Analysis

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Is the grass really greener?

Comparing how social insurance and tax-funded systems raise revenue

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The Health Foundation

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Contents

Key points

- This report describes how revenue is raised for publicly funded health care services in seven European countries, to inform debate about the merits of different funding models. It covers three versions of social health insurance (SHI) (France, Germany and the Netherlands) and four tax-based systems (Italy, Spain, Sweden and the UK).
- Distinctions between funding systems have blurred over time. All three of the SHI schemes covered in this report have added tax-based revenues to fund health care and no longer rely solely on employment-based insurance contributions.
- Other features once typical of SHI systems have also changed, bringing them closer to tax-based systems. SHI systems are not insulated from government control and central governments play an active role in setting and monitoring budgets in France and the Netherlands. The separation of bodies that purchase and provide health care is no longer a unique feature of SHI systems – it has been replicated in regions of Italy, Spain, Sweden and the UK, all of which have tax-based systems.
- Overall levels of health care funding are the product of political choices and there is no simple relationship between funding model and overall amounts raised to fund health care. France, Germany and the Netherlands spent more per head on health care than the UK between 2011 and 2021, but so did Sweden, a tax-based system. As a proportion of Gross Domestic Product (GDP), the UK's expenditure is now closer to that of France and Germany, as a result of spending on the COVID-19 pandemic and changes in the size of the economy.
- The proportion of spending on administration and governance is significantly higher in all three SHI-based systems than in the tax-based systems.
- The UK is unusually centralised in its approach to raising funding, and the tax-based systems in Italy, Spain and Sweden all raise tax locally as well as centrally. Despite reallocation policies to equalise funding within countries, regional variations in access to and quality of health care persist.

- All the health systems covered in this report have user charges regardless of their funding model. But they have developed policies to protect people against financial hardship resulting from the charges, including exemptions and annual caps.
- There is no perfect funding system. Policymakers in the UK should recognise the strengths of the UK's existing model – low administrative costs and low financial barriers to care compared with other countries – and focus on how to secure long-term sustainable funding in the face of growing demand. Switching to an SHI system would be costly and disruptive, with no evidence it would deliver benefits.

Introduction

The NHS is experiencing one of the toughest periods in its history. The COVID-19 pandemic brought a huge additional strain on a health system that was already struggling to meet demand with the resources available to it.[1] The enormity of the challenges facing the NHS, which include growing waiting hospital lists and rising pressure on GP services,[2] has led to a resurgence of appeals from some politicians and sections of the media to change the way the NHS is funded. These include calls for increasing user charges, for example introducing charges for GP appointments, in the hope that it might moderate demand and raise revenue,[3] and claims that switching to a social health insurance (SHI) system would generate more resources or deliver better results.[4,5,6]

A century ago, health care was insurance-based in all European countries.[7] Access to health care and sickness pay was tightly linked to contributions that workers and their employers made to insurance funds. Health care was therefore only available to those in employment, provided by myriad social insurance schemes, which were generally not-for-profit, self-governing and had a social rather than commercial identity.[7] Separate insurance schemes covered different professional groups, but generally excluded dependants and unemployed people. Germany was the first nation to use the authority of the state to mandate blue-collar employers and employees to contribute to insurance schemes in 1883 (under Bismarck), which was gradually extended to all working and non-working people over the course of the following decades.[8] Many European countries adopted this 'Bismarckian' model of SHI, attempting to balance the autonomy and independence of insurance bodies with the oversight of central government as health systems grew more expensive. In 1948, the UK abolished insurance funds and took over the collection and distribution of funds via the tax system. Countries in Scandinavia and southern Europe adopted this model, which was dubbed 'Beveridgian', while similar systems emerged further afield, for example in New Zealand in 1938.

In practice, these two models – SHI and tax-based – are no longer distinct, as nearly all countries with SHI have diversified their source of revenue-raising, for example using taxation to transfer additional revenues into social insurance schemes to cover unemployed people or pensioners. In any case, all forms of health financing models in Europe have evolved to have a similar function in order to cover all residents: compelling financial contributions from individuals and employers (whether via tax or insurance contributions), and pooling funds to even out the financial risks of treating illness across populations. The World Health Organization (WHO) recently concluded that 'conventional distinctions between SHI and tax-financed schemes are no longer meaningful'.[9]

But there are still major differences in how European countries raise revenue to pay for health care, shaped by the history, culture and institutional contexts specific to each nation. A recent survey of SHI systems in western Europe described social insurance as the

culmination of a '700-year historical process' with its roots in mutual guilds in medieval Europe.[7] Nations have different attitudes towards welfare, the role of central government in providing health care and the degree of political autonomy that regions should have in relation to central government. And there are variations in what choices people have (and expect) over which services they can use, who handles their contributions and how much they pay upfront to use services.

This report explores these differences to inform debate about the merits and drawbacks of the way the NHS is funded compared with other countries. The first section briefly describes how health care revenue is raised in seven European countries, including the UK. The second section sets out a number of themes from our analysis of how these health systems have reformed their funding arrangements in recent decades, to shed light on some of the challenges associated with different funding models.

We do not intend to answer the question of whether one system is 'better' than others in terms of producing higher-quality or more efficient services. Attempts to answer this question have found no strong evidence that one system performs better than another (Box 1).[10,11,12,13]

Box 1: Does either system lead to better health outcomes?

There is no strong evidence linking any particular funding model, whether SHI- or tax-based, to better health outcomes. In 2009, the World Bank analysed the relationship between the funding systems of 29 countries of the Organisation for Economic Co-operation and Development (OECD) and mortality from nine causes considered to be 'amenable' to better health care. The analysis found that there was no evidence that SHI systems had lower levels of amenable mortality than tax-based systems.[10]

In 2010, the OECD published an analysis of 29 countries, exploring whether variations in outcomes (such as life expectancy) were related to institutional characteristics.[11] These included funding systems, but also other characteristics, for example the degree of public or private ownership of provision, use of market mechanisms, freedom of choice for patients and so on. These institutional features were drawn from a bespoke survey of OECD countries,[12] and were used to create six different groupings of countries, which shared strong similarities. The analysis found that 'no broad type of health care system performs systematically better than another in improving population health in a systematic manner'.[11]

A more recent analysis, aimed at policymakers in low- and middle-income countries, compared countries that had transitioned from an out-of-pocket spending model as their main funding model to a predominantly SHI, or government-funded, system, to see if one model produced better outcomes. Outcomes included immunisation rates, life expectancy, child mortality and maternity mortality. The study found that SHI systems did not provide significantly better outcomes than government-funded systems for any of the outcomes chosen.[13] It should be noted that very few countries transition from SHI to government-funded systems or vice versa.

Approach and methods

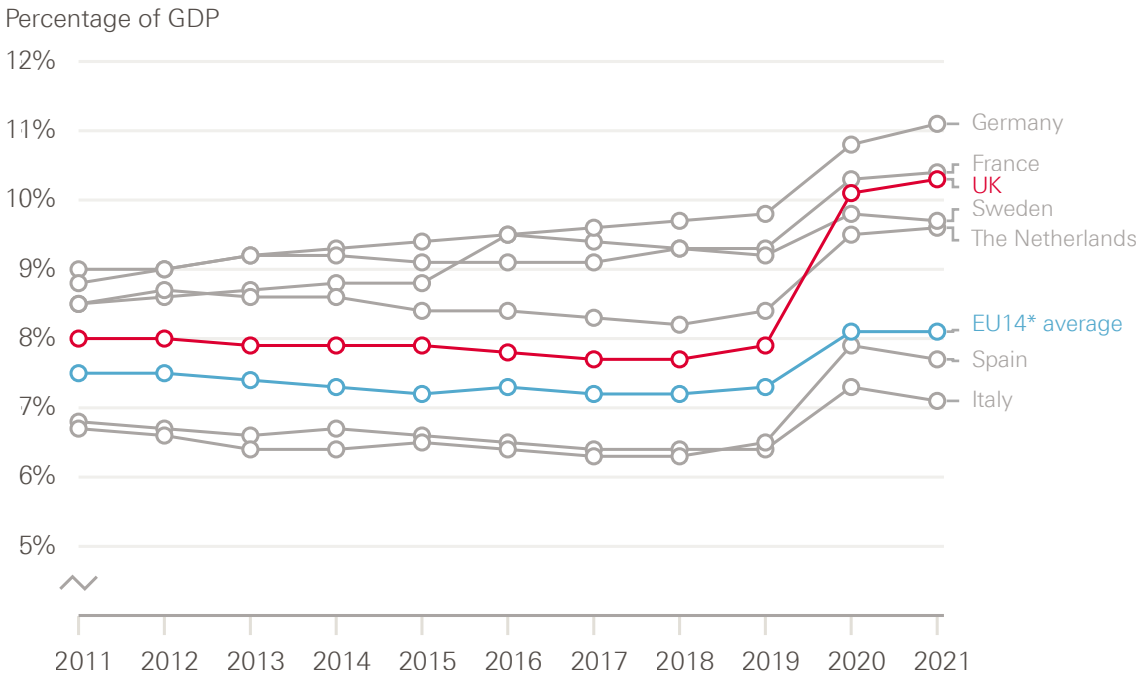
For this analysis we identified seven European countries with varying models for raising revenue for health care and reviewed the evidence on the structure and evolution of these models. We looked at three countries in Europe that have developed different versions of the SHI model to fund health care – France, Germany and the Netherlands – and four countries that have relied on taxation as their main source of revenue – Italy, Spain, Sweden and the UK. We did not include funding for social care, but an account of how social care funding has changed in a range of high-income countries is given in a previous Health Foundation publication.[14]

We also based our selection of countries on those that have higher or lower levels of spending on their publicly funded* health care than the UK. Spending is measured in two ways: per head of population (that is, the money spent relative to the population in each country) or as a percentage of Gross Domestic Product (GDP), which shows the level of resources spent on health care relative to a country's wealth.

