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Identifying options for funding the NHS and social care in the UK: international evidence

Funding options for the NHS and social care in the UK

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Abstract

We investigate how other high-income countries have thought about and implemented changes to their funding systems for health and social care to better meet the challenges ahead. This paper is part of a broader project funded by the Health Foundation, which aims to identify a range of feasible options for the future funding of health and social care in the four countries of the UK, and assess the relative (un-)attractiveness of different funding approaches to the general public. The research reported here examines trends and innovations in health and social care funding in a selection of high-income countries. We focus on where the money to pay for care comes from, not on how it is then spent.

Drawing on a review of the literature and interviews with 30 key informants in a range of high-income countries, we explore current thinking on the options for funding health care and social care. Our aim is to add to the evidence base and improve the quality of the debate, rather than make recommendations. Specifically, we:

- provide examples of funding configurations for health and social care, as well as changes that have been implemented, or are being considered, in a range of high-income countries
- explore the drivers of recent or planned health and social care funding changes and reforms and the contexts within which decisions around funding were taken
- highlight key points that can inform the range of conceivable options for funding health care and social care in the four countries of the UK.

Overall we find that:

- most reviewed countries fund health care primarily from public sources, such as taxation and mandatory health insurance, while social care often relies to a comparatively greater extent on individuals paying privately
- health and social care funding reforms tend to be incremental rather than radical, are path-dependent, and are catalysed by changes in economic conditions rather than by rising demand for care
- high-income countries have taken diverse approaches to tackling the need to increase health and social care funding and there is no single optimal, or commonly preferred, solution to achieving sustainable revenues.

Glossary

ACA – Patient Protection and Affordable Care Act 2010 (USA)

ACC – Accident Compensation Corporation (New Zealand)

ADL – Activities of daily living

AME – Aide Médicale d'État (France)

APA – Allocation Personnalisée d'Autonomie (France)

CASA – Contribution Additionnelle de Solidarité pour l'Autonomie (France)

CMU – Couverture Maladie Universelle (France)

CNAMTS – Caisse Nationale de l'Assurance Maladie des Travailleurs Salariés (France)

DPA – Deferred payment arrangement (UK)

GDP – Gross domestic product

GST – Goods and services tax (New Zealand)

IADL – Instrumental activities of daily living

LTC – Long-term care

LTCI – Long-term care insurance

OECD – Organisation for Economic Co-operation and Development

OOP – Out-of-pocket (expenditure)

PHI – Private health insurance

PPP – Purchasing power parity (adjusted exchange rate)

SHI – (Mandatory) Statutory health insurance

VHI – Voluntary health insurance

WHO – World Health Organization

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Summary

The demand for health and social care is rising and this is for good reasons. We are living longer and, as a consequence, the number of older people is growing rapidly. Coupled with the rising burden of multiple chronic disease and increasing frailty at older ages, this means that the number of people needing support in their daily lives through health and social care is also rising. This comes alongside accelerated advances in medical technology and knowledge that provide significant potential for new methods of delivering and organising care. Demand for social care and health care is rising faster than the public funds that are being made available to spend on them in all four countries of the UK, leaving a large and growing funding gap.

The UK is not the only country facing these challenges and there is potential to learn from the experiences in other countries to identify possible ways to address these difficulties in the UK. In this paper, we seek to understand how other high-income countries have thought about and implemented changes to their funding systems for health and social care to better meet the challenges ahead.

This paper is part of a broader project funded by the Health Foundation, which aims to identify a range of feasible options for the future funding of health and social care in the four countries of the UK, and assess the relative (un-)attractiveness of different funding approaches to the general public. Conducted by RAND Europe, in collaboration with the European Observatory on Health Systems and Policies and with the Personal Social Services Research Unit at the University of Kent, this paper examines trends and innovations in health and social care funding in a selection of high-income countries. We focus on where the money to pay for care comes from, not on how it is then spent. Drawing on a review of the literature and interviews with 30 key informants in nine countries, we explore current thinking on the options for funding health care and social care. Our aim is to add to the evidence base and improve the quality of the debate, rather than make recommendations.

This paper is the first publication from the project. A subsequent paper will present findings from research into the preferences of the general public in England, Northern Ireland, Scotland and Wales for different ways of funding health care and social care.

Specifically, in this paper we:

- provide examples of funding configurations for health and social care, as well as changes that have been implemented, or are being considered, in a range of high-income countries

- explore the drivers of recent or planned health and social care funding changes and reforms and the contexts within which decisions around funding were taken
- highlight key points that can inform the range of conceivable options for funding health care and social care in the four countries of the UK.

We report on each of these in turn.

Most reviewed countries fund health care primarily from public sources, such as taxation and mandatory health insurance, but funding of social care often relies more than health care on individuals paying privately.

In 2016, across most high-income countries reviewed in this report, government and mandatory health insurance schemes ranged from around two-thirds of total health care expenditure in Australia and Switzerland, to as much as 85% in Sweden, Japan and Germany. This compares with 79% in the UK. In the USA and South Korea – the two notable outliers in this review — around half of health expenditure was from public sources. Real public expenditure on health care per person increased between 2006 and 2016 (or the latest available year) in all reviewed countries, with the exception of Italy, which saw a small decline in spending.

Social care also tends to have a significant publicly funded component in most reviewed countries, particularly for long-term care services deemed health-related. However, personal care services to assist people with activities of daily living often rely to a much greater extent on private funding, as is the case in all four UK countries. Furthermore, in some countries there has been a focus on constraining public expenditure on social care, which implies greater reliance on expenditure by care recipients themselves. Of note, we do not consider public expenditure on welfare payments to people living with disabilities, sometimes referred to as ‘disability benefits’, because these are transfer payments that supplement the income of the recipients rather than constituting funding for the provision of care *per se*.

Differences between the two sectors in terms of funding sources may lead to seemingly arbitrary boundaries between health and social care within a country. While the integration of health care funding with social care funding is an acknowledged priority in some countries, this has tended to remain an aspiration in many settings with a few notable exceptions, for example, in the legislation of the planned health and social care reforms in Finland.

Health and social care funding reforms tend to be incremental rather than radical, are path-dependent, and are catalysed by changes in economic conditions rather than by rising demand for care.

Almost no country is engaged in radical reform of health care funding, but social care funding has been subject to more substantive change in a few countries. Concerns that prompt changes in, and reform of, funding often arise from economic crises, or perceived

crises, and associated public resource constraints. The ability to generate revenues, whether public or private, is inevitably dependent on the broader economy and in times of economic difficulty, a common policy response has been to try to limit public expenditure. Changes in taxes are often made as part of a wider tax reform programme and are typically not designed with increasing or protecting health or social care funding in mind. At the same time, countries may also reconsider how they generate resources to pay for health and social care in an effort to make resources sustainable or to raise additional revenues. Perhaps not surprisingly, political commitment and preferences, alongside a perceived understanding of what is publicly acceptable, shape whether and what changes in funding are considered in a given country.

However, no funding system that we reviewed has been entirely unaffected by change, although changes tend to be incremental rather than radical. This is not to say that incremental change is not important. Indeed, in England the recently introduced Social Care Precept, allowing local government to increase council tax by up to 3% per year to pay for more social care, is just such an example of an important but incremental change.

While incremental change to health and social care funding arrangements tends to be more common, there are nevertheless examples of more fundamental reform efforts, such as the introduction of mandatory long-term care insurance in Germany and Japan. But even in those instances, path dependency, societal values and country context are clearly key to shaping the options that are considered or implemented.

High-income countries have taken diverse approaches to tackling the need to increase health and social care funding and there is no single optimal, or commonly preferred, solution to achieving sustainable revenues.

Overall, we find – unsurprisingly – that the international evidence does not signpost a single best path to follow for funding health and social care, for the countries of the UK to follow.

The reliance on public funding of health care remains strong across all reviewed countries, while social care funding has been at the core of the reform debate in several countries, perhaps more so than the financing of health care. This is reflected, at least in part, by the adoption of mandatory insurance arrangements for funding of (some) social care in a number of countries that originally operated, as the countries of the UK still do, ‘safety net’ or means-tested systems. These are France, Germany, Japan and Korea.

Many countries raise taxes for health and/or social care at sub-national as well as national levels. Similarly, throughout the UK, local government contributes a small part of funding to the tax base for social care (via council tax, a form of tax based on house values, and business rates), although it does not raise funds for health care. To do so would be administratively complex and would require funding equalisation arrangements so that areas with more vulnerable populations and/or weaker local tax bases did not lose out. Our international review revealed no clear interest in either increasing the reliance on locally

raised taxes or, conversely, on greater centralisation at the level of national government. There are examples of movement in each of those directions.

Among the reviewed countries there was little indication of active consideration of earmarking/hypothecation of taxes to fund health care or social care. Hard hypothecation – where funding is directly tied to the revenues raised by a specific tax that is not used to fund anything else – has not been used anywhere. This may be for a variety of reasons, including the unappealing pro-cyclical nature of relying on a single revenue source and the rigidity that hypothecated revenues introduce into balancing public expenditures across the full range of public services and welfare benefits. Hypothecation of any taxes to fund health and/or social care is not currently practised in the UK, although in the past an increase in the National Insurance contribution rate has been described as being dedicated to increasing NHS funds (i.e. soft hypothecation). There are near-precedents, such as the national television licence fee that is hypothecated to finance the British public service broadcaster BBC, though even the BBC does not rely in full on television licences for its income. National Insurance, paid for by workers and employers as a tax on income from employment, may be thought of by some as a hypothecated tax to fund the NHS, state pensions and welfare payments. However, revenue generated from national insurance contributions is not hypothecated in practice.

There has been consideration of using other forms of hypothecated revenue generation to fund health (or social) care through so-called ‘sin taxes’. These are taxes levied on alcohol, cigarettes or sugary drinks. Sin taxes have some popularity but where they are being extended it is to encourage behaviour change, not to raise dedicated funds for health care and they tend to raise only relatively modest sums.

In recognition of the likelihood that the baby boomer generation will put increased strain on the social care system in the future, the mandatory long-term care insurance programme in Germany is setting aside a small proportion of the funds it raises from monthly contributions for use from 2034 onwards. Such ‘pre-funding’ of future care is not in common practice. Among the countries we reviewed, only New Zealand has so far attempted anything similar, but that was to pre-fund future state pensions, rather than social care or health care, and payments into the fund have been suspended for several years now.

There has been no major extension of user charges for health care in any of the countries we reviewed. But user charges remain a component of health care funding. They are a much greater source of funding for social care where means-tested charges are a common and continuing feature. A number of countries are considering (further) increases in these charges, recognising the potentially dampening effects on demand as well as the revenue implications. For health care, countries have in some cases reduced or abandoned specific cost-sharing arrangements, in part due to negative public reaction to charges and limited revenue generation from them. User charges in health care are contentious in the UK, too,

and the devolved governments in Northern Ireland, Scotland and Wales have all taken the opportunity to abolish prescription charges.

Mandatory insurance has long been the basis of funding health care in several of the countries we reviewed. More recently it has, as noted earlier, been extended into social care. By contrast, we found no increase in reliance on voluntary insurance as a source of either health care or social care funding. For social care, no country among those that we reviewed has made voluntary insurance work. Voluntary health insurance is present in many countries in a complementary (insuring against patient charges and co-payments) or supplementary (financing improved or greater access beyond publicly funded health services) role. It has a supplementary role in funding health care in the UK, more so in England than in the rest of the UK.

1. Introduction and background

This section sets out:

- the motivation behind, and scope of, the research project
- key features of the current health and social care funding arrangements in the four UK countries
- the structure of the rest of the Working Paper.

The demand for health and social care is rising and for good reasons. We are living longer and as a consequence the number of older people is growing rapidly. Coupled with the rising burden of multiple chronic disease and increasing frailty in old age, this means that the number of people needing support in their daily lives, through health and social care, is also rising. This comes alongside accelerated advances in medical technology and knowledge that provide significant potential for new methods of delivering and organising care. Demand for social care and health care is rising faster than the public funds that are available to spend on them in all four countries of the UK, leaving a large and growing funding gap.

Clearly, the UK is not the only country facing these challenges and there is potential to learn from the many experiences in other countries. In this paper, we seek to understand how other high-income countries have thought about and implemented changes to their funding systems to better meet the challenges ahead.

This paper is part of a broader project funded by the Health Foundation, which aims to identify a range of feasible options for the future funding of health and social care in the four countries of the UK, and assess the relative (un-)attractiveness of different funding approaches to the general public. Conducted by RAND Europe, in collaboration with the European Observatory on Health Systems and Policies and with the Personal Social Services Research Unit at the University of Kent, this paper examines trends and innovations in health and social care funding in a number of high-income countries. We focus on where the money to pay for care is to come from, not on how it is then spent. Our intention is to add to the evidence base and improve the quality of the debate, rather than make recommendations.

This Working Paper has been produced at an interim stage of the two-year research project. Drawing on a review of the literature and interviews with 30 key informants in nine countries, we identify current thinking in high-income countries internationally on the options for funding health care and social care. We build on existing descriptions of health and/or social care funding in high-income countries, with a particular focus on understanding the more salient issues around changes and reform in health and/or social care funding. We consider the diverse starting points in terms of existing funding arrangements and how different countries

have addressed the increasing demand for health and social care amid economic pressures. By examining what, if any, changes have been made to funding arrangements in countries that face challenges comparable to some of those in the UK, this paper seeks to stimulate further thinking to inform pivotal policy decisions about how health and social care are funded in the four countries of the UK.* A later Working Paper will then present findings from the discrete choice experiment and focus groups about the preferences of the general public in England, Northern Ireland, Scotland and Wales for different ways of funding health care and social care.

In the present paper we:

- provide examples of funding configurations for health and social care, focusing on the changes and adjustments to them that have been implemented, or are being considered, in a range of high-income countries
- explore key drivers of recent or planned health and social care financing changes and reforms and the contexts within which decisions around funding were taken
- highlight key points that can inform the range of conceivable options for funding health care and social care in the four countries of the UK in the future.

We do not attempt to provide an exhaustive typology of countries according to how they fund health and social care. Such an attempt would be of limited practical use, as systems continue to evolve in response to challenges (ageing populations, the rising burden of chronic diseases, growing public expectations and technological advances), against a background of constrained financial and human resources and pressure for increased efficiency. Instead, we begin by identifying the key dimensions and features of health and social care financing systems in a range of high-income countries, building on existing literature. Specifically, we aim to focus on those dimensions where there has been a change over the last decade or so.

We recognise the inherent complexity and interdependence of health and social care funding systems. There are many ways to characterise their key features and analyse the drivers and effects of changes. Health care funding arrangements have received greater attention in the academic and policy literature than social care funding. This is reflected, in part, in the much greater wealth of internationally comparable data on variables such as expenditure by source and trends over time, such as those compiled by the OECD. By comparison, any analysis of social care funding arrangements is more limited. Overall, we view the analysis presented in this paper as largely exploratory in nature, in particular with regard to issues that arise when funding of health care is compared with funding of social care. We hope that the paper will stimulate further discussion among stakeholders.

Finally, it is important to emphasise that our focus is on the generation and collection of money to fund health and social care. We recognise the interdependency between how

* Funding may not be the only binding constraint. There may also be constrained supplies of specialised resources such as particularly skilled labour. But our focus is on funding rather than any other constraints.

money is raised and how it is spent to deliver health and social care services, not least in those instances where care users are required to pay, in part or in full, for the services they receive. But it was beyond the scope of this work to examine how the funds are allocated to the provision of different care services.

1.1 Background to the research

How to raise funding to pay for health care has long been a subject of discussion in the UK, as elsewhere. Periodically ideas are put forward, and less often they are evaluated, with respect to changing the heavy reliance on general taxation that has characterised funding of NHS services in the UK since its inception in 1948. The pros and cons of tax funding versus mandatory health insurance and the arguments for changing the balance between public and private funding, both via private insurance and from out-of-pocket payments, have frequently been debated. However, the debate in the UK has often taken place without much consideration of details or learning from international contexts.

More recently, growing attention has been given to options for funding social care, especially for long-term care of frail older people*, with a parallel debate emerging around the challenge of the largely historical separation of health care and social care funding, given that services can be seen to lie along a single spectrum of services aimed at improving people's wellbeing. Boundaries between what may be thought of as 'health care' services or as 'social care' services exist *de facto*, largely as a result of the institutional and funding arrangements that have developed over time in the UK and (differently) in other countries. However, for practical purposes those boundaries are increasingly being questioned and attempts are being made to break them down altogether.

In this Working Paper, we explicitly consider the funding of both health care and social care. We do not offer precise definitions of 'health care' or 'social care', as these vary in practical detail between countries and our concern is with how to pay for the whole spectrum of care. In the rest of the Working Paper, the term 'health care' can be thought of broadly as the range of services that are currently available from the NHS in all countries of the UK. The term 'social care' carries more or less the same meaning throughout the UK, although the specifics vary concerning who currently receives particular kinds of publicly funded social care services, as is described later. However, the term 'social care' is not in universal use across the countries we have studied. Within social care we focus on funding care for dependent adults, which in some jurisdictions is more commonly referred to as long-term care (LTC). Hence, in the remainder of the Working Paper, the terms 'social care' and 'LTC' can be thought of as interchangeable.

* Social care of this kind as understood in the UK is often referred to as long-term care (LTC) in other countries.

1.2 Key features of health and social care funding in the four UK countries

Health and social care are devolved policy areas in the UK, and therefore any discussion of their funding must be seen in the context of the UK's devolution settlement of 1998. Northern Ireland, Scotland and Wales receive funding from the UK government in the form of block grants, the size of which is determined by the so-called 'Barnett formula'. The principle of the arrangement is that any increase or reduction in public expenditure by the national government on health or social care (and some other areas of public expenditure) in England will then automatically feed through to a proportionate increase or reduction in public funding available to the devolved governments in Northern Ireland, Wales and Scotland.¹

Arrangements for funding health care are very similar across the four UK countries, although with differences in use of prescription charges (Box 1). Funding of social care is rather different than for health care, but the four UK countries fund social care similarly, although with important differences in how much money is levied by local authorities through user charges (Box 2).

Questions of how to fund health care, social care, or both, have generally been considered in a context of demand rising faster than the resources made available to meet that demand. As the number of people with multiple chronic conditions grows, in the context of ageing populations and advances in technology, so does the demand for health and social care services – alongside an expectation that these should be of high quality and good value for money. Consequently, discussion of funding is often couched in terms of whether existing approaches can be expected to be sustainable under ever-growing demand pressures.² Whatever the rate at which demand for health and social care grows in the future, it is important to gather evidence as to which of the many funding options are the most publicly acceptable, and to identify the most important factors that drive policy choices.

1.3 Structure of the Working Paper

The rest of the paper is structured as follows. Section 2 describes the methods and approach used. Section 3 presents a synthesis of patterns and trends in international care funding models. Section 4 sets out a wide range of reform initiatives along with specific case studies. Section 5 discusses key aspects of the funding environment that can drive or constrain reform. Section 6 concludes this first stage of the research project by summarising the key points from our analysis of current thinking internationally and its possible relevance in the countries of the UK.

Box 1: Funding health care in the UK: key points

- Throughout the UK the National Health Service (NHS):
 - provides near-comprehensive health care to all UK residents, predominantly free of charge to the patient at the point of use
 - is 99% funded from general taxation at a UK level – that is, from the total ‘pot’ of UK government revenues from all taxes and other sources, including National Insurance contributions
 - is not paid for by any specific tax – in other words there is no “hypothecated” tax funding of the NHS
 - is not funded by local taxation
 - is 1% funded from patient charges, including prescription charges and dental fees
- In the 2016-17 financial year, total UK government expenditure on the NHS (operating expenditure and capital expenditure combined) was £143.6 billion (source: HM Treasury³ Table A.11), which is equivalent to £2,187 per person. Government expenditure on the NHS ranged from £2,169 per person in England, to £2,233 in Wales, £2,240 in Northern Ireland and £2,332 per person in Scotland (source: HM Treasury³ Table A.15) (all figures in this bullet point are in 2016-17 prices).
- UK residents buy additional health care out of their own pockets, ranging from over-the-counter (non-prescription) medicines to non-emergency surgical procedures
- In 2016, 10.5% of UK residents were covered by additional, voluntary health insurance for non-emergency care in order to have the option of treatment at their convenience rather than having to join NHS waiting lists, or because they prefer to be treated in private facilities (source: LaingBuisson⁴)
- The only significant differences among the four UK countries in how health care is funded is the presence or absence of charges for prescriptions dispensed outside hospital. Until 2007, prescription charges applied throughout the UK, but they were abolished in Wales in that year, in Northern Ireland in 2010 and in Scotland in 2011. Charges continue to be levied in England, and in the year 2017-18, £8.60 per prescription for the non-exempt population (meaning, essentially, that charges are paid only by adults aged 18-60, excluding full-time students, some people on low incomes, pregnant women, women within one year of childbirth, and people with certain specified health conditions).

