased by individuals or by employers for their employees. Private medical insurance is usually used to finance services not offered by the NHS or to access NHS-covered services more quickly. Co-payments are costs shared with the NHS, and can include dental care and, in England, outpatient prescription charges. Direct payments can include private treatment, social care, general ophthalmic services and over-the-counter medicines. (See Sections 3.4 and 3.5 for more information.)

Fig. 3.5 Financial flows



3.3 Overview of the statutory financing system

3.3.1 Coverage

The purpose of the NHS is to make health care accessible to all legal United Kingdom residents, regardless of their ability to pay. As such, any resident can use NHS health care services, usually without paying at the point of access. Rules vary slightly across the United Kingdom in the definitions, but generally, "normally" or "ordinarily" resident people can access health care anywhere in the United Kingdom. "Ordinarily" means that the residence is not temporary and that the individual is in the country legally. "Overseas visitors" can receive emergency medical treatment for free, but subsequent care is usually charged. For non-emergencies GPs charge as private providers. GPs are required by law to determine whether their patients are ordinarily resident. There are some exceptions, notably for members of the European Economic Area (EEA), where reciprocal arrangements are in place for temporary residents. EU treaties mean that citizens of EU member states may receive medical treatment in other EU countries. Patients who are not from an EU or EEA member state may receive health care in the United Kingdom but will be charged. United Kingdom patients who travel to countries with reciprocal agreements may receive free treatment, although patients who travel abroad specifically to receive treatment are rarely recompensed by the NHS. Patients can arrange for private insurance to cover their health care while abroad.

While there is no explicit list of benefits, legislation from the 1970s charges ministers with ensuring the delivery of necessary health services. The NHS Constitution for England in 2009 established a set of rights for people working for and using the NHS, but this constitution mostly pulled together laws and rights that were already established (see Section 2.9.3 for more information).

The ministers of health decide how expansive the idea of "comprehensive" health care is, and through delegation, the various health boards in England, Scotland, Wales and Northern Ireland decide what treatments will be funded when commissioning (i.e. purchasing) and delivering (i.e. providing) services. Local authorities make decisions about what services they will provide to their populations, given budgetary constraints. This has led to complaints of "postcode lotteries", wherein some areas will cover certain services or treatments that are not available in a neighbouring region. The National Institute for Health and Care Excellence (NICE), as a specialist in health technology assessment (HTA), provides NHS boards in England, Northern Ireland and Wales with cost–effectiveness analyses that can serve as guidance on how to allocate

resources most efficiently (see Section 2.7.2). Scotland refers to the Scottish Intercollegiate Guidelines Network for such guidance. Such guidance aims to even out "postcode lotteries" and improve equity between regions.

3.3.2 Collection

The vast majority of tax revenue is collected by Her Majesty's Revenue and Customs (HMRC), including income tax, VAT, corporation tax and excise duties (on fuel, alcohol and tobacco) from across the United Kingdom. Generally, taxes are not earmarked for a specific purpose. In addition to general taxation, HMRC collects National Insurance Contributions on earned income from all employers, employees and self-employed people in the United Kingdom. Treatment under the NHS is not contingent upon National Insurance Contributions, but about 10% of National Insurance Contributions are put towards NHS funding (Boyle, 2011). Northern Ireland, Scotland and Wales then receive funding from HM Treasury in block grants determined by the Barnett formula (see Section 3.3.3). The Scottish Parliament gained some tax-raising powers as a result of devolution, but they are not used.

3.3.3 Pooling of funds

Once funds are collected, they are pooled at the United Kingdom level. The Department of Health allocates health funds in England, while block grants that fund all devolved services (i.e. not only health) are given to Northern Ireland, Scotland and Wales for their administrations to allocate a portion to health.

England

In England the Department of Health allocates funds to Public Health England, which distributes funds to local authorities for public health programmes, and to NHS England, which distributes funds to clinical commissioning groups as well as to specialist and primary care services (The King's Fund, 2013b). Clinical commissioning groups contract for community and mental health services, as well as for general hospital services in their districts. As of April 2015 clinical commissioning primary care services, if they choose to do so. NHS England uses weighted capitation to determine funding levels for clinical commissioning groups. The needs of each clinical commissioning group population are weighted according to age, input costs (such as staff and building expenses), social factors (such as deprivation) and measures of health status as refined by the Advisory Committee on Resource Allocation (Boyle, 2011).

Clinical commissioning groups then receive funding based on their weighted populations (NHS England, 2014c), but the level of funding has not increased under austerity measures.

In an effort to provide more integrated social and health care, especially for elderly and disabled people, the Better Care Fund was announced in 2013. The fund collects its £3.8 billion budget from clinical commissioning groups, local authorities and the NHS budget for social care (The King's Fund, 2014a).

The Barnett formula

The Barnett formula was devised in 1978 as a temporary measure, but it has carried through to this day as the main method by which the Treasury allocates funding to Northern Ireland, Scotland and Wales. The Treasury determines what changes in spending will be made in England, and then distributes funds according to which powers are devolved, and broadly in proportion to population, but with a number of weightings. Each devolved administration receives a block grant, which it then distributes to departments such as health and education, according to its own priorities and processes as funds are not earmarked. This means that if England makes cuts to the NHS budget, for example, funding to Scotland, Wales and Northern Ireland will be cut as well, but the devolved administrations do not have to make cuts in the same department.

The formula is controversial, as it does not necessarily meet the needs of various parts of the population in the United Kingdom. Many in England, including Lord Barnett (Wilkinson, 2014) who devised the formula, believe that too much money is distributed to Scotland and that England deserves a larger share. Wales, on the other hand, is the poorest of the four nations but receives less funding per capita than either Scotland or Northern Ireland. Wales' funding has declined by £300–380 million per year under the formula. A needs-based formula, taking into account poverty levels, age of population and other factors, has been recommended by many (House of Lords: Select Committee on the Barnett Formula, 2009), but the current Conservative government is not in favour of plans to devise a new formula.

Northern Ireland, Scotland and Wales

Scotland and Wales, similar to England, allocate funds to their health boards and trusts (in the case of Wales) using weighted capitation formulas. Funds are also allocated using a capitation formula in Northern Ireland, although the approach differs in some respects, notably in the inclusion of an economies of scale adjustment that effectively links funds to the local hospital stock (McGregor & O'Neill, 2014). The Wales Bill 2014 gives the Assembly and the Welsh government greater financial flexibility and enhanced policy tools, such as the power to create new devolved taxes on a case-by-case basis, and borrowing powers (Welsh Government, 2014).

3.3.4 Purchasing and purchaser-provider relations

There is no purchaser-provider split in Scotland and Wales, meaning the NHS boards in Scotland and the local health boards (LHBs) in Wales both plan and fund services. In Northern Ireland the purchaser-provider split has been maintained, in principle.

The purchaser–provider split also remains in place in England. Under the Health and Social Care Act 2012 in England, the internal market, which was established in 1991 by a Conservative government and adjusted in 1997 by a Labour government (after it had tried to abolish it), was reinforced. The more recent internal market in England consists of the purchasers – clinical commissioning groups – and the providers of mostly non-primary care services. Competition among the providers is encouraged, as a means to improving quality of service (encouraged through payment by results mechanisms) and containing costs. Commissioners must respect rules on procurement but are supposed to be able to decide, within these parameters, when to harness competition in delivery of many local services. Every year the NHS issues a standard contract for use in purchaser–provider agreements, as well as permitted variations (NHS England, 2015b). There are rules for providers, both preventing them engaging in anti-competitive conduct and requiring them to cooperate in patients' interests.

The Any Qualified Provider (AQP) plan was introduced in 2012 in England in an effort to give patients more choice in which service providers they access for routine elective care. In order to be put on the AQP list in their area, a provider must meet the following requirements: be registered with the Care Quality Commission and licensed by Monitor or equivalent; meet the terms and conditions of the NHS Standard Contract; accept NHS pricing (pricing is standard across AQP providers, so that patient choice is based on quality, not price); be able to deliver the agreed services; and assist local commissioners in meeting referral thresholds and patient protocols. However, GPs are required to include an independent provider in offering choices to their patients.

3.4 Out-of-pocket payments

NHS care is mostly free at the point of access, but in some cases patients do have to make co-payments (for goods and services covered by the NHS but requiring cost sharing) and direct payments (for services not covered by the NHS or for private treatment). Some populations, such as children, pensioners over 65 and those on low income, have recourse to reimbursement or exemption for some co-payments, although this varies across the United Kingdom.

3.4.1 Cost-sharing (user charges)

NHS dental care carries a charge throughout the United Kingdom, although exemptions exist for certain populations. In England and Wales a three-tiered charging bands system exists to cap charges for NHS dental care. In Scotland and Northern Ireland patients pay up to 80% of the cost of treatment.

NHS prescription charges in England are set at a flat rate of £8.20 as of 1 April 2014. Exemptions cover a broad range of people, including children under 16 years of age and pensioners over 65 years of age, so that about 90% of all prescriptions were distributed free of charge in 2012, with the majority of those covering medicines for the elderly. Northern Ireland, Scotland and Wales have all abolished prescription charges, although in recent years ministers in Northern Ireland have proposed introducing small charges, with a proposed cap of £25 per year, in order to pay for expensive cancer drugs (O'Neill, McGregor & Merkur, 2012; BBC, 2014a).

3.4.2 Direct payments

Basic ophthalmic services are generally not covered under the NHS. Free eye tests are available to all in Scotland, and to eligible groups such as children and pensioners in England, Northern Ireland and Wales. Eligible patients can also get vouchers to help with the costs of corrective contact lenses or glasses. Over-the-counter medicines, by definition, are purchased directly and are not covered by the NHS. Travel costs incurred to get to NHS appointments may be reimbursed, so long as the patient has a referral and meets other conditions related to low income.

In early 2013 the Dilnot Commission provided recommendations on social care changes in England, although these changes have yet to be implemented. The Dilnot Commission recommended a cap on social care costs at £35 000, but the government decided on a cap of £75 000 (BBC, 2013). Local authorities are in charge of providing these funds, but they generally do so when needs are

substantial and patients have no assets to draw on. Wales and Northern Ireland have no such cap. In 2002 Scotland abolished charges for long-term personal and nursing care for people aged 65 and older.

3.5 Voluntary health insurance

Approximately 11% of the population of the United Kingdom has private medical insurance of some kind (Arora et al., 2013). Types of private medical insurance vary, from coverage for specific conditions like cancer, to broader packages encompassing complementary therapies and elective outpatient diagnostic tests. Of the 4 million people with private medical insurance in 2011, about 18% purchased it as individuals, with the remaining 82% having employer-based private medical insurance (The King's Fund, 2014b). Insurance companies charge premiums based on the scope of coverage, product options such as fixed-price or excess-charge policies, the nature and degree of risk the insurer takes on, and the loading charge related to the insurer's profits (Boyle, 2011).

The Prudential Regulation Authority regulates financial institutions, and is the overall regulator of private insurance companies in financial matters. The Prudential Regulation Authority's approach to failing insurers is to allow them to fail in a way that has as little impact as possible on policy-holders. The Financial Conduct Authority seeks to protect consumers by ensuring that relevant markets function well and that consumers are treated fairly.

3.6 Other financing

Charitable contributions are an additional source of funding for the health system in the United Kingdom. For example, NHS trusts and boards can run separate registered charities and accept donations in addition to public funds. These funds can be used for expenses such as medical equipment, medical research and specialist training to improve patient facilities. Some services, like air ambulances in Wales, depend entirely on charitable funding, and others, like hospice care, are heavily dependent (see Section 5.10).

3.7 Payment mechanisms

Methods of payment for commissioning (i.e. purchasing) services from hospitals has remained consistent in Scotland, Wales and Northern Ireland, but significant changes to equivalent services have been made in England since 2003. Meanwhile, the varying systems of payment for health care personnel were reformed in 2003 and 2004, and the resulting contracts for GPs, consultants (i.e. hospital specialists), junior doctors, other NHS staff, dentists and pharmacists are mostly uniform throughout the United Kingdom, with some minor cross-border variation.

3.7.1 Paying for health services

Purchasing of health services varies only somewhat across the United Kingdom. In Northern Ireland the Health and Social Care Board negotiates contracts with Health and Social Care trusts. Wales uses a capitation-based mechanism, and local health boards manage the funds they use in delivering services.

Boards manage their own funds in Scotland, which includes reimbursing primary care contractors for services they provide to the NHS, paying for services provided by the independent sector, and transferring resources to local authorities to assist in the funding of community care. The NHS Scotland Resource Allocation Committee recommended changes to the Arbuthnott allocation formula in 2007. These changes, implemented in 2009/2010, institute a more sophisticated capitation-based allocation system, taking better account of the needs of the elderly and the very young, and of those living in deprived areas (Steel & Cylus, 2012).

Payment by Results (PbR) in England

In 2002 the government introduced the idea of a national tariff on hospital activity in England. Until that point, commissioners paid hospitals in block contracts. These contracts did not take into account how much activity hospitals actually saw, or what type of health issues they treated, whereas the new tariff would do that. In 2003 the Payment by Results tariff system was put into place. The system started with some elective inpatient procedures, and has since expanded to include much acute care, covering about 60% of the activity in an average hospital (Marshall, Charlesworth & Hurst, 2014).

Hospital stays, from admission to discharge, are assigned to a Healthcare Resource Group (HRG) code; if there are various episodes of care within one hospital stay, the dominant episode is the one coded for. Tariffs are determined by taking national average costs (providers submit their own costs), adjusting for changes in costs over time due to factors like technology updates, and finally, adjusting according to the market forces factor (MFF), which factors in differences in costs by location. All operations commissioned under Payment by Results must adhere to the Department of Health Code of Conduct (last updated February 2013) (Department of Health, 2013a).