Two of the tax-based systems (Italy and Spain) spent less (per head and as a percentage of GDP) than the UK over the 10-year period from 2011 to 2021, while Sweden spent more (Figures 1 and 2).[15] All three have more devolved funding systems than the UK, raising much larger proportions of revenue through local taxation. France, Germany and the Netherlands consistently all spent more than the UK until 2019 (Figures 1 and 2). From 2019, the UK's increase in expenditure as a proportion of GDP rose sharply due to COVID-19 spending and changes in the size of the UK's economy (Figure 2) but spending per head remains higher in all three social insurance countries (Figure 1). France, Germany and the Netherlands have developed different approaches to social insurance. Germany and the Netherlands have encouraged competition between insurance funds, while France has seen the evolution of a larger, state-owned insurance body.

* For comparing countries' expenditure, we used OECD data on 'government or compulsory' health spending, which counts mandatory SHI contributions, rather than total health expenditure, which also includes private insurance and out-of-pocket spending.

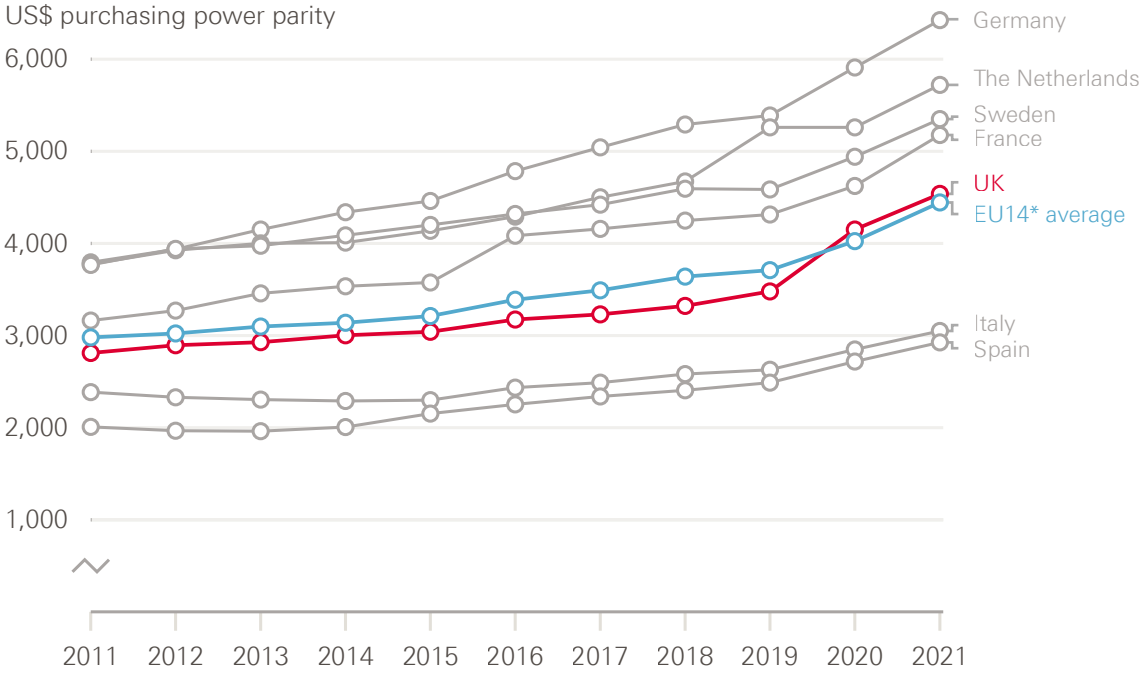
Figure 1: Government/compulsory health expenditure as a percentage of GDP, selected countries, 2011–2021



* EU14 refers to a group of countries that were members of the EU prior to 2004 (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Republic of Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and Sweden).

Source: OECD. Health expenditure and financing.

Figure 2: Government/compulsory health expenditure per head, selected countries, 2011–2021



* EU14 refers to a group of countries that were members of the EU prior to 2004 (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Republic of Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and Sweden).

Source: OECD. Health expenditure and financing.

To describe and assess the revenue-raising systems in the seven countries, we drew on a mix of publicly available data from the OECD, the WHO European Observatory on Health Systems and Policies, the WHO's Regional Office for Europe and the Commonwealth Fund. These included the detailed overviews contained in the Health Systems in Transition series (HiTs) produced by the WHO European Observatory, and previous reviews of health care financing in Europe.

Our aim is to give the most up-do-date description of the current health system for each country and then describe some key changes in each system over time. Publication dates of HiTs (the most detailed source of information on national health systems) vary, and we have used the most recently available publications. We have also used data from the most recent year available from the OECD. Our objective is to give an overview of how the health system funding models work, rather than a comprehensive compilation of data on each system.

How revenue is raised: country descriptions

In this section we present some brief contextual data for each of the seven countries in our analysis (including population size and total spend on health care),[15,16,17] and a very brief description of the main characteristics of the health care system in each country. We then describe how revenue is raised, what role user charges play, how people are financially protected and whether there is a role for additional private insurance.

The way health systems are designed varies between countries – and there are major differences between countries using broadly insurance-based or tax-based approaches to raising revenue (Tables 1 and 2). For example, insurance-based systems have differences (for instance, in France, no choice of insurer and widespread use of user charges) but also similarities, in that all have added taxation alongside social insurance contributions. The variation between countries using the tax-based system centres on the degree of local taxation raised, and how widespread user charges are.

Table 1: Overview of key features of SHI-based systems

	Germany	The Netherlands	France
All 'residents' entitled to social health insurance coverage?	Yes	Yes	Yes
Possible to opt out of social insurance?	Yes, people on higher incomes can choose private insurance	No	No
Choice of insurance fund?	Yes	Yes	No
Additional funding added from general taxation?	Yes	Yes	Yes
User charges?	Partial (eg drugs, hospital stays, dental care, medical aids)	Partial (eg drugs, outpatient visits, hospital stays, dental care, medical aids)	Yes, including GP visits

Source: Authors' analysis of WHO European Observatory sources (especially Health Systems in Transition series).[18,20,27]

Table 2: Overview of key features of tax-based health systems

	Italy	Spain	Sweden	UK
All 'residents' entitled to use national health care?	Yes	Yes	Yes	Yes
Opportunity to opt out of contributions to national health service?	No	No, but civil servants and the judiciary are entitled to opt for either the public or the private sector once a year, but still pay taxes	No	No
Tax-raising split between local and national bodies?	Yes	Yes	Yes	No
User charges?	Partial (eg drugs, outpatient visits, dental care)	Partial (eg drugs, dental care, medical aids)	Yes, including GP visits	Partial (eg dental care, medical aids, drugs – England only)

Source: Authors' analysis of WHO European Observatory sources (especially Health Systems in Transition series).[30,34,40,43]

Social health insurance systems: Germany, the Netherlands and France

Germany

Table 3: Summary of key data for Germany

Population	83.3 million
Public health expenditure as a share of GDP	11.1%
Public health expenditure per head, purchasing power parity (US dollars)	$6,424
Health expenditure from public sources as a share of total government expenditure	20%
Tax revenue as a share of GDP	37.9%
Share of public health expenditure spent on government and administration	3.9%

Sources: Population size (UNFPA, 2023); public health expenditure as a share of GDP (OECD, 2021); public health expenditure per head, purchasing power parity (OECD, 2021); health expenditure from public sources as a share of total government expenditure (OECD, 2020); tax revenue as a share of GDP (OECD, 2020); share of public health expenditure spent on government and administration (OECD, 2021).

Box 2: Brief overview of the health care system in Germany

Germany's health care system is among the most well-resourced in Europe in terms of spending per head (Figure 2), with high numbers of hospital beds, doctors and nurses per head compared with other countries. Patients have free choice of GP and hospitals and can also self-refer to specialist care without seeing a GP. GPs (and some non-hospital-based specialists) are mostly private, for-profit. About half of Germany's hospitals are publicly owned, with the remainder split between profit and non-profit ownership. Germany's federal government plays a mainly regulatory role, while the organising, planning and financing of health care takes place at regional and local levels.