Box 2: Funding social care in the UK: key points

- Unlike health care, funding for social care comes mostly from private sources.
- Not only that, a large portion of social care is provided informally, by family and friends. Estimates from the National Audit Office (NAO) for England in 2014 showed that the informal care being provided was worth between £55-97 billion, which is much greater than the amount of public spending on social care.⁵
- Local authorities (LAs) have the primary responsibility for public funding of social care in the UK, except in Northern Ireland, where five health and social care trusts (HSC) have this responsibility. In England in 2016-17 (source: Adult Social Care Statistics)⁶:
 - £14.8 billion was spent by LAs on adult social care (net current expenditure)
 - £2.4 billion was contributed by the NHS to social care. Although the NHS focuses on health care, it does contribute to some social care to improve health outcomes.
- In England a Social Care Precept was introduced in 2016-17, allowing local government to increase council tax (a form of tax based on house values) by up to 3% per year to pay for more social care.
- Northern Ireland, Scotland and Wales each receive a block grant from the UK government (determined by the 'Barnett formula') and have autonomy to decide how to spend their funds, which are then allocated to LAs and NHS organisations. Each country also has autonomy to set their own limits on the value of assets that a person can have while still qualifying for public funds. That ranges from £23,250 in England and Northern Ireland to £26,500 in Scotland and £30,000 in Wales (for care in Wales in a care home, though an asset limit of £24,000 applies in Wales for care in the recipient's own home).
- With the exception of Scotland, social care is not free of charge unless the recipient passes a means test. All countries have charges on residential care that vary by country and the recipient's assessed income.

2. Data and methods

This section describes how we obtained information on funding arrangements (and changes to them) internationally, via two main routes:

- review of published literature
- interviews with key informants internationally

Our approach consisted of two stages: a review of published evidence and key informant interviews. Our approach was pragmatic, seeking to capture key trends in a number of high-income countries that we considered to be most useful in terms of health or social care funding from which the UK could potentially learn. We principally draw on published reviews of health and social care funding arrangements in high-income countries, supplemented by additional evidence as identified from ‘snowballing’ and interviews with key informants. We have benefitted from thorough review and discussion of our findings by the members of the Expert Reference Group (listed in Appendix A). We are therefore confident that the material presented and discussed in this paper is a good representation of the range of funding options available.

2.1 Review of the published evidence

We carried out a targeted review of the published and grey literature on health and social care funding in 15 high-income countries plus the UK. Country selection was informed mainly by relevance to the UK context in terms of comparability to the UK regarding both short- and long-term challenges. A key criterion was that countries should exhibit some variety and change in funding arrangements for health and/or social care, with evidence of active consideration of reforms affecting the sources of funding for health care and/or social care in the past two decades. It was beyond the scope of this work to carry out a comprehensive assessment of the available literature, given the large number of countries we wished to review. Rather, we drew on the considerable collective experience of the research team (the authors of this report) to identify literature likely to provide the required information about health and social care funding options, and reforms to those, among high-income countries. As a starting point, we used detailed country reviews from the *Health Systems in Transition* (HiT) series* and the Assessing Needs of Care in European Nations (ANCIEN) reports,† as well as existing overviews of health care and/or social care arrangements in various high-income countries. Additional literature was sourced from a targeted search of documented assessments of identified reforms in the reviewed countries

* All *Health Systems in Transition* (HiT) reports can be found on the website of the European Observatory on Health Systems and Policies: <http://www.euro.who.int/en/about-us/partners/observatory/publications/health-system-reviews-hits/full-list-of-country-hits>, accessed most recently on 10 May 2018. There are many HiT reports, and they are only cited in this Working Paper where we refer to information from specific individual reports.

† Available at: https://cordis.europa.eu/project/rcn/90930_en.html, accessed most recently on 16 May 2018.

(using PubMed and Google Scholar) and of governmental and non-governmental agencies and organisations with a remit in the area of health care and/or social care in each country.

We developed an analytical framework to guide the review of each individual country. Information for each country was extracted into a spreadsheet, using a common format. The table template is too large to present in this document but its structure was based on an analytical framework described in Appendix B. This enabled structured assessment of the key configuration choices and recent trends related to revenue collection and financing, coverage and benefits, and cost-sharing arrangements in the reviewed countries.

Table 1: Countries included in this review

	Australia	Austria	Canada	Finland	France	Germany	Ireland	Italy	Japan	Korea	Netherlands	New Zealand	Sweden	Switzerland	UK	USA
Health care	L	I	L	L,I	L,I	L,I		L	L	L	L,I	L,I	L,I	L	L	L
Social care	L	L,I		L,I	L,I	L,I	L	I	L,I	L	L,I		L,I		L	L

Note: L = in literature review; I = in interviews

2.2 Key informant interviews

Literature review findings were discussed in a workshop meeting with the Expert Reference Group (Appendix A) in order to test the findings for relevance to the UK context and identify comparator countries of particular interest in respect of health care and/or social care funding arrangements and policy discussions around those. This informed the selection of a sub-sample of nine countries out of the 15 for further in-depth analysis, using interviews with key informants in the identified countries to gain better understanding of current thinking about options for reforming health and social care financing systems and the contexts within which reforms have been implemented or considered.

Key informants were identified through a combination of purposive and ‘snowball’ strategies using the published literature, official websites, the authors’ professional networks and recommendations from other study participants. We focused on a range of stakeholders involved in the organisation, governance or delivery of health services, considering representatives of ministries responsible for health and/or social care, or of local government, representatives of medical associations, associations of social security institutions or associations of insurance funds (policy stakeholders) as well as experts from universities and research institutes (‘academic’ stakeholders).

Potential study participants were invited to participate by e-mail and provided with background information. Interviews were semi-structured, using an interview topic guide. They explored reform(s) and the drivers behind them, perceived impacts of past or ongoing reforms, the roles of different forms of funding sources, and measures to ensure medium- and long-term sustainability of health and social care funding. The interview topic guide, which was shared with participants before the interview, is presented in Appendix C. Interviews were conducted by telephone and lasted between 30-60 minutes. Most interviews were conducted in English, but a small number were conducted in French or German at the request of the interview participant. Interviews were audio-recorded with permission, translated where appropriate and transcribed verbatim for ease of reference and to ensure accuracy in understanding the points made.

We conducted a total of 30 interviews in nine countries (Tables 1 and 2) during the period December 2016 – February 2017.* Interviews were undertaken by one researcher in each case. The transcripts were shared with the other members of the research team and key points noted concerning funding arrangements. These were then discussed and agreed among the research team, with reference back to the source transcript where necessary to ensure clarity.

As noted, the main purpose of key informant interviews was to gather additional insight into some of the more salient characteristics of health and/or social care funding, including drivers behind changes and perceived impacts. As such, they served to provide additional factual information and data were organised according to pre-defined topics. Interview data were incorporated into the evidence review, with direct quotes serving to illustrate a given aspect of interest. In the text, we label these by country and stakeholder affiliation (eg New Zealand policy NZ_1). Data reported here represent reviewed countries' policy context as of March 2017.

As the project required interviews from professional and academic specialists, the project proposal was submitted to the Research Ethics and Governance Ethics Panel of the University of Kent School of Social Policy, Sociology and Social Research, where it received approval in December 2016.

* We approached a total of 69 people for interviews, of whom 27 did not reply after the initial contact and a reminder, and 13 declined to be interviewed themselves but passed us to alternate interviewees (who are counted within the total of 69 approached).

Table 2: Key informants interviewed

Country	Area	Policy	Academic	Total
Austria	Health care, social care	2	2	4
Finland	Health care, social care	-	3	3
France	Health care, social care	1	2	3
Germany	Health care, social care	5*	2	7
Italy	Social care	-	1	1
Japan	Social care	-	1	1
The Netherlands	Health care, social care	2	4	6
New Zealand	Health care	1	-	1
Sweden	Health care, social care	3	1	4
Total		14	16	30

Note: * includes one interview with two key informants participating

2.3 Case studies of selected funding approaches or trends

Taken together, the literature review and interviews yielded a rich set of information from numerous countries. In discussion with the Expert Reference Group, we identified five areas where more detailed information in the form of case studies was desirable in order to make clearer the practicalities of what lies behind the ‘headline’ funding approach. These were: the introduction of mandatory long-term care insurance in Germany; the history of repeated political interventions leading to frequent changes to the payments required under mandatory health insurance in Germany; the various forms of tax hypothecation, particularly as used in France and Italy; how local income taxation works, using the Finnish example; and evidence for the impact of user charges, particularly on access to health care.

Case studies drew on additional reviews of the published evidence and, where appropriate, the aforementioned key informant interviews.

3. Funding of health and social care in 15 high-income countries

This section sets out:

- how health care and social care are funded in practice in a range of high-income countries
- the balance between public and private funding of health care and social care and whether that is changing

In this section we describe configurations for the funding of health and social care in 15 countries. The findings presented in this section are drawn mainly from the literature review, supplemented by what we learned in the interviews. We review published data on health and social care funding from public and private sources respectively, and explore how these have evolved over time. As noted earlier, there is a greater wealth of internationally comparable data on funding configuration and trends in health care, and this is reflected in the data presented here.

We start by setting out the main approaches to funding either health care or social care implemented in the 15 reviewed countries, noting that countries typically use a blend of different sources. With this in mind, we review the current balance of public and private funding of health care and in social care in those countries and whether that is changing.

3.1 The main funding arrangements in place in high-income countries

The following is the range of funding options for health care or social care (see Mossialos and Dixon⁷ for a similar structure in the specific context of health care):

- **taxation**, which may be paid by individuals or companies, and may include:
 - direct taxes – on incomes or wealth, eg income tax, corporation tax, council tax, inheritance tax
 - indirect taxes – on what people buy, eg VAT, petrol duty, excise duties, stamp duty

and may be collected at various levels of jurisdiction:

- nationally
- sub-nationally.

Taxes may either be put into a general pot for funding all areas of public spending (including defence, foreign aid, and so on) or they may be earmarked (or 'hypothecated') to be spent only on health care or social care (or both).

- **mandatory insurance**, which may be collected by a government body (national or sub-national) or one or more independent public bodies (eg social insurance funds) or private companies, whether not-for-profit organisations or for-profit commercial enterprises. Mandatory insurance is usually collected as a levy on earnings from employment, with both employee and employer contributing
- **voluntary insurance**, usually collected by private companies (for-profit or not-for-profit)
- **out-of-pocket payments**, which means that individuals pay for the care they want when they need it, but if they cannot afford the price then they have to go without the care.

A further type of funding option is known as ‘medical savings accounts’, where an individual pays in over time (in a similar way to paying for a pension) but what they may take out of the account to pay for care is limited to what they have paid into it, the consequence of which is that medical savings accounts are invariably accompanied by voluntary insurance. Thus medical savings accounts can be seen as a combination of out-of-pocket expenditure with voluntary insurance, rather than as an additional, distinct option for care. Hitherto, medical savings accounts have only been used to a significant degree in Singapore (for health care, not social care) – a country whose population is characterised by an exceptionally high propensity to save, much higher than in the UK.

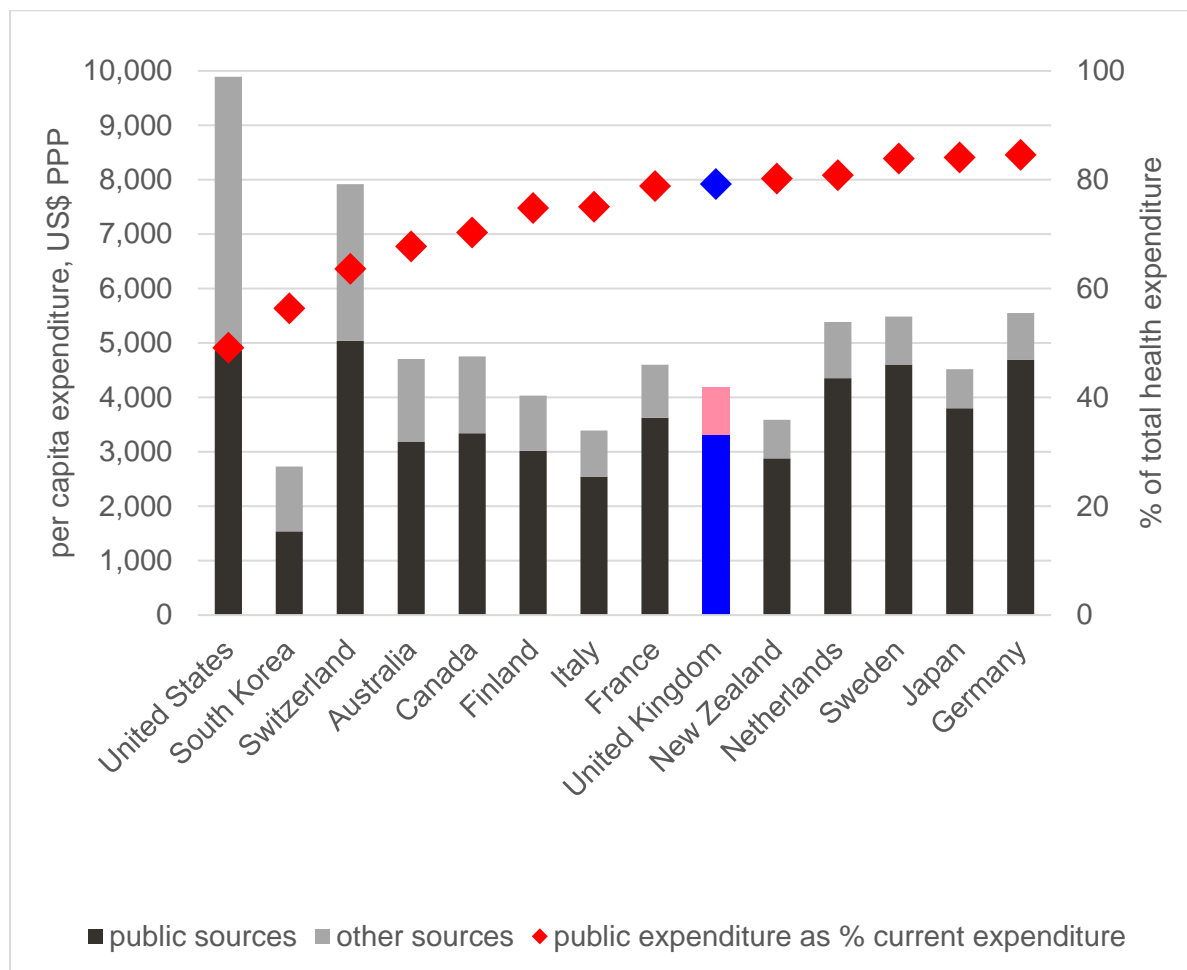
Thus, in the remainder of this Working Paper, we will be discussing options for funding health care and/or social care in terms of the list set out above. Appendix D describes how entitlement to publicly funded care services, and the range of services to which people are entitled, varies across the high-income countries we reviewed.

3.2 The balance between public and private funding of health care

In most of the reviewed countries, expenditure on health is largely funded from public sources, such as taxation and mandatory health insurance.* In 2016, across most high-income countries reviewed in this report, government and mandatory health insurance schemes accounted for between two-thirds of current health expenditure in Australia and Switzerland, to around 85% in Sweden, Japan and Germany (Figure 1). This compares with 79% in the UK. In the USA and South Korea – the two notable outliers in this review— only about half of total health expenditure was considered to be from public sources, at 49% and 56%, respectively, with the remainder from private sources.

* Sources of revenues of financing schemes are notoriously difficult to quantify. The System of Health Accounts (SHA) (see OECD, Eurostat and WHO)⁸ provides the basis for capturing revenues of financing schemes, but in practice this data is currently not reflected in the OECD database. For example, where we refer to expenditures in systems operating mandatory health insurance schemes, some portion of this expenditure is from general government revenues (i.e. taxation), which is transferred to insurance schemes. Similarly, private and voluntary health insurance schemes are at times difficult to disentangle. We comment on these issues where relevant.

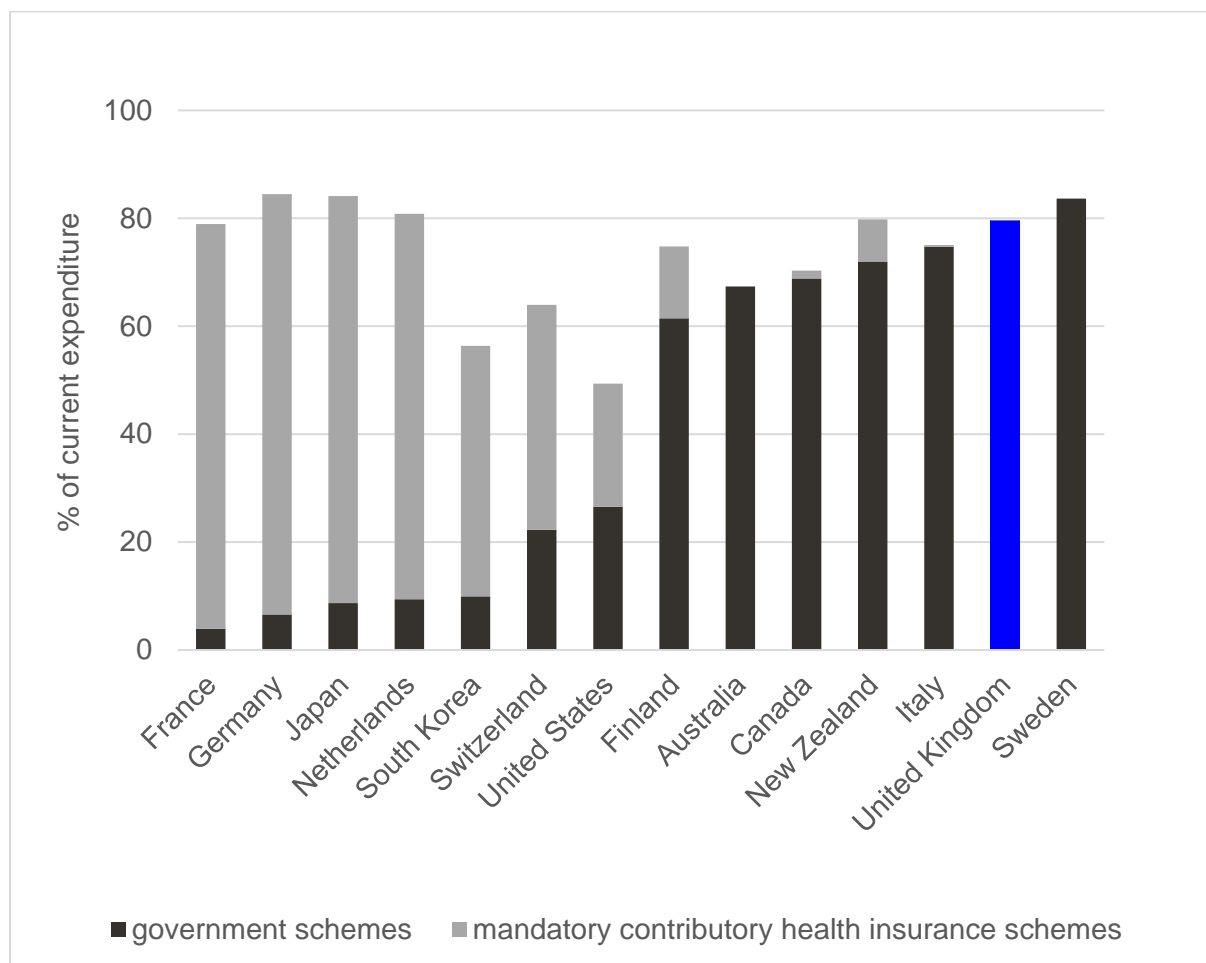
Figure 1: Per capita expenditure on health (US\$ purchasing power parity) by principal source in 14 OECD countries, 2016



Source: OECD⁹

Commentators frequently distinguish government tax-funded systems and mandatory (sometimes referred to as statutory, compulsory or social) health insurance systems, although in reality many countries draw on a combination of these and other resources. Half of the countries considered here are predominantly funded through taxation (sometimes referred to as ‘government’, see also Figure 2) (Australia, Canada, Finland, Italy, New Zealand, Sweden, UK), accounting for between 61% of total health expenditure in Finland and 67% in Australia to 79% in the UK and 84% in Sweden. France, Germany, Japan and the Netherlands are mainly financed through mandatory contributory health insurance, which, in 2016, accounted for between 75% of total health expenditure in France and 78% in Germany. Mandatory contributory health insurance schemes also constitute a substantial component of health financing in South Korea (46%) and Switzerland (42%).

Figure 1: Public funding sources – government tax funding and mandatory contributory health insurance – as a proportion of total health expenditure in 14 OECD countries, 2016 or most recent year for which data available*



* 2015 for France, Germany, Switzerland, US, UK and Sweden; 2014 for Japan and Australia; 2013 for New Zealand

Source: OECD⁹

Government tax revenues can come from a multitude of sources, which may or may not be earmarked for health. Sources include income, property, corporate and consumption taxes. Depending on the system, taxes may be collected (and set) at central, regional or local levels, or a combination of these. For example, in Finland the health care system has historically been financed by a mix of central government and municipal taxes largely based on income; however, revenues generated through the national social security institution (Kela) have also played a role. In Sweden, the health care system is financed mostly through locally determined income taxes (at both municipal and county level) as well as from the central government budget, and sources include a combination of consumption, corporate

and income taxes.* Central government resources are allocated to county councils and municipalities, or even selected organisations, to support particular objectives identified at national level.

The health system in New Zealand is financed primarily through central government revenues, drawing on personal income, corporate and value-added taxes (goods and services tax, GST), with additional revenues coming from the government-operated Accident Compensation Corporation (ACC), a form of compulsory social insurance paid by employers and employees to meet the health care costs of accidents and injuries.¹⁰ Taxes are collected at central, local and regional levels, the latter in the form of property taxes, but local funding plays a very minor role in health care financing (under 1% of total public health care expenditure).