The Payment by Results system is meant to make it possible to commission all activity according to a standard tariff, but several types of care have not been included in the Payment by Results system so far, notably mental health, critical care and community health care, as well as ambulance services. Some critics argue that the tariffs do not accurately reflect hospital costs, and some commissioners use fixed block contracts rather than payment by results to allocate their funds to public providers to keep those providers financially viable. Additionally, in 2015 many NHS providers protested about the planned tariffs for the following year because of concerns that the proposed price reductions were unsustainable; despite some progress in negotiations, at the time of publication no formal tariff was in place for 2015/2016.

Between the financial years 2012/2013 and 2013/2014 total spending by trusts in England increased by 4.3% but their income increased by only 3.5%. A few trusts have large surpluses, but many are now in deficit (National Audit Office, 2014). Trusts are expecting to receive more income than purchasers are expecting to spend on health services, and trusts with deficits are assuming that the Department of Health will continue to provide cash support. In 2013-2014 the Department of Health issued £511 million in cash support to 21 NHS trusts and 10 foundation trusts in the form of public dividend capital (PDC) loans; these are provided so that organizations in difficulty have the cash they need to pay creditors and staff (National Audit Office, 2014). NHS England expects clinical commissioning groups to achieve a surplus, but 19 out of 221 did not achieve this in 2014. These trends are unsustainable and an increasing number of providers and purchasers in England are in financial difficulty. Much of the financial pressure on providers has come from the increasing wage bill in response to pressure to increase staffing levels to improve quality of care as many hospitals have had to rely on expensive agency staff. This has been a particular problem for 11 trusts that were placed in "special measures" in July 2013 following quality and safety concerns (Murray, Imison & Jabbal, 2014).

Pay for Performance (P4P) in England

In addition to Payment by Results, Pay for Performance schemes have been introduced in order to encourage improved quality of care.

Commissioning for Quality and Innovation (CQUIN) is a payment framework introduced in 2009 that makes provider income conditional upon reaching certain goals. Commissioning for Quality and Innovation covers 2.5% of all provider income, and at least 0.5% of that is conditional upon the provider reaching nationally determined goals (NHS England, 2014a). The rest is conditional upon locally determined goals. The focus on local goals was intended to encourage cooperation between commissioners and providers. Commissioning for Quality and Innovation covers acute care hospitals, ambulance services and community mental health and learning disability services.

Best practice tariffs (BPTs) were introduced in 2010 with the aims of increasing the use of best practice in high impact cases and reducing the variation in quality of care. The Department of Health allows for best practice tariffs to be established in areas for which there is strong evidence for, and clinical consensus on, what constitutes best practice. When the programme was introduced in 2010 there were four areas covered by best practice tariffs, but that number increased to twelve in 2012/2013 (Audit Commission, 2012). The Department of Health intends to add more best practice tariffs in time.

3.7.2 Paying health workers

NHS Employers is an organization that negotiates pay and conditions for NHS employees across the United Kingdom, with some variations made in Scotland, Wales and Northern Ireland according to their input. The Agenda for Change agreement, introduced in 2004, applies to all NHS staff except some senior managers and those covered under the Doctors' and Dentists' Pay Review Body. It was designed to ensure fair pay for non-medical staff; create stronger connections between pay and career movement; and standardize terms such as sick pay, annual leave entitlement, and so on. In 2004 a new contract was negotiated for GPs and consultants (i.e. hospital specialists) between the British Medical Association (BMA) and NHS Employers.

GPs

GPs work under the General Medical Services (GMS) Contract negotiated between the British Medical Association and NHS Employers. The contract is held with practices, not individual GPs, which was the previous arrangement. A growing number of GPs in the United Kingdom are salaried rather than being partners in a practice. A fixed national global sum funds the essential services portion of the contract. The global sum is determined according to the Carr-Hill formula, which is a refined weighted capitation rubric that takes into account the sex and age of the patients, the number of new patients, the morbidity profile of the population, rurality and the market forces factor (Boyle, 2011). In order to ensure that no practice would lose income in the first few years of the contract, a minimum practice income guarantee (MPIG) was put into place, but it is scheduled to be phased out by 2020–2021 (BMA, 2014b). The BMA has objected to the phasing out of the MPIG (BMA, 2014a), saying it will hurt over 400 deprived surgeries and force some to close, but the Department of Health maintains that once the funds are reabsorbed into the global sum, all practices will receive the correct weighted funding (Iacobucci, 2012).

GP practices can agree to provide enhanced services, which may meet specific needs of the local population, support patient choice and otherwise provide additional services. This means they can receive supplementary payments for services provided.

Prior to the 2004 contract, GPs were responsible for providing out-of-hours care to their patients; this is care outside the 8am to 6:30pm period (BMA, 2015c). Since 2004 practices can provide their own out-of-hours care, or opt out and forfeit 6% of their annual global sum. As of 2014, around 10% of GP practices provide their own out-of-hours services; the other 90% delegate out-of-hours care to GP cooperatives or other specialized providers.

The Quality and Outcomes Framework is a voluntary extra payment structure intended to link payments to quality of care, and is used across the United Kingdom with some variation in the choice of indicators. One of the main aims when introducing the Framework was to improve management of chronic diseases, in order to reduce avoidable hospital admissions. The Quality and Outcomes Framework's main components are clinical standards, organizational standards, experience of patients and additional services (Boyle, 2011). The quality scorecard makes 1000 points available, and in 2011–2012 each point was worth £130 (Marshall, Charlesworth & Hurst, 2014). Most practices in England reached their targets more quickly than the Department of Health had anticipated, which raised incomes. In the 2013–2014 contract the thresholds have been raised and new cost–effective measures introduced, to be monitored by NICE.

Alternatively, it is also possible to pay for GP services through locally agreed Personal Medical Services (PMS) agreements (NHS England, 2014b). This mechanism has been in place since 1997, but it is only recently that more GP practices have started choosing PMS agreements rather than GMS contracts. PMS agreements are entirely negotiated at the local level without input from the Department of Health or the British Medical Association. In Scotland these are known as Section 17c practices. There are no PMS agreements in Wales or Northern Ireland (BMA, 2015d).

Consultants/Specialists

Since 1948, when the system was founded, NHS consultants (i.e. hospital specialists), who are salaried employees, have also been allowed to work in private practice in addition to their work for the NHS. Full-time consultants could earn up to 10% of their NHS pay via private practice, and part-time consultants could earn without restriction, provided they gave up one-eleventh of their NHS salary.

From 2000 the Department of Health pushed for a change in the contract in order to more directly manage consultants' performance. Doctors resisted the new contract, which was seen as restrictive, but it was signed in 2003. The contract codified what constitutes full-time employment, introduced new elements that made up a consultant salary, including merit awards, and removed all restrictions on earnings from private practice. There are concerns that the new contract has not achieved its goal of increased productivity among consultants, and that the lack of objective measures used in awarding the clinical excellence payments is problematic (National Audit Office, 2007). The basic salary scale was raised by the new contract, and the average consultant salary has increased since then.

As a cost-saving measure, England and Wales did not offer consultants a general 1% pay rise in 2014, although Scotland did. This has contributed to the stalemate on agreeing a new contract between the BMA and the United Kingdom government.

In addition to the basic salary and any income from private practice, consultants' income is dependent on merit awards (known as clinical excellence awards in England, distinction awards in Scotland and commitment awards in Wales). There is also a system of discretionary points in Scotland (although holders of distinction awards are not eligible), but the distinction award system has been frozen and new awards suspended since 2010 in Scotland.

Junior doctors

Junior doctors (doctors in training) hold their own contract, negotiated between the BMA and NHS Employers. There is an emphasis on meeting the European Working Time Directive, which mandates working hours and rest requirements in order to protect the health of employees so they are not over-tired, which in turn protects their patients (Longley et al., 2012). Currently, junior doctors must work no more than an average of 48 hours per week calculated over a period of 26 weeks, and they must have 11 hours of continuous rest per day (BMA, 2015b). Junior doctors may train to be GPs or consultants, and their pay bands differ accordingly (BMA, 2014c).

Nurses, midwives and other NHS staff

Other staff in the NHS are usually paid salaries according to the Agenda for Change pay structure. That salary is paid by the employing body, such as a clinical commissioning group in England and a local health board in Wales and Scotland. NHS trusts also employ and pay nurses in hospitals. Staff begin in one of nine pay bands depending on the skill level and experience necessary for the job; the Job Evaluation Scheme determines where each job falls in the pay bands, and staff can progress in annual increments along the pay points found within each band. Nurses who work in GP practices may be paid under the same pay structure, but the GP practice they work for makes that decision (Boyle, 2011; Longley et al., 2012).

NHS dentistry

NHS dentists were paid based on fee by item-of-service, which led to unnecessary treatments and not to better oral health. Starting in 1990, NHS dentists were paid partly on capitation. Dentists have been unhappy about remuneration for years, and many have moved to private practice in part or in total as a result. Dentists are private contractors, and so may work entirely within the NHS, entirely outside it, or a mix of the two. A new contract was introduced in 2006, which significantly changed how dental services were commissioned, transferring responsibility to primary care trusts in England; these responsibilities now lie with NHS England and with equivalent commissioning bodies in Scotland, Wales and Northern Ireland. Under these contracts, dentists were no longer paid on a fixed fees for service basis (except in Northern Ireland), but on the number of units of dental activity (UDA) they completed. UDAs correspond to a points system set up for banded dental activities.

This was not well received and disputes have arisen between the United Kingdom government and the independent Review Body on Doctors' and Dentists' Remuneration (DDRB). The Review Body has recommended certain pay rises, which the Treasury has rejected, and as of 2014 negotiations for a new contract were at a standstill (Rimmer, 2014).

Pharmacists

Hospital pharmacists, who make up about a third of the pharmacists in the United Kingdom, are salaried employees under the Agenda for Change pay system (Boyle, 2011). Community pharmacists are paid from a combination of retained profit of their pharmacies (the difference between what they pay for drugs and the amount the Department of Health reimburses them), the global sum and the budgets of their commissioning bodies. Pharmacies receive a dispensing fee per item (negotiated by the Pharmaceutical Services Negotiating

Committee). Pharmacies receive practice payments from their commissioning bodies; these payments are related to the quantity of prescriptions dispensed, at fixed fees within pay bands.

The 2005 contract developed between the Pharmaceutical Services Negotiating Committee, the Department of Health and the NHS Confederation established three levels of service for community pharmacies: essential services, which all pharmacies are required to provide; advanced services, which they may provide if they are accredited; and local enhanced services, which they may provide if commissioned by their local authority (Boyle, 2011). A separate but broadly similar Scottish contract for community pharmacists was introduced in 2006 (Steel & Cylus, 2012).

4. Physical and human resources

he NHS holds land and properties that it manages for investment and service provision purposes. The number of hospitals across the United Kingdom has declined since the start of the NHS in 1948, due to shifting care from smaller hospitals to larger ones, and to shifting health services away from hospitals and into the community.

Recent years have seen a decline in the number of hospital beds, and also a decline in average length of stay, which taken together may indicate increasing efficiency in hospital care and an ambition to shift more care into the community; however, high occupancy rates suggest little spare capacity to deal with demand shocks.

The United Kingdom government made a concerted effort in the mid-2000s to purchase more MRI and CT machines, in a push to come closer to the EU average. The NHS has sought to adjust to the explosion of public use of computers and information technology by introducing patient portals online and cross-departmental electronic record-keeping.

The NHS is the largest employer in the United Kingdom. There has been a consistent increase in the health workforce and in 2014 there were more nurses in the United Kingdom than ever before, although the number of patients per nurse has been increasing too.

4.1 Physical resources

4.1.1 Capital stock and investments

Current capital stock

No figures exist for the total land size and value of NHS properties across the United Kingdom, but as of 2013 the NHS estate in England covered 6.9 million hectares (Edwards, 2013).

Since the beginning of the NHS in 1948, there has been a decline in the number of hospitals across the United Kingdom as a whole. This is mainly due to two reasons: the shift of acute medical and surgical care from smaller hospitals to larger ones, in the interests of quality and safety; and the closure of long-stay hospitals for mental health and learning disabilities as those services are moved into the community. The latter is also the main reason for the decline in the total number of hospital beds, which is a trend throughout Europe (see Figure 4.2).

In 2015 there were 155 acute NHS trusts and 56 mental health trusts in England, most of which consist of several hospital sites (NHS Confederation, 2015). Most are concentrated in urban areas. Although the total number of hospitals has declined, there is still a strong building programme. There is a nationwide focus on increasing the number of fit-for-purpose hospitals sited properly for optimal use, rather than attempting to update old buildings that may never be fit for purpose and may be sited in the wrong place for current and future needs.

Investments

Capital expenditure is funds used to acquire land and premises, and works on buildings, equipment and so forth. In the last several years administrations have disposed of surplus estate, including land that used to contain psychiatric hospitals. Investment in NHS capital generally comes from public funds. The Department of Health Estates and Facilities Division maintains an asset register for all NHS estates in England, and it monitors and reports on all transactions related to NHS property. NHS trusts in England must work within their estate strategies and report on the condition of their estate and facilities.

Any appropriate authority that wants to use capital above a certain budget threshold must present a business case to the appropriate authority and obtain permission. In England that means area and regional directors, with support from commissioning support units (CSUs), present business cases (NHS England, 2013a); in Northern Ireland, Health and Social Care trusts; in Scotland, NHS boards; and in Wales, local health boards and trusts. Clinical commissioning groups in England have a separate process to go through to gain access to capital funds. Each administration has a set of objectives, which business cases must try to meet in order to be allocated capital.