Source: Blümel et al, 2020.[18]

Main source of revenue

Since 2009, Germany has had a dual system of mandatory public and private insurance. The majority of people (87%) choose a social insurer from one of 105 'sickness funds', which are competing, non-profit, 'quasi-public' health insurance funds.[18] People can switch funds every 18 months. Those earning over a defined threshold (62,550 euros in 2020), or who belong to a specific professional group (for example, civil servants or self-employed people), can choose to take out private insurance instead and opt out of the public system.

Payments to a sickness fund are in proportion to earned income from employment, pensions or unemployment benefits and do not include income from capital or savings. Contributions, totalling 14.6% of earnings, are split between employer and employee (or relevant agency for pensioners and unemployed people), to a ceiling, which was an income of 56,250 euros a year in 2020.[18] Subsidies apply to students and certain categories of self-employed people, such as artists and writers. Contributions are pooled, risk-adjusted by the federal government (for age, sex and morbidity from chronic and serious illnesses), before being redistributed back to the sickness funds. In addition, the sickness fund can charge a further payment, on average 1.1% of income, which is split equally between employer and employee.

All sickness funds must cover the same set of services and treatments defined by the federal government, but they can add extras (including extra physiotherapy or homeopathy) to compete for patients. The sickness funds contract with hospitals and other service providers, which include both publicly and privately owned providers.

In 2018, 11% of the population opted for private insurance (8.7 million people).[18] They do not pay sickness fund contributions, but instead pay a premium directly to a private insurer. Unlike the statutory system, premiums are 'risk rated' (that is, premiums vary according to health status), and separate insurance must be purchased for dependants. Once opted out of the public system, people are generally not allowed to switch back to it. GPs and non-hospital-based specialists receive higher payments from privately insured patients. As a result, treatment is often quicker for those with private insurance. Hospitals are paid the same rates for the treatment of social and privately insured patients.

A growing number of people in the SHI system have also been buying supplementary insurance in recent years, mostly to cover dental care, which is only partially covered in the SHI system. In 2018, people in the SHI system bought 20.1 million supplementary policies.[18]

User charges and financial protection

User charges are also a source of revenue, although their overall contribution is modest (1% of total health expenditure or 2% of SHI expenditure)[19] User charges apply to prescription drugs, inpatient stays, non-medical treatment (for example, physiotherapy), medical aids, dental care and patient transport. For prescription drugs, patients pay 10% of the cost, between a minimum of 5 euros and a maximum of 10 euros. Inpatient stays have a charge of 10 euros a day, capped at 280 euros a year.

Exemptions apply to children younger than 18 years and maternity care. People can also apply for an exemption from further user charges once their costs have exceeded 2% of their gross income for the year, or 1% if they have a chronic illness. In 2014, 300,000 people were exempt from further user charges as their costs exceeded the 2% cap, while a further 6.4 million (9% of all SHI members) were exempt on the grounds of chronic illness.[18]

Other sources of funding

The bulk of finance for health care in Germany comes from the contributions to insurance schemes (public and private), but tax-based funding also plays a role. An estimated 10% of total health expenditure comes from general taxation, if subsidies for statutory insurance,

such as cover for maternity benefits, sick pay for parents with ill children and *in-vitro* fertilisation, are included.[18] The German states (*Länder*) are responsible for funding capital investment for health care providers from general taxation. In 2017, an average of 6,335 euros was spent on capital investment per hospital bed, with a threefold variation between the highest spending state and the lowest.[18]

Uninsured

In 2019, an estimated 61,000 people in Germany had no insurance (0.08% of the population), based on survey data.[18] The uninsured include self-employed people on low incomes, wealthier people who object to having insurance, people whose contributions have fallen into arrears, people living in poverty and undocumented migrants. Of those with no insurance, 57% were working. People in this category have limited access to services, typically emergency and maternity care only.

The Netherlands

Table 4: Summary of key data for the Netherlands

Population	17.6 million
Public health expenditure as a share of GDP	9.7%
Public health expenditure per head, purchasing power parity (US dollars)	$5,766
Health expenditure from public sources as a share of total government expenditure	16%
Tax revenue as a share of GDP	40%
Share of public health expenditure spent on government and administration	3.2%

Sources: Population size (UNFPA, 2023); public health expenditure as a share of GDP (OECD, 2021); public health expenditure per head, purchasing power parity (OECD, 2021); health expenditure from public sources as a share of total government expenditure (OECD, 2020); tax revenue as a share of GDP (OECD, 2020); share of public health expenditure spent on government and administration (OECD, 2021).

Box 3: Brief overview of the health care system in the Netherlands

The Netherlands' health care system is also well resourced compared with other European countries in terms of spending per head (Figure 2). Numbers of hospital beds per head are slightly lower than the European average, but essential health care services are in easy reach of most of the population, and outpatient clinics have been increasing in number. The numbers of doctors per head are average, with higher-than-average numbers of nurses. Patients must see a GP to be referred to specialist care. Most providers of primary and specialist care are private, non-profit, and there is competition between social insurance providers and between most health care providers. People can choose their GP, provided there is capacity, and some patients have free choice of specialist after referral depending on their insurance plan. The Dutch government has active oversight of the health care system, including the regulation of competition, ensuring quality and setting overall budgets.

Source: Kroneman et al, 2016.[20]

Main source of revenue

Since 2006, all residents in the Netherlands have been legally obliged to buy health insurance from competing insurance funds. Before 2006, there was a dual private and social insurance system similar to Germany's but major reforms in 2006 amalgamated insurance companies and required all to be non-profit.[20]

The Dutch government requires insurers to accept all patients regardless of age and health status, and to cover a standard set of core health services (including primary and hospital care). Insurers can vary the price of the premiums based on whether additional services are covered (for example, extra physiotherapy) and the degree of choice over which hospitals or clinics a person can use. Costs of premiums can also vary depending on the maximum amount that has to be paid out of pocket first (deductible) and whether people pay upfront for services and are reimbursed, or the insurers handle all the payments (benefit-in-kind plans). In 2019, there were 24 insurers offering a choice of 59 plans, and 75% of people chose a benefit-in-kind plan.[21] People are allowed to switch insurance plans once a year (about 6% of people do), and can use a range of commercially funded comparison websites to choose a plan.

Premiums are paid directly to insurance companies. In 2022, the average annual premium was 1,514 euros, with a difference of 536 euros between the cheapest and the most expensive plan.[22] As well as paying insurance premiums, people also pay an income-related contribution for health insurance via their employer or benefits agency (or via tax returns for self-employed people). In 2023, this amounted to 6.7% of an employee's income paid by the employer.[23] The cost of the insurance scheme as a whole is split evenly between premium contributions paid directly by the consumer and employer-paid contributions.

Other sources of revenue

General taxation is also used to fund health care. A grant from income tax is combined with the social insurance contribution from employers to cover the cost of care for people younger than 18 years. Funds are then redistributed to the insurance companies after risk adjustment to compensate the insurers with higher proportions of older, or sicker, patients. The insurers then contract with providers, which are a mixture of private and publicly owned providers. In 2016, 81% of spending on health care came from public funding, including the insurance contributions paid by employers (46%), general taxation (22%), premiums paid by individuals (20%) and co-payments (11%).[24]

User charges and financial protection

The Dutch government has set an annual amount of 385 euros (known as a 'deductible') that has to be paid out of pocket first before the insurer covers the rest. This applies to all services except general practice, maternity care, district nursing care and all care for people younger than 18 years.[25] Some drugs (for example, branded drugs) and tests prescribed by a GP are chargeable under the deductible, as are visits to hospital, including emergency departments. People can choose whether to increase the deductible up to a maximum of 500 euros in exchange for a lower premium.

People on incomes below a certain threshold can apply for an allowance from the government to reduce the cost of the social insurance premium. This allowance is funded from general taxation. In 2019, 30% of the population received an allowance,[24] and in 2020, the total cost of allowances was estimated to be 5.2bn euros.[21]

Some people choose to buy supplementary voluntary health insurance, often combined with their main insurance plan. These plans cover treatments left out of statutory services (for example, dental care for adults) but they also offer other services, including complementary health services. This additional insurance does not allow people greater choice or quicker access to services. In 2019, 83.7% of people took out a voluntary health insurance plan.[21]

Uninsured

In the Netherlands it is illegal not to buy health insurance. People who fail to buy insurance face fines in the first instance, and then forcible enrolment into an insurance plan, with payments automatically deducted from their wages. Since 2011, the agency in charge of insurance (the National Healthcare Institute) has worked with municipalities to track and trace uninsured people, and the percentage of people with no insurance fell from 1% of the population in 2008 to 0.14% in 2019. Similarly, those who have not paid their premiums for more than 6 months (1.3% of the population in 2018) are also traced and arrears are also claimed back from their income until their debts are cleared.[21]

Registered asylum seekers do not have to buy insurance or pay a deductible, but are entitled to a package of care similar to what mandatory insurance covers. Undocumented migrants are able to access 'medically necessary' care from a GP but are liable to pay out of pocket for care from other designated providers. If they cannot pay for care, hospitals can reclaim the cost from the government.[20]

France

Table 5: Summary of key data for France

Population	64.8 million
Public health expenditure as a share of GDP	10.4%
Public health expenditure per head, purchasing power parity (US dollars)	$5,510
Health expenditure from public sources as a share of total government expenditure	16%
Tax revenue as a share of GDP	45.3%
Share of public health expenditure spent on government and administration	3.6%

Sources: Population size (UNFPA, 2023); public health expenditure as a share of GDP (OECD, 2021); public health expenditure per head, purchasing power parity (OECD, 2021); health expenditure from public sources as a share of total government expenditure (OECD, 2020); tax revenue as a share of GDP (OECD, 2020); share of public health expenditure spent on government and administration (OECD, 2021).