In countries that rely to a large extent on mandatory insurance schemes to fund health care, insurance contributions are typically linked to earnings from employment. In France, individuals and their families are affiliated with one of the three insurance schemes based on their employment status. The majority (some 90% of the population) are covered by the general scheme (Caisse Nationale de l'Assurance Maladie des Travailleurs Salariés, CNAMTS). This covers all employees and their dependants and also includes non-working people eligible for universal basic coverage (Couverture Maladie Universelle, CMU).¹¹ For those not covered through one of the obligatory SHI schemes on an employment basis, the CMU Act offers coverage to individuals who legitimately reside in France. CMU coverage is free for individuals in low-income households, but other beneficiaries must pay an annual premium equal to 8% of income above the ceiling (€9,534 in 2013–14). The third scheme is for transitory foreigners and undocumented migrants who have resided in France for at least three months: for them, the state medical assistance programme (Aide Médicale d'État, AME) provides free access to medical care if their incomes are below the CMU ceiling.¹¹ The latter two schemes are funded as part of the national government's budget, which accounts for 4% of total health spending. The CMU Fund is mostly financed by an earmarked premium tax on voluntary health insurance (VHI) contracts (€2.1bn in 2014).¹¹ Overall, nearly 20% of statutory health insurance (SHI) revenue in France comes from state subsidies and earmarked taxes (eg on tobacco).

In Germany, employees whose (gross) wages are lower than a (legally defined) income threshold are required to enrol with statutory health insurance (SHI), while those with higher incomes may purchase private health insurance.¹² Non-earning dependants of SHI members are covered free of charge by the sickness funds. That is: the contributions to the sickness funds (plus a subsidy from government general tax revenues) are centrally pooled and then reallocated to the sickness funds based on a risk adjustment formula. All contributors to the sickness funds and their (non-contributing) dependants are covered by this funding. In 2015,

* County councils and municipalities also receive state grants, which are financed through national income taxes and indirect taxes, and are designed to contribute to equalisation across local government areas with different tax bases and different spending needs.

about 86% of the population were covered by SHI, 11% by substitutive private health insurance (PHI), while the remainder (soldiers, police) were covered under special programmes. Taxes play a modest role in financing SHI in Germany at around 5%-10% of the total cost. General tax revenues at national, regional and local levels are used, among other purposes, to cover the costs of health care for recipients of social welfare, who are not insured elsewhere (and who then have to choose an SHI fund), as well as to subsidise a range of benefits paid for through SHI. These include maternity benefits, sick pay for parents caring for sick children, in vitro fertilisation, prescription-only contraception up to the age of 21, and legal abortions.¹²

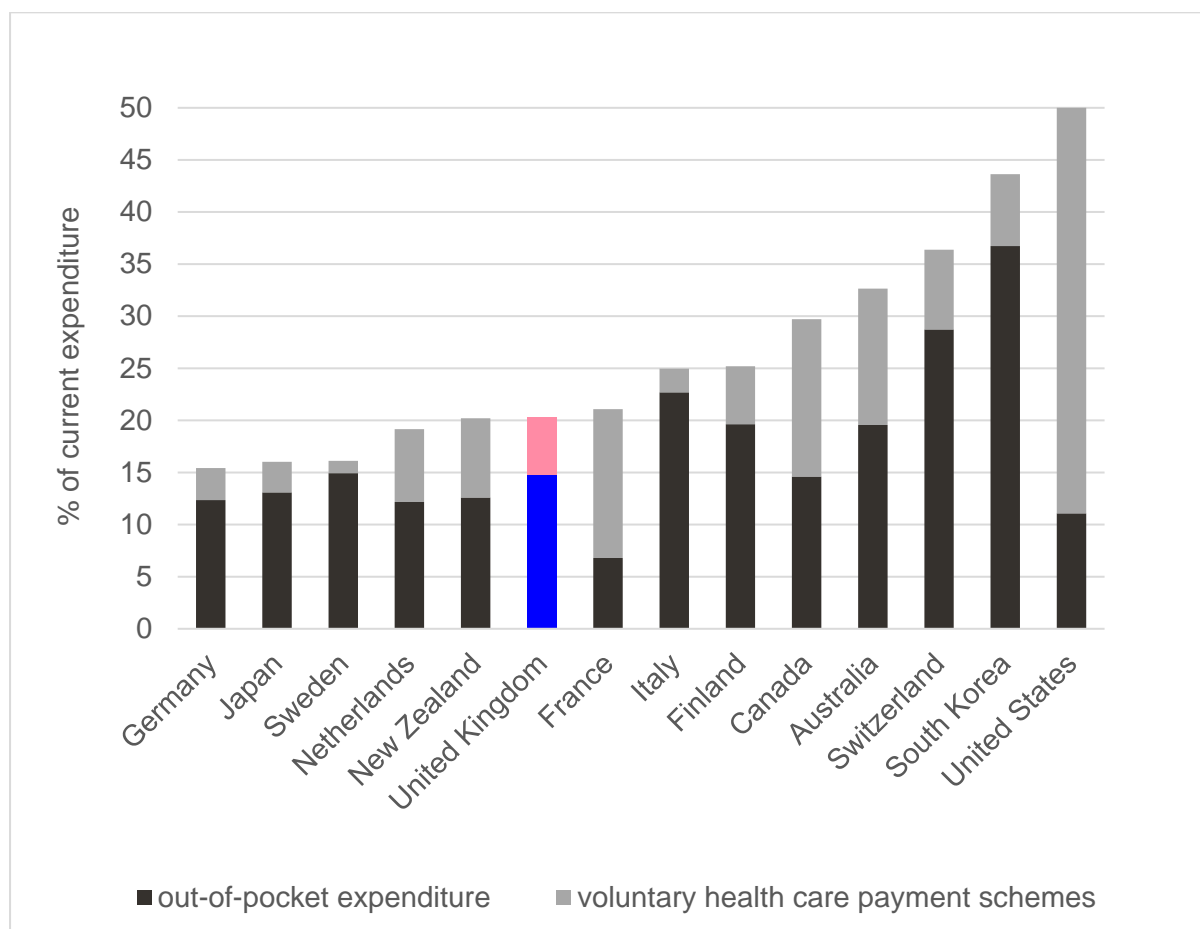
In the Netherlands, mandatory health insurance accounts for 71% of total health care expenditure (Figure 2). Health insurers are 50% financed through a community-rated premium (that is, a premium that is the same for everyone and does not vary according to the health or other circumstances of the insured person) and 50% through an income-related employer contribution (paid to the tax office).¹³

In both Japan and Korea, general tax revenues subsidise the respective national health insurance schemes and in Korea, fully finance the medical aid programme (MAP) for the very poor.^{14,15}

The USA is the only country among those reviewed where private health insurance (PHI)* constitutes a significant part of health system financing, at 40% in 2015 (Figure 3), along with public insurance schemes such as Medicare for people aged 65 and older and Medicaid for those who meet means-testing criteria. However, even in the USA, where insurance coverage has been made mandatory under the 2010 Affordable Care Act and where some PHI is tax-subsidised, the line between whether this revenue source should be considered public or private is blurred.

* OECD data categorises this expenditure as 'voluntary'.

Figure 2: Private funding sources as a proportion of total health expenditure in 14 OECD countries, 2016 or most recent year for which data available*



* 2015 for Japan, UK, France and US; 2014 for Australia; 2013 for New Zealand
 Source: OECD⁹

VHI forms a fairly important component in health system funding in Australia, Canada and France, at 13-15%, while elsewhere VHI accounts for a smaller proportion of health expenditure, at 1-3% in Germany*, Italy, Japan and Sweden; less than 6% in the UK; and up to nearly 8% in New Zealand and Switzerland.⁹

Household out-of-pocket expenditure[†] plays a role in all health systems reviewed here, ranging from 7% of health expenditure in France; to around 11-15% in several countries, including the UK; and up to 37% in Korea (Figure 3).

* From 2009, when health insurance was made mandatory in Germany, OECD data categorise substitutive voluntary health insurance, which was previously considered under the category of 'voluntary health care payment scheme', as a 'mandatory contributory health insurance scheme', which explains the sudden drop in the former as a proportion of total health expenditure, from 9.5% in 2008 to 2.2% in 2009 and, respectively, the increase in the latter from 69.5% in 2008 to 77.1% in 2009.

† Out-of-pocket expenditure by households typically comprises direct spending by households after deducting third-party payments such as insurance. Thus it includes direct purchases by private households of care services,

Total health care expenditure has grown in per capita terms over the decade 2006-2016 everywhere except Italy. In most countries, including the UK, total and public expenditure on health grew at similar rates over this period, meaning that the public/private mix of health care expenditure remained largely unchanged. However, in Switzerland and the USA, public expenditure on health care grew rather faster than private expenditure 2006-2016.

3.3 The balance between public and private funding of social care

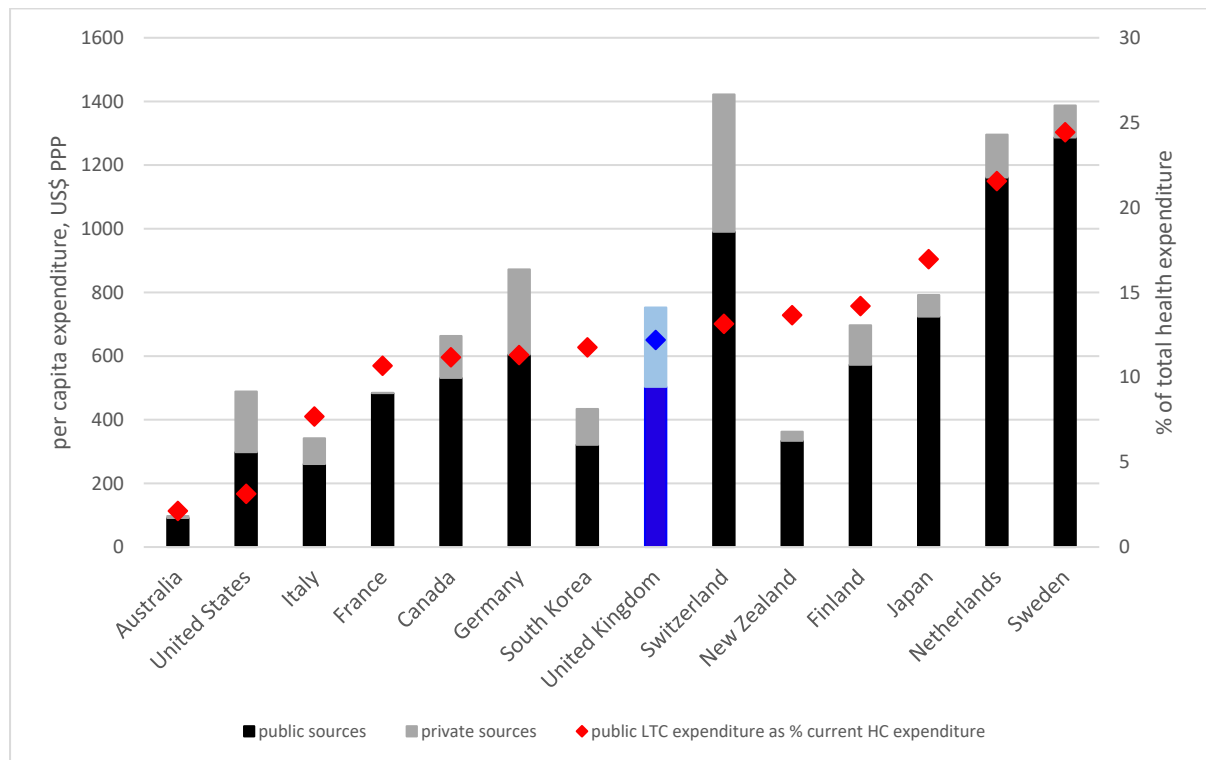
For social care, countries included in the review also have a significant publicly funded component, although more stringent needs- and means-testing generally means that a lower proportion of all social care spending is (directly) publicly funded in most of these countries compared to health care spending. The levels of expenditure and funding discussed here exclude any public expenditure on welfare payments to people living with disabilities, sometimes referred to as ‘disability benefits’ – because these are transfer payments that supplement the income of the recipients rather than constituting funding for the provision of care *per se*.

Unfortunately, measuring social care, or long-term care (LTC), as it is often referred to in international discussions, is not straightforward. There are two components to it: services of long-term health care and social services of long-term care.¹⁶ The health care component includes either medical or core personal care services to assist individuals with activities of daily living (ADL*) such as palliative care or health services in support of family care. The social care component provides assistance with instrumental activities of daily living (IADL) such as preparing meals, housework and household management. But these definitions are not completely clear cut. Each country has its own accounting system. These systems have been reviewed by the WHO, OECD and Eurostat so that there is more comparability between countries with regards to measured total expenditure in LTC and its share of GDP and total health expenditure. But statistics regarding LTC expenditure and financing are currently scarce. Nevertheless, Figure 4 provides some insights, but only for the health component of LTC. This component is largely dominated by public funding, with the Netherlands and France providing almost all of LTC health funding through public sources.

plus any co-payments they are required to make for services that are otherwise paid for out of insurance or from taxation.

* Activities of daily living (ADL) include bathing, dressing, eating, getting in and out of bed or chair, moving around and using the bathroom. Often they are referred to as ‘personal care’.¹⁶

Figure 4: Per capita expenditure on LTC (health component - US\$ purchasing power parity) by principal source in 14 OECD countries, 2016 or most recent year for which data available*



* 2015 for US, France, Germany, UK, Switzerland and Sweden; 2014 for Australia and Japan; 2007 for New Zealand
 Source: OECD⁹

It is, however, necessary to take into account the social services component of LTC as well, in order to see a complete and accurate picture. In that component of LTC, private contributions play a larger role. But internationally comparable data for the social services component of LTC are not currently available.

A wide variety of methods of funding social care are used across the countries we reviewed. In countries operating ‘safety net’ means-tested arrangements, financing for that is commonly part of the general tax revenue system, with funding allocated to social care on a budgetconstrained basis, rather than as an entitlement. Countries such as Australia, Austria, Ireland, Sweden, Finland, the UK and the USA all rely on general taxation collected either locally, regionally or nationally.

For example, Austria has a large portion of its LTC system funded by the national government as opposed to municipalities and regions,¹⁷ whereas the Nordic comprehensive systems rely heavily on local tax revenues (albeit with central government grants). In Sweden, more than 80% of funding comes from municipal taxation.¹⁸ Similar arrangements work in Finland. However, as is discussed later, both these countries are undergoing a

centralisation reform of their financing systems, moving responsibility from municipalities to regional bodies.^{19,20} In the USA, the Medicaid system that supports long-term care for those on low incomes is a state-managed system, paid for with both state and federal tax revenues.

By contrast, social insurance systems rely largely on mandatory contributions. In Germany, contributions are mandatory for all ages, with working adults and employers making a contribution; people without children pay a slightly higher rate than those with children (who might be expected to provide some informal care for their parents). Pensioners are required to pay at the same rate from their pension income. In Japan, financing is through a combination of a payroll tax for people over the age of 40, pensioner contributions and general taxation. In Korea, the LTC insurance system is funded by an LTC contribution rate equal to 6.55% of the National Health Insurance contribution. This value went up from the original 4.05% in 2008. It accounts for 60-65% of total LTC insurance expenditure. General non-earmarked taxation also funds the system through government subsidy of roughly 20% of total LTC expenditure, and the rest is covered by public insurance contributions.²¹ Japan also has a mixed system, with general taxation constituting 40-45% of social care funds and the remainder covered by co-payments (10% or 20% of service cost, depending on income) and payroll tax premiums.

4. What can the UK learn from how other countries generate funding for health and social care?

This section sets out the main findings from the interviews with international experts, the review of literature and detailed case studies, and covers:

- sub-national taxation, with Finland as a case study
- hypothecation (earmarking) of specific taxes to fund health care
- the option of mandatory insurance for long-term care (LTC), with a case study of the German long-term care insurance (LTCI) system
- the inevitability of political intervention in funding arrangements, with a case study of mandatory health insurance in Germany
- the role of voluntary insurance
- the role and impact of user charges

To better understand the options available to the UK for reforming health and social care funding, Section 4 examines reform initiatives in selected high-income countries. We have also explored the extent to which countries have considered particular policy options related to revenue generation, even if they have not (yet, at least) implemented them.

We begin by considering the mix of national versus local taxation. Sub-national taxation is already a feature of the funding landscape throughout the UK for social care – where revenues raised by local authorities are an important part of the total funding picture – but not hitherto for health care. Several other countries have broader experience of local taxation, for health care as well as social care, and in section 4.1 we discuss the case of Finland in a case study.

We consider in section 4.2 a topic that recurs in the debate in the UK, particularly in the context of funding health care; namely, the idea of hypothecating (earmarking) specific taxes as raising funds solely for health care.

We then take a detailed look at the option of mandatory insurance. While the UK relies exclusively on general taxation for public funding of both health care and social care, it is still worth exploring and debating whether there should be a role for social insurance schemes (meaning mandatory insurance) to replace or supplement tax funding. We look first at the possibility of introducing mandatory insurance for long-term care (LTC), i.e. social care, using a detailed case study of the German long-term care insurance (LTCI) system as our guide (section 4.3) and then considering the political implications of mandatory insurance (section 4.4).

As described earlier, voluntary insurance plays some role in health care funding in many countries and a minor role in funding social care in a small number of places. But only in the

USA is it a major source of funding for health care and nowhere is that the case for social care. We discuss the role of voluntary insurance in section 4.5.

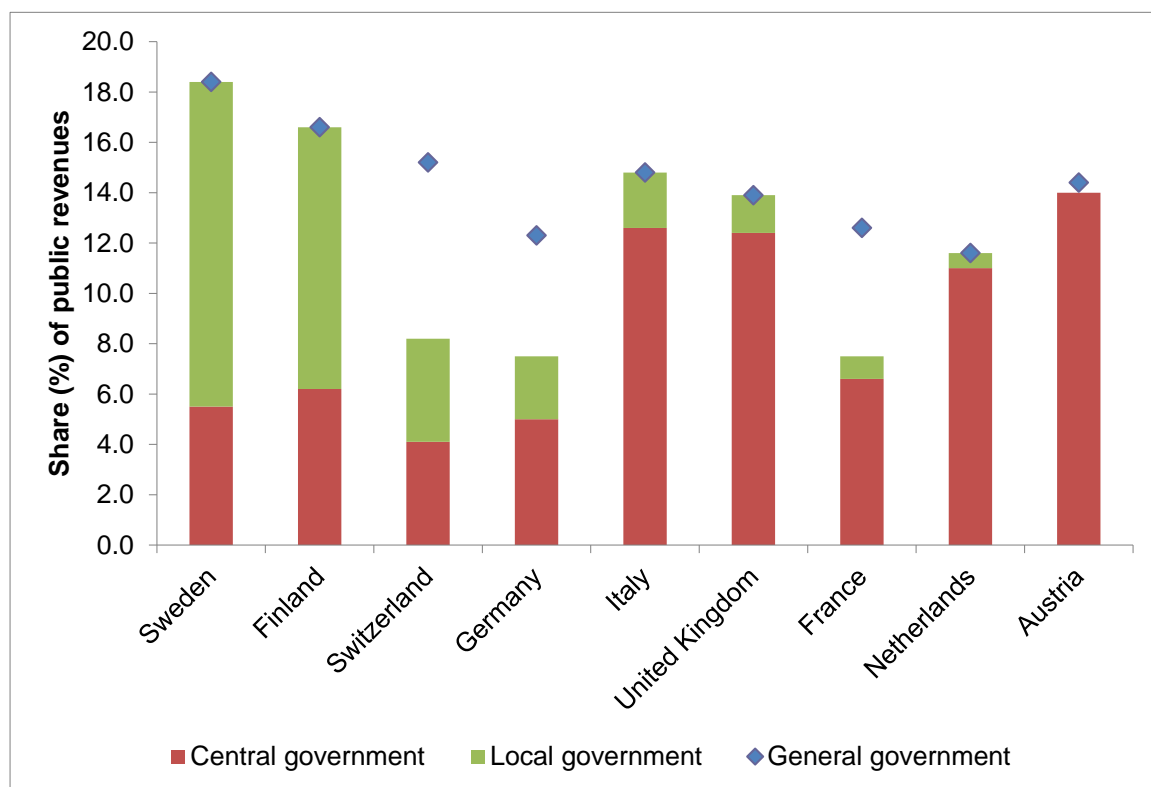
Finally, no discussion of ways to pay for care would be complete without considering the role of user charges. These are rather more controversial when talking of health care than social care – out-of-pocket payments have always been a major source of funds for social care in every country we reviewed as well as throughout the UK. We therefore focus the discussion of user charges in section 4.6 mainly on evidence about their impact in the more controversial role they play in health care.

4.1 Local taxes or national taxes? Case study: local taxation in Finland

A key question for public finance concerns the optimal mix of taxes. In this sense, optimal can be considered the most stable, able to generate sufficient revenues, but also the most equitable.²² Income and wealth taxes make up a significant portion of government revenues in EU countries, on average just under one-third of total tax and social contributions in 2015.²³ However, there is important variation in terms of whether those revenues are generated at local or national government levels. There is variation across reviewed countries in the extent to which sub-national levels of government are permitted to generate their own tax revenues, as well as the extent to which this plays a role in health and social care financing. Sweden and Finland have historically relied most heavily on local income and wealth taxes; in 2015, 70.1% and 62.7% of income and wealth taxes were generated at the municipal level in those countries, respectively (Figure 5). Throughout the UK, local authorities have a major role in public funding of social care, although not currently NHS care.