Private finance initiatives (PFI) were introduced by the Conservative government in the early 1990s; the private finance capital option is tested against the public sector capital option, and if the private finance initiative option demonstrates better value for money, it is selected. A strong argument for its use is that the private sector assumes the risk when planning, building and operating hospitals for the NHS trust, but critics argue that the private sector makes large profits and runs high costs over the life of the contract, so that the cost–efficiency of using PFI over public sector funds is negated. In addition, some buildings built to be fit-for-purpose are of poor quality. The Scottish government has responded to these concerns by introducing the Non-Profit Distributing Model, which uses the risk and discipline principles of the private sector but allows smaller profits for the private sector and reduces costs to the public sector compared to private finance initiatives. Over a third of capital funding in Scotland comes from Public Private Partnership/Private Finance Initiative (PPP/PFI) and non-profit distributing funding (Steel & Cylus, 2012). There are no new PFI arrangements in Wales, but there are some schemes in existence which were approved before the current prohibition. The most recent PFI health project in Northern Ireland was in 2012.

4.1.2 Infrastructure

The overall number of hospital beds in the United Kingdom decreased between 2003 and 2013, from 395 to 277 beds per 100 000 people (Figure 4.1). The decline in acute hospital beds (from 312 to 229 per 100 000 people between 2003 and 2013) is mostly due to an increase in day surgery and ambulatory services, as well as better rehabilitation and discharge processes. Figure 4.2 shows that this is part of a general trend across Europe, although the number of acute hospital beds in the United Kingdom remains below that of the EU average.

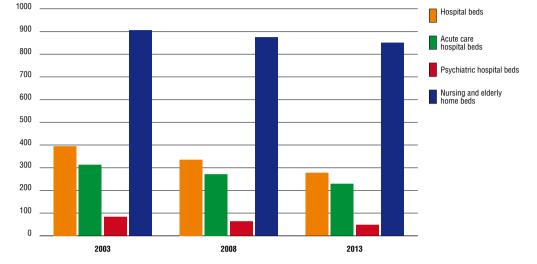


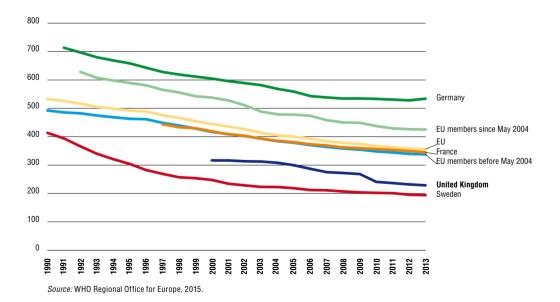
Fig. 4.1

Hospital beds by type per 100 000 population, 2003, 2008 and 2013

Source: WHO Regional Office for Europe, 2015.

Fig. 4.2

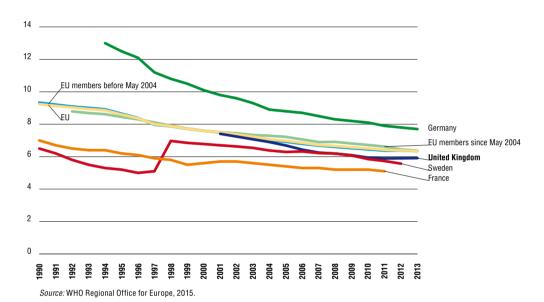
Acute care hospital beds per 100 000 population



The number of psychiatric beds has almost halved, which is consistent with the closing of speciality psychiatric hospitals in favour of more communitybased care. The number of beds in long-term care facilities has decreased slightly as well, but remains more than double that of total hospital beds, which reflects the demand for nursing home and elderly care facilities.



Average length of stay, acute care hospitals only



The average length of stay in acute care hospitals steadily declined between 2000 and 2011, as seen in Figure 4.3, from 8.1 to 6.5 days. This follows a general trend of decreasing average length of stay across Europe. Average length of stay in the United Kingdom has consistently been above the EU average, but in 2011, the most recent year available, the number was nearly identical, as the average length of stay in the EU was 6.4 bed days. Bed occupancy rates have remained stable throughout the early 2000s, increasing from 82.3% in 2000 to 84.4% in 2010. These rates are consistently above those of other European countries and the EU average, suggesting limited spare capacity. In England the combination of reduced beds and high occupancy rates, coupled with the increasing demands of an ageing population and cuts to social care, is thought to have contributed to longer A&E waiting times towards the end of 2014 and into 2015 (Edwards, 2015).

4.1.3 Medical equipment

Medical products and services were purchased piecemeal before 2000 but, after the formation of the NHS Purchasing and Supply Agency in England, purchasing was largely centralized until the Agency was disbanded in 2010. All non-clinical purchasing was passed to the public sector procurement agency "Buying Solutions", while pharmaceuticals procurement was passed to the Commercial Medicines Unit under the Department of Health. The purchasing of medical supplies was outsourced to a private company in 2006 (see Section 2.8.5). In Scotland all procurement is undertaken by NHS National Procurement, which is part of NHS National Services Scotland. In Wales the Shared Services Partnership purchases on behalf of the local health boards and trusts. In Northern Ireland the Procurement and Logistics Service (PaLS), part of the Business Services Organization, manages procurement.

The United Kingdom has fewer CT scanners and MRI units per capita than other countries in Europe, but the NHS Improvement Plan (England) of 2004 made it clear that equipment procurement would have to significantly increase in order to reach the 18-week referral to treatment timeline target (see Section 5.4.3). Accordingly, an extra £2 billion was spent in England over five years in order to obtain equipment for diagnostic services, and half of that was used in the private sector. It is not clear whether this spending level was matched in Scotland, Wales and Northern Ireland (or whether such spending on "big ticket" items would be rational), but the number of MRI units in the United Kingdom as a whole has increased from 4.5 per 1 million people in 2003 to 6.8 in 2012 (Table 4.1). Similarly, the number of CT scanners has increased from 6.9 per 1 million people in 2003 to 8.7 in 2012; data on imaging technology reflect only public sector equipment. However, despite lower per capita figures, CT and MRI units are used more intensively in the United Kingdom than in other health systems (OECD, 2013).

England introduced a programme called Choice of Scan, which allows a patient who has not received an appointment for an imaging scan within 13 weeks to get a scan with another provider, including one within the private sector, within that timeframe. A similar scheme has been discussed in Northern Ireland for wait times of more than 9 weeks. No such programme exists in Wales. Scotland has had a six-week standard wait time for eight diagnostic tests since 2009.

Table 4.1

Diagnostic imaging in the United Kingdom (2012)

	Per million population	Exams per 1 000
MRI units	6.8	40.4
CT scanners	8.7	75.5

Source: OECD, 2013. OECD Health at a Glance, http://www.oecdilibrary.org/dobserver/download/8114211ed Note: Exams outside hospital are not included.

4.1.4 Information technology

The proportion of households in Great Britain with access to the Internet rose from 55% in 2005 to 84% in 2014 (ONS, 2014a); in 2014 92% of the United Kingdom population were Internet users, which is higher than the 2014 EU average of 78% (World Bank, 2015). Health-oriented web sites such as NHS Choices have grown in popularity; adults who used the Internet to find health information rose from 18% in 2007 to 43% in 2013. The United Kingdom health system is trying to adapt to the information age, with varied success.

The English National Programme for Information Technology (NPfIT) was abandoned in 2013 after being plagued by accusations of being inefficient and not cost-effective – it went considerably over budget, costing £9.8 billion (€13.3 billion), and failed to deliver on what had been promised (National Audit Office, 2011). Some parts of the programme remain, and other programmes have been introduced as well. These include Summary Care Records, in which patient information is stored to allow emergency and out-of-hours staff faster access to clinical data; Choose and Book, an online booking system for appointments; the Electronic Prescription Service (EPS); NHSmail for internal mail; Picture Archiving and Communications Systems (PACS) to store and transmit patient imaging; and a GP payment system. These information-sharing services are known collectively as Spine Services. NHS Choices, introduced in 2008, is a web site supporting patient health care by providing information on local NHS services and serving as a portal to Choose and Book.

Scotland took a more unified approach to IT since the 2004 introduction of the Information Management and Technology (IM&T) Strategy. Scotland's unique patient identifier has been nearly universally adopted, and other eHealth systems are in place, similar to those mentioned above, such as imaging storage, digital referral systems and the United Kingdom's first electronic prescriptions transfer programme. There have also been improvements in telehealth and telemedicine, which was deemed especially important as Scotland has large remote rural areas. The government has also issued information about assuring the security of patient information as part of an overall eHealth strategy. Implementation of information technology development in Wales is led nationally, and shares similar objectives to Scotland.

4.2 Human resources

4.2.1 Health workforce trends

As of 2014, 1.57 million people were working for the NHS (ONS, 2014c), making it the largest employer in the United Kingdom, and indeed in Europe (NHS Jobs, 2015). Between 2000 and 2009 the NHS workforce expanded at an average annual rate of 3.4% (The King's Fund, 2013c). In the figures below, note that because of differences in the way data are recorded and physicians are defined, they are not fully comparable across countries.

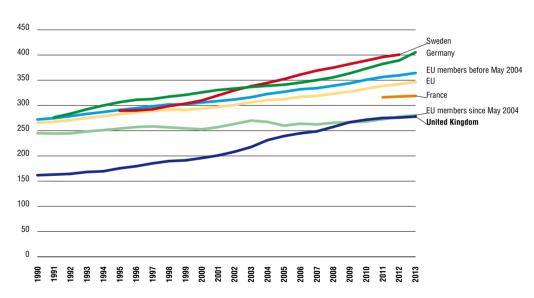


Fig. 4.4

Physicians per 100 000 population

Source: WHO Regional Office for Europe, 2015.

The number of physicians working in the United Kingdom has been steadily increasing for the past 25 years, as shown in Figure 4.4. In 1990 there were 162 physicians per 100 000 people, and by 2013 that number had risen to 278. However, the United Kingdom still has among the lowest number of physicians

per capita in the EU, despite the rapid increase in numbers between 1997 and 2010. While all specialties have been growing, the lowest growth rate has been in psychiatry, and the rate of growth in GP numbers is also insufficient to meet current or future demand (Addicott et al., 2015).

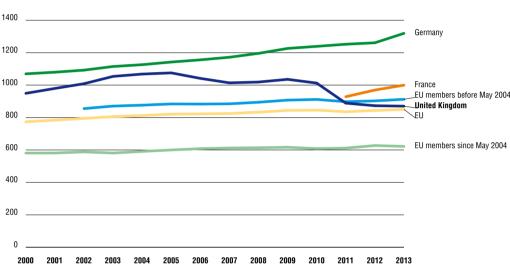


Fig. 4.5

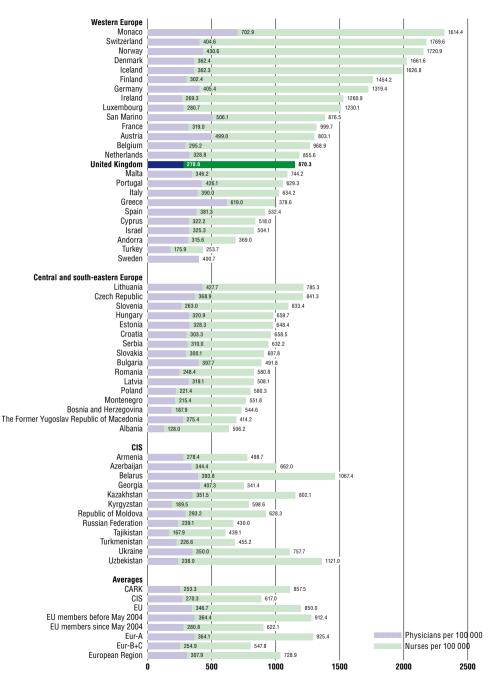
Nurses per 100 000 population

As shown in Figure 4.5, the number of nurses has decreased rather sharply since 2010, when health spending in the United Kingdom fell. After a high-profile scandal over the quality of care at one NHS foundation trust (Robert Francis's 2013 report), trusts that were worried about safe staffing levels hired more nurses (The King's Fund, 2013d). The number of nurses in the United Kingdom is consistently above the EU average, as is the nurse to doctor ratio (Figure 4.6), although this average conceals a wide variation across the EU. Despite this growth in staff numbers in the United Kingdom, shortages remain a concern, particularly as providers have to rely on more costly solutions such as hiring agency staff as the number of patients per nurse has been increasing too (Addicott et al., 2015).

Source: WHO Regional Office for Europe, 2015.

Fig. 4.6

Physicians and nurses per 100 000 population



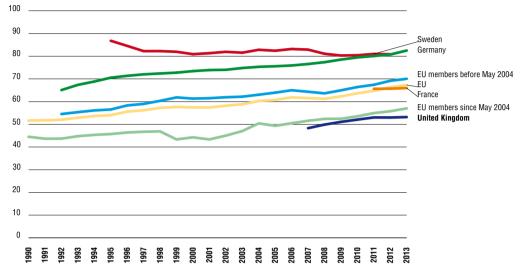
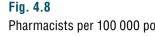
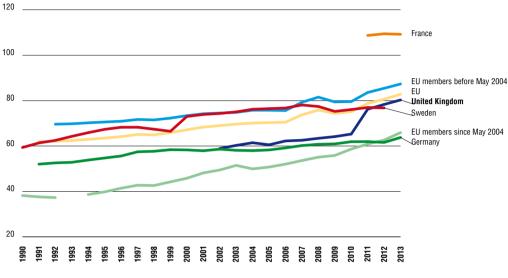


Fig. 4.7 Dentists per 100 000 population

Source: WHO Regional Office for Europe, 2015.