Box 4: Brief overview of the health care system in France

Health spending per head in France is higher than in most EU countries (Figure 2). France has slightly below-average levels of doctors and above-average levels of nurses per head compared with other EU countries. There is a mixed market of private doctors, public hospitals and private hospitals (both for-profit and non-profit), with a higher share of for-profit hospitals than comparable high-income countries. There are large regional variations in the distribution of doctors, including specialist doctors and GPs. Patient choice has been a longstanding feature of the French health system. Patients can access specialist care directly, although recent policies have incentivised greater use of GP referrals. The government has a strong role in the health care system, particularly in setting yearly budgets for how much is spent on health care by the regions.

Source: Chevreul et al, 2015.[26]

Main source of revenue

In France, all residents are covered by statutory insurance, but, in contrast to Germany and the Netherlands, the insurance funds are non-competing and state owned. Employed people are automatically enrolled, the vast majority (92%) into the biggest fund, the Caisse Nationale de l'Assurance Maladie (CNAM). Smaller funds cover specific employment groups, including those working in agriculture, self-employed people, railway workers, miners, civil servants and students. The contribution between employers and employees is split, with employers contributing 13% of gross employee earnings and workers contributing 0.75%.[26]

Other sources of funding

Until 1991, the social insurance system was funded almost completely from employment-related contributions. Since then, increasing amounts of tax-funded revenue have been added, to enable a shift from contribution-based entitlement to residency-based entitlement. Taxes include an earmarked income tax, payable on all forms of income by everyone, including pensioners and unemployed people. In 2019, this was payable at rates ranging from 9.2% to 3.4% (depending on levels of income and their source – from earnings, investments or benefits, for example). People with incomes below 11,306 euros are exempt.[27] Other earmarked taxes include taxes on alcohol and tobacco consumption, and on pharmaceutical companies. In 2021, 33% of social insurance revenue came from employment-based contributions, 24% from the earmarked income tax and 33% from other taxes.[27] Social insurance contributions and the earmarked tax are collected and pooled by a central social security agency, and redistributed to the various branches of social security, including health. Allocations to SHI bodies are adjusted for differences in the size of the populations they cover.

User charges and financial protection

France is distinctive in its use of co-payments for a wide range of services and reliance on additional private insurance to cover these. When people access services, they are expected to pay a percentage of the costs (sometimes upfront) before social insurance picks up the rest. This applies to GP visits, hospital care, diagnostic tests and drugs. For example, in

2016, a person needing inpatient treatment would be covered by the state for 80% of the costs, but liable for the remaining 20% and a daily additional charge of 18 euros a day.[28] For GP care, 70% of the costs are usually covered. Exemptions apply to maternity care, people on low incomes and people with disabilities. In 2019, 96% of the population purchased private insurance to offset these co-payments under the state insurance scheme, and also to cover the additional amounts that some doctors are allowed to charge beyond the state tariff (known as 'balance billing').

The market for private health insurance is competitive and includes a mix of for-profit and non-profit companies. In 2019, there were 439 providers offering insurance. Around half of those insured were covered through their employment, with the rest purchasing their own insurance. Insurers are allowed to base costs on a person's age, but not their health status. In 2013, the average annual premium for someone aged between 40 and 59 years was 612 euros; it was 85% higher for people aged 75 years and older.[28]

Since 2005, user charges have been added that cannot be offset by private insurance (with the aim of moderating patient demand) – for example, a charge of 1 euro per GP visit, capped at a maximum of 50 euros a year.

A separate health insurance scheme covers people on low incomes, regardless of whether they are employed or not. All those under an income threshold (8,723 euros per person in 2016) are exempt from contributions. Vouchers to buy private health insurance are also available to those on low incomes, covering all co-payments. In 2015, 5.4 million people were covered by this scheme (8% of the population).[29]

Uninsured

Since reforms that were enacted in 1999, all those residing and working in France have been eligible for social health insurance. Before the reform, less than 1% of residents were not eligible for social insurance. The government pays for health services for undocumented migrants who have applied for residency.[29]

Tax-funded systems: Italy, Spain, Sweden and the UK

This section looks at four countries that use taxation as the main method to raise revenue to fund health care: Italy, Spain, Sweden and the UK. The first three differ from the UK by raising a proportion of tax locally for health care and they also devolve responsibility for spending, planning and contracting to regional or local bodies, to a greater degree than in England, for example. Italy and Spain have traditionally spent less on health care than the UK, while Sweden has spent more.

Italy

Table 6: Summary of key data for Italy

Population	58.9 million
Public health expenditure as a share of GDP	7.1%
Public health expenditure per head, purchasing power parity (US dollars)	$3,254
Health expenditure from public sources as a share of total government expenditure	13%
Tax revenue as a share of GDP	42.7%
Share of public health expenditure spent on government and administration	0.8%

Sources: Population size (UNFPA, 2023); public health expenditure as a share of GDP (OECD, 2021); public health expenditure per head, purchasing power parity (OECD, 2021); health expenditure from public sources as a share of total government expenditure (OECD, 2020); tax revenue as a share of GDP (OECD, 2020); share of public health expenditure spent on government and administration (OECD, 2021).

Box 5: Brief overview of the health care system in Italy

Italy spends below the EU average per head on health care (Figure 2). The central government allocates budgets to 21 regions, which plan and deliver health care with a high degree of autonomy (unless they run up deficits). Regions take different approaches to delivering services, with some providing services directly, while others contract with a mixture of publicly and privately owned services. Italy has above-average levels of doctors per head, but has shortages in public hospitals and general practice. Nurses per head are lower than the EU average, with shortages in poorer regions. Hospitals are near-evenly split between publicly owned and privately owned. Patients need a referral from a GP for specialist care, and can choose hospitals in any region.

Source: de Belvis et al, 2022.[30]

Main source of revenue

Residents in Italy are automatically entitled to use the country's NHS, which is paid for by a combination of national and local taxes. National contributions to the health budget come primarily from Value Added Tax (VAT – a tax on goods and services). In each of Italy's 21 regions, citizens make further contributions through a local income tax, and a tax on the profits of companies and public sector salaries. The central government sets a budget for each region, taking account of differences in population need, and distributes nationally raised income (from VAT) to equalise differences in what regions are able to raise locally. Regions have the power to vary the levels of local taxation, and the level of user charges (up to a national ceiling) resulting in variations in access to services across Italy, with higher spending in the north of the country.[30]

NHS services are provided by a mixture of publicly owned and privately owned hospitals, and contracts are held by the regions. GPs are self-employed and are allowed to see a limited number of private patients, as are most outpatient-based specialists, who are also permitted to see private patients alongside NHS patients within public hospitals.

User charges and financial protection

Visits to GPs and hospital inpatient stays are free at the point of use, but user charges apply to seeing a specialist consultant as an outpatient, prescription drugs and dental care. The maximum charge for a specialist outpatient visit or procedure is 36 euros (2017).[31] In some regions, a 25 euro charge is payable for a visit to an emergency department that does not result in an admission (not all regions enforce this). User charges vary by region, but nationwide exemptions apply, including children, people older than 65 years, those on low incomes, disabled people and people with certain chronic conditions. In addition, anyone who spends more than 129 euros on user charges in a given year is eligible for a tax credit equal to a fifth of their spending.[32]

Use of private insurance and private payments

In 2020, more than 20% of the population were covered by private insurance, either individually or through their employer.[32] Private insurance is used to cover user charges, but also services not covered by the NHS (such as dental care), and to gain faster access to a specialist or superior inpatient amenities.

Italy is unusual in its high levels of out-of-pocket (private) spending in addition to private insurance. Of the total spent on health care in 2019, 73.9% came from public sources and 26% from private sources. Of this, private insurance accounted for 2.1% , while 23.3% came from user charges and direct payments (the remainder came from occupational health and non-profit entities).[30] Direct payments include one-off payments to private providers; one study based on survey data estimated that more than 40% of specialist examinations (in 2012/13) were paid for out of pocket, with users more likely to be better off and better educated.[33]

Spain

Table 7: Summary of key data for Spain

Population	47.5 million
Public health expenditure as a share of GDP	7.7%
Public health expenditure per head, purchasing power parity (US dollars)	$2,926
Health expenditure from public sources as a share of total government expenditure	15%
Tax revenue as a share of GDP	36.7%
Share of public health expenditure spent on government and administration	1.2%

Sources: Population size (UNFPA, 2023); public health expenditure as a share of GDP (OECD, 2021); public health expenditure per head, purchasing power parity (OECD, 2021); health expenditure from public sources as a share of total government expenditure (OECD, 2020); tax revenue as a share of GDP (OECD, 2020); share of public health expenditure spent on government and administration (OECD, 2021).