In Sweden, for example, revenues are generated from income taxes that are levied and set by county councils and municipalities and supplemented by grants from the national government to ensure equity and to compensate for variability in revenue generation across regions.²⁴ This means the responsibility for ensuring adequate financing involves a complex set of political, feasibility and technical considerations between two levels of government, local and national. A revenue equalisation scheme is in place aimed at enabling the different local authorities to offer an equal level of services across the country.¹⁹ The fairness of the equalisation scheme is reviewed on a regular basis by a committee appointed by the national government and the scheme is adjusted accordingly. The direction of adjustments is, however, influenced by the government in power, with recent experiences finding changes made by the previous government being reversed under the current government (information from interviewee Sweden Policy SE_1). Key informants interviewed for this study noted that there have been proposals to centralise health care and divide the country into just six regions rather than the current 21 counties, but no decision had yet (at the time of writing, in early 2018) been reached on this (Sweden Policy SE_3). However, while this was seen to change the tax base, it was not expected that it would fundamentally change the principles of the structure or the way taxation is being implemented.

Figure 5: General, central and local government tax receipts from income and wealth, selected countries, 2015



Note: Countries sorted from left to right according to the share of public revenues generated from local government taxes. State taxes are an important source of revenues in some countries, such as Germany; they are not shown in the figure above.

Source: Eurostat²³

In Australia, until recently, public funding of LTC was at state level, rather than being a national 'Commonwealth' (i.e. federal) responsibility. But since 2015, Australia has concentrated entry-level LTC funding and provision into a single institution: the Commonwealth Home Support Programme, organised by the Australian government's department of health. Initial contact with public services and initial admittance into the LTC system are all handled by this national institution.²⁵

Why might a country choose local versus national income taxes?

There are a number of possible reasons for choosing between local and centralised national income tax administration.²⁶ In practice, the locus of tax administration is often linked to the locus of expenditure and accountability. That is, if local governments are responsible for collecting or generating a large share of tax revenues, it is typically because they are also responsible for a large share of government expenditure. Local control over revenue generation creates an accountability mechanism in places where collection (and use) of public resources is arguably more visible to local constituents.

Locally generated income taxes may also appear favourable if there is interest in allowing flexibility; for example, in setting local tax rates. This could be to accommodate tax

preferences of the local population or to generate additional, needed revenues for use at a local level. Centralised tax administrations may alternatively be preferred because they are usually able to collect revenues at lower cost than local governments (unless local governments are quite large) since they can benefit from economies of scale of tax administration.

In all countries, at least some funding of care is national; this includes the countries referred to above. The issue then arises that a local decision to raise local taxes to fund higher levels of care runs the risk of being counteracted if central government reduces its contribution.

Even in the case of local income taxes, it should be noted that often taxes are collected centrally and reallocated to localities; there is also typically some degree of national level pooling to ensure equity of resources across localities. This ensures that wealthy areas do not have low tax rates while poorer areas must have high tax rates to fund local programmes of an equivalent standard.

How has local income taxation worked in Finland and what are the planned changes?

According to the Finnish constitution, the right to tax is granted to the national government, the municipalities, and local Evangelical-Lutheran and Orthodox churches. Each municipal council sets its flat tax rate each year. Data from 2009 shows the average tax rate was 18.6% of earned income (and estates of the deceased) but varied across municipalities from 16.5% to 21%. Alternatively, national taxes on earned income are set according to a progressive tax scale, set by parliament each year (Ministry of Finance, 2009).²⁷ As shown in Figure 1, in Finland the national government generates significantly less tax revenue from income and wealth than municipalities, although in total, the national government receives the majority of tax revenues (approximately 60% of total public revenues go to the national government).

Each individual in Finland receives a single tax return form pre-completed by the tax administration and containing information on earnings submitted by employers and other payers of income; it is up to each individual to submit any corrections, if necessary. The form reports an individual's municipality for taxation purposes, which factors into the tax calculation (see an example of a Finnish tax return at https://www.vero.fi/download/2016_Precompleted_tax_return/{FB5ABADF-330B-4172-9E03-9314438EB48E}/10486). Municipal taxes are therefore collected by the national tax administration alongside national taxes and subsequently paid to the municipalities.

To reduce disparities among municipalities resulting from their differing tax bases and hence ability to raise revenues, a tax equalisation system is in place. Essentially, municipalities that are unable to raise tax revenues per inhabitant that are commensurate with the average municipality (i.e. those municipalities that fall below 90% of the country average) receive transfers from wealthier municipalities. Poorer areas may receive a large transfer of funds in this way. Wealthy municipalities contribute a maximum of 15% of their tax revenue to the equalisation system. Similar approaches that pool and reallocate resources according to differential risk across purchasers exist not only in predominantly tax-funded systems, but also in systems with mandatory insurance funds, such as Germany (Box 3).

Box 3: Centralised or decentralised revenue collection: not only an issue of tax-funded systems

In Germany, until 2008, individual SHI funds could set their own contribution rates (within a legally defined framework). However, this changed with the 2007 health care reform, which introduced a uniform contribution rate to be set, initially, by the federal government (from 2011 by law).¹² The reform also introduced a central reallocation pool (Health Fund, Gesundheitsfonds) as a means to bundle and steer the SHI revenue streams and oversee risk-adjusted allocations to individual SHI funds. The reform further introduced the stipulation for those individual SHI funds unable to cover their expenditure from the allocations made by the central Health Fund, to impose an additional premium on their members. This additional premium ('capitation fee') was to be paid solely by employees and was meant to stimulate further competition between SHI funds, the idea being that SHI funds would seek to reduce their costs in order to not have to impose an additional rate and so risk losing members. It was noted that this stipulation led to problems for some SHI funds, especially those with higher risk members:

'At that point, there were some extreme reactions including termination of contracts. Two health insurance funds even went bust in 2011/2012... This set fee was a strong price signal. People were not willing to pay €8 more than they did with other providers. That price signal had been a goal of the... [federal] government at the time, and it had substantial effects' (Germany Policy DE_5).

However, in spite of the equalisation scheme, spending and capacity to raise revenues have been under increased pressures in many municipalities, in part due to demographic changes. There have been major efforts to encourage voluntary mergers of municipalities, with the notion that they will benefit from economies of scale. This has led to some reduction in the number of municipalities but there remain nearly 300 municipalities to date. Available evidence also suggests that municipal mergers did not successfully reduce public expenditures.²⁸

The reliance on locally generated income taxes in Finland is likely to change under major proposed reforms. According to the reform proposals, municipalities' role and responsibilities will be dramatically reduced, particularly in the areas of health and social care, which will be financed and organised by 18 newly formed counties.²⁹ Because municipalities will be responsible for fewer outlays, they will collect and receive less revenue.

It is expected that these changes will simplify the current multi-source financing system:

'We do have in Finland [an] economic efficiency problem resulting from the fact that for Finns, there are multiple sources for both collecting and allocating the finances that also creates incentives that are not aligned with each other' (Finland Policy FI_2).

Simplification is to be accomplished by reducing the levels of municipal taxes and national social security institution contributions and raising the national income tax, with approximately two-thirds of the current municipal tax rate being converted into a national income tax (Finland Policy FI_2). This is thought to be feasible because *'the government gave a guarantee... a political pledge that the effective income tax rate for individuals is not going to increase due to the reform'* (Finland Policy FI_2). These changes in taxes were made as part of a wider tax reform programme and not in order to increase or protect funding of health and/or social care.

In practice, it is expected that income tax rates will not change noticeably for individuals as a result of the shift, but rather, a considerable share of income tax generation will shift from municipalities to the central government. Perhaps surprisingly, anecdotal evidence suggests there has not been much unrest among municipal councils, even though they will receive lower revenues and have less control over expenditure in their local areas. This may be in recognition that some councils are truly unable to meet their constituents' needs, although such a conclusion is highly speculative.

Relevance to the UK

Interest in locally collected taxes has taken shape in the UK recently, not least because of the adult social care precept, which was collected as part of council taxes beginning in 2016. These are locally collected property taxes which are earmarked for adult social care. It is left up to each council to decide whether to collect them and at what rate, up to a 3% increase in council tax rates. However, without an equalisation scheme in place, wealthy areas are able to collect higher tax revenues or to levy lower tax rates in order to raise the desired level of funding, relative to poorer areas.

Decentralised income tax collection may make sense in a context where that same decentralised body is also responsible for expenditure; in this sense, local taxation acts as an accountability mechanism. In the NHS, however, the appropriateness of local income taxes (i.e. council-based income taxes) would be difficult to envisage since the geographical boundaries of the 326 billing authorities in England (i.e. councils) do not perfectly align with unique NHS clinical commissioning groups, who are the localised bodies responsible for paying for care. Additionally, based on the experience in Finland, any increase in the local income tax rate should be matched by a proportionate decrease in national income taxes, which may be unappealing from the perspective of the exchequer since the central government would receive fewer resources and therefore have less flexibility or discretion over how total public funds are allocated.

4.2 Tax funding of care: would hypothecation help?

Hypothecation is the earmarking of revenues from a particular tax or group of taxes for specific, explicit purposes. It is an approach to health care funding that has provoked continuous interest and debate in the UK and elsewhere; and it could in principle be considered for funding social care (or indeed for any other purpose of public expenditure).

The idea of a dedicated 'health tax' is raised, by politicians and academics alike, as a possible option for the future funding of the NHS. While few countries included in the international review undertaken for this study used hypothecated taxes of any form to fund health care, the idea of hypothecation has been considered in some places, such as Finland, and implemented to a small degree in Italy and France.

Tax hypothecation can take a number of forms, and is usually classified as either 'hard' (or 'pure' or 'strong') or 'soft' (or 'weak').³⁰ Hard hypothecation of a health tax, for example, would link its revenue directly and uniquely to health care spending and, importantly, the quantity of funds available for health care would be limited to the revenues raised by that tax. On the other hand, with soft hypothecation the specified tax(es) would fund only part of the total public expenditure on healthcare, the rest being supplemented by other sources. Another use of the term soft hypothecation is as a synonym for 'incremental' hypothecation, which is where the additional revenues raised from tax increases are used to fund increased public expenditure on health and/or social care.

Soft hypothecation allows governments to buffer health care funding from shocks and shortfalls, as deficits can be made up from general taxation revenue where needed to 'smooth' funding availability. However, this weakens the principle of hypothecation: the level of funding becomes dependent on the extent of general tax funds made available by the government and no longer just on the funds raised by the hypothecated tax. This distinction between hard and soft hypothecation is key to the substance of arguments for and against.

The television licence fee, which is used to fund public television, radio and internet broadcasting by the BBC, is arguably a practical example of a hard hypothecated tax in operation in the UK (although it is not paid by the small minority of the population who choose not to have a television); and hypothecation is commonly raised as an option to consider for future funding of the NHS.

Below, the key debates in the literature are explored in relation to the benefits and disadvantages of hypothecation, including a discussion of international examples of hypothecating tax. Finally, a case study draws out some possible implications for the UK context.

Arguments for hypothecation

Transparency for the taxpayer, and thus potentially improved public acceptability and greater willingness to pay (higher) taxes, is generally seen as the key advantage offered by hypothecation over general taxation. Hypothecation is contrasted with the situation where citizens see their tax payments disappearing into an undifferentiated pot of government revenues, which they know will be spent on a wide variety of ends, some of which they may not support. It is thought that linking the tax more explicitly to spending can make health funding potentially less vulnerable to political manipulation and fluctuation between budgets^{7,31,32} and may make people feel more 'connected' to their tax contribution. This in turn could increase pressure on providers to satisfy patients' expectations and improve

service quality.³³ Proponents also argue that this transparency and connectedness may make people willing to pay more tax³⁴ and would allow voters to directly signal this willingness, along with their desire to see more spending on health.^{32,35}

Arguments against hypothecation

On the other hand, arguments against hypothecation cite a number of possible disadvantages. While hard hypothecation may be said to introduce stability into health funding by protecting against political whims, the same mechanism can also create an unhelpful budgetary rigidity, where spending is determined by revenue generated rather than policy decisions informed by need or demand.⁷ This lack of flexibility to adjust spending according to changing priorities is a key drawback that dissuades many finance ministries, including in the UK, from favouring hypothecated taxation.³⁶ Furthermore, earmarked revenues may not lead to increases in the total resources available for health and social care if budget allocations from other funding sources, such as general tax revenues, are commensurately reduced.

In a reversal of the argument made above for hypothecation improving willingness to pay, there are concerns that, faced with a more distinct sense of their contribution to health care spending, social solidarity could be undermined by people increasingly pressing to be allowed to 'opt out' of a health tax, for example, if they hold private health insurance.³⁷ Others cite concerns that separating health care from other areas of public spending could lead to calls for earmarking in other areas, and work against the widely accepted good practice of integrated thinking around policies for population health.³⁸

Managing the challenge of macroeconomic fluctuation

A key disadvantage of hypothecation is widely considered to be the susceptibility of earmarked taxes to fluctuations and cycles that are harder to smooth out than are general tax revenues, and the resultant greater instability in revenue streams. Thus, in order for hard hypothecation (where the hypothecated tax is the sole revenue source for a specific purpose) to be viable, the tax source would have to be large, steady and ideally growing at least proportionally to demand for the expenditure area. The latter is required in order to avoid continually rising rates of taxation to match the upward trend in demand for health care. It may be difficult, however, to make the argument for such an attractive source of revenue to be rigidly assigned to a single purpose.³⁹

Some have argued that some form of stabilisation fund is needed to smooth fluctuations: extra revenue would be deposited in the fund during good years, which would be used to supplement funding during downturns. However, without strict laws in place to prevent governments from redirecting surpluses in times of buoyant revenues or adding to the stabilisation fund from general taxation revenues, this would 'soften' the principles of hypothecation and weaken the benefits of transparency and trust.^{34,37,40,41} Such 'soft' hypothecation would be primarily a superficial exercise, whose only clear strength would be its potential to increase support for a tax rise if persuasively communicated to the public.³⁷ In

addition, as the Barker Commission outlined, the expectation of a surplus in health spending in boom years may be misguided, as demand for health care is widely regarded as being income-elastic so that demand for health care expenditure rises more than proportionally with GDP.^{37,40,41} Resulting pressure on the government to spend more during boom years would negate any benefits of a stabilisation fund. To prevent this, the Barker Commission suggested the appointment of an independent body to stabilise spending by deciding how much should be dedicated to health care in any given year.⁴¹

Some tax hypothecation exists in Italy and France

Among the countries included in the review, we find that earmarking tax revenues for health care or social care is not common, although some countries have considered it. In our interviews it was noted that in Finland, discussions about the best way to fund health care and the option, in that context, to earmark funding have been ongoing for some time:

'We did consider [earmarking] – in fact, this is the third or fourth consecutive government which is trying to push through a reform on the social and health and welfare services in Finland' (Finland Policy FI_2).

Indeed, the previous government had considered a reform which would have involved earmarked taxes but it did not pursue this on the recommendation of the finance ministry (Finland Policy FI_2).

Italy's publicly funded health care system is financed through a number of earmarked taxes: a) an earmarked corporate tax (*IRAP*) on the value added of companies and public sector salaries, b) a regional surcharge on the national income tax (*addizionale IRPEF*) of up to 0.5% on either a flat rate or adjusted for income brackets, and c) a fixed proportion (currently 38.5%) of national VAT revenue used for the national equalisation fund, to supplement funding in poorer regions unable to fund the core health benefit package.⁴² *IRAP* and *IRPEF* rate levels can be further increased by regions facing budget deficits, and with an unevenly distributed tax base, poorer regions tend to take advantage of this mechanism most.

Under another scheme also implemented in Italy, following legislation at the end of 2015, employers who agree to provide LTC services to workers and their relatives are able to claim income tax exemptions and the same applies to employees. The maximum amount for relief is up to €2,000, as long as income does not exceed €50,000.⁴³ The idea is that companies would share their performance-related bonus in the form of services or vouchers for services instead of increased salary. On the one hand, the state would have less revenue from corporate taxation; on the other hand, there would be less need for public service provision as this would be done through private channels. The reform has been welcomed by society, but there are concerns about inequity, since large corporations and trade unions can negotiate better agreements than small firms and employees who are not part of large trade unions:

'These amounts of resources set free by the state... allow enterprises to use a huge amount of bonuses, performance bonuses for something which goes between €8 and €9 billion per year to direct them towards LTC sector. The barriers probably might be there, especially for smaller companies who do not have so much resources to implement it or put in place these kinds of schemes unless they join other networks' (Italy Academic IT_1).

A novel approach to hypothecation of a small part of income tax is also in operation in Italy. Individuals can choose to allocate 0.5% of their income tax payments to any of a list of non-profit organisations, including (but not limited to) those delivering or supporting health care and social care. The figures available indicate that payments allocated to health care organisations from this tax totalled just over €14 million in 2013.⁴⁴ The figures available indicate a dramatic fluctuation in the payments allocated to health care organisations from this tax, dropping from just over €51.5 million in 2012 to just over €14 million in 2013.* Reliance on such an unpredictable source of revenue for health or social care funding would make balancing the budget difficult; in any case, this system provides only a very small amount of revenue for eligible institutions in Italy.

In France, employee payroll contributions to mandatory health insurance have been slowly replaced since 1988 by a hypothecated tax called the 'general social contribution' (contribution sociale généralisée; CSG). The CSG is based on total income rather than on only earned income and was adopted as part of attempts to broaden the SHI system's revenue base. The rate varies depending on income source and level of earned income, and applies at a rate of 3.8% of earned income for almost half of French households on low incomes who were otherwise exempt from income taxation. In this case, it appears that it is the change in revenue source (from a broader revenue base and partially disconnected from earnings) that has been key to this reform, rather than its status as a hypothecated tax.¹¹

Pre-funding

Most governments of high-income countries recognise that baby boomers' (people born in the decade or so following the end of the Second World War) retirement and future needs for health care and LTC are likely to pose a challenge. This casts a particular light on the hypothecation debate as well as raising issues of intergenerational equity: to what extent should a cohort of the population be expected to pay for their future care by contributing to funds that are put aside now, to be drawn upon in the longer term, when care needs to be paid for? What guarantee would they have that the funds will not be raided before that time by governments perceiving more pressing needs?

The German federal government has started a fund that receives 0.1% of the income collected from public LTCL contributions (currently set at 2.55% of income in total, or 2.80% for people without children); the money being collected will be set aside and not used until

* The trends over two years also indicate dramatic fluctuation in the payments allocated under this scheme, dropping from just over €51.5 million in 2012 and to just over €14 million in 2013.⁴⁴

2034, by which time it is expected that baby boomers will be putting greatly increased pressure on the LTC system. As one German academic noted:

'[2034] is the year when the baby boomers in Germany are at risk of getting long-term care. So we have this payment to accumulate money for this group that are at risk of getting long-term care in about 2035' (Germany Academic DE_3).

In a comparable initiative in 2001, but not aimed at long-term care *per se*, the New Zealand government established and started paying into the New Zealand Superannuation Fund (commonly known as the Cullen Fund after the then minister of finance <https://www.nzsuperfund.co.nz/>). This was done to take advantage of a strong economy at the time, in order to partially pre-fund the state pension scheme, the cost of which is expected to greatly increase in the longer term as a result of New Zealand's ageing population. Payments into the fund were suspended in 2009 in the face of rising public debt as a percentage of GDP and have not yet resumed.

'Sin taxes'

A special form of earmarking is the use of taxes on health-damaging products such as tobacco, alcohol, sugar or fats ('sin' taxes) in order to finance health care; this has been discussed in the context of the WHO Framework Convention for Tobacco Control. Another variant might be financially penalising those, such as drunk drivers, whose anti-social behaviour leads to health care costs. Sin taxes may appear attractive to some policymakers as they simultaneously raise some revenues and discourage unhealthy behaviours. We found that while all reviewed countries, including the UK, levy taxes on tobacco and alcohol, and the UK has introduced a tax on sugar-sweetened soft drinks, the revenues raised by them are typically not earmarked for spending only on health care. One possible exception is France where revenues from tobacco taxes contribute to the CMU fund, which provides health care coverage for people on low incomes. For example, the 2013 Social Security Finance Act added 3.15% of revenues from tobacco taxes to the CMU Fund.¹¹ However, attempts in the early 2000s to earmark revenues from taxes on alcohol were not successful:

'[W]e did make many attempts to do the same for alcohol but failed because of the strong lobbying in France. We made very little progress on alcohol tax. We looked at several taxes on harmful products. However, today, the room for manoeuvre is relatively small' (France Policy FR_1).

In most countries, taxes on health-damaging goods are being levied in an effort to target consumption patterns rather than to close (much larger) funding gaps. Several countries have been discussing levying taxes on sugar, eg Finland (Finland Policy FI_2) and Sweden (Sweden Policy SE_1), but in both cases these would be intended to reduce consumption and improve health behaviours rather than to generate revenues for health care. Similar experiences have been reported for Germany, where there is interest in introducing a tax on sugar or other unhealthy foods, but again only with the intention of improving health behaviours, not with the goal of financing mandatory health insurance:

'Instead it's with the goal of creating incentives for people to behave in a healthier way. But the additional income for the state would not go to statutory health insurance. Perhaps the outgoings might be indirectly reduced because people are healthier, but that's difficult anyway' (Germany Policy DE_5).