The number of dentists in the United Kingdom has increased steadily in recent years, at an average annual growth rate of 2.1% between 2007 (the earliest year for which data are available) and 2013 (Figure 4.7). The number of dentists per capita remains lower than that of comparable countries and the EU average.





Pharmacists per 100 000 population

Source: WHO Regional Office for Europe, 2015.

Data on the supply of pharmacists reveal an increase from 58.9 per 100 000 population in 2002 to 78 per 100 000 population in 2012. The jump in numbers between 2011 and 2012 is due to changes in the way the number of pharmacists has been estimated in the WHO Health for All database

4.2.2 Professional mobility of health workers

Historically the United Kingdom has employed health workers from Commonwealth countries and the EU, and at times there has been intensive international recruitment, such as for nurses in the Philippines. The Migration Advisory Committee makes shortage occupation lists for the Home Office United Kingdom Border Agency; only consultants in a small number of specialties are on this list, meaning overseas workers from outside the EU should only be entering if they practise a listed specialty.

Most professional groups move freely around the United Kingdom. However, to the extent that employment conditions are centralized, this may change in the future

4.2.3 Training and career paths of health workers

The 2003 Modernising Medical Careers programme changed how medical training worked in the United Kingdom. There are minor variations between England, Scotland, Wales and Northern Ireland, but generally the training and career paths of health workers are as below.

Physicians

To train in medicine, students spend five years on an undergraduate degree course, which takes place under the supervision of the United Kingdom General Medical Council (GMC). There are 34 medical schools in the United Kingdom. Graduates then enter a two-year foundation programme (F1 and F2), entering placements in several specialty and health care settings. Specialist training begins after F1 and F2 rotations. Medical royal colleges create curricula and assessments for specialist training. The GMC approves curricula, assessments and the distribution of training posts (specialty registrar posts).

Specialists train in hospitals for five to seven years, and then join the GMC Specialist Register and can be appointed to a consultant post. GPs train for at least three years – two years in hospitals and the third in a GP practice. They then join the GMC's GP Register and can work as a GP. On average it takes nine years of clinical training after medical school to become a GP, and eleven years to become a hospital consultant. Staff grade doctors are those who do not become consultants, either by choice or by failing to gain a post.

Continuing professional development (CPD) is required of all doctors. Doctors show their proficiency in CPD by two methods: the annual appraisal process (one for GPs and one for consultants), and the five-yearly revalidation process introduced in 2012.

Dentists

To train as dentists, students attend five years of undergraduate dental school, at one of the 16 dental schools in the United Kingdom. After undergraduate school, they register with the United Kingdom General Dental Council (GDC) to practise as a dentist. More training is required for dental specialists, such as orthodontists. Specialists usually work in hospitals. Dentists are revalidated through the GDC, a process that began in 2011.

Nurses and midwives

To train as nurses or midwives, students attend a three- or four-year pre-registration degree course; the nursing diploma in higher education has been phased out and nursing is now a graduate-entry career. Courses are at universities that have placements in hospital and community settings. Generally,

the first year for all nurses in training is the Common Foundation Programme. After this, students specialize. Midwives have to have a midwifery degree, or, if they are already a nurse, they can do a short additional training programme. After training, nurses and midwives register with the United Kingdom Nursing and Midwifery Council (NMC) to practise. Nurses and midwives have to re-register annually, and every three years revalidate with the NMC to illustrate they have met the standards required for safe practice in their chosen area of work. Midwives also have to annually confirm their intention to practise to the NMC. The revalidation process has been piloted in 2015 and will roll out from April 2016. The requirements of revalidation include minimum hours of practice, evidence of continual professional development and reflection of their experiences with other nurses or midwives. The profession remains predominantly female; however, a growing number of men are entering the profession across all fields of practice. Programmes are in place to encourage nurses back into practice following a break in their career.

Pharmacists

To train as pharmacists, students must obtain a four-year Master of Pharmacy post-graduate degree from one of the 26 accredited universities in the United Kingdom. After that, they spend a year training in a community or hospital pharmacy, and then register with the Great Britain General Pharmaceutical Council in order to practise.

5. Provision of services

Public Health England, Health Protection Scotland, Public Health Wales and the Public Health Agency for Northern Ireland exist in their respective nations to strengthen and coordinate health protection. The key elements of public health in the United Kingdom are: health protection programmes, health improvement programmes, and reducing health inequalities.

Primary care in the United Kingdom serves three main roles: it is the first point of contact when a person has a health concern; it provides on-going care for common conditions and injuries; and it serves as a gatekeeper to more specialized care, which is generally provided in hospitals. Most NHS secondary care is provided by salaried specialist doctors and others who work in stateowned hospitals. Tertiary services offer more specialized care, and are often linked to medical schools or teaching hospitals. Tertiary care services often focus on the most complex cases and on rarer diseases and treatments. Across the United Kingdom there has been a move to concentrate specialized care in fewer centres in order to improve quality.

Patient pathways are fairly similar across the United Kingdom, with comparatively more emphasis on choice of provider in England. The GP is usually the first point of contact, although there are other primary care pathways, including telephone services and walk-in centres. Recent policies have focused on reducing demand for emergency care through public information campaigning and broadening access to urgent care services. It is hoped that improving the integration of health and social care should also reduce demand for emergency care services and unnecessary hospitalizations.

5.1 Public health

The Department of Health or its equivalent is in charge of public health in England, Scotland, Wales and Northern Ireland respectively, and the Chief Medical Officer of each of the four departments leads in setting and monitoring public health measures. The key elements of public health are: health protection programmes (immunization, etc.), health improvement programmes (smoking cessation, etc.) and reducing health inequalities. Public Health England, Health Protection Scotland, Public Health Wales and the Public Health Agency for Northern Ireland exist in their respective nations to strengthen and coordinate health protection.

Services are delivered through the NHS, local authorities and other groups. The Health and Social Care Act 2012 moved responsibility for commissioning (i.e. purchasing) public health services to local authorities in England. People whose work contributes to public health include: specialists (such as senior management figures and senior scientists); the wider community (teachers, social workers, doctors, etc.); and public health practitioners (health visitors, consultants in public health medicine, and those who use research, science or health promotion skills in specific public health fields). The United Kingdom Faculty of Public Health maintains professional standards and oversees the quality of training and professional development of public health specialists and revalidation methods for public health workers, who no longer also need to be medically qualified.

Public health priorities for all of the United Kingdom include: alcohol harm reduction, childhood obesity, health inequalities, infant mortality, response to sexual violence, sexual health, teenage pregnancy, tobacco control, vaccination and immunization, and the mental health and psychological well-being of young people. Some interventions have been introduced across the United Kingdom as a result of separate decisions by each administration, for example smoking bans in public places and raising the minimum age for tobacco sales to 18. However, Scotland, Wales and Northern Ireland have produced their own sets of goals and health priorities in addition to those listed above. For example, Scotland aims to improve healthy life expectancy, which has historically been below the United Kingdom average, and to break the link between early life adversity and adult disease.

Scotland, Wales and Northern Ireland may also focus on different factors in public health; the Scottish government passed a Public Health Act in 2008 in response to modern threats to public health like food production and environmental changes. Scotland has also been at the forefront of policies to tackle alcohol consumption through the suggested introduction of minimum prices per unit, which was agreed to in principle in 2012 but has not yet been implemented due to a legal challenge (Steel & Cylus, 2012). Wales intended to put forward a Public Health Bill in 2015 which would include action to reduce the harms to health from smoking, alcohol misuse and obesity.

The Joint Committee on Vaccination and Immunization is a standing advisory committee, independent of the Department of Health, with statutory responsibility to advise the Secretary of State (i.e. minister) for Health. Immunizations are not compulsory in the United Kingdom, but they are strongly encouraged. Health care professionals who work with immunizations and vaccines receive special training in those areas. The MHRA monitors vaccine quality under their remit. Immunization programmes cover children, older people and people with particular conditions or lifestyles, as well as health care and laboratory staff.

The United Kingdom National Screening Committee (NSC) recommends programmes that screen for potential problems or diseases in all of the United Kingdom. In determining which screening programmes will be most effective, the NSC takes into account the standard criteria: condition (it should be a serious and detectable condition, and one for which cost-effective prevention has been used as much as possible first); test (the test should be simple, safe, precise and validated); treatment (treatment should be effective, and there should be evidence for which people should receive treatment); and screening (there should be strong evidence that screening reduces mortality or morbidity, and that the benefit outweighs the physical and psychological harm of the screening itself). The NSC recommends systematic screening for adults, children, newborns and pregnant women. England, Scotland, Wales and Northern Ireland adopt the NSC's recommendations for their own screening programmes, with some local variation. Private sector health screening is widely available in England, including some screening tests that are not recommended by the NSC. Such tests are regulated by the Care Quality Commission.

5.2 Patient pathways

Patient pathways are fairly similar across the United Kingdom, with comparatively more emphasis on choice of provider in England. GPs act as gatekeepers to more specialized care, which is generally provided in hospitals. The GP is usually the first point of contact, although there are other primary care pathways, including telephone services and walk-in centres.

Anywhere in the United Kingdom a woman in need of a hip replacement because of arthritis would follow the same basic pathway:

- Once it is agreed that she needs a hip replacement, during a free visit to a GP at a practice where she is registered, the GP refers her to a hospital orthopaedic department and will prescribe any necessary medication.
- She may be given a choice of local hospitals, potentially including some private hospitals, and she can make her choice on the basis of waiting times and other criteria which are made available online through the relevant web site.
- She can choose to go to a private hospital directly, but she must pay for her treatment either out of pocket or through private medical insurance if these resources are available to her.
- She will have an outpatient hospital appointment with a specialist team where she will be assessed and the necessary diagnostic tests will be made.
- Within 18 weeks (12 weeks in Scotland) she will be admitted for surgery, but waiting times have fallen markedly since the 1990s (see Section 5.4).
- Following surgery and primary rehabilitation at the hospital, the patient goes home and is discharged to the care of her GP and their team of community nurses.
- The GP receives a copy of the discharge summary and is responsible for any further follow-up, such as referral to a physiotherapist.

The patient will not be expected to pay out of pocket for any of these appointments or for treatment under the NHS. In England she would have to pay a prescription fee for any medications prescribed by the GP if she is not exempted (for example by being over the age of 65 years). Prescription fees have been abolished in Scotland, Wales and Northern Ireland.

5.3 Primary/ambulatory care

Primary care in the United Kingdom serves three main roles: it is the first point of contact when a person has a health concern; it is the means to continuous access to care for common conditions and injuries; and it serves as gatekeeper to access more specialized care.

Primary care increasingly means not only a GP but a whole team of doctors, nurses, midwives, health visitors and other health care professionals in a community setting. There is also an increasing use of the voluntary sector in some situations, such as those involving mental health or long-term conditions. Primary care nurses include both practice and district nurses; practice nurses work in GP practices, while district nurses work for community health service providers to provide care in patients' homes.

People ordinarily resident in the United Kingdom can register with a GP and consult their GP practice without charge. GPs can reject an applicant (unless the applicant has been assigned to them), but they can only do so if it is not discriminatory, or if the patient is out of the practice boundary and the practice has no capacity or feels it would not be clinically appropriate (NHS Choices, 2015). Most GP consultations take place on GP premises, which are called surgeries. GP surgeries provide a range of services, including routine diagnostic services, minor surgery, family planning, on-going care for patients with chronic conditions, antenatal care, preventive services, health promotion, outpatient pharmaceutical prescriptions, sickness certification and referrals for more specialized care. Not all surgeries provide all of these services.

Efforts have been made to have an equitable distribution of GPs, but some areas of the country have a lower ratio of doctors to patients than is desired, such as rural areas in the north of England and Scotland.

The average number of GP consultations per person per year rose from 3.9 in 1995 to 5.5 in 2008 (Royal College of General Practitioners, 2013). Historically, GPs were responsible for out-of-hours (OOH) care, but starting in the early 2000s responsibility for commissioning out-of-hours care shifted to commissioning (i.e. purchasing) bodies, with services provided by GP cooperatives or private sector providers. Out-of-hours care consists of call handling, phone assessment and triage, and in-person consultations. GPs who work for a practice that does not provide out-of-hours care may provide out-of-hours care as part of a cooperative or private scheme.

Patients in England and Scotland can dial 111 to access information and advice 24 hours a day and to access out-of-hours primary care services, or they can consult the FAQs and symptom checkers online. Patients can also call the 111 hotline when they have immediate health concerns, and the nursing staff offers advice, including, if necessary, which other medical services the patient may wish to consult. In Wales, NHS Direct provides health advice and information services 24 hours a day by telephone and Internet. In Northern Ireland telephone arrangements for contacting out-of-hours general practice vary by region.

NHS walk-in centres were introduced in 2000 as an alternative means of accessing primary care without the need to book an appointment. They are usually led by nurses and hold regular office hours, rather than being open 24 hours a day. There has been a strong push in recent years for patients to use walk-in centres for minor complaints rather than using emergency care inappropriately (see Section 5.5).

Across the United Kingdom the Quality and Outcomes Framework incentivizes quality in primary care (see Section 3.7.2). The Framework is voluntary but most GP practices participate, although the indicators used are adapted to fit with the priorities of England, Scotland, Wales and Northern Ireland respectively so they are not standard across the United Kingdom (NHS Employers, 2015). In England the Care Quality Commission reviews the performance of general practices, monitoring their compliance with core standards.