Box 6: Brief overview of the health care system in Spain

Compared with other countries in the EU, Spain spends a below-average amount per head on health care (Figure 2). The health system is devolved: the central government is responsible for national planning and regulation, but responsibility for the purchasing and provision of care is delegated to 17 'autonomous communities'. There are above-average numbers of doctors but below-average numbers of nurses and hospital beds in Spain compared with other EU countries. In 2015, 45% of hospitals were publicly owned and these provide the bulk of specialist acute care, but smaller, for-profit private hospitals also play a role. Primary care, by contrast, is mostly publicly owned, and organised in teams, which include doctors and nurses. Patients need a referral from their GP for specialist care, and are generally referred to a local hospital within the region in which they live.

Source: Bernal-Delgado et al, 2018.[34]

Main source of revenue

All residents of Spain are entitled to use the country's NHS. NHS services are paid for through general taxation, which is collected at both regional and national levels. Roughly 50% of funding comes from income taxes (on individuals and corporations) and 50% from VAT and excise taxes, for example on tobacco. Taxes are not earmarked. The NHS is planned and administered by 17 separate regions, and the national government uses allocation formulae and several national funds in an attempt to equalise regional funding according to need.[34]

Some sections of the civil service, the judiciary and armed forces (about 2 million people) are covered by a separate health insurance scheme known as 'mutual funds', paid for by employee contributions and taxation. This scheme allows people to choose between

services in the private sector and NHS services.[35] NHS patients are treated mainly by publicly owned services, but can access some privately run services, which have contracts with the NHS (mostly diagnostic and elective surgery).

User charges and financial protection

Revenue is also raised from user charges. Services are free at the point of use, but charges are levied on prescription drugs and some health-related aids such as wheelchairs, prostheses and hearing aids. Medicines for most chronic conditions involve a co-payment of 10% of the retail price, up to a maximum of 4.24 euros per item. For all other drugs, co-payment varies according to a person's income and whether they are retired or not. Pensioners pay either 10% or 60% of the cost (depending on income); all others pay between 40% and 60% depending on income. Pensioners only have a cap ranging from 8.24 euros a month to 61.75 euros a month, also dependent on income.[35] These charges date from 2012, but in the past 2 years, other exemptions have been added, including for low-income pensioners, some disabled children, and families in receipt of child benefits.[36]

Private insurance and private payments

Nearly 23% of people in Spain were covered by private health insurance in 2015, as individuals or through their employment.[34] Private insurance offers benefits including faster access to elective hospital treatment and better amenities.[37] In addition to purchasing private health insurance, people in Spain also contribute a higher proportion of private spending (out-of-pocket payments) than the EU average: 21.8% in 2019 compared with the EU average of 15.4%. Large proportions of this went to paying for outpatient care, prescription drugs, medical devices and dental care.[38]

Sweden

Table 8: Summary of key data for Sweden

Population	10.6 million
Public health expenditure as a share of GDP	9.7%
Public health expenditure per head, purchasing power parity (US dollars)	$5,351
Health expenditure from public sources as a share of total government expenditure	19%
Tax revenue as a share of GDP	42.3%
Share of public health expenditure spent on government and administration	1%

Sources: Population size (UNFPA, 2023); public health expenditure as a share of GDP (OECD, 2021); public health expenditure per head, purchasing power parity (OECD, 2021); health expenditure from public sources as a share of total government expenditure (OECD, 2020); tax revenue as a share of GDP (OECD, 2020); share of public health expenditure spent on government and administration (OECD, 2021).

Box 7: Brief overview of the health care system in Sweden

Public spending per head on health care in Sweden is among the highest in the EU (Figure 2). There are higher-than-average numbers of doctors and nurses per head in Sweden than the EU average, but fewer GPs per head than in other countries. The provision of health care in Sweden is decentralised: central government sets national policy and standards, but 21 counties are responsible for organising and funding local health care services. Nearly all hospitals are publicly owned, as are primary care providers, but in recent years there has been an increase in the private provision of primary care, particularly in some regions. Patients have a choice of GP and can also choose to contact a specialist without a referral in some regions.

Source: Anell et al, 2012.[39]

Main source of revenue

All residents are automatically entitled to use Sweden's publicly funded health care system, which is funded predominantly through taxes, with modest amounts raised through user charges. Most tax revenue used to fund health care is raised locally, by 21 autonomous county councils and 290 municipalities. County councils are responsible for funding and delivering health services, and municipalities are responsible for services for older people and disabled people, under the oversight of the national ministry of health.

People pay taxes proportional to their income to both counties and municipalities, and rates vary between local areas.[39] In 2020, these taxes accounted for around 64% of county councils' revenue.[40] The taxes are supplemented by grants from the central government to equalise funding between local regions in proportion to need and other targeted national programmes. These grants are financed by national income taxes and indirect taxes, and in 2020, accounted for 28% of the county councils' total revenues.[40] Neither local nor national taxes are earmarked for health, but health services consume a large proportion of local spending (88% of county councils' spending in 2019).[41]

User charges and financial protection

User charges are applied to almost all health services and raise about 2% of local revenue. As with taxation rates, regions have the authority to set the level of co-payments, which apply to primary care, and outpatient and inpatient specialist care. In 2019, the charge for a GP visit varied between 15 and 30 euros, an outpatient visit varied between 20 and 40 euros, and an inpatient stay varied between 5 and 10 euros a day.[42]

There are three mechanisms in place to protect people from the financial impact of charges: exemptions, annual caps and social assistance. Some groups, such as children and people aged 85 years and older are exempt from some user charges, but there are no exemptions based on annual income. There is an annual cap on co-payments for outpatient visits (117 euros), and a separate annual cap for prescriptions (234 euros). People in receipt of social benefits can apply for reimbursement of all co-payments.

Private insurance and private payments

In Sweden, 13% of the population purchase private health insurance, which mainly has a supplementary role (covering planned specialist care but not emergency care). One of the main reasons for having private insurance is to get quicker access to ambulatory care and to avoid long waiting lists for elective treatment.[42]

The UK

Table 9: Summary of key data for the UK

Population	67.7 million
Public health expenditure as a share of GDP	10.3%
Public health expenditure per head, power purchasing parity (US dollars)	$4,539
Health expenditure from public sources as a share of total government expenditure	19%
Tax revenue as a share of GDP	32.1%
Share of public health expenditure spent on government and administration	1%

Sources: Population size (UNFPA, 2023); public health expenditure as a share of GDP (OECD, 2021); public health expenditure per head, purchasing power parity (OECD, 2021); health expenditure from public sources as a share of total government expenditure (OECD, 2020); tax revenue as a share of GDP (OECD, 2020); share of public health expenditure spent on government and administration (OECD, 2021).

Box 8: Brief overview of the health care system in the UK

The UK's spending per head on health care has increased since 2020 to above the EU14 average, but is still less than countries such as France or Germany (Figure 2). Compared with the EU average, it has lower numbers of doctors, nurses and hospitals beds per head. Patients have a choice of GP (subject to practice capacity) and need a GP referral to access specialist care. Once referred, in England people can choose a hospital, including hospitals run by private sector providers that have contracts with the NHS. The majority of hospitals in the UK are publicly owned, with salaried staff. Many GPs are self-employed but contract with the NHS.

Source: Anderson et al, 2022.[43]

Main source of revenue

People who reside in the UK are automatically entitled to use the NHS, which is primarily paid for by general taxation. The three largest components of general taxation are income tax, national insurance contributions and VAT, but no taxes are earmarked for health.[43]

His Majesty's Revenue and Customs (HMRC) collects and pools taxes at the UK level. HMRC allocates funding to the Department of Health and Social Care for health services in England, and allocates block grants to Northern Ireland, Scotland and Wales to fund all devolved services, not only health. The allocation of block grants to the devolved

administrations is calculated using the 'Barnett formula'. While the formula takes into account population size, it is not based on the assessed health needs of each nation of the UK.[43]

All four nations of the UK distribute funding for health care to local areas using formulas that adjust for factors including age and health status, which aim to match funding to the health needs of local areas. There is no explicit list of what services the NHS covers. Local health bodies, which arrange or purchase care for their populations, have some autonomy to vary what is available on the NHS, for example fertility treatment.

User charges and financial protection

User charges apply to dental care across the UK. Co-payments and exemptions vary in each nation of the UK. For example, in England, charges range from £23 to £282 depending on the type of treatment needed, with exemptions that include pregnant women, people younger than 18 years and unemployed people.[43] People also pay for eye tests and glasses upfront, with vouchers available to some groups to offset the costs, for example in England for people younger than 16 years or households with low incomes. Eye tests are free in Scotland.

England is the only UK nation that levies co-payments on prescription drugs. Prescriptions are charged at a flat rate of £9.65 per item (as of April 2023).[44] Alternatively, patients can pay for a yearly subscription service, capped at £111.60 a year, or for a 3-month one, capped at £31.25. Exemptions from prescription charges apply to a broad range of people, including people younger than 16 years and people aged 60 years and older, people on low incomes, pregnant women and people with chronic diseases.