Likewise, there have been discussions in New Zealand about the introduction of a sugar tax⁴⁵ but this is also not seen as a means to raise revenue but to change behaviour. No decisions have been made so far:

'The government's policy is that they're going to wait for better evidence that it works. They're looking... there's a couple of major studies underway looking at the impact in Mexico. They're also going to observe what happens in the UK and whether the levy on manufacturers does indeed lead to reformulation' (New Zealand Policy NZ_1).

For the Netherlands, one interview participant commented that while increasing taxes on certain unhealthy goods may be desirable from a health perspective, such a move would likely attract opposition from the finance ministry, which is *'not in favour of more, different taxes'* (Netherlands Policy NL_5).

Hypothecated tax and the NHS: debates and implications

The persistent interest in political and policy circles in implementing a designated NHS tax for the UK has been noted by a number of authors.^{32,36,46} Existing examples of tax hypothecation in the UK include not only the television licence fee, as mentioned earlier, but also the soft hypothecation introduced by Gordon Brown in 2002 when National Insurance Contribution rates were increased with the explicit intention to spend the extra revenue on the NHS.³²

The National Insurance Fund (NIF) has been put forward as another prominent example of soft hypothecation, as it is notionally used to fund public benefits.³⁷ Indeed, supporters of an NHS tax have proposed the full hypothecation of National Insurance (NI) contributions to fund the NHS.³² However, others have presented a number of reasons why this would be inappropriate.^{37,41} As NI applies to employers and employees under the state pension age only, such an approach would generate intergenerational disparities and any future changes in NI rates to keep up with demand for NHS care would disproportionately affect those relying on earned incomes rather than asset wealth or a pension.^{37,41}

The viability of a hypothecated tax may depend ultimately on how far members of the public trust the government to allocate funding in their best interests. As Doetinchem⁴⁷ notes, 'The same argument is made in favour of as well as against hypothecated taxes. While proponents argue that they limit a government's propensity to spend according to their own agenda, critics retort that they curtail a government's flexibility to spend when and where it is needed most.'

4.3 Is mandatory (social) insurance the way to go? Case study: long-term care insurance in Germany

One of the ways to fund LTC is through a mandatory social insurance system. In essence, individuals are required to contribute to a fund throughout their adult lives and they are then entitled to LTC, should they need it in case of a disability or frailty. The economic principle is the same as in any insurance. The greater the number of people who contribute to the system, the more risk-pooling there is and the lower the contributions each person has to make to the fund in order to insure themselves against the risk of high costs being incurred in future.⁴⁸ For (any country of) the UK to consider introducing mandatory insurance for long-term (social) care, it is instructive to look at Germany, a country that implemented statutory LTC insurance (LTCI) around 20 years ago. This allows us to gain insight into what setting up a newly introduced mandatory insurance system entails, although we recognise that Germany had already established the institutional structure for operating a nationwide public insurance scheme for health care (Box 4), a precondition which is not yet present in the UK context.⁴⁹

Box 4: Mandatory health insurance schemes in high-income countries

Mandatory insurance for health care has been long established in several of the countries in our review. In Germany, the mandatory nature of statutory health insurance (SHI) was extended in 2009 to include all residents (until 2008, SHI was mandatory up to a specified income threshold only). As a result, the proportion of public expenditure on health that originated from mandatory insurance increased from 69.5% in 2008 to 77% in 2009.⁹ Switzerland made the purchase of basic health insurance cover mandatory for all residents in 1996 (about 80% of the population also hold private health insurance to cover additional services)⁵⁰. In the Netherlands, following the introduction of a single insurance scheme under the 2006 Health Insurance Act, all residents are required to take out nationally regulated, private health insurance. Residents contribute through a flat-rate premium, paid directly to the health insurer of their choice, and an additional income-related contribution is deducted through payroll and transferred to a central Health Insurance Fund.¹³

In traditional SHI systems such as France, Germany and the Netherlands, contribution rates are typically shared between employers and employees, but the precise mechanism by which contributions are levied differs, and this has also changed over time in an effort to broaden the financial basis for SHI. For example, in Germany, the SHI contribution rate is determined from monthly gross salary, and this was historically equally shared between employers and employees. However, since the early 2000s, a series of reforms challenged this principle in order to stabilise the employer's part of the contribution rate. This effectively involved an incremental shift of costs to individuals (see section 4.3). Conversely, France moved, in 1991, to payroll taxes (CSG) and from 1998, employees' contributions have been based on total income. This replaced the previous system in which employees' contributions

were based on earned income only (as in Germany) while employers' contributions continue to be determined from gross salary (at 13% in 2013). In the Netherlands, calls to increase the income-dependent part of the mandatory health insurance premium have been resisted: 'That simply was not a politically acceptable way to go forward [at the time]' (Netherlands Policy NL_5).

How, when and why was the German statutory LTC insurance system created?

LTC in Germany is funded through social insurance. But this was not always the case. In 1995, Germany had a longstanding statutory health insurance (SHI) system in which every employer and employee made contributions to a fund that was used to cover the costs of healthcare and some LTC services. It was in that year, 1995, that the SGB XI (German Social Code, book 11) was implemented and guided LTCl funding in Germany. According to the law, anyone who had SHI was automatically covered by the statutory LTCl. Those who had private health insurance (PHI) were obliged to purchase private LTC insurance as well. The minimum period of contribution for eligibility was initially set at five years but was changed to two years in 2008. The change in 1995 happened after 20 years of discussions on how to reform the funding of social care.^{12,51} Until 1995, individuals were expected to rely on their own finances or family to pay for or provide long-term care. Those who had run out of capital and assets or were simply not able to provide for their own care had to request social benefits which were means-tested (*Hilfe zur Pflege*).⁵² The ever-increasing social care expenditures, especially after German reunification in 1990, began to create pressure to make changes to LTC funding.⁵¹

How does the system work?

The German statutory LTCl works as a 'pay as you go' system and contributions are split equally between employers and employees. The initial contribution rate was set at 1% of wages but there have since been several increases to address growth in the cost of care.^{51,52} Table 3 shows the changes in contribution rates from 1995 to 2017. Since 2004, pensioners have also been required to pay at the same rate: thus, in 2017, the full rate of 2.55% is deducted from their pensions. Starting in January 2005, employed people over the age of 23 who do not have children have been required to pay an additional 0.25% charge, so that childless adults currently pay 2.80% of their salary. The additional 0.25% charge is paid by the employee only, and not by the employer, who still pays at the rate of 2.55%.⁵³

Table 3: Income contribution rates for statutory LTCI

Year	Rate			
	Total	Employee	Employer	Employee without children
1995	1%	0.50%	0.50%	0.50%
1996	1.70%	0.85%	0.85%	0.85%
2008	1.95%	0.975%	0.975%	1.225%
2014	2.05%	1.025%	1.025%	1.275%
2015	2.35%	1.175%	1.175%	1.425%
2017	2.55%	1.275%	1.275%	1.525%

Source: German Federal Ministry of Labour and Social Affairs⁵³

This extra charge for employees without children shows that there is still reliance on care being provided informally by other family members. In fact, until the implementation of the LTCI system, individuals relied mostly on help from family, something so ingrained that there are legal obligations to care for an elderly member of the family.⁵⁴ In view of this, the LTCI is not designed to pay for the entirety of LTC costs, but to cover basic services that enable individuals to carry on with their activities of daily living.

For the general public, the LTCI system is straightforward and easy to follow. Automatic contributions are deducted from employees' pay. Employees are automatically enrolled in the statutory LTCI, but those who are employed or self-employed and earning above €57,600 a year in 2017 can opt to take on private LTCI with the same benefits as the statutory LTCI. Civil servants, even those earning less than the threshold, must take up private LTCI.

Eligibility and coverage

The mandatory LTCI covers very nearly the whole population in Germany; only homeless and undocumented people are not part of it. In December 2016, 71.7 million people were insured by the statutory LTCI, and 9.4 million were insured through mandatory alternative private LTCI in December 2015.⁵⁵ This near-universal coverage is a result of the generous criteria that allow individuals who have contributed for more than two years to also have their family members or non-earning dependents insured. The same applies for unemployed people whose LTCI charge is paid from their unemployment insurance (which in turn is funded from taxation).

Individuals who have contributed for at least two years, and their dependents, are entitled to benefits based on a needs assessment test. Entitlement is independent of age, income or wealth. The needs assessment test ranks individuals in five categories, from low to high need, and benefits are provided accordingly. As a result of the Second Act to Strengthen Long-term Care, implemented in 2016, patients with dementia are also now included in the

LTCI system. Before this, individuals with dementia were able to apply for benefits but at reduced rates compared to other impaired individuals. As of July 2008, the amount was set at €100 per month (basic rate) to up to €200 per month (augmented rate). This amount was raised from the previous maximum €460 per year benefit, set in January 2002.^{53,56}

Benefits

Insured people have a choice between benefits in cash, in-kind services or a combination of both. The value of benefits depends on the level of care needed, which is measured by a needs assessment test. The cash benefit is meant to facilitate and reward care-giving by relatives.⁵⁷ When the benefit is taken in cash, the value is smaller than when taken in services. Most people still rely on family members for care, so LTCI beneficiaries may use cash benefits to compensate their relatives for their services. For example, the benefit rates for someone with Level 2 care need who opts to take cash rather than have services provided is €316 per month (Table 4). If, however, the person opts to receive up to six weeks of care in a calendar year as an in-kind service, payments are differentiated based on who is providing care – a family member or an independent third party. These benefits are not meant to cover the full cost of care, only a part of it. Even when benefits are provided in kind, some services are not included. Coverage of care in nursing homes, for example, does not include ‘hotel costs’, which need to be paid for by the insured person. People requiring social care still typically pay out of pocket for some of it and/or receive informal care from family members. About 4% of Germans have chosen to purchase additional private LTCI to supplement their mandatory public or private coverage.⁵⁷ In Germany there is a legal responsibility to help pay for the care of near relatives.

Table 4: LTC cash benefits in euros (as of January 2017)

	LTC monthly allowance €per month	Benefits rate for up to 6 weeks of care in the calendar year (lump sum, in-kind service)	
		By family members	By other people
Level 1	-	-	-
Level 2	316	474	1,612
Level 3	545	817.5	1,612
Level 4	728	1,092	1,612
Level 5	901	1,351.50	1,612

Source: German Federal Ministry of Health.⁵⁵

Pre-funding LTC

Germany experienced a baby boom between 1959 and 1967. As a result, in the 2030s there is very likely to be a bulge in the number of people who will become frail and need care. This was anticipated in the 2015 reform with the First Act to Strengthen Long-Term Care (*Erstes Pflegestärkungsgesetz*). In order to prepare in advance for this demographic change and the anticipated heavy burden on LTC expenses, the government has decided to set aside 0.1%

of contributions and place it in a fund that will not be used until 2035, when baby boomers are expected to need LTC, putting pressure on the system. It is estimated that this will raise €1.2 billion a year and help smooth and stabilise the contribution rate from 2035 onwards, which would have to be increased dramatically otherwise.

The federal ministry of health describes this fund as being both necessary and efficient. The cohort born between 1959 and 1967 was larger than the previous and subsequent cohorts. Setting a pre-fund (*Pflegevorsorgefonds*) was deemed the best solution for the expected future pressure on the system. From 2035 onwards, up to one-twentieth of the capital accumulated will be used to provide LTC benefits over a period of at least 20 years. As the cohort that came after the baby boomers is smaller, the government felt no need to extend the fund. The reception from expert commentators has been positive, though with some qualification. In a 2014 article for the newspaper *Süddeutsche Zeitung*, German experts in health economics Wolfgang Greiner and David Bowles describe the pre-fund as necessary but too small to achieve its goal of smoothing contribution rates.

The public reception has been good but there is some suspicion of how the fund will be used. The newspaper *Die Welt* reported that there was already pressure to access the fund early, the weekly magazine *Der Spiegel* has reported that the German Trade Union Confederation (DGB) is doubtful that the fund will be kept in place for the next 20 years,⁵⁸ and the *Bundesbank* has admitted that it cannot keep the fund out of reach of future finance ministers.

Strengths and weaknesses

LTCI can be seen as a form of hypothecation. One of the main advantages of having a funding system such as statutory LTCI is that the general public appears more willing to contribute financially when it is better informed about how the revenues raised are being spent. In other words, statutory LTCI helps to overcome distrust of government as it provides reassurance that the money paid will be used for a specific purpose and not siphoned off for something else.³¹ This is made clear by looking at the public acceptance of the system, including recent increases in contribution rates.⁵⁷ The public perception, according to one of the experts we interviewed, is that the system is fair and necessary:

‘... so the public is aware that we have a need of long-term care insurance and they are happy that we solve the problems with these mental health diseases, with dementia, etc’ (Germany Academic DE_3).

Political acceptability is also enhanced since the general public support the system. When implementing reforms, people’s opinions paved the way:

‘We have done some surveys and people agree that there’s a need for reform and depending on the survey it’s more than 50% agreeing to or being fine with increase of the contributions. So the same holds for the additional fee for childless people; the majority agree’ (Germany Policy DE_4).

Having a contribution-based system also is thought by some to reduce the need for the political bargaining that is otherwise present in systems that rely on general taxation. In reality, however, the size of the LTCI contribution rates is also a result of political discussion and could go up or down just as budgets for LTC could rise and fall in a system funded by

general taxation. In practice, what we observe is that countries with statutory LTCI, like Germany or Japan, have either maintained or increased the size of their contribution rates while many countries that rely on general taxation have had budget cuts.* However, one of the potential downsides is that relying solely on a single source of funding may leave LTC budgets more vulnerable to macroeconomic fluctuations.⁵⁹ If the labour market is weak, for example, revenue from payroll contributions will be reduced and this may lead to budget deficits that need to be addressed by using funds from previous surplus years, taking on debt or drawing funds from general taxation. If poorly administered, this system of LTCI may mean that expenditures will fluctuate with the peaks and troughs of the economy rather than smoothing them out, so as to continue to more closely match the trend in demand for care, which does not follow the macroeconomic cycle.

Having an entitlement system could potentially lead to moral hazard. Individuals could possibly be less concerned about maintaining healthy habits and trying to minimise future reliance on care services, and might demand more extensive services when they do qualify for assistance. Evidence from France indicates a positive correlation between private LTCI purchases and alcohol consumption levels and body mass index.⁶⁰ However, this does not necessarily mean that these individuals changed their behaviour only after insuring themselves. Indeed, it appears unlikely that people's behaviour would be significantly influenced by future prospects around entitlement to social care.

The German LTCI system and the UK

The German and UK systems for funding LTC differ greatly from one another. While the German LTC funding system relies on mandatory insurance contributions, the UK system relies on general taxation. But if we compare today's UK with the Germany of 1995, we see some similarities. With the exception of Scotland, the UK does not provide social care services free of charge. Individuals are expected to cover their care expenses out of their own pockets; only after they have spent their capital and assets and reached a low threshold value of remaining assets do they qualify for public funds through needs assessment tests. This was also true in Germany until 1995. Both the UK and Germany also have cost-sharing charges for most services, such as 'hotel' costs for care in nursing homes. Neither system, even in Germany today, is meant to fund the entirety of LTC cost. Both countries also rely on informal care from family members. Estimates from 2013 suggest that the value of the informal care provided in England alone ranges from £55 billion to £97 billion a year.⁵

Implementing a German-style LTCI system in the UK would face some challenges and barriers. Most countries tend to make only incremental changes to their LTC funding systems, and those that have changed dramatically have only done so after years, even decades, of discussion. Were the option to be contemplated of introducing mandatory LTCI in the UK, this could not be done within a short timescale. Any system that replaces the current one would require a new administrative structure. Detailed consideration would need to be given to whether LTCI would replace, partly or wholly, income support payments that are currently available in the UK.

* The International Long-Term Care Policy Network organised a conference in 2016. In a session entitled 'Budget cuts and Long-Term Care Systems', evidence was presented from countries such as the Netherlands, Poland, Italy, and the USA.

Replacing tax funding of LTC by a system of mandatory LTCI might be problematic for an individual devolved administration within the UK. Unless the same change were to be made simultaneously in all four countries of the UK, there would need to be a fundamental change to UK tax laws and arrangements to permit a devolved administration wishing to introduce mandatory LTCI to simultaneously reduce the burden of general taxation within that country by a compensating amount.

Many people are uncertain about their own need for LTC or may prefer to rely mostly on family members, with no public assistance.⁶¹ This part of the population may be expected to resist having to pay for mandatory LTCI. Another possible barrier to LTCI is the belief by some that LTC should be provided free of charge by the state. This may be more likely in Scotland, where part of LTC is already being provided free of charge.

4.4 Mandatory insurance does not take the politics out of funding. Case study: statutory health insurance in Germany

The experience of mandatory health insurance in Germany illustrates that such a funding arrangement remains susceptible to repeated changes driven by government.

One of the main challenges facing health systems that are largely funded from mandatory health insurance, and in which contributions are mainly based on earned income, is the dependence on a stable labour market in order to ensure financial sustainability. In Germany, the mandatory contribution rate for statutory health insurance (SHI) is determined from monthly gross salary, and this was historically equally shared between employers and employees. However, Germany has introduced a range of measures since the 2000s which involved shifting a greater part of SHI costs to individuals. This was an attempt to stabilise the employer part of the contribution rate, and so make labour costs more predictable, although this decision has been reversed more recently. We here trace the changes that were introduced in the German system over the past decade or so, describing the continued challenges faced by the system and the solutions that have been proposed. This highlights the role of the political context in enabling or hindering more fundamental reform – an issue not specific to Germany, of course, as we show in other parts of this report.

The 2004 German health care reform

Throughout the 2000s, political intervention in health care in Germany primarily sought to address financial deficits in the SHI system and to consolidate SHI financing overall.¹² The deficits occurred in the context of broader economic stagnation in the early 2000s, with a continued rise in unemployment rates. In response, the then government launched the Agenda 2010 economic and social policy programme in 2003.⁶² The reform programme also targeted the health sector, with the 2004 SHI Modernisation Act (GMG) foreseeing a wide range of cost-containment measures (among other changes), including the following three key measures:

- the exclusion of certain services from the SHI benefit catalogue such as reimbursement for non-prescription drugs and some types of patient transport
- the redesign of out-of-pocket payments involving: (a) the introduction of co-payments for physician consultations in the ambulatory care sector (€10 quarterly practice fee),

(b) the move to cost-sharing for medical goods and services of 10% (a minimum of €5 and a maximum of €10 per good or service), and (c) the replacement of exemptions from co-payments for people under a certain income threshold by an annual limit of co-payments for every SHI member to 2% of annual gross household income (1% for those with chronic conditions)

- the transferring of a greater part of the SHI contribution rate to the employee from July 2005, with 0.9% of the contribution rate to be solely paid by the employee, whereas the remainder was equally shared between employer and employee. Effectively this meant that the historical equal sharing of the contribution rate of 50% for both employers and employees shifted to 46% and 54% respectively.

The need for more fundamental change: *Bürgerpauschale* versus *Bürgerversicherung*

However, following these changes there was a consensus that the SHI system was in need of more fundamental reform, in particular as far as revenue streams were concerned.¹² Two basic models were discussed by different (political) groups: a per capita premium or 'capitation fee' (*Bürgerpauschale*), and citizens' insurance (*Bürgerversicherung*). The former model essentially foresaw financing of SHI exclusively by SHI members via a community-rated per capita premium (approx. €200 per month) independent of income (or age, sex, or pre-existing disease) for all adults (SHI members), while the existing employer contribution would be superseded and instead paid out as part of gross salary (and thus be subject to income taxes). People on low incomes would be covered via payments from general tax revenues. The private health insurance system would remain as it was. Conversely, the citizens' insurance model would expand the existing SHI system by requiring all citizens to take out insurance; the upper wage threshold that entitles employees with higher salaries to opt out would be abolished (substitutive private health insurance would successively transition out) and the revenue base would be broadened in that other forms of income (not only wages) such as rental income would also be considered for determining contributions.

A compromise: the 2007 health care reform

Neither model succeeded. Instead, following the 2005 elections (and the formation of a 'grand' coalition of Christian Democrats and Social Democrats), a compromise was agreed as part of the 2007 reform (GKV-WSG), which required all residents to take out health insurance (while retaining the principal separation of SHI and private health insurance) from 2009. The special contribution rate of 0.9% paid solely by employees was retained. In addition, the government introduced the possibility for SHI funds to collect an additional community-rated premium or bonus (or a percentage rate) to compensate for financial shortfalls. This additional premium ('capitation fee') was to be paid solely by employees, although between 2009 and 2011, supplementary contributions could not exceed the lower of €8 per month or 1% of gross salary. This option was meant to stimulate further competition between SHI funds, the idea being that SHI funds would seek to reduce their costs so as to not have to impose an additional charge and risk losing members. In addition, SHI funds were able to offer a range of tariffs, enabling SHI members the option to pay a lower contribution rate or choose a tariff that entitled them to additional services and benefits.