5.4 Specialized ambulatory care/inpatient care

Most NHS secondary care is provided by salaried specialist doctors (known as consultants) and others who work in state-owned hospitals. Patients may stay overnight, depending on their condition and their doctor's recommendation, but there has been a move to increase the number of day cases across the United Kingdom where appropriate. In order for patients to receive care from specialists (i.e. consultants), they must be referred by a GP or admitted to the hospital as an emergency case. Patients may pay privately for a private consultation, but most still require a GP referral.

In England and Northern Ireland state-owned hospitals are called trusts. Most hospitals in Wales are managed by local health boards, except for the leading cancer centre, in Cardiff, which is part of an NHS trust. In Scotland there have been no trusts since 2004; instead, NHS boards plan and oversee the hospitals, while operating divisions handle their day-to-day management. Under the PPP/PFI initiative some hospitals in Scotland are owned privately and leased to the NHS, and the NHS runs the clinical services.

Foundation trusts are found only in England; they are independent corporations that are locally run, with more control over budgets and hiring/ firing than non-foundation trusts. The cap on income that foundation trusts can generate from private sources is currently set at 49% of all income.

In parts of the United Kingdom with large rural areas, especially Scotland, secondary care is provided to people in those rural areas (if they cannot reach hospitals) in the form of some specialist clinics in outlying areas and an increasing use of telemedicine.

Acute elective care paid for by the NHS but carried out in the private sector grew in England at the beginning of the decade, following the government's introduction of independent-sector treatment centres to drive down waiting times. These are often co-located with NHS acute hospitals, and provide many elective procedures.

In Wales especially, patients use hospitals across the border in England if they are actually closer than the nearest one in Wales. Also, in the north and central parts of Wales, where the population is sparser, people make use of the specialized hospitals in England when necessary; in south Wales there are enough people for there to be specialized services.

Because Northern Ireland's health care system is so small, there are times when complex or difficult specialist conditions need to be referred to other health care systems in the United Kingdom that are better equipped to deal with those issues.

One way in which NHS hospitals can add to their revenue across the United Kingdom is to offer private hospital services on NHS sites and what are called "amenity-beds" (facilities more comfortable than standard NHS facilities). For these beds patients pay an amount that may be close to what they would pay at private hospitals, but the care they receive is still provided through the NHS.

Tertiary services offer more specialized care, which is often also at higher cost. They are generally found in higher density areas, and are often linked to medical schools or teaching hospitals. Tertiary care services often focus on the

most complex cases and on rarer diseases and treatments. Across the United Kingdom there has been a move to concentrate specialized care in fewer centres in order to improve quality.

Patients usually choose to go to their local hospital, although for elective care in England, Scotland and Wales, but not Northern Ireland, they can choose to go to any hospital that provides services at NHS prices (including private providers). This is rare in Scotland and Wales. Performance information is made available so patients and their GPs can make informed decisions about where to go.

Across the United Kingdom, leaders have tried to reduce waiting times, which have historically been considered too long. The current English target for elective surgery procedures is a maximum wait time of 18 weeks from GP referral to start of treatment (this is known as the Referral to Treatment standard). Waiting times have improved since this target was introduced in 2007, although 2014 saw the highest number of people in six years waiting longer than 18 weeks for treatment in England (Smith, 2014). Waiting times for most of the main inpatient procedures substantially decreased from 2005/2006 to 2009/2010 across the United Kingdom, although after that time the average wait times in Wales increased (Bevan et al., 2014). Scotland also has an 18-week Referral to Treatment standard, but it is working towards a 12-week wait time. The Patient Rights (Scotland) Act 2011 established a 12-week waiting period for inpatient and day cases.

5.5 Emergency care

Emergency care (from the patient's perspective) includes GPs, walk-in centres, minor injuries units, urgent care centres, NHS 111 or equivalent, local pharmacists, local mental health teams, Accident and Emergency (A&E) departments at general hospitals, and dialling 999 for an ambulance. From a provider's perspective, emergency care is composed only of ambulance services and A&E; the rest are part of the urgent care system. There is no official definition of emergency services.

Emergency care is provided free of charge. A&E departments are open 24/7 throughout the year, while minor injury units and walk-in centres are generally open for fewer hours. Patients mostly self-refer to emergency services, but they can be referred by health care personnel.

There are 11 ambulance services in England (of which 6 are NHS Trusts and 5 are Foundation Trusts) and one each in Scotland, Wales and Northern Ireland. Because of the large sparsely populated areas in Scotland with poor road access, there is also an air ambulance service operating there. There are also air ambulance services in England and Wales, but these are provided by charities. There are 21 air ambulance charities in the United Kingdom - 19 of these are in England. Emergency medical dispatchers triage calls into three categories. There has been an increase in calls for ambulances from 1994 to the present, and indeed the number of calls received has increased more quickly than the number of vehicles dispatched or the number of patient journeys to hospital. Emergency calls have historically been prioritized according to three categories: category A, immediately life-threatening; category B, serious but not immediately life-threatening; and, category C, not serious or life-threatening. There are target response times for categories A and B, while category C calls do not have national targets. In Wales a new system for emergency ambulance services is being piloted from October 2015 and introduces three new categories of calls - red (immediately life-threatening), amber (of varying severity but where patients may require care at the scene) and green (non-serious) - to replace the current system. The amber category will see patients prioritized on the basis of clinical need; there will be a range of clinical outcome indicators to measure the quality, safety and timeliness of care, rather than time-based targets (Welsh Government, 2015).

Although the Care Quality Commission inspects emergency services in England, there is limited quality monitoring on the effectiveness of emergency care across the United Kingdom. However, many emergency departments monitor their performance against the College of Emergency Medicine standards.

England, Scotland, Wales and Northern Ireland track different sets of indicators of A&E performance, though all have data on the numbers of attendances and the time spent waiting in A&E. The latest available data indicate that Northern Ireland has the highest number of attendances at major A&E departments relative to population size. However, if minor A&E departments are included, England's total rate of A&E attendance is higher (Baker, 2015). There has been a well-documented increase in new attendances at A&E in England since 2003, which has received considerable media attention (The King's Fund, 2015).

Waiting times for emergency care in the United Kingdom have been deemed too long in the past, and England, Scotland, Wales and Northern Ireland have all issued targets to cut waiting times across all emergency care services. Wales has a greater percentage of its A&E episodes lasting over four hours as compared to England or Scotland (which performed best on this indicator as of 2014/15). In Northern Ireland over a quarter of A&E patients spent over four hours in major A&E departments in 2014/15 – the highest rate in the United Kingdom (Baker, 2015).

5.6 Pharmaceutical care

The United Kingdom is a major producer of pharmaceuticals, fourth in the world in 2007 by value of exports. Manufacturers distribute drugs to wholesalers, who then sell these on to pharmacies and dispensing doctors. Wholesalers supply 85% of the medicines dispensed in pharmacies; the rest are supplied by manufacturers or parallel importers of drugs. Manufacturers, wholesalers and retail pharmacies are all commercial enterprises and retail pharmacy has managed market entry. Pharmaceutical spending comprises approximately 1% of total GDP in the United Kingdom (OECD, 2014).

Pharmacists may also be commissioned for a wider range of services, including advising patients on common conditions, smoking cessation, sexual health services and management of long-term conditions.

In order to reduce the burden on primary care doctors and improve access to pharmaceuticals, other health care workers are allowed to prescribe certain medicines under certain circumstances. Supplementary prescribers prescribe medicines in partnership with a doctor or dentist, as long as doing so works with the patient's clinical management plan (as defined by the doctor or dentist). Supplementary prescribers must be qualified and registered, and can include nurses, midwives, specialist community public health nurses, pharmacists, chiropodists and podiatrists, physiotherapists, radiographers and optometrists, where they have had the required training.

Patients are not charged for pharmaceuticals used in inpatient care. In England there is a fixed charge for drugs dispensed in the community regardless of the price of the drug being dispensed, although there are many categories of patients who are exempt from such charges (such as children up to 16 years, those aged over 65 years and those with certain long-term conditions such as diabetes). Since April 2014 the prescription charge in England has been £8.20 per item dispensed, although it is possible to buy "season tickets" which effectively cap the prescription charge at a certain level for a year. Prescription charges are not levied on certain categories of drugs, such as those used in family planning, the treatment of STDs and cancer drugs. Prescription charges have been abolished in Northern Ireland, Scotland and Wales at different times since devolution (see Section 3.4).

In 2000, 14.2% of total health expenditure in the United Kingdom was spent on pharmaceuticals; by 2008 that figure had decreased to 11.5% (OECD, 2012). From 2012 to 2014 the proportion of generic medicines dispensed by pharmacists rose from 72% to 74%. The United Kingdom had the highest consumption per capita of cholesterol-lowering drugs in the OECD in 2012 – 30% above the EU average – and among the highest consumption of anti-diabetic drugs (along with Finland and Germany) (OECD, 2014).

5.7 Rehabilitation/intermediate care

Intermediate care encompasses a range of functions that focus on prevention, rehabilitation, reablement and recovery to prevent unnecessary hospital admissions, delayed discharge from hospital and premature admission to long-term care (Ham et al., 2013). Intermediate care providers include rapid response teams, hospital-at-home services, residential rehabilitation and reablement units, supported discharge and day-care rehabilitation. Care takes place in various wards of hospitals, community housing, nursing homes, outpatient clinics, day facilities, and even a patient's home. Intermediate care is mostly for older people, but it does help people with a variety of health conditions, including mental health issues. An overarching goal of all intermediate care is to help patients remain in their homes rather than go to hospital care. Most intermediate care is community-based rather than in a hospital or care home setting.

In recent years there has been less emphasis on the development of rehabilitation and intermediate care than on inpatient hospital care. One measure of the accessibility of such care is that patients experience a delayed discharge from hospital while waiting for such care, whether provided by the NHS or social care. The number of patients in England experiencing a delayed discharge rose to record highs in 2014 (Brimelow, 2014). In Wales delayed discharges have remained fairly constant. The Welsh government attributes this in part to its protection of local authorities' Social Services funding.

In Scotland there has been a specific drive to build intermediate care to prevent delayed discharge from hospital and premature admission to long-term care. Those areas which have implemented "hospital at home" and other forms of intermediate care have witnessed an accelerated reduction in both delayed discharge from hospital and emergency bed days (Ham et al., 2013).

5.8 Long-term care

Long-term care is a blend of health and social care, provided in a combination of residential/institutional care and care provided in the community. Some care is provided by the NHS, but a large part of it is provided by the private and voluntary sector. Financing is a mix of public and private funds. Long-term care is provided to: older people; people with physical disabilities, frailty and sensory impairment; people with learning disabilities; people with mental health problems; people who misuse substances; and other vulnerable people.

Residential or nursing care is provided in homes specifically for that purpose. It is provided mostly by the private and voluntary sector, except for some residential care provided in homes run by local councils, and in Scotland there are still NHS continuing care beds (Steel & Cylus, 2012). "Supported" residents are those who receive financial support from local authorities to live in their residential or nursing care home (this is most residents). Unsupported residents either pay the full cost or have their costs covered by social security benefits or private means.

With the exception of Northern Ireland, social care has been separated from health care since the creation of the NHS in 1948. There are user charges for social care whereas health care is provided free at the point of access. Historically, social and health care have not been well integrated. In 1998 the government suggested that health and social care should work together at three levels: strategic planning, service commissioning and service provision. The Health Act 1999 created a duty of cooperation between NHS bodies and local authorities, which made it easier for the NHS and local authorities to purchase or provide care jointly, such as by pooling resources, delegating functions and resources to one another, and acting as a single provider of services. Integration of care continued to be emphasized over the next decade, but achievements have been patchy and have varied across the United Kingdom. To improve integration of health and social care in England, in the 2013 spending round the Better Care Fund (originally the integration transformation fund) was announced in England. The Better Care Fund creates a single pooled budget to be allocated at the local level, which is intended to encourage closer cooperation between the NHS and local government; in 2014 this budget was £5.3 billion. The Better Care Fund is included in the operational and strategic plans of the NHS and local government planning. The Better Care Fund is due to be implemented in 2015/2016, and the government has set up programmes in the interim to help those in both the health and social care sectors transition to this new way of working together (NHS England, 2015a). In Wales the 2014 Social Services and Wellbeing Act gives the government the power to compel integration between health and social services where it deems local progress to be inadequate.

According to statute, local authorities are required to assess the needs of people who might need social care, and if those individuals are eligible for support, to provide that support. There are no eligibility criteria across the United Kingdom; rather, they are determined locally and they often depend on what funding is available. The Care Act 2014 introduced national eligibility criteria for the first time in England, but there is still great variation across the United Kingdom.

If an individual meets the eligibility criteria, the local authority must commission (i.e. purchase) or provide residential accommodation and non-residential services as necessary; a social worker makes these arrangements and provides the written care plan for the individual. For non-residential services in England the local authority has to offer individual direct payments instead of services, as long as the individual can manage direct payments and wants to take them. The local authority sets a standard rate that it pays for those in residential care, but the rate varies between authorities.

There are national thresholds for how much an individual is expected to pay for residential care in England. Charges range from nothing to the full costs. All the assets of an individual are taken into account, including the value of their house if they own it, as well as their income from pensions, social security benefits and other sources. The Department of Health provides guidelines to local authorities on how much they should charge for non-residential services, and the local authorities decide what to charge within those guidelines. Cost-based charges are preferred to charges placed in usage bands, and charges should not reduce an individual's income below the basic income support level plus 25%, and an individual's savings (but not other assets) may be taken into

account. Individuals may arrange to pay their own costs by working directly with care providers, but that places them outside the state system. The Care Act 2014 promoted the rights of patients receiving social care in England.