Private insurance and private payments

In 2019, 10.3% of the UK population had private voluntary health insurance, purchased either individually or via their employment.[43] Private insurance offers more rapid access to services, access to services that the NHS does not cover and access to better amenities such as private rooms. People with private insurance still make contributions to the NHS via taxes, and some forms of health care, for example emergency hospital and intensive hospital care, are only provided via the NHS. Use of private insurance is primarily concentrated in London and the south-east of England, accounting for nearly half of the total UK spending on voluntary health insurance.[43] Of the total spent on health care in 2018 77.8% came from public sources, 5.5% from private insurance and 16.7% from out-of-pocket spending.[43]

What can be learned from the evolution of these different systems?

Each country's method of revenue raising is the product of policy evolution unique to that country, but there are some common themes that can illuminate some of the benefits and challenges associated with different funding models.

What are the perceived strengths and weaknesses associated with different funding models?

In the UK, debates about the likely benefits and drawbacks associated with moving to a SHI system date back at least two decades.[45] Proponents of changing to social insurance often focus on the additional revenue that could be raised, alongside the supposed advantages of the institutional arrangements that typically evolve in these systems.[46] These include non-governmental bodies raising and spending funds for health care, and particularly their separation from central government, and the assumption that these systems are insulated from the politics that accompany the disbursement of tax-derived funds. Researchers at both the World Bank and the WHO have summarised some of the perceived strengths of SHI-based versus tax-based funding models, primarily to inform debates about developing health care funding systems in middle- and lower-income countries (Box 9).[10,47]

Box 9: Perceived strengths of SHI-based versus tax-based funding models

The perceived strengths of SHI-based models are as follows:

- SHI systems are more economically stable, as they avoid the unpredictability of tax revenues rising and falling as the economy changes.
- SHI systems are more politically independent, because they avoid the risk that central government or finance ministries can reduce the flow of tax-based revenues to health ministries.
- SHI systems tend to have purchasers (insurance bodies) separate from providers and this purchaser–provider split is a route to better value.

By contrast, the perceived strengths of tax-based systems have been characterised as follows:

- Tax-based systems are simpler and less expensive to administer.
- Tax-based systems are more progressive (as income is more likely to be raised in proportion to people's ability to pay).

In the subsections that follow we look at selected recent developments in the seven countries under analysis in this report to explore the supposed strengths and weaknesses of each of the two models, under the three broad areas:

- the experience of raising revenue and containing costs
- ensuring sources of revenue are sustainable
- the fairness of revenue raising, including user charges.

The experience of raising revenue and containing costs

Do social insurance systems spend more on health care?

There is no simple link between funding models and overall levels of spending on health care. The WHO's 2009 analysis of 29 OECD countries found that SHI systems tended to be more expensive than tax-based systems by between 3% and 4%.[10] Taking a snapshot of recent spending data (from 2021) from the OECD (and excluding the US as an outlier), there is a mix of tax-funded and SHI systems, if countries are ranked by spending per head (Table 10)[48] or by proportion of GDP (Table 11).[48]

Table 10: Health care spending for OECD countries, 2021, ranked by spending per head

Country	Government/compulsory spending per head, US dollars, 2021	Predominant financing type
Germany	6,424	SHI
Norway	6,025	Tax
The Netherlands	5,722	SHI
Denmark	5,429	Tax
Luxembourg	5,397	SHI
Sweden	5,351	Tax
Austria	5,241	SHI
France	5,178	SHI
Switzerland	5,135	SHI
Belgium	4,674	SHI

Note: The UK is 13th with US$4,539 per head.

Source: OECD, 2023, Health spending [indicator] (doi: 10.1787/8643de7e-en).

Table 11: Health care spending for OECD countries, 2021, ranked by spending as a percentage of GDP

Country	Government/compulsory spending as a percentage of GDP, 2021	Predominant financing type
Germany	11.1	SHI
France	10.4	SHI
UK	10.3	Tax
Japan	9.7	SHI
Sweden	9.7	Tax
The Netherlands	9.6	SHI
Austria	9.5	SHI
Denmark	9.2	Tax
Canada	9.0	Tax
Belgium	8.6	SHI

Source: OECD, 2023, Health spending [indicator] (doi: 10.1787/8643de7e-en).

Containing costs in social insurance systems: not so independent of politics?

One of the perceived attractions of SHI is a greater separation from central government,[49] including more stability in funding as tax-based budget allocations are not potentially beholden to the 'whims of policymakers'.[10] In practice, central government plays an active role in both France and the Netherlands in setting and enforcing budgets. Germany's government has also intervened to influence spending, revealing some of the complexities of managing a more devolved social insurance system.

In France, for many years, the norm was for the social insurance schemes to automatically reimburse services chosen by patients and provided by their doctors (often on a fee-for-service basis), and freedom of choice was (and still is) valued by patients.[50] In 1996, faced with growing deficits in the social security budget, the Social Security Financing Act was passed to bring a much more active role for central government in controlling spending on health care (and other areas of social security spending). Parliament now votes annually on the maximum amount of growth in health spending for each sector, based on plans agreed between the government, social insurance bodies, and hospital providers. Despite the 1996 Act, for the next decade, targets were regularly exceeded and deficits grew. Further reforms were needed, including an early warning system to give alerts that targets were being exceeded, and the power to freeze or reduce payments for hospitals and other providers. Since 2010, the spending targets have been met, and the rate of annual growth reduced (from 4.9% in 2004 to 2.3% in 2018).[51]

In the Netherlands, the market-inspired reforms of the health system in 2006 grew out of the repeated failures, from the 1970s, to control health care spending by setting annual hospital budgets or overall health spending caps. The creation of competition between health insurers via the 2006 reforms was designed to incentivise insurers to negotiate lower prices with providers, as well as drive up quality. Growth in overall health spending in the Netherlands began slowing from 2008, and was lower than in many other European countries between 2013 and 2018.[21] There is evidence that, from 2012, insurers succeeded in negotiating lower prices for drugs, mental health care and GP care, although underspends in these sectors were compensating for overspends in the hospital sector.[21]

What drove the success of these cost-containment efforts is still a matter of debate. Sharpened incentives for insurers played a role, as reforms brought in full liability for insurers for any deficits, and the removal of compensation for overspends.[21] But so did government intervention through setting budget ceilings: maximum annual growth rates for different sectors are agreed through negotiations between the ministry of health, insurers, providers and patients.[20]

Similar concerns about growing deficits arose in the 1990s in Germany, as sickness funds consistently spent more on care than the contributions they received. From 1993, the government attempted to impose legally binding caps on spending, and introduce more competition between the sickness funds, while still preserving the tradition of self-governing arrangements over planning and budgeting between sickness funds and providers.[8] Reforms to hospital payment systems and the introduction of selective contracting were subsequently introduced in the 2000s to sharpen the incentives for hospitals to become more efficient.

The relative strength of Germany's economy since then has reduced the pressure to contain costs and the complex, self-governing characteristics of Germany's health care funding and planning have endured.[52] Regional associations of sickness funds still hold separate budget negotiations with ambulatory services (local associations of GPs and non-hospital-based specialists) and with individual hospitals, reinforcing the silos between these sectors. The federal government negotiates the overall rules for pricing with national representatives of sickness funds and providers, but local budgets are largely agreed on the basis of the previous year's spending.[18] The result has been sustained growth in hospital activity, seen by some as potentially wasteful oversupply.[53] In 2018, Germany had 19 million hospital discharges, the second-highest level in the EU (after Bulgaria),[18] with limited levers for the federal government to directly intervene.[8]

More scope for government intervention in tax-funded systems?

Social insurance systems do not, therefore, automatically mean insulation from government action, as can be seen in the case of France and the Netherlands. But tax-funded systems usually have more direct levers for influencing health spending, through the allocation of budgets by central government, and the scope for action is large.

This can be a weakness as much as a strength, most obviously so in the case of the UK. Health spending has gone through cycles of 'feast or famine' growth followed by retrenchment, which has resulted in a health system struggling to meet demand. Between

1997 and 2009, total health spending grew in real terms by 5.3% a year. This was followed by a period of austerity in which spending grew much more slowly, in real terms by 1.9% a year on average between 2009 and 2018. Another shift in government priorities in 2018 resulted in faster funding growth, a 3.4% a year average real-terms increase over 5 years, still lower than the historical average growth of 3.7%.[43] These fluctuations in spending growth have contributed to inadequate investment in staff training, and capital investment in beds and equipment, which has left the UK vulnerable to external shocks, such as the COVID-19 pandemic.[43]

The decentralised tax-based systems analysed in this report add a layer of complexity, because revenue is raised by both central and local government, and regions often have greater autonomy in decision making as a result. In the case of Spain, the decentralised system did not prevent nationally led reductions in health spending. Spain was hard hit by the financial crisis of 2008 and was required by the EU stability programme to reduce public spending on health from 6.5% of GDP in 2010 to 5.1% by 2015.[34] This was achieved by reductions in wages and numbers of staff (many of whom are salaried employees in the NHS in the country) and changing the scope of user charges and who was entitled to health coverage.