The debate continues

The 2007 reform was followed by another reform in 2011, under the subsequent conservative-liberal coalition government, which revisited the previous discussions about the move towards a 'Kopfpauschale' mainly as a means to separate health care costs from labour costs while further strengthening private health insurance.¹² However, while the 2011 SHI Financing Act did introduce further changes to the revenue generation aspects of the SHI system, the move towards a community-rated per capita premium was not pursued (it was widely perceived as 'unsocial' by large parts of the population). Key changes introduced by the 2011 reform concerned: (i) the uniform contribution rate, which from 2011 was to be set by law at 15.5% of gross salary (employees: 8.2%; employers: 7.3%); (ii) the supplementary contribution rate or premium, which was to become an income-independent, per capita premium and which was to be set by individual SHI funds (and so further strengthen competition between funds), while the upper limit of 1% of gross income was abolished; and (iii) the introduction of a so-called 'social adjustment' (*Sozialausgleich*) to protect those on lower incomes from the potential impacts of the supplementary premium, to be financed from the federal budget (the *Bundeszuschuss*).

'Ultimately, you have to say, the whole model failed, so this capitation fee was not received well at all by the population. It turned out that this social balancing payment via taxes is so complicated, because we don't have a tax system, but we finance the health insurance through social security contribution, that basically, [the capitation fee] was dropped' (Germany Policy DE_1).

All of this was eventually changed again under the coalition government that came into power in 2013, with the subsequent 2015 reform seeking, among other things, to further develop the financing of SHI (GKV-FQWG). Among the key changes was the reintroduction of the parity of employee and employer contributions to SHI (parity had been abolished in 2004). This means that from January 2015, the legally set contribution rate of 14.6% is equally shared between employers and employees. As before, the employer contribution remains fixed at 7.3% to ensure that the costs of labour remain stable. The special contribution of 0.9% to be paid solely by employees was abolished. However, the supplementary premium that can be imposed by individual SHI funds remained, although the previous community-rated premium was replaced by an income-dependent percentage rate. Again, as before, this additional premium is to be set at the discretion of individual funds to compensate for financial shortfalls. In 2015, the average premium was 0.9%.

'The abolition of this small flat rate [in 2015] and return to income dependent additional contributions, this also had a divided response in the media. The media that was convinced by the new concept criticised it, including the economic associations and also economic research institutes. They were very critical because it was viewed in regulatory terms as problematic. The competition was reduced between the insurers as the efforts towards more efficient care and tax financing for social compensation were considered as more sensible politically' (Germany Academic DE_3).

This is reflected in the latest annual report by the German Council of Economic Experts (2016/17), which reiterated its recommendation from its 2012 report to finance the SHI system through a per capita premium independent of income (*Bürgerpauschale*), with an

integrated social adjustment scheme, in an effort to decouple health care costs from labour costs and so keep the latter less vulnerable to fluctuations in contributions.⁶³

Tax funds to supplement SHI are growing over time

While health care in Germany has traditionally been funded largely through mandatory insurance schemes, tax revenues also play a role. Tax funds were initially used to help cover care for residents who do not actively contribute to the SHI system; to cover non-personal health spending, such as prevention activities, health research, or training of health care professionals; or to maintain resource stability in the context of labour market fluctuations. But the role of tax revenue in the SHI system changed from 2004. Until 2003, SHI contributions were the sole revenue stream for publicly funded health care, but the 2004 reforms included the introduction of a tax-funded federal contribution or subsidy (*'Bundeszuschuss'*) to help cover care for dependents of insured members, or services for new and expectant mothers, for example. Starting from a low base of €1bn in 2004, the federal subsidy remained small until 2009 when, following the global financial crisis and as part of a wider macroeconomic package, the subsidy was increased to €7.2bn. This was later followed by additional increases during 2010 and 2011 to over €15.7bn to help prevent increases in SHI contribution rates and relieve the labour market of additional costs (Germany Policy DE_7). It has now been set at a planned €14.5bn from 2017 onwards.⁶⁴

While the added revenue from taxation is generally seen to be welcome in SHI systems and can be important for maintaining predictability of revenues in the face of labour market fluctuations, some commentators have been more cautious about the potential for unintended consequences. For example, key informants in Germany reported that with the introduction of tax revenue into the SHI system there is a risk that the federal ministry of finance might gain greater influence on decisions concerning the allocation of public funds. It was noted that the cutbacks in the federal subsidy in 2013-15 were *'justified [by the government] by saying that the statutory health insurance funds were doing quite well financially. That is why tax funding can be temporarily cut... Every little reform by the ministry of health led to conflict with the ministry of finance and had to be negotiated'* (Germany Policy DE_5).

Overall, the lack of predictability of the size of the funding that would be coming from the federal budget was also seen as problematic:

'The federal [budget]... often fluctuates a lot, i.e. is not stable, which means the insurance funds can basically not rely on it, because if the budgets are not well positioned in other places, then the [federal government] likes to help themselves out of that pot' (Germany Policy DE_1).

Relevance to the UK

While the SHI system implemented in Germany may appear to have little direct relevance to the UK, given the reliance of the NHS on tax-based revenues, it serves to illustrate the continued struggle in other high-income countries to design a funding mechanism that is both economically sustainable and provides for a comprehensive package of services. The continued discussion about the need for more fundamental change, with the citizens' insurance (*Bürgerversicherung*) among the themes debated in the negotiations leading to the formation of a new German government following the 2017 general elections, highlights

the challenges of breaking from tradition, although it is interesting to note that the proposed models of funding retain the core commitment to an insurance-based system.

4.5 Voluntary insurance has a widespread role, but a minor one

Moving beyond public revenue generation, voluntary health insurance (VHI) currently plays a fairly minor role in the majority of the countries included in the review, as it does in the UK. Even in the USA, VHI has essentially converted into mandatory insurance as a result of the Affordable Care Act. However, there are instances where VHI can play an important role in aiding the financial sustainability of the public system. Voluntary LTCI plays a minor role in a few countries but is generally less significant than voluntary insurance for health care.

In Finland, voluntary private insurance has historically played a relatively greater – though still very marginal – role in health care financing than in the UK and some other countries:

‘We do have a pretty lively private sector in health and social care, and also increased... private health insurances for different reasons... the public sector is giving a service promise which is satisfying certain needs, but then there are some additional insurance needs, and convenience needs, where private sector and private insurers do play a role’ (Finland Policy FI_2).

There is an expectation that the forthcoming health and social welfare reforms discussed in section 4.1 may serve to draw some more formal distinctions regarding the publicly covered benefits and leave some space for private financing of services in the future (Finland Policy FI_2). This is seen to be of particular relevance in the future if demand for care outpaces publicly available resources.

We highlighted earlier that in Germany, following the reform that made health insurance mandatory from 2009, there was an apparent decline in VHI as a share of total health care expenditure, but that this reflects a change in data reporting rather than an actual change in the proportion of the population taking out substitutive private health insurance instead of SHI. Indeed, the proportion of the population insured privately has remained relatively stable at around 11%. Substitutive private health insurance is open to those whose gross wages exceed a specified threshold, as well as civil servants and the self-employed.¹²

A key challenge in Germany remains that private health insurance is seen as undermining the principle of solidarity governing the social insurance system. There is no financial equalisation mechanism between SHI and private health insurance that would take account of the typically higher incomes (and lower risks) of those opting to join private health insurance,¹² which can be seen to pose a threat to the financial sustainability of the SHI system. Also, people with private health insurance tend to receive preferential treatment (shorter waiting times, more extensive diagnostic workup etc.). Hence, the reform introduced a higher income threshold for those eligible to switch from SHI to private health insurance.

In Sweden there has been some debate about allowing voluntary insurers to play a larger role in health care financing, but it does not appear likely there will be major changes in the near future (Sweden Policy SE_1). Similarly, commentators from the Netherlands and New Zealand did not believe that VHI would assume a significant role in those countries in the near future (Netherlands Policy NL_5; New Zealand Policy NZ_1).

Box 5 provides a rare example in the EU of how VHI provided an important lever in ensuring the financial stability of health care financing during macroeconomic constraints.

Box 5: Voluntary health insurance in Slovenia

Voluntary health insurance was introduced in Slovenia in 1993 to cover co-payments for services otherwise paid for by the mandatory health insurance system. There are currently three providers of VHI. Unlike many other European countries, nearly all Slovenians purchase VHI coverage. This probably reflects the comparatively high level of co-payments for publicly funded health services. VHI premiums are lifetime-community rated and therefore affordable for most households.

The 2008 global financial crisis led to a number of austerity measures, throughout which the public insurer, the Health Insurance Institute of Slovenia, was able to remain solvent in part by raising co-payment rates. This shifted costs from the public purse to VHI but without causing severe financial hardship for users of health care, as it meant that households did not have to pay out-of-pocket for care.

Subsequently, successive governments in Slovenia have tried to dismantle the VHI market, perceiving it to be wasteful and generating profits that are not used for health care. Under the current government, there is a proposal to replace VHI with a levy and remove all co-payments. This proposal has gained widespread political support, although it remains to be seen whether it will be successful. It has been estimated that the levy would need to generate around €400 million per year to fully substitute for the revenues generated through VHI.

Sources: Cylus⁶⁵ and Thomas et al.⁶⁶

Various *voluntary* LTCI arrangements have been advocated in a number of countries but only two have a significant voluntary private insurance system for LTCI: the USA and France. In the USA, around 10 million people have LTCI, which is approximately 3% of the total population.⁶⁷ In the USA, the Community Living Assistance Services and Support (CLASS) Act was passed as part of the 2010 ACA package, but was not implemented and was repealed in January 2013.⁶⁸ There was growing unease about the possibility of low and selective uptake in these schemes, which would undermine the key benefit of risk-pooling. These expectations probably stem from the experience of private, voluntary LTCI internationally, which, with the possible (but special) exception of the French case, has shown very modest uptake in the population. Even in the USA, where the use of voluntary private health insurance is widespread, rates of voluntary private LTCI are below 10% of the population over the age of 40.

In France, 7.3 million people were privately insured against LTC needs in 2014, or 11% of the total population.⁶⁹ A combination of factors has led to this relative, though still modest, success of the French private LTCI market.⁷⁰ First, the public benefit available, the APA, is modest and covers less than a third of LTC cost, which encourages people to look for LTCI to supplement public coverage. Second, the small premiums paid, thanks to employer-based products, are encouraging to take-up. The average annual premium for these contracts, which makes up 75% of all contracts, was €70 in 2015. Third, 'family responsibility' laws holding adult children responsible for care costs incurred by their parents are still in place and private LTCI is purchased in order to protect family members from the need to pay for or/and provide care.

4.6 User charges. Case study: evidence on the impact of health care user charges

No discussion of options for funding health care and social care would be complete without consideration of user charges, regardless of how unpopular they may be. If public funding is insufficient to meet all needs, countries may choose to institute or raise user charges in an effort to raise revenues and reduce excess demand. Hitherto that reality has evidently been much more accepted (in high-income countries) for social care than for health care. User charges are a generally small but highly controversial part of total funding for health care, and a larger but rather less controversial part of total funding for social care (Appendix E provides details on cost-sharing arrangements for health care and also for social care in the countries reviewed).

In the following paragraphs we focus on the more controversial area of charges for people accessing health care. We first clarify the rationale for user charges and the various main types. We then describe the extent of user charges for health care, also known as cost-sharing, in the countries we reviewed, and how such charges are becoming part of policy debates about future funding. We conclude by summarising the evidence about the impact of those charges, and hence their relevance in a UK context.

Rationale for user charges

In most high-income countries, there appears to be a widespread conviction that health care is not a commodity like other commodities, because health care expenditures are largely imposed on individuals, rather than freely chosen. It follows that the financial burden should not disproportionately rest on those who suffer from illness, i.e. that it should be largely independent of the health risks. User charges, i.e. prices paid at the point of service, by definition go against this basic ethical intuition (Schokkaert and Van de Voorde, p.339⁷¹).

Nevertheless, nearly all health care systems in such countries, including the NHS in the UK, make some use of charges to patients at the point at which they receive care.

Charges for health care at the point of service have two main purposes. The first is to counteract the tendency for care services, if free of charge to the user, to be demanded even

if the value they bring the patient is less than the cost to society as a whole of supplying the services. In public debate this may be phrased as introducing (or increasing) charges so as to deter 'unnecessary' or 'frivolous' use of costly health services. By charging a price, it is hoped to deter frivolous use. But it may also put off some patients, especially those with low incomes, from seeking necessary health care.

The second purpose of user charges is to raise revenues to contribute to funding the health service. In most health care systems in high-income countries, user charges currently contribute only a small percentage of the total funds required by health services. In the NHS in England, the two main areas of user charges for health care are prescription charges and dental charges, which raised £555 million and £777 million respectively in financial year 2016/17, representing together just 1% of the total gross NHS costs in England of £139 billion in that same year.⁷² Dental charges are levied throughout the UK, but prescription charges have been removed in Northern Ireland, Scotland and Wales. In other high-income countries, patient charges may sometimes be more significant than in the UK, but they are still a small part of the total funds required: in Germany, patient charges totalled more than €40 billion in 2011, but that was only 13.7% of total health service expenditure there.¹²

The main constraint limiting the application of user charges has been the likely unequal impact they would have on different socioeconomic groups. As reflected in the earlier quote from Schokkaert and Van de Voorde, health care is, to a large degree, not a matter of individual choice; the need for it is largely unpredictable – hence the need for insurance of some kind – and to expect people to pay extensive charges at the point they receive care would be to exacerbate their misfortune in requiring that health care in the first place. Furthermore, user charges for health care are 'regressive'. That is, on average, the lower a household's income, the greater the proportion of it that would be spent on health care charges were they to be levied. The desire not to penalise people financially for being ill and not to burden low income groups proportionally more than high income groups form the basis of arguments against health care user charges.

A 'work around' is to introduce systems of exemptions or caps on expenditure per time period – eg for the chronically ill, children, the elderly, those on low incomes – alongside the imposition of user charges. Indeed, when health care user charges are imposed, there is usually a list of exemptions from those charges, too. While reducing negative impacts on social equity, exemptions and expenditure caps simultaneously undermine the rationale for imposing charges: the deterrent to unnecessary demand for services is removed from those who are exempt from charges or have reached the expenditure cap, and the revenues raised by charges are reduced. The latter is particularly evident in the exemptions from prescription charges in the UK: these exempt approximately 50% of the population from paying charges but as they are precisely those people who have the highest demand for prescribed medicines the consequence is that more than 90% of prescriptions dispensed in England are exempted from the prescription charge.

A secondary disadvantage of user charges is the cost of administering them. The charges have to be collected and the exemptions and expenditure caps have to be policed. This entails administration costs, which may not be high but which nonetheless offset the revenues raised from charges, which are themselves quite modest.

Types of health care user charges

In this paper we define user charges broadly, to mean any payment required of patients at the point at which they receive care. For the purposes of our discussion we are excluding those services where the patient is required to pay 100% of the cost, because that service has *de facto* been removed from the basket of health care services. Our focus is on raising revenues to fund the existing basket of services made available by the NHS (and social care) in the UK, not on reducing the range of services offered.

The main forms of user charges in health care are as follows:

- **fixed fee/copayment** – the user pays £X every time they use service Y
- **percentage co-insurance** – the user pays X% of the cost of the service. That cost is usually published in a tariff of prices applied to all providers, but in some cases it may be left to the service provider to determine the price, which could then vary from provider to provider
- **deductible** – the patient must pay for the first £X of health care that they use in a specified time period (commonly a year, but it could be a quarter or a month or any other time period). Once their cumulative health care expenditure in that period exceeds £X, all subsequent health care within the specified time period is then either provided free of charge, or is charged to the patient at less than 100%, via a copayment arrangement or limited fixed fees or both.
- **balance billing** – also known as ‘extra billing’ or ‘supplementary billing’. In some health care systems, providers are permitted to set their own charges, but the system payer (insurer or tax-funded health service) will only pay up to £X for those services. If patients want to obtain their care from providers charging more than £X for the service, then the patient must pay the balance.

All of these forms of user charges are in use somewhere. Hybrid approaches combining two or more of these types of charges are also possible and in use. Table 5 and Appendix E show the charging approaches used in the UK and some other high-income countries. In practice, all forms of charging are commonly combined with exemptions for some population groups on grounds of their high health care needs or their low incomes. Caps on the maximum anyone is expected to spend on health care and fund out of their own resources per time period are also common, as charges could accumulate over time to become large burdens for some people. Table 5 and Appendix E show the kinds of health care services that are charged for in practice. In summary, all categories of health care services are the subject of user charges somewhere among high-income countries.

Table 5: Types of user charges in use in selected high-income countries*

Type of charge	Primary care/ GP services	Prescribed medicines outside hospital	Specialists outside hospital/ specialist outpatients	Inpatient care	Dental care**
Fixed fee/copayment	Finland, Sweden	Australia, England, Italy (some regions)	Finland, France, Italy, Sweden	Finland, Germany, Sweden	England, Finland, Northern Ireland, Scotland, Wales
% co-insurance	Japan, Korea, New Zealand	Finland, France, Italy (some regions), Japan, Korea	Japan, Korea	Japan, Korea	Germany, Japan, Korea
% co-insurance + fixed fee	France			France	
Deductible		Netherlands	Netherlands	Netherlands	
Deductible + % co-insurance	Switzerland, US Medicare***	Sweden, Switzerland	Switzerland, US Medicare***	US Medicare***	Sweden
Deductible + % co-insurance + fixed fee				Switzerland	
Balance billing	Australia				
% co-insurance + balance billing		Germany	Australia		

Notes:

* Payment arrangements can be intricate; this table is a simplification. Note also that in most countries user charges are applied in conjunction with caps and/or exemptions.

** In many countries other than those listed in this column, patients must pay 100% of dental charges. In those countries dentistry is thus excluded from the basket of services offered by the public health care system.

*** In this table, for the USA we refer only to the publicly funded Medicare system. Within the large US private health insurance system, most types of payment are in evidence somewhere.

Reforms and initiatives to change role of cost-sharing

All reviewed countries impose some degree of cost-sharing for health care services covered under the statutory system. Table 5 and Appendix E provide an overview of the range of cost-sharing arrangements in a range of OECD countries. There is a clear contrast in the UK between health care, which has remained mostly free of charge at the point of use, and social care, which many people have to pay for at the point of use.

As Table 6 shows, at least some patients are charged something for prescription medicines in almost all of the countries in our review. In England, but not the other countries of the UK, a fixed charge is paid by the patient each time a prescription is dispensed outside hospital, although that is only the case for approximately half of the population. People aged over 60, pregnant women and new mothers, children under 16, those with certain medical conditions such as cancer, epilepsy and diabetes, and people on a low income are all exempt from prescription charges. In all countries of the UK, patients pay a significant proportion of the costs of NHS (non-hospital) dental care and optical care. Proposals to introduce charges for

other parts of NHS care, such as for seeing a GP, are a recurring feature of the health care funding debate in the UK.*

Internationally, user charges for medicines most often take the form of co-insurance (with differentiated rates) or fixed prescription charges. Several countries also use deductibles. The level of cost-sharing required varies among countries, although each system applies uniform rules, with most countries offering some form of mechanism to protect the income of selected population groups, for example through reduced rates (eg concessional beneficiaries in Australia), exemptions from charges (eg children and pregnant women in England, Italy, Sweden; pensioners and people on low incomes in Italy and England; some people with chronic conditions and disabilities in England, France and Italy), annual caps on expenditure (eg Australia, Sweden) and complementary private health insurance covering statutory user charges (eg France). Medicines dispensed in the inpatient hospital sector do not typically incur a separate co-payment.

* See for example: <http://www.pulsetoday.co.uk/news/practice-news/half-of-gps-in-favour-of-charging-for-routine-appointments/20003741.article> and <http://www.bbc.com/news/health-38913394>

Table 6: Cost-sharing arrangements for prescription medicines in 14 countries

	User charge required	Exemptions			Maximum out-of-pocket limit
		Chronically ill/disabled	Low income	Age	
Australia	Yes	Yes	Yes	Older people, children	After reaching annual cap of AUD 1,475.70 (2016) low-income earner cost per prescription (AUD 6.20) applies Annual cap of AUD372 (2016) for low-income earners (concession card holders)
Canada	Yes	-	Yes	-	Varies by plan
Finland	Yes	Yes	-	-	Yes
France	Yes	Yes	Yes	-	-
Germany	Yes	Yes	-	Children	2% of annual net household income (1% of income for chronically ill)
Italy	Yes	Yes	Yes	Older people, children	-
Japan	Yes	-	Yes	Children (reductions)	Monthly co-payment cap depending on age and income
Korea	Yes	Yes	Yes	-	Expense limit for all cost-sharing is based on the average health insurance fee per year
Netherlands	Yes	-	-	Children	Annual deductible
New Zealand	Yes	-	Yes	Children	-
Sweden	Yes	Yes	-	Children	-
Switzerland	Yes	-	-	Children	Set at CHF700 for adults and CHF350 for children (treatment costs, incl. drugs)
England (UK)	Yes	Yes	Yes	Older people, Children	-
USA	Varies	Varies	Varies	Varies	Varies

Where countries face concerns over generating adequate public revenues, it is conceivable that increases in cost-sharing may be seen to play a role. Cost-sharing may also be attractive for those interested in reducing demand for care. However, we find limited evidence that the countries included in the review are taking steps to draw increasingly on direct payments from households to finance their own health care.