In Northern Ireland nursing or residential home funding is subject to means testing, which includes the value of the person's house (unless a spouse or dependent still lives there). A 1999 report recommended free personal social care across the United Kingdom, and in 2002 Scotland introduced it (after initially deciding not to) but England, Wales and Northern Ireland did not.

As the United Kingdom population ages and the number of older people needing care increases, the question of how to fund long-term care becomes more pressing. Because of the reduction in the number of long-stay hospital beds, many of the services once provided free at point of use in NHS hospitals are now provided in means-tested residential and nursing homes, with the attendant costs to individuals.

The Care Quality Commission regulates and inspects all social care providers in England, including care homes, nursing agencies and home care agencies, based on standards established by the Department of Health in 2000 and amended in later legislation. The Care Inspectorate registers and inspects care homes in Scotland. In Scotland NHS Healthcare Improvement Scotland has a set of quality indicators and a best-practice statement for learning disabilities, but there is still a risk of services not meeting the needs of such patients.

5.9 Services for informal carers

Informal, or unpaid, care is that which is provided to family members, partners, friends or others who are suffering from a long-term illness or disability, or who have problems relating to old age.

There are no legal obligations for any family member to provide financial support to another except for spouses and parents for under-age children, but most informal care is provided by family members. In fact, as of the 2001 census, 10% of the United Kingdom population are unpaid carers. Carers look after those with physical and/or mental health needs, and also the elderly. Most carers are women.

There have been efforts to identify informal carers, and to provide them with information and training. England passed the Care Act 2014, and Scotland issued a Carers Rights Charter for consultation in 2013. Under the Care Act 2014 carers in England have a legal right to needs assessment and support. The Act requires local authorities to assess carers' needs for support if they appear to have such needs. Informal carers can receive assessments of their needs, breaks from caring (in the form of day-care services for the individual requiring care and short-term institutional respite care), services for the person being cared for to ease the burden on the carer, and Jobcentre (the working-age employment support service) support so that carers can update their skills and knowledge level if they want to obtain employment while caring.

The Carer's Allowance is available to all carers in the United Kingdom, but it has strict eligibility requirements: the carer must provide care for 35 hours or more per week; the person being cared for has to be significantly disabled according to their own disability benefit; the carer must be over 16 and not in full-time school; and the carer must not earn more than £100 per week or receive most other types of benefit. The allowance is supposed to replace income that the carer might have earned if they weren't caring, although the amount is clearly not anywhere near what they might have actually earned. Carers can receive a little more if they are also receiving means-tested benefits like housing or pension benefits. The allowance is not based on National Insurance Contributions, but in 2010, new National Insurance Carer's Credits were introduced for those who provided care for at least 20 hours a week, in order to support their eligibility for a full state pension.

5.10 Palliative care

Palliative care aims to provide the best quality of life for patients with advanced progressive illnesses, and for their families, by managing pain and symptoms, and by providing social and psychological support. It is provided when a cure is not an option. Historically, there has been an uncoordinated approach to care, but there have been efforts to change this. There has been an increase in the number of people working as palliative care specialists, although the differences in access across the United Kingdom are visible in the number of palliative care staff in different regions.

Palliative care has historically been provided through the voluntary sector, although in the 1990s the NHS started to create palliative care strategies. The NHS Cancer Plan of 2000 provided additional funds to support hospices and palliative care services for cancer patients and their families in England. By 2003 the Department of Health announced an End of Life Care Programme to improve quality of care for those in the advanced stages of progressive

illnesses. Best practices for cancer and HIV/AIDS patients were applied to other conditions, and more staff were trained in palliative care to improve care to these standards. In 2008 the Department of Health's end-of-life care strategy recommended a care pathway approach to integrated services. In Wales the level of NHS financial support for palliative care is lower than it is in England.

Specialist palliative care includes doctors, nurses, social workers and psychologists with specialist training in symptom control, pain relief and emotional support for patients and their support system. General palliative care comes from non-specialist staff. Residential palliative care is mostly provided in voluntary sector hospices (the NHS has 20% of such beds), and all such care for children is in the voluntary sector (NCPC, 2015). Home care is also provided, including hospice-at-home services and day-care centres. In addition to trained medical staff, volunteers provide support in hospices. Help the Hospices conducted a study in 2006 which concluded that volunteers contribute value equal to nearly a quarter of the cost of running hospices, including bereavement support services. Most inpatient and day care is in voluntary sector hospices. Most hospices have been found to perform to a high standard.

5.11 Mental health care

The NHS, local authorities, and voluntary and private sector organizations provide mental health services in the United Kingdom. NHS services are free at the point of access, while some services provided by local authorities are charged according to means-testing. Clinical commissioning groups and their equivalent bodies in Scotland, Wales and Northern Ireland commission and can provide mental health services, while local authorities fund housing and social services for people with mental health needs, often in partnership with health services (as part of the increase in integration between social and health care in general).

Inpatient mental health care can take place in psychiatric hospitals or wards within acute hospitals, both of which provide residential care and support for acute illness; intensive care units care for people receiving compulsory treatment; and there are secure facilities providing inpatient treatment for people who need high levels of security. Community-oriented accommodation options also exist, such as supported housing, group homes and short-term hostels.

Community mental health teams can include different groups of medical and community health staff, and they support primary care mental health services, working in teams to help GPs treat people with common mental health problems. There are many types of community mental health service, including: crisis resolution teams that provide short-term intensive care; assertive outreach teams that provide on-going intensive help; early intervention teams that provide assessment and care during a person's first psychotic episode; home or community support services that support patients and their families; rehabilitation or continuing care teams that care for long-term patients; gateway workers who assess and triage in mental health emergencies; graduate primary care workers who assist GPs in managing and treating common mental health problems with therapy; support time and recovery workers who spend time with patients to develop needs and strengths assessments for the patient; and community development workers who support groups that work with black and minority ethnic groups to address inequalities in the services they receive for mental health issues

Criminal offenders with mental health problems, or those who need high levels of security, may receive forensic mental health services, which are provided in secure hospitals. Forensic mental health services assess, manage and treat high-risk individuals in hospitals, prisons and the community; assess, support and treat victims; provide advice to GPs, psychiatrists, lawyers, police officers, prison staff, social workers and probation officers; and provide evidence and testimony for legal purposes. Some forensic services are provided in private sector units and in prisons, but mostly they are provided in mediumand low-security NHS units.

Legislation regarding the rights of mentally ill patients who are involuntarily detained has gone through three major steps: the Mental Health Act 1959, which moved the decision-making process for compulsory admittance from the courts to the medical profession; the Mental Health Act 1983, which restricted the amount of time patients might be detained without their consent, and allowed for the patient's nearest relative to consent if the patient could or would not; and since devolution separate approaches to meeting the mental health needs of the population.

In 2005 Scotland implemented mental health legislation that strengthened the rights of detained individuals, and established a tribunal to review compulsory detention. Scotland has developed national standards for crisis response; standards and guidelines for treating various mental health disorders; and integrated care pathway standards. Scotland has an independent body that investigates ill-treatment or deficiency of care of mentally ill people. In Wales

the Mental Health Measure (a law applying only to Wales) enshrines various additional rights, for example in respect of access to primary mental health services, and the use of care and treatment planning.

The Mental Health Act 2007 in England both protects the rights of people with mental health issues and allows compulsory treatment for people who threaten their own safety or that of others, either in the community or in institutions. The Act further shifted focus from hospitals to community-based care, and emphasized treating people regardless of consent, if it is deemed necessary to protect the patient or others from the patient. The Act requires that appropriate medical treatment is provided if a patient is going to be detained or if their detention will continue. The Act allows for some manoeuvrability in the role the nearest relative plays: civil partners can now take this role; patients can petition a county court to displace the nearest relative; and the county court can determine on its own to displace the nearest relative if that relative is not considered suitable to take the role. The Act introduced various protections for children, such as that electroconvulsive therapy (ECT) can only be applied to a child under 18 if a second doctor approves, and no child under 16 may be on an adult ward. If a patient can refuse to consent to ECT, it may not be given unless it is an emergency. The Secretary of State (minister) for Health has to provide advocacy services, and service providers have to tell patients that there are advocacy services of which they can avail themselves. Advocates can meet with patients in private, but they may only access the patient's records in certain circumstances. Community Treatment Orders are issued upon discharge from a hospital, running for six months and then possibly renewed for another six months and then annually after that.

The Mental Health Strategy for Wales expands the definition to include mental health and well-being in addition to mental illness; combats stigma and discrimination; and focuses on individual care with a recovery approach.

Northern Ireland has had recommendations to amend its laws regarding those with mental health problems, but has been slow to implement legislation.

Various programmes have been introduced over the years to address the stigma and discrimination surrounding mental health issues, including cross-sector initiatives in areas like housing and employment. For example, Action on Stigma specifically aimed to help people return to work and help employers adopt best practice on how to reintegrate them. SHiFT, part of the National Mental Health Development Unit, also encourages the media to report more responsibly on mental health issues.

5.12 Dental care

Dental services consist of a three-part system: general dental services in the community; secondary and tertiary dental services in acute hospitals for difficult problems; and community dental services in clinics and nursing homes, provided for those who cannot use general dental services, and also in schools to screen children for problems. Treatment considered necessary to dental health can include: dentures, root canal treatment, crowns and bridges, preventive treatment, white fillings, and orthodontic care (for under-18s). Individuals are entitled to these under the NHS but may choose to receive them in both private and NHS settings. Local commissioning groups must ensure that NHS dental care is available within the geographic area for which they are responsible.

The current contract was negotiated between commissioners and dental practices, and is based on the units of dental activity the dentists provide. Dentists may subcontract their work, which results in some dentists being providers (they contract with the NHS), providing performers (they contract with the NHS), and performers (they deliver services but do not contract with the NHS). Registration with an NHS dentist used to be necessary, and that is how access was determined, but since the 2006 contract registration is no longer required, so the new measure for access is the number of patients seen by an NHS dentist in the previous 24 months.

Dental care was initially free at the point of use when the NHS began in 1948, but charges were quickly introduced. There are three NHS charge bands in England and Wales (NHS Choices, 2014):

- Band 1: £18.50 covers an examination, diagnosis and advice. If necessary, it also includes x-rays, a scale and polish and planning for further treatment.
- Band 2: £50.50 covers all treatment covered by Band 1, plus additional treatment such as fillings, root canal treatment and removing teeth (extractions).
- Band 3: £219 covers all treatment covered by Bands 1 and 2, plus more complex procedures, such as crowns, dentures and bridges.

In Scotland and Northern Ireland all patients are entitled to free check-ups and NHS patients, who pay for their treatment, pay 80% of the treatment costs (including any x-rays), up to a maximum of £384. A dentist can ask for payment in advance.

Individuals pay for private dental care through private insurance plans or directly out-of-pocket. Private dental insurance is either based on capitation plans that include a basic package, or a fixed amount per year that covers cost of treatment up to a pre-determined amount. There has been an increase in the number of people receiving private dental care, partly as the NHS contract introduced in 2006 reduced the number of dentists providing NHS services.

The General Dental Council regulates all dental professionals in the United Kingdom, including allegations of misconduct or being unfit to practise. Also, the General Dental Council issues guidance on what constitutes good clinical care. The General Dental Council can advise on how to deal with poor experiences in private dental care, although it cannot enforce its recommendations in the private sector. Commissioners can request the Dental Reference Service conduct a quality review of a practice. The Care Quality Commission regulates and inspects both NHS and private sector dental care providers in England and monitors them for compliance, which it can enforce via fines, warnings and so on if providers do not meet the legal requirements of registration.

While dental health has improved considerably over the last fifty years, there is still a social class difference in oral health. Only 10% of the population receives fluoridated water in England, but the Department of Health is providing extra funding to increase coverage in England. Fluoridation is not provided elsewhere in the United Kingdom, although there is one area in Scotland where it occurs naturally.

Scotland, which historically has very poor oral health, announced an ambitious plan in 2005 to improve the oral health of the nation. Initiatives included improving oral health among children, and helping get dental care to the elderly who might have difficulty attending the dentist. While some targets have been met, most dental disease occurs in children from deprived backgrounds; the Childsmile programme is meant to address this, mostly by giving children fluoride varnishing.

There are still some areas of Wales where dentists are scarce, and children from the most deprived areas are falling far behind their peers on oral health. Designed to Smile is a community dental service that delivers enhanced dental care to children in deprived areas.

Because some areas of Northern Ireland have difficulty meeting the dental health needs of the population, a contract with a private provider helps fill that gap.

5.13 Complementary and alternative medicine

In order of how often they are used, the major complementary and alternative medicine services are massage therapy, osteopathy, aromatherapy, chiropractic manipulation, homoeopathy, reflexology, acupuncture and herbal medicine. The House of Lords Select Committee report in 2000 found that many therapies had a weak evidence base, and it recommended that:

- practitioners be properly trained and supervised;
- the NHS pay for therapies only if an NHS GP referred the patient to them, and if they are well regulated;
- the public receive more information and guidance on complementary and alternative medicine;
- and legislation be introduced to control the herbal sector.