An OECD survey of government officials in 27 countries in 2015 found that decentralisation was seen as a mixed blessing. Officials from Sweden believed that decentralisation had made it easier to control costs (county councils and municipalities have been required to balance their budgets since 2000, with deficits to be eliminated within 3 years by reducing spending or raising local taxes). On the other hand, it could result in geographical inequalities in health spending (reported by Italy and Spain) and soften budget control, resulting in a 'blame game' between different levels of government, where ultimate responsibility for staying within budget is not clear.[50]

In Italy, where regions have been responsible for the organisation and management of health services since 2001, the emergence of regional deficits from 2008 led to increasing levels of intervention by central government, via financial recovery plans to control budgets.[30] One study has looked at the impact of these recovery plans in 10 (of 20) regions, mainly located in the poorer south of Italy. The study found that the recovery plans led to spending cuts of 3.8% a year on average, achieved by cutting staff and beds, and estimated that they had also resulted in a small increase in avoidable deaths.[54]

Administrative costs: higher in social insurance systems?

SHI has been linked with higher administrative costs.[10,11] In a 2017 study of waste in health care, the OECD noted that SHI systems spend more on administrative costs than tax-based systems, and that some cases, where there is a free choice of competing insurers (such as Germany), were more likely to be associated with higher administrative costs.[55] Table 12 shows that administrative costs are higher in the three SHI systems included in this report.[15]

Table 12: Share of public health expenditure on governance and administration (%), 2021

Country	Share of spend (%)
Germany	3.9
France	3.6
Netherlands	3.2
Spain	1.2
Sweden	1.0
UK	1.0
Italy	0.8

Source: OECD health data, 2021.

Insurance companies in Germany and the Netherlands spend money on marketing and advertising, as they are expected to compete. On the government side, regulators are needed to monitor the policies and premiums that insurers offer, as well as scrutinise mergers and takeovers. The negotiation and administration of contracts between payers and providers also take place in tax-based systems, but the complexity, and costs, of multiple insurers negotiating contracts with multiple providers are likely to be higher.[55]

Purchaser–provider splits exist in both types of funding systems

A perceived advantage of social insurance systems has been the separation of insurance bodies (purchasers) from providers, particularly if the purchasers are competing, compared with a state-run system. In recent decades, tax-based systems have increasingly adopted purchaser–provider splits. This has happened most comprehensively in England since the 1990s, but also in the decentralised systems. In Italy, for example, the region of Lombardy has adopted a quasi-market system, offering patient choice and fostering competition between public and private hospital providers, in contrast to other regions with more centrally planned and publicly provided services.[30] Similarly in Sweden, in the 1990s, several county councils including Stockholm set up separate purchasing organisations, brought in contracting and new payment mechanisms for providers, and in some cases contracted with more private providers.[39]

The evidence on how effective these sorts of reforms (known as 'strategic purchasing') have been since the 1990s is mixed, and many countries have struggled to make strategic purchasing work.[56] Of the countries assessed here, the Netherlands represents a comprehensive attempt to embed strategic purchasing by insurance companies, but there is still little evidence that it has been a decisive factor in reducing costs or improving quality.[21] The equivalent reforms in England, in which purchasing is known as 'commissioning', have proved complex to implement and have not been associated with any improvements in outcomes.[57]

Ensuring revenue sources are sustainable?

Social-insurance-based systems historically relied on revenues derived from employment, which requires a stable labour market.[14] Concerns about the impact of wage-based contributions on the competitiveness of labour in a global market and, more recently, about the consequences of ageing populations supported by smaller working-age populations,[58] have seen a trend among some social-insurance-based systems to diversify their revenue streams, and include more tax-based funds.[9] This is true of both France and the Netherlands, and to a more limited degree Germany.

Between 1947 and 1998, the French health system was funded almost entirely from employment-based contributions, split between employer and employee.[27] In 1991, a new earmarked tax on personal income was introduced, which was applied to income from employment, but also income from financial assets, investments, benefits and pensions (with caps for those on low incomes) and, most recently, income from gambling. This reflected a long-term change in the sources of household income over the previous 40 years, where the share of income in household finances that came from employment fell from 80% in 1970 to 71% in 2011, replaced by income from capital and benefits. In 2021, payroll contributions accounted for 33% of SHI revenues, and the earmarked tax accounted for 24%.[27] France has also introduced a range of smaller earmarked taxes, including on tobacco, alcohol, health insurance and company cars, and companies with sales over a certain amount. These taxes, plus contributions from VAT, contributed 33% of SHI revenues in 2021.

In the Netherlands, general taxation is also an important component of revenue for health care, accounting for 13% of spending on health care, compared with 72% from compulsory contributions to insurance companies (which include the income-related contributions paid via employers and premiums paid direct to insurance companies). Tax-funded subsidies for people on low incomes to help with the costs of their insurance premiums were introduced with the reforms in 2006. Tax revenues are also used to pay for the care of people younger than 18 years and preventive services such as vaccinations and cancer screening.[20]

Tax revenue has also played a greater role in funding Germany's health care system since 2004. There were concerns in the early 2000s about the burden of insurance contributions on employers, as the economy experienced a period of stagnation and unemployment. Reforms were introduced to increase the proportion of contributions coming from employees versus employers (54% and 46% respectively) and to fix the employer contribution rate to make it predictable. Although these reforms were later reversed (and contributions are currently split evenly between employer and employee), sickness funds can impose an additional income-related premium on employees. The 2004 reforms also brought in tax-based federal subsidies to the insurance system to cover maternity benefits, *in-vitro* fertilisation and other family-based policies. The introduction of a tax-based revenue stream was controversial. An important principle of Germany's SHI system was that contributions were kept separate from general taxation,[59] and some have described contributions based on the federal budget as inherently unstable because of the political

influence over spending decisions.[14] In official spending accounts, these tax subsidies are not identified separately, but combined with social insurance expenditure. They are estimated to be around 10% of total health expenditure.

The addition of tax funding in Germany has been seen as a positive in one respect: counteracting (to some degree) the drawbacks of a dual private–public insurance system.[18] A prerequisite of publicly funded health systems, whether tax-based or social insurance-based, is spreading contributions across the entire population, by ensuring that people are not able to opt out. Of the countries surveyed in this report, only Germany offers high-earning residents the possibility of opting out of the public system. Critics argue that the public system is deprived of the income that would otherwise have come from these high earners, and that the public system is forced to cover a pool of people with above-average risk of ill health, as wealthier people tend to be healthier. As everyone pays income tax, the tax subsidies offset this to some degree. But, the 'two-tier' system has proved difficult to end, as it derives powerful support from the medical profession (who are paid more for treating privately insured outpatients) and the wealthy section of the population who benefit from it.[28]

Are tax-based systems fairer than social insurance systems?

A 'fair' or equitable health system has two main components: it should raise funds in proportion to people's ability to pay and distribute health care according to need, not ability to pay.[60] To understand the former – whether revenue raising is equitable – all streams of revenue need to be taken into account, including taxes, social insurance contributions, private insurance and out-of-pocket payments. Studies of OECD countries based on data from the 1980s and 1990s found that tax-based systems in general tended to be more progressive (that is, raising money in proportion to people's ability to pay) than social insurance-based systems. But just how much each country was progressive or regressive varied according to how policies were designed, for example whether people on a low income or pensioners were mostly exempted from social insurance contributions, or to the mix of taxes (indirect taxes, such as VAT, tend to be regressive). In all systems, out-of-pocket payments were likely to be 'highly regressive' unless exemptions were put in place.[61]

The fairness of social insurance systems depends on the degree to which contributions are linked to people's ability to pay. In France and Germany, social insurance contributions are income related. In the Netherlands, half of insurance revenues are income related, but the remainder come from flat-rate premiums paid directly to the insurers. To protect low-income families from the cost of these premiums (which rose sharply between 2005 and 2006 after the reforms were brought in), a tax-financed subsidy was introduced (known as the 'care allowance'), which was claimed by 30% of the population in 2019. The subsidy has been controversial: critics view it as an administratively wasteful mechanism to move large amounts of tax-based money around the system.[21]

Tax-based systems are not automatically progressive and much depends on the mix of taxes that are used. A recent study from Italy analysed the impact of decentralising the health system in the late 1990s, which allowed regions to vary how much people were charged for services, among other reforms. The researchers found that Italy's financing system as a

whole was regressive (due to increasing reliance on VAT as a source of revenue for health care) and that some regions, particularly in the poorer south, were more regressive than the north.[62]

Out-of-pocket spending

Another method of assessing the equity of financing is by looking at the proportion of revenue that is out of pocket, which is considered to be the most regressive form of raising revenue. Comparable data are collected on out-of-pocket spending, which includes payments for medicines and medical supplies, consultations, diagnostic tests, hospital stays and complementary or alternative medicines. The OECD publishes these costs as a percentage of total health expenditure, and there is considerable variation between countries (Table 13).[15]

Table 13: Household out-of-pocket spending as a percentage of total health expenditure (%), 2021

Country	Household out-of-pocket spending (%)
Italy	21.9
Spain	21.0
Sweden	13.1
UK	12.7
Germany	12.0
The Netherlands	9.4
France	8.9

Source: OECD Health Statistics. Health expenditure and financing.