In Germany we find, on the contrary, that cost-sharing arrangements that have been implemented have ultimately been reversed. As part of the 2004 German health care reform, a quarterly fee of €10 was introduced for visits to physicians in the ambulatory care sector.¹² The fee was, however, abolished in 2013, mainly because this measure did not result in reduced utilisation rates as had been intended:

‘So the practice fee, well, how do you say, it was well meant, but not well done... out of this solidarity thought, the ones who are sicker shouldn’t be in a worse position, so in that respect, it wasn’t received well, but this steering, guiding function of the GP could basically

not be implemented, i.e. the free choice of physician is a, how do you say it, a golden calf here in Germany' (Germany Policy DE_1).

In Germany, changes in co-payments are not expected, at least in the short- to medium-term future, mainly because the financial situation of the mandatory system is seen to be fairly stable for the time being, but also because of the experience with the practice fee:

'If at all, then it is currently being discussed how we can further reduce co-payments. We have the good financial situation where [mandatory] health insurance is used to consider how we can do more good for various parties. The discussion currently isn't about how can we introduce co-payments again, how can we make it useful, but with the abolishment of the practice fee, it's relatively avoided territory for health politicians. And basically we keep away from it at the moment because the financial pressure doesn't exist, so we take a step back from it' (Germany Policy DE_5).

In New Zealand, co-payments in primary health care are a traditional feature of the system, with successive adjustments over the years involving health care subsidies for people on low to middle incomes. The co-payments also vary from primary care physician to primary care physician where they constitute the difference between government subsidies and physician fees.¹⁰ Following the 2001 Primary Care Strategy, funding for primary care was significantly increased, which helped reduce co-payments, but the government '*could not afford to make it completely free*' (New Zealand Policy NZ_1).

In the Netherlands a mandatory deductible is in place for all citizens aged 18 years or older, requiring individuals to cover health care costs in a given year up to the deductible amount out of pocket (except for GP consultations, maternity care and home nursing care).¹³ The level of the deductible has been rising since 2008, from an initial €150 to €385 in 2016. On an individual basis, some municipalities will pay the deductible for very poor households. However, in general most people have to pay and in 2013, about half of the insured population paid the full deductible.¹³ There are very few additional out-of-pocket payments for health care in the Netherlands (Netherlands Policy NL_5). The evidence of whether the deductible reduces utilisation of care services remains unclear, although there has been political debate about whether the deductible should be lowered or even abolished in the future.

In Sweden there have been only limited debates on changing the maximum amount that an individual can be required to spend out-of-pocket on health care in a given year in a cost-sharing context, and there has been no action thus far (Sweden Policy SE_3). Increasing user charges does not currently appear to be on the agenda, although it could be in the future (Sweden Policy SE_1).

With respect to social care, nearly all provision of service in the countries included in our review requires some contribution from the care user, whether it is for home care or care in nursing homes, regardless of the basis for entitlement. In Japan there is a standard 10% (means-tested) co-payment for LTC with a recent 20% co-payment for wealthy users, and means-tested charges for care home accommodation and meals. In France, although access to the APA system is universal, as in the German and Japanese systems, the amount of support people receive is dependent on their financial means as well as their level of assessed need. Public funding coverage ranges from 90% to 10% of the assessed care

costs, depending on the service user's income and assets. Recipients are expected to make up the remainder from their own resources. The French APA is an example of a 'progressive universal' system. As noted above, the German system also only covers a part of the costs of LTC, with the expectation that remaining costs are met out of pocket (potentially also with the help of means-tested social assistance benefits).

The comprehensive systems of the Nordic countries generally have smaller co-payments. In Finland the co-payments are based on income (but are constrained so that they never exceed the actual cost of care). The exact percentage of income to be paid depends on the type of care. For residential care, the cost should never exceed 85% of the user's monthly income and at least €90 should be left for the patient, per month, after fees are paid. For home care, fees depend on the number of people living in the patient's household. For a person living alone, 35% of any income above €573 is paid towards fees. In Sweden, care is free of charge for individuals who earn less than SEK 4,679 a month, but above this limit there is a charge that can go up to SEK 1,772 (Swedish Government, 2015). These charges, however, account for only 4% of the overall funds for LTC. This share has been consistent over the years.¹⁸

As regards the safety net systems (eg the UK and the US Medicaid system), access to the public social care system is means-tested, and those who are not eligible are expected to meet the full costs of care from their own means (albeit often with the support of some universal disability-related income support benefits, such as Attendance Allowance in the UK). A partial exemption exists in Scotland, where free personal care is available. However, in both cases the services that are free of charge are not comprehensive. For example, in Scotland accommodation costs in care homes and practical care are still subject to (not insignificant) means tests.

Even for people who are eligible for some public support in means-tested safety net systems, charges are high. In England, eligible care home residents are required to contribute all of their income in charges, leaving them with a small personal allowance. In Australia, there are standard fees that must be paid by all users, although these are capped on an income basis. For example, the daily fees cap for home care for low-income users is 34.8% of the maximum daily cap for high-income earners. Also, there is financial hardship assistance for people unable to afford even the basic fees. Until recently, to meet accommodation costs in care homes, individuals were required to pay an accommodation bond. This system has now been replaced by a tariff of accommodation charges.

In addition to the relatively high cost-share proportions required from individuals in most social care systems, there are also some examples of further increases in, or plans to increase, these charges. In the Nordic countries, a user charge was only relatively recently introduced. In Japan, a discussion about whether to increase the co-payment rate from 10% to 20% started in 2013; and the increase was implemented in August 2015 for high-income earners. In England, many local authorities now charge up to the maximum allowable, whereas previously, many set charges below this rate. In Australia fees are adjusted annually but changes need not be in line with general consumer price inflation. As regards the maximum basic cap rate in residential care, rates consistently increased above inflation until 2014, after which increases followed inflation more closely, sometimes with a reduction of fees in real terms.

Evidence on the impact of user charges

As discussed earlier, part of the rationale for user charges in health care, in addition to raising revenues, is to deter some ('frivolous') demand. The problem is that the deterrent effect of charges is likely to be stronger not only where the benefit that the patient expects from the health care is lower (i.e. where the care is less effective or the patient's demand for it is more 'frivolous'), but also for people with lower incomes independently of their need for health care. The empirical literature addresses both the average impact of charging on the quantity of health care used, and how that impact varies between different groups in the population according to their income and likelihood of illness.

The principal measure of impact is the 'price elasticity of demand', which is the percentage by which the quantity of a service that is demanded changes when there is a 1% change in the charge for that service. Thus, if a 1% increase in the charge for prescription medicines were to be associated with a 0.2% fall in the quantity of prescription medicines demanded, then the price elasticity of demand would be said to equal -0.2.

It is also possible that increasing the price to the patient of using one health care service but not another may cause the patient to substitute the latter service for the former. For example, if user charges were to be levied on consultations with GPs, but not on attendances at Accident and Emergency (A&E) departments of hospitals, then we might observe reduced GP visits but increased A&E visits. There exists only a small empirical literature estimating such substitution effects.

If user charges do discourage some people on some occasions from presenting for (effective) health care, then detrimental effects on their health may be expected. This may have the further consequence that demand for health care increases in the longer term, because health problems have been exacerbated by inadequate (or no) care at an earlier stage. If user charges are imposed on preventive measures, eg flu vaccination, then they also risk a direct impact of higher future health care costs in consequence.

The famous RAND health insurance experiment is the only randomised controlled trial of the impact of user charges on the use of health care services. It ran in the USA from November 1974 to February 1977 and studied health service use by 5,809 individuals randomly assigned across 14 different health care plans with varying levels of copayment. The experiment found that higher charges lead to lower use of health care, with a price elasticity of demand in the range -0.1 to -0.2.⁷³ Reductions in use of care services were found to be the same for both 'effective' and 'ineffective' medical services. In other words, effective health care was as likely as ineffective care to be deterred by higher user charges.

Kiil and Houlberg⁷⁴ undertook a systematic review of the empirical evidence from 1990-2011 (inclusive) of the price elasticity of demand for health care services subject to user charges, finding 47 relevant papers from a variety of (high-income) countries. It is currently the most recently published review of evidence in this area. We have extended their review by searching the empirical economics literature (published in English) on the EconLit database from January 2012 to April 2017 (inclusive), which revealed a further 14 papers with relevant empirical results. Taking this published empirical evidence together, we find that:

- the evidence is overwhelmingly that user charges do lead to a reduction in use of health care services. A small minority of studies finds no significant association between

increases in user charges and reduced health care use but the large majority finds a negative relationship.

- this negative relationship, where quantified, indicates a price elasticity of demand commonly in the range -0.1 to -0.3, with a cluster of estimates around -0.2, as in the RAND experiment. Thus to increase user charges by 10%, say, would be to expect a 1-3% reduction in the quantity of those services taken up by patients.
- similar magnitudes of price elasticities are evident for all kinds of health services: GP consultations; prescribed medicines; specialist outpatient care; visits to hospital emergency departments (A&E); hospitalisations; rehabilitation; prevention; and health care in total. (The first two of these types of care are the most common focus of empirical studies.)
- there is little apparent difference in the price elasticity of demand for health care across different population groups. Chandra et al.⁷⁵ focus on low-income groups in one US state and find magnitudes of price elasticity still in the same -0.1 to -0.3 range.
- Chandra et al.⁷⁵ find that adults aged 19-64 on low incomes and with chronic illnesses (asthma, diabetes, high cholesterol) respond less to user charges than do people of the same age on low incomes who do not have chronic illnesses: there is a price elasticity of -0.06 for those with chronic illnesses, compared to -0.27 for those without, and compared with -0.16 for the total low-income population in that age range.
- there is very little empirical evidence about the effect of increased user charges for one type of health care service on the demand for other types of health care service. Kiil and Houlberg in their review⁷⁴ refer to six studies of the impact on other services of increased user charges for prescription medicines. They report that two of the six studies show that increased prescription charges are associated with increased demand for hospital services and one with increased demand for GP visits, but the other three studies show no association. Two of the more recent studies we reviewed considered such substitution effects: Li and Anis⁷⁶ found that higher co-payments for medicines were associated with more doctor visits and hospitalisations; but Ziebarth⁷⁷ found no impact on doctor visits.
- few studies have attempted empirical estimates of the effects of increased user charges on health. Kiil and Houlberg⁷⁴ report that two of the studies in their review find an association between increased charges for prescription medicines and worsened health (increased mortality) and one found no such association. Among the more recent studies we have reviewed, only Shigeoka⁷⁸ estimated impacts of user charges on mortality and other health outcomes and they did not detect any such impacts.

Evidence on the price elasticity of demand for social care services is considerably scarcer than for health care, and what there is mainly focuses on the US. Forder and Allan⁷⁹ reviewed the few studies available at that time. Nyman⁸⁰ suggests that private nursing home patients are very responsive to price changes, with a price elasticity between -2.3 and -1.7, but this indicates patients' ability and willingness to go to an alternative provider when one provider puts up its price unilaterally, rather than their willingness to go without care if all prices rise. Nyman's results confirmed two previous studies that found similar results but failed to control for supply-side factors and other sources of bias. In the UK, Forder⁸¹ used an alternative approach by calculating price elasticity through the price mark-up above marginal costs. Forder's estimates showed price elasticities ranged from -0.08 to -0.28, which is very similar to the price elasticity of demand for health care noted above. The difference between findings from the UK and the US may be explained by the differences in

the samples used, according to Forder. The British data focused mostly on publicly funded patients with mental health problems, while Nyman used data from private nursing homes whose patients had varied conditions, an approach similar to other American studies. Despite a relative lack of research on price elasticity for social care, the little evidence that exists suggests that individuals react negatively to price increases. However, the magnitude of this negative effect is still disputed.

Relevance to the UK

Since the founding of the NHS in 1948, user charges for NHS care have always been controversial. But they were introduced early in the life of the NHS: for dentistry and spectacles in 1951 and for prescriptions in 1952; and charges have been present in some form ever since. Since devolution, the devolved administrations of Scotland, Wales and Northern Ireland have removed prescription charges, but have retained dental charges. Thus health care user charges are not without precedent in the UK and, as noted earlier, they are a recurrent feature of policy discussions.

It would be administratively possible for providers of NHS services to collect charges from service users: NHS dentists and community pharmacies already do, and many NHS providers already collect income from private (non-NHS) patients. There would be an administrative cost involved in billing patients, or charging them at point of care (eg in the GP's practice) but it would be feasible to do.

User charges account for only around 1% of NHS funding in England currently, and an even lower proportion in the other countries of the UK. The main barrier facing extension of user charges for NHS services beyond this small base is the strong and widespread public opposition to them. A May 2017 Ipsos-MORI poll across Great Britain for the Health Foundation found that 88% of those polled were in favour of the statement 'The government should support a national health system that is tax funded, free at the point of use, and providing comprehensive care for all citizens' (*emphasis added*) (poll results accessible at: http://www.health.org.uk/sites/health/files/Polling2017_web.pdf). Over the years there have been many such polls, all with very similar results on the question of user charges.

5. Aspects of the funding environment that drive or constrain reform

This section explores three key aspects of the health and social care funding environment that can drive or constrain reforms:

- the state of the wider economy
- concerns with long-term financial sustainability, rather than just more funds in the short term
- the dominant role of context and politics

Overall, countries have taken different approaches to health and social care financing; there is no commonly preferred solution to achieve sustainable revenues.

For the countries included in the review, we find that the emphasis remains on relying on public sources to fund health care, as is currently the case in the UK, with concerns expressed in a small number of countries about an eventual need to rely more on private funds. Some countries are either considering, or have previously considered, allowing local regions to generate their own revenues for health care. This may be as part of consideration of wider reforms of local government financing rather than specifically to raise additional funding for health and/or social care. However, it is important to note that in all of these instances, an equalisation scheme is in place to pool and reallocate resources in an effort to ensure some degree of equity.

Importantly, we find no single source of public revenues that countries are focusing on to alleviate sustainability concerns. 'Sin' taxes, despite anecdotal popularity, are not being widely used in the countries included in the review to (co-)finance health care. Earmarking/hypothecation of taxes is also not common overall and does not improve the sustainability of resources for health and social care.

Our research to date has, however, highlighted the importance of three major aspects of the funding environment that can act to drive, or to constrain, changes to the ways in which health and/or social care are financed:

- the state of the wider economy
- concerns with long-term financial sustainability rather than just more funds in the short term
- the dominant influence of social and economic context and political factors in shaping reforms.

All of these aspects apply as much to the UK as to the countries in our review. We discuss each aspect in turn below.

5.1 Changes in the wider economy drive reforms to funding of care

In all countries, economic factors play an important role in determining approaches to health and social care financing. Indeed, one interviewee noted how, in the Netherlands, all decisions regarding public budgets and revenue generation are considered in the context of how they will affect household incomes and purchasing power. For example, if the health care allowance were to be increased, policymakers would consider lowering the sums distributed by other forms of income-compensating policies.

The ability of health care and social care financing mechanisms to generate sufficient revenues cannot be thought of in isolation from the broader economy. In contribution-based systems, revenues are dependent on wider economic performance that affects the labour market. In Germany, for example, ensuring sustainable financing of the SHI system has been among the major aims of successive governments since 2000.¹² This has to be seen in the wider context of economic stagnation in the early 2000s, with a continued rise in unemployment rates (to just over 11% in early 2005). This also affected the SHI system, given its dependence on contributions from the paid labour force (and pensions). In response, the then government initiated a major structural reform ('Agenda 2010') in 2003, targeting the labour market, social policies (including health) and the financial sector. Widely seen as a departure from the traditional German social policy model, the reform has been perceived by some to have been crucial for the economic turnaround of the country (Schwander and Manow, 2016).⁸² Unemployment decreased steadily while employment increased. This has significantly increased the number of people subject to mandatory health insurance contributions, and their number continues to rise. These trends are seen to have ultimately benefitted the financial basis of the SHI system:

'Over the last five, six, seven years... we've seen a consistent increase in [SHI] income from year to year of 3-4% volume, [which] is enormous compared to the last 30 years. And that's of course because every year there's been a very good increase in the number of employed – with employees it's considerably over 1% each year and then there are pay increases as well, which are also considerably higher in the last few years than in the 2000s' (Germany Policy DE_5).

Together with other measures, including reforms within the mandatory health insurance system, these measures have been viewed as putting SHI financing on a firm footing. One interviewee commented:

'Health insurers have a financial buffer and the Health Fund has one too. Together it's approximately 28 billion currently... Although it's not a transition to large capital reserves, but of course it's different to the political situation' (Germany Policy DE_7).

Conversely, a thriving economy may also be seen as obviating the need to reform. For example, for Sweden, it was argued that the changing demographics should trigger changes

in the way the system is financed in a sustainable way but this has not become an issue because the Swedish economy has been stable:

'I think that government can sleep with good conscience because we still have a good economy. I've seen that when I've been out in Europe, and having discussions about elderly care, then I hear from UK, from Finland, from the Netherlands, the discussion is always about how we are handling all the cutbacks in financing. They ask me, so what is Sweden doing? How are you handling the cutbacks? What cutbacks? We're getting more money every year into the system. Even though we have a demographic situation this last ten years, we haven't increased our number of plus-80s. We have had some six, eight, nine years that have been very favourable' (Sweden Policy SE_1).

5.2 Ensuring financial sustainability may be more pressing than raising additional funds in the short to medium term

While it is difficult to generalise from the countries included in the review, it appears that concerns about the long-term sustainability of public finances overall play a greater role in financing decisions than does interest in raising additional revenues in the short to medium term for health and social care. This is an important distinction, as pressure to increase health and social care funding may be weaker in many other countries than in the UK.

For example, for France it was noted that increasing attention is being paid to improving the allocation of resources within health care rather than increasing the level of revenues generated:

'To be frank, the increase of funding for healthcare insurance is not the number one priority in France ... and you know that health spending/GDP is traditionally quite high in France compared to other countries. We are convinced that there is a room for manoeuvre to make savings while retaining a good health service to the population' (France Policy FR_1).

Similar concerns were raised by stakeholders from New Zealand. While there is political debate about whether the health system is adequately funded given observed health outcomes, in particular in the indigenous population, not everyone agrees that additional revenue would solve this problem:

'So, there is an argument about whether that needs to be addressed by additional funding or by better organisation of existing funding, depending on which side of the political spectrum you're on. Because of course, as you know, none of these things can be solved by hard evidence' (New Zealand Policy NZ_1).

Of note, since 1989 the New Zealand treasury has been required, by law, to produce a report on the long-term fiscal position every four years to identify future challenges and options for addressing them.⁸³ Population ageing and health care tend to be among the key

issues but the degree to which recommended options are being taken up by the government varies:

'It's sometimes something that politicians disregard because they don't commission it, it's something that treasury is required to do in legislation, so it's sometimes an area where the civil service and the policy butt against each other' (New Zealand Policy NZ_1).

Likewise, while sustainability as such was reportedly less of a concern in countries such as Sweden, where the economy is expected to do well at least in the short to medium term, the focus of discussions there is on ensuring that resources are used efficiently, rather than on how to better generate revenues: *'The biggest discussion in Sweden right now is not on how you get money into the system but how we use it'* (Sweden Policy SE_1).

Some evidence of interest in sustainability rather than raising additional revenues can also be seen by looking at counter-cyclical measures countries have put in place. For example, there is recognition that VHI in Slovenia allowed the Health Insurance Institute to maintain access to health care services following the 2008 economic crisis without shifting the burden disproportionately to users of health care or raising additional public revenues (see Box 5). While there are currently efforts to dismantle VHI in Slovenia and replace it with a levy, previous reform efforts in this regard have not been successful. The health care allowance in the Netherlands also serves to buoy revenues for health care by increasing the tax-funded component of the health care system when households become poorer and unable to make income-related contributions. Closing the so-called sustainability gap in Finland has been a key driver of the forthcoming health and social welfare reforms. Expectations for depressed economic growth have heightened concern in Finland about fiscal sustainability and the goal of the reform is therefore seen as *'not to reduce the budget, but to keep the projected costs under reasonable control'* (Finland Policy FI_2).

On a related note, the reforms in the Netherlands were designed to improve sustainability through increased competition between health insurers. The evidence on whether this has occurred is mixed, particularly as expenditures increased fairly rapidly in the first years of the reforms.¹³ However, more recently, expenditure growth has slowed, which has not been attributed to the market mechanisms but instead because *'government made an agreement with all the interest groups that annual healthcare expenses will grow to 2.5%, then 1.5%, and currently 1% per year. And that has basically been the threshold, or benchmark, in negotiations'* (Netherlands Policy NL_5).

Social care, in comparison with health care, is arguably seen as something necessary but nevertheless more expendable when there are to be cuts in public expenditures. Exceptions to this tendency appear to be the Scandinavian countries, which were not hit as hard by the 2008 economic crisis as other European countries were. Elsewhere among the countries where we interviewed key informants, we heard of efforts to contain social care costs. In the Netherlands there were budget cuts in 2015, while caution about overspending led to a budget surplus in that fiscal year. As described earlier, the Netherlands also reformed its

LTC funding system to incentivise care at home to allow people to remain independent for longer before being admitted to nursing homes, as a form of cost containment, which is in step with many people's preference to receive care in their own home. In Germany needs assessment levels have changed so that lower levels of need for care are now granted home modifications, which allows users to stay at home for longer. Austria has strengthened their 24-hour-care programme, which has similar implications, and Japan implemented similar changes earlier, in 2005.