In response, a steering group set up in 2006 investigated regulating acupuncture, herbal medicine and traditional medicines such as Chinese and Ayurvedic. The subsequent Pittilo Report recommended that emerging professions be regulated by existing bodies, so CAM would be regulated by the Health Professions Council. However, as of February 2015 only osteopathy and chiropractic manipulation were regulated by statutory professional regulation by the General Osteopathic Council and the General Chiropractic Council respectively. Most complementary and alternative medicine services have voluntary professional bodies that have their own rules and best practices, but these are not formally regulated. The focus in regulation of complementary and alternative medicine is on ensuring safe care while regulating in proportion to risk of the treatment.

Complementary and alternative medicine is mostly provided in the private sector by independent practitioners. Some specialist complementary and alternative medicine centres contract with the NHS and provide private care. There are even three NHS homoeopathic hospitals – two in England and one in Scotland. Complementary and alternative medicine patients usually self-refer, but NHS GPs can refer them as well, and in some cases the NHS pays for the consultation. Complementary and alternative medicine therapies are often used as part of an integrated care approach to end-of-life care or cancer treatments.

6. Principal health reforms

Since devolution, England, Scotland, Wales and Northern Ireland have taken their own approaches to health care. The main approach in England has been towards decentralization, reinforcement of the internal market, and more localized decision-making. Scotland and Wales have moved in the other direction, dissolving the internal market and keeping more power centralized. Scotland is in starkest contrast to England, seeing itself as maintaining a strong tradition of publicly provided health care for all in a high-quality environment maintained by rigorous performance standards, whereas policy-makers in England hope private partnerships and internal competition, along with rigorous performance standards, will drive forward higher quality health care.

6.1 Analysis of recent reforms

The Labour government that came to power in the United Kingdom in 1997 instituted broad reforms in the NHS, such as introducing a duty of partnership to work together for the common good, setting national standards and performance measures, and establishing NICE. With the NHS Plan of 2000, the government committed an unprecedented amount of funding to make necessary changes quickly – the goal was to increase spending for the whole of the United Kingdom to match the EU average at the time. With the Barnett formula, Scotland, Wales and Northern Ireland were able to enjoy a significant increase in funding but because of devolution, the policies for managing performance differed. Since devolution in 1999, health care reforms in the United Kingdom have been made by each nation individually, and as such, the reforms will be discussed separately here.

England

Although the 1997 White Paper of the Labour government had explicitly rejected the internal market, the health care market continued in England albeit in a new framework that involved demand-side reforms, supply-side reforms, transactional reforms and system management reforms. In 2002 the Department of Health issued guidance for commissioners (i.e. strategic purchasers) and providers, acknowledging that a competitive market was in place, but also encouraging cooperation, especially for care networks.

Lord Darzi's 2008 report echoed similar objectives to the 1997 White Paper and the 2000 NHS Plan, although the focus of the report was on quality measures, including introducing such measures as Payment by Results. The Care Quality Commission was founded in 2008, taking over from previous similar quality control bodies.

The Conservative-Liberal Democrat coalition government published a White Paper in 2010 that upheld some basic elements of the NHS – free at the point of access, equal access to all, commitment of resources to health, importance of the NHS Constitution – but also introduced significant changes. A major theme of the paper was on decentralizing the power of the NHS, in order to make power and choice more local. The paper proposed introducing new NHS institutions that would have broad responsibilities and freedoms, and would be devolved from the central government.

The proposed reforms underwent much debate in parliament and in the public arena as they were extremely controversial (Ham et al., 2015). Finally, after several amendments were made, the law passed both houses of parliament on 19–20 March 2012. It received royal assent, i.e. was formally approved by the head of state, on 27 March 2012 and became known as the Health and Social Care Act 2012. It became fully operational on 1 April 2013.

Under the Health and Social Care Act 2012, primary care trusts and strategic health authorities were abolished and replaced by clinical commissioning groups, supported by commissioning support units. The regulatory powers of Monitor were extended beyond foundation trusts to include all trusts, and the Trust Development Authority was established to shepherd trusts into foundation trust status. NHS England was established to commission (i.e. purchase) primary care and some specialist care, and Public Health England was established to improve public health. The responsibilities of the Care Quality Commission and of NICE were expanded. Local Health and Well-being Boards were introduced,

as well as national and local Healthwatch England groups (see Section 2.3). Responsibility for commissioning public health services was also moved to local government.

The realm of social care was affected by reforms as well. In 2013 the Better Care Fund was introduced, as an initiative to improve integration of health and social care. The Care Act 2014 introduced a cap on the amount people pay for care, following the recommendations of the Dilnot Commission (see Section 5.8).

The health information service NHS Direct was replaced by NHS 111, and the Audit Commission was dismantled, with its functions taken on by other agencies or left to volunteer auditors.

Following the publication of the Francis Report which argued for greater regulation of quality of care (see Section 2.8.2), the government published a detailed response called "Hard Truths" in 2013 which sought to focus on patient safety and quality (Department of Health, 2014).

Northern Ireland

The most recent reforms in Northern Ireland came about under the Health and Social Care (Reform) Act (NI) 2009, often referred to as "the Reform Act". This Act rearranged the structures of health and social care in an effort to streamline services and decrease the amount of administration attached to each service. Although multiple administrative bodies did connect the administration of services more closely to the public, the burden of administrative costs and resources was too great.

The main concern of health and social care in Northern Ireland is cooperation and consultation instead of competition. This is an approach both pragmatic (the population is so small that a competitive model might not work) and principled (working together should produce the best results for patients). However, because the purchaser–provider split remains in place, but the model is not competitive, there may be some tensions in purchasers not requiring stronger performance from providers, for example.

Scotland

Immediately following devolution Scotland focused on dismantling the internal market, dissolving trusts, promoting integration of care and partnership among health and social care departments, improving public health, and developing partnership arrangements with NHS staff. Services were meant to be decentralized and integrated. Community health partnerships were introduced and organizations were expected to share information and resources. Many of

these reforms took place under the NHS Reform (Scotland) Act 2004. Following the National Advisory Group's 2005 report, the Scottish government committed to shifting focus from secondary to primary care and to integrating care. The HEAT target system (see Section 2.5) was introduced for a more rigorous approach to performance management.

In 2007 the minority Scottish National Party government recommitted the Scottish government to mutuality between the NHS and the Scottish people as a key idea in their approach to the NHS, in concert with an emphasis on cooperation and collaboration rather than competition and market forces. The action plan resulting from this recommitment included increasing public involvement, linking performance targets and strategy, strengthening partnership working, and improving quality. The Scottish government also proposed replacing the Public Private Partnership/Private Finance Initiative approach to capital investment. A Healthcare Quality Strategy clarified NHS priorities to be: caring and compassionate staff and services; clear communication about conditions and treatment; effective collaboration; clean and safe care environments; continuity of care; and clinical excellence (NHS Scotland, 2010). The Public Bodies (Joint Working) Scotland Act 2014 provides for nationally agreed outcomes across health and social care and requires integrated health and social care budgets (Scottish Government, 2015).

Wales

Since devolution Wales has focused on improving public health, removing the purchaser–provider split, reorganizing structures to reduce waste, and making policy reforms that emphasize the Welsh government's commitment to health and social care (such as abolishing prescription charges and hospital parking charges). Local health boards are responsible for the full range of health services (primary and specialized care, including mental health and public health) for their population, and are seeking to use this integrated structure to effect a significant shift towards seamless and prevention-focused care.

A 2011 White Paper set a framework for reforming social services, including creating legislation around the issues. Coordination, prevention and localization are the core values behind this reform. The Social Services and Wellbeing Act received royal assent in 2014 and is intended to come into force in 2016. The Act is intended to promote people's independence, to integrate and simplify the law, and to provide better clarity and consistency to all those involved in the social services system, including carers, local authorities and the courts.

6.2 Future developments

England

Over the next several years the health system in England will continue adjusting to the many significant changes introduced by the Health and Social Care Act 2012 and other pieces of legislation and government policy of the coalition government. Most transitions were only completed in 2014 or early 2015, so it is too early to determine whether the newly configured or entirely new structures and programmes will meet their aims.

Northern Ireland

Both the Republic of Ireland and Northern Ireland wish to have closer cross-border relations, especially in areas such as out-of-hours services and general efficiency. Such improvements would benefit patients and would be economically helpful to both nations.

A 2011 review of the health and social care system resulted in a reform approach by the government called Transforming Your Care. One of the conclusions was that shifting the emphasis from secondary to primary care would prove useful, especially for those with mental health issues and learning disabilities. The government created 17 integrated care partnerships, comprising doctors, nurses, pharmacists, social workers, hospital specialists, other health care professionals, the voluntary and community sectors, as well as service users and carers (Health and Social Care Board, 2015).

The review also recommended that smaller hospitals be closed in order to more closely mirror the number of hospitals per population size seen in England. As of early 2015, no hospitals had yet been closed, although the number of hospital beds had been reduced. In early 2015 the NHS Chief in Northern Ireland announced that smaller hospitals would be closed in order to conform with the Transforming Your Care recommendations (McBride, 2015). Recommendations have been made to also close some publicly owned long-term care facilities, but none has yet been closed.

Scotland

The divide between England and Scotland in their approaches to the NHS came into sharp relief as the Health and Social Care Act 2012 was being debated. Scotland maintained that its public sector focus on the NHS would emphasize cooperation, collaboration, partnership and performance management. Financial constraints, health disparities and an ageing population present challenges for Scotland as it looks to the future.

Wales

In October 2013 the National Health Service Finance (Wales) Bill passed, changing the financial duty for local health boards to break even every year so that they now have to break even over a rolling three-financial-year term. This was intended to limit short-term planning and spending, and to remove unnecessary administrative burdens. The bill began implementation in 2014/2015.

7. Assessment of the health system

The health care systems of the United Kingdom are among the few in the world that have a tradition of providing care to all residents that is free at the point of service. Some significant changes were made in recent years that distinguish England, Scotland, Wales and Northern Ireland in their approach to financing and delivering care, but the overarching goals across the United Kingdom remain the same: to provide equitable, safe, effective, cost–effective, high-quality health care.

Service users are generally satisfied with their experiences in obtaining treatment in the NHS, and for the most part people can access health services easily. The population of the United Kingdom is healthier now than ever before, and overall life expectancy is high, albeit with strong geographical variations. Nevertheless, there are still some serious population health issues, particularly the high level of health disparities in some areas; concentrated public health campaigns are in place to address those but it remains to be seen how effective they have been.

The NHS systems across the United Kingdom are striving to be more effective and efficient in their allocation of human resources and finances, while at the same time trying to engage with the public in the way they operate to improve the responsiveness of the system.

7.1 Stated objectives of the health system

While the approaches to health and social care in each of the four nations of the United Kingdom are increasingly divergent, they all share the same objective: to provide a high-quality health system to everyone, largely free at the point

of access. All four health systems aim to promote public health, provide high-quality care, be efficient and cost–effective, and provide an integrated system of health and social care.

As of the 2010 White Paper "Equity and excellence: liberating the NHS", which led to the Health and Social Care Act 2012, England includes decentralization of decision-making, choice and competition in the commissioning (i.e. strategic purchasing) of care, and meeting performance targets as stated goals. Scotland, on the other hand, maintains a national approach and formally emphasizes cooperation, collaboration and partnership over competition. It also makes meeting performance targets a priority. Wales takes a moderated version of Scotland's approach; it is generally centralized, and emphasizes cooperation over competition in commissioning. The Northern Ireland system seems to be, in some respects, most similar to what was in place in England in the 1990s.

7.2 Financial protection and equity in financing

7.2.1 Financial protection

Because the NHS was founded on the principle of being free at the point of access, people in the United Kingdom are well protected from the financial consequences of ill-health. Dental care provided through the NHS incurs charges across all of the United Kingdom, but these are capped. There are also no prescription charges in Northern Ireland, Scotland or Wales, and no hospital parking charges in Scotland and Wales. These do all apply in England, but there are broad exemptions which means OOPs remain low by international standards.

However, the rising costs of care and meeting the needs of an ageing population across the United Kingdom present challenges. Leaders will need to make difficult financing decisions in order to preserve the current level of financial protection for health services.

7.2.2 Equity in financing

The funding of the NHS across the United Kingdom is equitable in the sense that the share of OOP payments in total health expenditure is small and that the system of taxation that funds it is reasonably progressive (i.e. it raises more from income taxes than from consumption taxes such as VAT). While the Barnett formula is seen by some to be problematic, it has yet to be replaced by a more equitable or permanent solution (see Section 3.3.3).

7.3 User experience and equity of access to health care

7.3.1 User experience

The British Social Attitudes (BSA) survey of 2012 (which does not include Northern Ireland) showed that at least 50% of respondents were "very" or "quite" satisfied with GP services, outpatient care, inpatient care and the way the NHS is run overall. The largest disparity among the responses was on inpatient care – 52% of the respondents in Wales were satisfied, while 68% of the respondents in Scotland were satisfied. The smallest disparity was around outpatient care – 65% of respondents in England were satisfied, as opposed to 70% in Scotland.

Aside from the BSA there are no other comparable surveys that would provide an overview of user experiences for the United Kingdom as a whole. Each system undertakes its own survey of the experience of care received in GPs' surgeries and, although the classifications used differ, each survey reported high levels of satisfaction in 2011: 94% in Northern Ireland, 92% in Wales, 89% in Scotland and 88% in England. There is a lack of comparative data on patients' experience with hospital care (Bevan et al., 2014). However, there is a concern that although data on the user experience are widely collected, few providers are systematically using the information to improve services (Coulter et al., 2014).