The tax-based systems, particularly Italy and Spain, report higher levels of out-of-pocket spending than the three social insurance-based systems. In Italy, there has been a growing number of people willing to pay directly for faster access to health care from private providers, particularly for specialist consultations and diagnostic tests. In 2019, 26% of Italy's total health care spending came from private sources, and out-of-pocket spending made up the majority of this (89%), spent on dental care, outpatient consultations and prescription drugs. Private health insurance is relatively small (accounting for just over 2% of total health expenditure). In 2019, 44% of Italians paid directly for at least one health care service without attempting to use the public system, with a higher proportion (50%) of those with a high income doing so, compared with 38% of those on a low income.[30]

A full understanding of the degree to which these costs are equitable or not requires analysis of their impact on household spending. The WHO's Regional Office for Europe has analysed national household survey data across Europe. In Spain, for example, despite higher levels of out-of-pocket spending compared with other countries, the incidence of 'catastrophic' spending (defined as exceeding 40% of a household's capacity to pay) was

relatively low (Table 14).[63] In Spain, 1.6% of households experienced catastrophic spending in 2019, concentrated in the poorest quintile, driven mostly by dental and outpatient medicine costs.[35] In Italy, by contrast, it was 9.4% in the same year.

Table 14: Share of households with catastrophic spending on health (%)

Country	Share of households, % (year)
Italy	9.4 (2019)
Germany	2.4 (2018)
France	2.1 (2017)
UK	1.5 (2019)
Sweden	1.7 (2012)
Spain	1.6 (2019)

Note: Data for the Netherlands (0.5%, 2015) are not directly comparable to other countries as the household survey does not include the out-of-pocket payment of the deductible.

Source: WHO Barcelona Office for Health Systems Financing.[63]

User charges are common in both systems

One of the components of out-of-pocket costs is user charges for statutory health care. The presence or extent of user charges has no connection with funding models. Both the tax-funded and social insurance countries examined in this report raise some revenue from user charges, including the UK, where charges apply to dental care across all four nations of the UK, and to prescription drugs in England (Table 15).

Table 15: User charges by country

	Germany	France	The Netherlands	Italy	Spain	Sweden	UK
GP visit	No	Yes	No	No	No	Yes	No
Inpatient stay	Yes	Yes	Yes	No	No	Yes	No
Outpatient visit	No	Yes	Yes	Yes	No	Yes	No
Prescription drugs	Yes	Yes	Yes	Yes	Yes	Yes	Yes (England only)
Dental care	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Medical aids	Yes	Yes	Yes	No	Yes	Yes	Yes

Source: Authors' analysis.

User charges are often designed to have two aims: to generate additional revenue and to dampen demand for health care. Not all countries publish data on the amounts raised. Where they do, for example in Germany, the funding raised is found to be only a modest proportion of the total amount spent on health care (1.1% in 2019).[18] Evidence on the effectiveness of user charges in dampening demand is limited.[64] Experimental evidence from the US suggests that user charges reduce both necessary and unnecessary demand, and that the poorest and sickest patients suffer most as a result.[65] All the countries analysed in this report have developed policies to protect the most vulnerable, and these policies have often required revision and adjustment.

In 2012, the government in Spain reformed user charges for outpatient prescription drugs, as part of a series of policies to reduce spending in the wake of the financial crisis. Exemptions for pensioners were abolished and charges increased for everyone else. Some financial protection was included, for example caps on the maximum amount that pensioners had to pay, which varied by income. Researchers found that there was a short-term reduction (of 18 months) in the number of prescriptions for drugs to treat chronic illnesses, including anti-diabetic drugs, and that some vulnerable people reduced their use of medicines (for example, drugs prescribed following a heart attack).[34] The incidence of catastrophic spending rose from 0.6% of households in 2006 to over 2.0% in 2014, before falling back to 1.6% in 2019, concentrated in the poorest fifth of the population. Spending on dental care (minimally covered by the Spanish NHS) drove most of this spending, but the share of costs from outpatient medicines has steadily increased

since 2012.[35] In 2021, as concern grew about the impact of charges, heightened by the COVID-19 pandemic, exemptions from outpatient medicine charges were extended to low-income pensioners, moderately and severely disabled children, and households in receipt of child benefits.[36]

In Germany, a new user charge for outpatient visits was abandoned within a decade. The reforms introduced in 2004 imposed a new charge for visiting an 'ambulatory care' doctor (office-based specialist or GP) of 10 euros per quarter, and for each contact thereafter with a physician without a referral. (At the same time, charges for outpatient medicines were changed from a fixed co-payment to a percentage co-payment.) Early evaluations of the new outpatient charge found that visits to doctors fell in 2004 compared with 2003, with no evidence of a drop in necessary visits by disabled people and people with chronic conditions. But patient–doctor contacts rose in subsequent years, suggesting that the effect on reducing demand was temporary.[19] The charge was also unpopular with patients and the medical profession, and brought an additional administrative burden.[18] It was abolished in 2012.

The outpatient charge had a tangible impact on household spending between 2003 and 2013. The share out-of-payment pocket payments rose in all income groups between 2003 and 2008 before decreasing in 2013 (after the abolition of the outpatient charge). The rate of increase was steepest among those in the two poorest quintiles. The outpatient share of out-of-pocket costs increased fourfold for those in the poorest quintile (from 4% to 18%) between 2003 and 2008, before dropping in 2013.[19]

All systems that impose user charges have policies designed to financially protect those people least able to afford payments. These bring additional administrative costs and can also create barriers for claimants. In France, the majority of people buy supplementary private insurance to offset the user charges imposed on a wide range of health services (see Table 15). Until 2019, people on low incomes and those just above the poverty line were protected from charges through two schemes to provide access to insurance, financed by a tax on insurance companies. One of these, a voucher scheme, had only been taken up by a quarter of those potentially eligible in 2015, and research suggested that the administrative burden of applying was a barrier.[28] The schemes have since been merged, but in 2019, 5% of the French population did not have private insurance. A survey of more than 150,000 people in 2019 found that a quarter had forgone health care in the previous 12 months, and nearly 60% reported that the charges were too high, even if people had additional insurance.[66]

In Sweden, although overall catastrophic spending is low (1.7% of households in 2012), the WHO has calculated that it is highly concentrated in the poorest quintile, affecting about 6% of households, driven by the costs of outpatient medicines.[42] The WHO concluded that the system for protecting poorer households from the burden of co-payments is bureaucratic and could be improved: people in receipt of social benefits have to apply to their municipality for retrospective reimbursement of health care charges, or request an invoice from the region (which organises health care) to be sent to the municipality to pay on their behalf.

Conclusion

This report has described the main ways in which revenue is raised for publicly funded health systems in seven European countries, and some of the ways each country's system has evolved. There is no straightforward balance sheet that can show whether a tax-funded or a social insurance model is a 'superior' way to fund health care. But there are a few areas where there are distinctive differences – social insurance systems tend to have higher administrative costs, for example. In many other areas, the differences have blurred. These include the increasing use of taxation to top up (or even displace) wage-based contributions in social insurance systems, and the creation of purchaser–provider splits in tax-based systems. The existence and extent of user charges appear unrelated to any funding model.

For this reason international bodies such as the WHO assess the performance of how health systems are financed in terms of functions, rather than by category of funding model.[67] According to the WHO's framework, effective revenue raising needs to ensure that sufficient resources are raised to meet health care needs, that revenue raising is equitable – so that the burden of financing does not fall on those in poverty or who are sick – and that revenue is stable and predictable.

No country performs well across all functions. Regardless of whether budgets are set by decentralised negotiations between insurance bodies or by central or local government, no system has developed a needs-based approach to setting budgets that is free from political influence.

All countries face a common challenge in the future: they will have to grapple with the implications of an ageing population, who will need more health care as they grow older.[68] Ageing will also reduce the stability and sustainability of labour-related contributions and premiums. This will continue to affect SHI systems, but tax-based systems will also have to consider diversifying the mix of revenue streams within taxation, to balance earnings-related tax with other sources such as consumption taxes and taxes on wealth.[69]

How each country adapts its funding system to meet the challenges of the future will be shaped by their specific context, culture and decisions taken in the past. Given the absence of strong evidence that any country's funding system is superior to others, policymakers in the UK should focus on improving the current funding system for the NHS, rather than embarking on a wholesale switch to another funding model.

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We are an independent charitable organisation working to build a healthier UK.

Health is our most precious asset. Good health enables us to live happy, fulfilling lives, fuels our prosperity and helps build a stronger society.

Yet good health remains out of reach for too many people in the UK and services are struggling to provide access to timely, high-quality care.

It doesn't have to be like this. Our mission is to help build a healthier UK by:

1. Improving people's health and reducing inequalities
2. Supporting radical innovation and improvement in health and care services
3. Providing evidence and analysis to improve health and care policy

We'll achieve this by producing research and analysis, shaping policy and practice, building skills, knowledge and capacity, and acting as a catalyst for change.

Everyone has a stake and a part to play in improving our health. By working together, we can build a healthier UK.

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