7.3.2 Equity of access to health care

Across the United Kingdom, while care is largely free at the point of service, there are still disparities in access to health care. Leaders have committed to tackling the issue, but the gap between the most deprived and the most privileged continues to widen, rather than close. In the more rural and difficult to reach areas of the United Kingdom it is sometimes difficult for people to have easy access to health care, which is why telehealth and more mobile primary care services have been promoted, especially in Scotland. Overall, however, in 2012 unmet need for a medical examination was very low and did not differ substantially between high- and low-income households; 2.1% of high-income households reported unmet need compared to 3.9% of low-income households (OECD, 2014).

7.4 Health outcomes, health service outcomes and quality of care

7.4.1 Population health

Overall, the health of the population of the United Kingdom has improved in the last decade (see Section 1.4). There have been considerable reductions in amenable mortality (death before age 75 due to conditions that are considered preventable in the presence of timely and effective health care) across the United Kingdom, with the number of deaths more than halved between 1990 and 2010 (Bevan et al., 2014). In 1990 around 30% of all male deaths before age 75 and 40% of all female deaths before age 75 were amenable, and by 2010 these figures had fallen to 20% and 30%, respectively. The decline in cardiovascular mortality has been largely responsible for reductions in amenable mortality overall. Amenable deaths, however, have remained around 20% higher in Scotland which has the highest rate in the United Kingdom compared to England (the lowest). Deaths from respiratory and circulatory diseases, as well as from cancers, have fallen, and at least some of this can be attributed to effective screening programmes. There are no significant differences across the United Kingdom in terms of preventive services, such as breast cancer screening or immunization rates (Bevan et al., 2014). Screening rates in the United Kingdom are among the highest in the OECD for cervical and breast cancers; mammography screening reached 75.9% of women aged 50-69 in 2013 (OECD average 58.8%) while cervical cancer screening reached 78.1% of women aged 20-69 in 2013 (OECD average 61.6%). Leaders continue to support healthy living programmes such as smoking cessation, alcohol reduction and obesity reduction programmes.

Since the 1980s England and Wales saw an increase in health inequalities between socioeconomic groups (ONS, 2015). Various plans have been put in place to address them, including two key targets: reducing the infant mortality rate and increasing life expectancy; there has been progress on both these fronts (see Section 1.4). Scotland, Wales and Northern Ireland have also seen some gains in overall health, however, the most deprived communities continue to fall behind.

7.4.2 Health service outcomes and quality of care

Performance targets seem to have largely proved effective at improving quality of care, at least as far as specific indicators are concerned. For example, hospital admissions for diabetes were among the lowest in the OECD in 2013 (64.3 per

100 000 population, OECD average: 149.8); the Quality Outcomes Framework rewards GPs for proper management of diabetes, which may be a factor behind the low rates. Conversely, admission rates for other chronic conditions, such as asthma and chronic obstructive pulmonary disease (COPD) were above the OECD average (273.2 per 100 000 population, OECD average: 242.2) (OECD, 2015).

Reductions in cardiovascular mortality rates are in part due to improvements in acute cardiovascular care. Acute myocardial infarction mortality rates (30 days after admission to hospital using hospital admissions data) have fallen in recent years, reaching 7.6 per 100 admissions aged 45 and over in 2013, slightly lower than the OECD average (8.0). Cancer survival rates have improved over the last decade, but survival five years after diagnosis remained among the lowest in the OECD for cervical, breast and colorectal cancers in 2013 (59.5%, 81.1% and 56.1% respectively) despite high screening rates (OECD, 2015).

In terms of patient safety, the United Kingdom had slightly lower rates of postoperative pulmonary embolism (321.1) and deep vein thrombosis (213.5) in hip or knee surgeries in 2013 (per 100 000 hospital discharges), and postoperative sepsis for abdominal surgeries (1723) than the OECD average (329.4, 506.1 and 1818.6 per 100 000 hospital discharges, respectively). Rates of foreign bodies left in during a surgical procedure per 100 000 hospital discharges were higher in the United Kingdom at 7.2 than in the OECD on average (5.7) in 2013 (OECD, 2015).

7.5 Health system efficiency

7.5.1 Allocative efficiency

There have been shifts across the United Kingdom favouring primary care over secondary care, in the hope that better primary care will be cost-efficient and more effective at treating people before conditions worsen. However, there is still a disproportionate amount of money tied up in hospital care rather than primary and community care, and that will need to be addressed if efficiency is to improve.

7.5.2 Technical efficiency

Measures of technical efficiency include average length of stay in a hospital, day-case surgery rates, levels of generic prescribing, staff turnover, sickness absence rates and use of agency staff. For the most part the NHS is moving forward in all of these areas. For example, in 2013 the United Kingdom had the second shortest average length of stay for a normal delivery, 1.5 days, compared to other OECD countries (OECD average of 2.9 days). However, this may indicate differences in priorities or preferences rather than efficiency; the average length of stay for acute myocardial infarction was 7.1 days in the United Kingdom, above the OECD average of 6.8 (OECD, 2015).

A recent report by the Commonwealth Fund named the United Kingdom as the most efficient health system among 11 high-income countries as a result of factors such as low expenditure levels per capita as a proportion of GDP and comparatively low levels of bureaucracy (for example, patients did not have to spend a lot of time on paperwork related to medical care) (Davis et al., 2014). However, it should be noted that the United Kingdom also performed second from worst on the composite indicator of healthy lives in the very same report. In this respect the United Kingdom health systems appear to be missing their main goal – that of improving population health – due to relatively high rates of amenable mortality, comparatively high infant mortality rates and low healthy life expectancy at age 60 years, despite ranking as the most technically efficient (Davis et al., 2014). However, it is important to reiterate that the United Kingdom has experienced some of the largest improvements in key health indicators such as amenable mortality among high-income countries during the past decade.

7.6 Transparency and accountability

While the United Kingdom does not face transparency problems in financing the health systems, such as widespread informal payments or tax evasion, achieving transparency through public participation has thus far proven elusive. Performance data for providers are made public to inform patients about performance against standards. In England, patients can drive not only service improvement but financial decisions (including funding private providers) by exercising patient choice and taking their activity-based reimbursement to wherever they feel they receive the best services. However, the public are not given such a strong voice when major service changes or reorganizations are being proposed. This means there are issues with the reality of accountability where on paper there are consistent efforts to involve the general public in decision-making but their priorities actually hold very little sway. There is also a lack of transparency in how big financing decisions are made and there is increasing need for greater transparency around the awarding of contracts to commercial partners, particularly in England, because the greater the involvement of private providers and markets in the health system, the greater the need for regulation and transparency becomes.

8. Conclusions

lthough the emphasis among analysts in the United Kingdom has been on how much the health systems of England, Scotland, Wales and Northern Ireland have diverged since political devolution in 1997, their health systems still have much in common. Their shared primary objective remains to provide high-quality health care to everyone that is free at the point of service, and increasingly one of their main goals has been to better integrate health and social care. Indeed, from their funding sources and levels of expenditure, to provider characteristics such as the professional qualifications required to practise, to the value they place on public participation, the four health systems are all quite similar. From the outside, the health systems in the United Kingdom function as a single whole; and most importantly, from the perspective of patients, the health systems of the United Kingdom are accessed in fundamentally the same way. Patient pathways are the same and legal residents of the United Kingdom may use the services of the NHS in England, Scotland, Wales and Northern Ireland – if a patient requires specialized care that is not locally available there are no issues in sending them across internal country borders.

While there are differences across the United Kingdom health systems in terms of waiting times and various other service characteristics, the primary differences in approaches to care organization and delivery appear to be largely ideological, mostly regarding whether leaders seek to encourage efficient, high-quality care through collaboration and integration of providers, or through competition among providers, or both. Whether these differences in approaches will ultimately lead to better outcomes remains a source of significant debate and there is a need for careful monitoring and evaluation to better understand the impacts these differences will have in the long run.

But even though there are ideological differences between the health systems, these have led to relatively minor differences in practice; Scotland, Wales and Northern Ireland have abolished prescription charges while England continues to charge a nominal fee, but the amount of revenue generated in England is negligible and exemptions cover a broad range of people. Out-ofpocket spending continues to comprise a small share of health spending across the United Kingdom and in comparison with other high-income countries.

Overall, the health systems function remarkably well given their relatively low levels of funding – less money is spent on health as a percentage of gross domestic product than in comparable affluent EU nations like Germany and France. Nevertheless, important health disparities remain between socioeconomic groups despite the existence of advanced health systems that guarantee access to care for all. All of the United Kingdom faces many of the same challenges going forward, including how to cope with the needs of an ageing population, how to manage populations with poor health behaviours and associated chronic conditions, how to meet patient expectations of access to the latest available medicines and technologies, and how to adapt a system that has limited resources to expand its workforce and infrastructural capacity so it can rise to these challenges.

9. Appendices

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9.2 Useful web sites

Agenda for Change: http://www.nhsemployers.org/ your-workforce/pay-and-reward/pay/agenda-for-change-pay/ how-agenda-for-change-works

British Medical Association: http://bma.org.uk/

General Medical Council: http://www.gmc-uk.org/about/UK_health_ and_social_care_regulators.asp

Healthcare Improvement Scotland: http://www.healthcareimprovementscotland.org/about_us.aspx

HSCIC: http://www.hscic.gov.uk/supportandguidance

Independent Community Pharmacist: http://www.independentpharmacist.co.uk/aboutus.cfm

Integrated Care and Support Exchange: http://www.icase.org.uk/pg/dashboard

MATCH: http://www.match.ac.uk/

MHRA: https://www.gov.uk/government/organisations/ medicines-and-healthcare-products-regulatory-agency/about

NHS Choices: http://www.nhs.uk/Pages/HomePage.aspx

NHS Direct Wales: http://www.nhsdirect.wales.nhs.uk/

NICE: http://www.nice.org.uk/

NI Direct: http://www.nidirect.gov.uk/

NIHR: http://www.nihr.ac.uk/

Office for National Statistics: http://www.ons.gov.uk/ons/index.html

Private Healthcare UK: http://www.privatehealth.co.uk/health-insurance/

RQIA: http://www.rqia.org.uk/home/index.cfm

The Scottish Charter of Patient Rights and Responsibilities: http://www.gov.scot/Resource/0039/00390989.pdf

SHOW Scotland: http://www.show.scot.nhs.uk/

Spine Services: http://systems.hscic.gov.uk/spine

Universal Credit: http://www.nhs.uk/NHSEngland/Healthcosts/Pages/ universal-credit.aspx

9.3 HiT methodology and production process

HiTs are produced by country experts in collaboration with the Observatory's research directors and staff. They are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources and examples needed to compile reviews. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The most recent template is available online at: http://www.euro.who.int/en/home/projects/observatory/publications/health-system-profiles-hits/hit-template-2010.

Authors draw on multiple data sources for the compilation of HiTs, ranging from national statistics, national and regional policy documents to published literature. Furthermore, international data sources may be incorporated, such as those of the OECD and the World Bank. The OECD Health Data contain over 1200 indicators for the 34 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All database. The Health for All database contains more than 600 indicators defined by the WHO Regional Office for Europe for the purpose of monitoring Health in All policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments, as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard Health for All data have been officially approved by national governments. With its summer 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.

9.4 The review process

This consists of three stages. Initially the text of the HiT is checked, reviewed and approved by the series editors of the European Observatory. It is then sent for review to two independent academic experts, and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health, or appropriate authority, and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

9.5 About the authors

Jonathan Cylus is a research fellow at the European Observatory on Health Systems and Policies based at the London School of Economics and Political Science, United Kingdom.

Erica Richardson is a research officer at the European Observatory on Health Systems and Policies. She is a specialist in health system reform in Eastern Europe and holds an honorary post at both the London School of Hygiene & Tropical Medicine and the Centre for Russian, European and Eurasian Studies at the University of Birmingham, United Kingdom

Lisa Findley is an editor and writer based in London. She is also the marketing coordinator for a publishing company and an academic transcriptionist.

Marcus Longley is Professor of Applied Health Policy and Director of the Welsh Institute for Health and Social Care, University of South Wales. He was educated at the universities of Oxford, Cardiff and Bristol, and worked as a manager and planner in the NHS for 14 years before joining the University in 1995. His interests include the relationship between health policy and practice (especially under Devolution), integration of health and social care, and public and patient engagement in policy. He has been an expert advisor to various

bodies, including the Bevan Commission (which advises the Health and Social Services Minister in Wales), and is also Vice Chair of the Cardiff and Vale University Health Board. He was elected a Fellow of the Faculty of Public Health of the Royal Colleges of Physicians in 2008.

Ciaran O'Neill is Professor of Health Technology Assessment at NUI Galway and Honorary Professor at Queen's University Belfast. He has researched across a range of subjects including service utilization, health technology assessment and cost of illness. He has held lectureships at the Department of Economics Queen's University Belfast, the School of Economics and the School of Medicine, University of Nottingham, as well as Chairs in Health Economics and Policy at the University of Ulster and in Oral Health Research, Queen's University Belfast. He has held visiting positions at the University of Michigan's Institute of Gerontology, the RAND Corporation and the University of Nottingham. He has acted in an advisory capacity to the Northern Ireland Assembly's health committee and is part of HIQA's scientific advisory group on health technology assessment.

David Steel was Chief Executive of NHS Quality Improvement Scotland from its creation in 2003 until March 2009. After 12 years as a Lecturer in Public Administration at the University of Exeter, he moved into NHS management in 1984 as Assistant Director of the National Association of Health Authorities. From 1986 until 2009 he held various senior posts in the Scottish Office Health Department and in NHS Scotland. In retirement he is Senior Research Fellow at the University of Aberdeen. He was awarded an OBE for services to health care in 2008.

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;
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