5.3 The role of context and political factors in shaping reforms cannot be overestimated

Country context, path dependency and societal values (especially notions of fairness and equity between socioeconomic groups, regions and generations) play major roles in all countries in shaping health and social care financing systems and in determining what sorts of reforms are considered acceptable by citizens. This can lead to change being incremental or even to no change at all. In Sweden it was suggested that:

'Rights to health care will stay the same' because it is 'so deeply rooted in what [people are] expecting as a citizen'; providing adequate resources for health is considered to be 'a matter of principle' (Sweden Policy SE_3). Similarly, 'all the political parties say that health care and elderly care and social care should be paid through taxes; there is no debate about it' (Sweden Policy SE_1).

Reforms have also generally been designed in a way that broadly maintains existing systems. The 2006 health care reforms in the Netherlands provide a good example. Pre-2006, those on higher incomes, about 40% of the population at that time, had to purchase private health insurance, while the remainder of the population was covered through sickness funds.¹³ The system was then reformed to improve efficiency and achieve universal access, but a market competition model was chosen over a tax-based NHS-style model because the structures for insurance markets were already in place.

In Finland it was observed that *'under the previous government there was some consideration for an insurance-based system'*, but ultimately the government *'opted for a Nordic solution, a Scandinavian solution where there is tax-funded universal service system which is, by the way, more like the case of the NHS in England'* (Finland Policy FI_2). It was highlighted that the Finnish population did value the universal public service of the health system and dismantling it would be very challenging politically.

The framing of the overall debate has been noted in some countries to be an important driver as well, presenting the health sector as an important part of the economy, as in Germany:

'Here, at least here we have the principle... we try to present publicly, as we did when we introduced legislation, when we introduced more services [and so] try to achieve willingness

from the public to pay more for it. So that health expenditure is not necessarily perceived the same way before as a burden, but actually as a very important economic branch of our country. We keep emphasising that the health sector especially can be viewed positively as far as employment is concerned but also where the economic factors are concerned, economic growth, innovation cycles etc.' (Germany Policy DE_5).

6. Summary of key points of relevance

This final section summarises the key points that have emerged from the review of selected countries and which we consider important to the identification of potential options for funding health and social care in the UK.

In this paper we have outlined the variety of health and social care funding systems in high-income countries. We have reported how selected countries configure their systems at present, whether and how this has changed or been interrogated in recent years, as well as important aspects of the funding environment which drive or constrain reform. Below, we summarise key points that have emerged from the review of selected countries and which we consider important to the identification of potential options for funding health and social care in the UK. We will test the relative public acceptability of different funding options, via focus groups and a discrete choice experiment, in the remaining stages of our research.

6.1 Drivers and constraints

The review of international experience highlighted what drives policymakers to consider changes to how they fund health and social care, and what constrains them when doing so. We found that health and social care financing reforms tend to be catalysed by changes in economic conditions rather than by rising demand for care. Concerns that instigate reform often arise from economic crises, or perceived crises. The ability to generate revenues, whether public or private, is inevitably dependent on the broader economy. In times of economic difficulty a common policy response has been to try to limit public expenditure, leading to concerns about how to pay for health and social care. This story is familiar in the UK and many other countries.

It may appear a truism to say that political commitment and preference, alongside a perceived understanding of what is publicly acceptable, shape what funding reforms are considered in a given country. As the demand for health and social care grows steadily and progressively rather than in sudden, highly visible jumps, there can be political inertia, which prevents change to existing funding arrangements beyond relatively minor adjustments. That is a circumstance that affects all countries. However, a widely supported principle in one country, such as social solidarity as a basis for health care funding, may generate unwillingness to diverge significantly from a longstanding commitment to tax-based or mandatory insurance-based funding. But in another country, the weight accorded to social solidarity may be perceived as significantly weaker, with consequently greater willingness by policymakers to at least consider other funding options. Such differences of emphasis may apply across different parts of the UK, and we are investigating this in the latter stages of our research.

We have found that incremental change to health and social care funding arrangements is much more common than fundamental reform. But even in the case of more profound changes – such as the introduction of mandatory long-term care insurance in Germany and Japan – path dependency, societal values and country context are clearly key to shaping the options that are considered or implemented. For example, approaches to addressing perceived cost pressures in social care systems with high degrees of universal coverage for the whole population appear to emphasise reducing benefits and increasing co-payments, rather than fundamental reform that might threaten the principle of universality. The experience to date in all parts of the UK, with much social care paid for by private individuals rather than by the state, can be expected to have its own constraining effect on consideration of future funding options.

Finally, the framing of the overall debate can be important, both as a driver of reform and a brake on it. We found Germany to be an interesting example of the scope for such framing, as there the debate about health care has included seeing it as an important sector in the economy, providing employment and opportunities for investment.

6.2 Patterns in care funding internationally

A few general patterns emerge when we study the landscape of health and social care funding systems of high-income countries. Health care funding is commonly heavily dependent on tax, as it is in the UK, or mandatory insurance; whereas social care often (though not everywhere) relies to a greater extent on private funding, as it does in all four UK countries. This difference between the two care sectors has the potential to lead to seemingly arbitrary boundaries between health care and social care within a country, according to how they are respectively funded. While the integration of health care funding with social care funding is an acknowledged priority in some countries, and is planned in Finland, there is little evidence of when and how and such integration will be taken forward elsewhere.

The overall balance between public and private financing of health care or social care typically changes incrementally, if at all (other than as a result of definitional changes in data recording). In England the recently introduced Social Care Precept, allowing local government to increase council tax (a form of tax based on house values) by up to 3% per year to pay for more social care, is just such an example of important but incremental change. Despite the emphasis internationally on incremental changes, there remains considerable interest in reforming financing systems to make them more sustainable and predictable, and to raise additional revenues. No funding system that we reviewed has been entirely unaffected by change.

Many countries raise taxes for health and/or social care at sub-national as well as national levels. Similarly, throughout the UK, local government contributes a minority of funding to the tax base for social care (via council tax and business rates), though it does not raise funds for health care. Our international review revealed no clear interest in either increasing the

reliance on locally raised taxes or, conversely, on greater centralisation at the level of national government. There are examples of movement in each of those directions.

Reliance on public funding of health care remains strong across all countries included in the review; in some cases, publicly funded expenditure has increased at a faster rate than has total health expenditure. At the same time, in some countries there has been a focus on constraining public expenditure on social care, which implies greater reliance on expenditure by care recipients themselves.

6.3 Specific changes to funding arrangements

High-income countries have taken diverse approaches to tackling the need to increase health and social care funding. Internationally, no single optimal or commonly preferred solution to achieving sustainable revenues has emerged. Thus the international evidence does not signpost a single best path to follow for funding health and social care for the countries of the UK to follow.

Debate and reform around the basis of entitlement to publicly funded social care has been growing internationally in recent decades, more so than in respect of health care. Perhaps most notable has been the adoption of mandatory insurance arrangements for funding (some) social care in a number of countries that originally operated – as the countries of the UK still do – safety net or means-tested systems: France, Germany, Japan and Korea.

Accordingly, there has been, in effect, increased use internationally of mandatory contribution arrangements for funding social care. A citizen of those countries who pays the mandatory long-term care insurance premium knows that that money will be spent on long-term care rather than merely adding to the total pot of government revenues that might be spent on any other area of public activity, as would be the case with general taxation. Although there are pressures on mandatory insurance contribution rates (not to let them rise continually), these systems continue to be sustained fiscally and appear to remain popular and politically acceptable (especially in Japan).

Additionally, many countries have made changes to how access to publicly funded social care is needs-tested: changes affecting the treatment of informal care; and taking into account lifetime needs rather than just current needs. As regards the scope of the public benefits package for social care, accommodation costs are now covered by fewer systems. An innovation in the benefits package, elsewhere as in the UK, is the inclusion (and recognition as such) of publicly supported private financing solutions as non-care benefits.

Beyond those countries with mandatory insurance systems, we did not find active consideration of earmarking/hypothecation of non-payroll-related taxes to fund health care or social care, other than to a very minor degree. This may be for a variety of reasons, including the unappealing pro-cyclical nature of relying on a single revenue source and the rigidity that hypothecated revenues introduce into budget setting, which is often unpopular

with ministries of finance. Hypothecation of any taxes to fund health and/or social care is not currently practised in the UK. There are near-precedents, such as the national television licence fee that is hypothecated to financing the BBC, although it, too, receives other sources of funding. National Insurance Contributions may be thought of by some as being hypothecated to fund the NHS, state pensions and welfare payments, but they are not hypothecated in practice and represent, rather, a tax on income from employment.

More specifically, hypothecated revenue generation to fund health (or social) care through ‘sin taxes’ – eg taxes on alcohol, cigarettes or sugary drinks – is not widely implemented or discussed in the countries included in the review, despite anecdotal popularity. Such taxes are seen as a way of incentivising healthier behaviours rather than as a significant source of funds for health (or social) care.

Cost-sharing by care recipients – user charges, in other words – is more significant in social care than health care, with means-tested charges being a common and continuing feature. A number of countries are considering (further) increases in these charges, recognising the potentially dampening effects on demand as well as the revenue implications. For health care, countries have in some cases reduced or abandoned specific cost-sharing arrangements, in part due to negative public reaction to charges and to the limited revenue they generate. User charges in health care are contentious in the UK, too, and the devolved governments in Northern Ireland, Scotland and Wales have all taken the opportunity to abolish prescription charges. Nevertheless, no discussion of funding options would be complete without some thought being given to the role of user charges, even if they are ultimately rejected.

Finally, we found that reliance on voluntary insurance as a source of either health care or long-term (social) care funding is not increasing. It is present in many countries in a complementary (insuring against patient charges and co-payments) or supplementary (financing improved or greater access beyond publicly funded health services) role. It has a supplementary role in funding health care in the UK, more so in England than in the rest of the UK, but none in social care. Voluntary insurance for social care has not made a significant addition to social care funding in any country we studied with the possible exception of France.

6.4 Next steps

The final stage of this two-year research project is to discuss the advantages and disadvantages of different ways of funding health and social care with a cross-section of the public, in focus groups and in a discrete choice experiment, in all four countries of the UK.

References

- ¹ Bevan G, Karanikolos M, Exley J, Nolte E, Connolly S, Mays N. *The four health systems of the United Kingdom: how do they compare?* London: The Health Foundation and Nuffield Trust; 2014.
- ² Charlesworth A, Firth Z, Fisher R, Gershlick B, Gray H, Roberts A, *et al.* *The social care funding gap: implications for local health care reform.* London: The Health Foundation; 2017.
- ³ HM Treasury. *Country and regional analysis November 2017.* London: HM Treasury; 2017. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/657987/County_and_Regional_Analysis_November_2017.pdf (accessed 14 March 2018).
- ⁴ Blackburn P. *Health cover – UK market report.* 14th edition. London: LaingBuisson; 2017.
- ⁵ Morse A. *Adult social care in England: overview.* HC 1102, Session 2013-14. London: National Audit Office; 2014.
- ⁶ Adult Social Care Statistics, NHS Digital. *Adult social care activity and finance report: detailed analysis. England 2016-17.* London: National Statistics, NHS Digital; 2017. Available from: https://files.digital.nhs.uk/pdf/2/m/adult_social_care_activity_and_finance_report.pdf (accessed 16 May 2018).
- ⁷ Mossialos E, Dixon A. Funding health care: An introduction. In: Mossialos E, Dixon A, Figueras J, Kutzin J. (eds.) *Funding health care: Options for Europe.* European Observatory on Health Care Systems Series. Buckingham: Open University Press; 2002. p.1-30.
- ⁸ OECD, Eurostat, WHO. *A system of health accounts.* Paris: OECD Publishing; 2011. Available from: doi: 10.1787/9789264116016-en (accessed 13 May 2018).
- ⁹ OECD. *OECD health statistics 2017.* Paris: OECD; 2017. Available from: <http://www.oecd.org/els/health-systems/health-data.htm> (accessed 23 November 2017).
- ¹⁰ Cumming J, McDonald J, Barr C, Martin G, Gerring Z, Daubé J. *New Zealand health system review.* Geneva: World Health Organization (on behalf of the Asia Pacific Observatory on Health Systems and Policies); 2014.
- ¹¹ Chevreur K, Berg Brigham K, Durand-Zaleski I, Hernández-Quevedo C. France: Health system review. *Health Systems in Transition.* 2015;17(3):.
- ¹² Busse R, Blümel M. Germany: Health system review. *Health Systems in Transition.* 2014;16(2).

- ¹³ Kroneman M, Boerma W, van den Berg M, Groenewegen P, de Jong J, van Ginneken E. 2016. The Netherlands: Health system review. *Health Systems in Transition*. 2016;18(2).
- ¹⁴ Matsuda R. The Japanese health care system, 2015. In: Mossialos E, Wenzl M, Osborn R, Sarnak D. (eds.) *2015 International profiles of health care systems*. New York: The Commonwealth Fund; 2016, 107-14.
- ¹⁵ Chun CB, Kim SY, Lee JY, Lee SY. Republic of Korea: Health system review. *Health Systems in Transition*. 2009;11(7)..
- ¹⁶ Colombo F, Llana-Nozal A, Mercier J, Tjadens F. *Help wanted? Providing and paying for long-term care*. OECD Health Policy Studies. Paris: OECD Publishing; 2011. Available from: <http://dx.doi.org/10.1787/9789264097759-en> (accessed 23 February 2017).
- ¹⁷ Miklautz A, Habersberger J. The Austrian long-term care system. Comments paper (Austria) presented at: Peer review on financing of long-term care (Long-term care – the problem of sustainable financing). Ljubljana, 18-19 November 2014. Peer Review in Social Protection and Social Inclusion programme, fund by the European Commission. Available from: <http://ec.europa.eu/social/BlobServlet?docId=13214&langId=en> (accessed 23 February 2017).
- ¹⁸ OECD. Long-term care in Sweden. In *OECD Reviews of Health Care Quality: Sweden 2013*. Paris: OECD Publishing, 2013. Available from: <http://dx.doi.org/10.1787/9789264204799-7-en> (accessed 23 February 2017).
- ¹⁹ Anell A, Glenngard A, Merkur S. Sweden: Health system review. *Health Systems in Transition* 2012;14(5). Available from: http://www.euro.who.int/_data/assets/pdf_file/0008/164096/e96455.pdf (accessed 23 February 2017).
- ²⁰ Kallioma-Puha L, Kangas O. *In-depth reform of the healthcare system in Finland*. ESPN Flash Report 2016/34. European Commission - European Social Policy Network. Available from: <http://ec.europa.eu/social/BlobServlet?docId=15887> (accessed 23 February 2017).
- ²¹ Choi YJ. *Long-term care of older persons in the Republic of Korea*. SDD-SPPS Project Working Paper Series. Bangkok: United Nations Economics and Social Commission for Asia and the Pacific; 2015. Available from: <http://www.unescap.org/sites/default/files/SDD%20Working%20Paper%20Ageing%20Long%20Term%20Care%20ROK%20v1-2.pdf> (accessed 23 February 2017).
- ²² Harmon OR, Mallick R. The optimal state tax portfolio model: an extension. *National Tax Journal*. 1994;47(2): 395-401.
- ²³ Eurostat. *Eurostat database*. Luxembourg: European Commission; 2017.

- ²⁴ Glenngard AH. The Swedish health care system, 2015. In: Mossialos E, Wenzl M, Osborn R, Sarnak D. (eds.) *2015 International profiles of health care systems*. New York: The Commonwealth Fund; 2016, p.153-160.
- ²⁵ Australian Government. *Commonwealth Home Support Programme*. Canberra: Department of Health (Ageing and Aged Care); 2018. Available from: <https://agedcare.health.gov.au/programs/commonwealth-home-support-programme> (accessed 12 May 2018).
- ²⁶ Martinez-Vazquez J, Timofeev A. Choosing between centralized and decentralized models of tax administration. *International Journal of Public Administration*. 2010;33: 601–619.
- ²⁷ Colliander A. Taxation in Finland 2009. Helsinki: Ministry of Finance; 2009. Accessible from: https://www.vero.fi/download/Taxation_in_Finland_2009/%7BF740042A-A01D-49ED-8B3F-FBD3420D19D7%7D/7714 (accessed 1 February 2017).
- ²⁸ Moisio A, Uusitalo R. The Impact of Municipal Mergers on Local Public Expenditures in Finland. *Public Finance and Management*. 2013;13(3): 148-166. Available from: https://www.researchgate.net/publication/272795680_The_Impact_of_Municipal_Mergers_on_Local_Public_Expenditures_in_Finland (accessed 1 February 2017).
- ²⁹ Couffinhal A, Cylus J, Elovainio R, Figueras J, Jeurissen P, McKee M, *et al.*. *International expert panel pre-review of health and social care reform in Finland*. Helsinki: Reports and Memorandums of the Ministry of Social Affairs and Health; 2016:66. Available from: <http://urn.fi/URN:ISBN:978-952-00-3848-9> (accessed 12 May 2018)
- ³⁰ Cashin C, Sparkes S, Bloom D. *Earmarking for health: from theory to practice*. Health Financing Working Paper No.5. Geneva: World Health Organization; 2017. Available from: <http://lnct.global/wp-content/uploads/2017/10/9789241512206-eng.pdf> (accessed 12 May 2018).
- ³¹ Kallbekken S, Aasen M. The demand for earmarking: results from a focus group study. *Ecological Economics* 2010;69(11): 2183-2190.
- ³² Layard R, Appleby J. Is it time for a dedicated tax to fund the NHS? *BMJ* 2017;356:j471. doi: 10.1136/bmj.j471 (accessed 13 May 2018).
- ³³ Commission on Taxation and Citizenship. *Paying for progress: A new politics of tax for public spending*. London: Fabian Society; 2000.
- ³⁴ McKenna H, Dunn P, Northern E, Buckley T. *How health care is funded*. London: The King's Fund; 2017. Available from: <https://www.kingsfund.org.uk/publications/how-health-care-is-funded#taxation> (accessed 12 May 2018).

- ³⁵ Harrison A, Dixon J, New B, Judge K. Funding the NHS: is the NHS sustainable? *BMJ* 1997;314:296–8.
- ³⁶ Seely A. *Hypothecated taxation*. London: House of Commons Library Standard Note SN01480; 2011.
- ³⁷ Keable-Elliott I. *Hypothecated taxation and the NHS*. London: CentreForum; 2014. Available from: <http://www.centreforum.org/assets/pubs/hypothecated-taxation.pdf> (accessed 12 May 2018)
- ³⁸ Mossialos E, Dixon A, McKee M. Paying for the NHS. *BMJ* 2000;320: 197–8.
- ³⁹ Evans R. Financing health care: taxation and the alternatives. In: Mossialos E, Dixon A, Figueras J, Kutzin J. (eds.) *Funding health care: Options for Europe*. European Observatory on Health Care Systems Series. Buckingham: Open University Press; 2002.
- ⁴⁰ Commission on the Future of Health and Social Care in England (Chair: Kate Barker). *A new settlement for health and social care: interim report*. London: The King's Fund; 2014.
- ⁴¹ Commission on the Future of Health and Social Care in England (Chair: Kate Barker). *A new settlement for health and social care: final report*. London: The King's Fund; 2014.
- ⁴² Ferré F, de Belvis AG, Valerio L, Longhi S, Lazzari A, Fattore G, *et al.* Italy: Health system review. *Health Systems in Transition*. 2014;16(4).
- ⁴³ Iudicone F. *Italy: New stability/Law extends range of tax-exempt benefits*. Loughlinstown: European Observatory of Working Life; 2016. Available from: <https://www.eurofound.europa.eu/observatories/eurwork/articles/working-conditions-industrial-relations-law-and-regulation/italy-new-stability-law-extends-range-of-tax-exempt-benefits> (accessed 23 February 2017).
- ⁴⁴ Ministero della Salute. *Rendiconto dell'assegnazione dei fondi del cinque x mille*. Rome: 2016. Available from: http://www.salute.gov.it/portale/temi/p2_6.jsp?lingua=italiano&id=1946&area=Ricerca%20sanitaria&menu=cinque (accessed 16 May 2017).
- ⁴⁵ New Zealand Beverage Guidance Panel. Policy brief: Options to reduce sugar sweetened beverage (SSB) consumption in New Zealand. *Pacific Health Dialog*. 2014;20(1): 98-102.
- ⁴⁶ Jones A, Duncan A. *Hypothecated health taxes: an evaluation of recent proposals*. London: Office of Health Economics; 1995.
- ⁴⁷ Doetinchem O. *Hypothecation of tax revenue for health*. World Health Report Background Paper, No 51. Geneva: World Health Organization; 2010.

- ⁴⁸ Smith P, Witter SN. *Risk pooling in health care financing: the implications for health system performance*. Health, Nutrition and Population Discussion Paper. Washington, DC: World Bank; 2004.
- ⁴⁹ Dixon A, Mossialos E. Social insurance. Not much to write home about? *Health Service Journal* 2002;112(5789): 24-6.
- ⁵⁰ De Pietro C, Camenzind P, Sturny I, Crivelli L, Edwards-Garavoglia S, Spranger A, *et al.* Switzerland: Health system review. *Health Systems in Transition*. 2015;17(4).
- ⁵¹ Geraedts M, Heller G, Harrington C. Germany's long-term-care insurance: putting a social insurance model into practice. *The Milbank Quarterly*. 2000;78(3): 375-401.
- ⁵² Centre for Policy on Ageing. *Case Study 8: Long term care insurance in Germany*. Foresight Future of an Ageing Population – International Case Studies. London: Centre for Policy on Ageing; 2016.
- ⁵³ German Federal Ministry of Labour and Social Affairs. *Social security at a glance 2016*. Bonn: 2016.
- ⁵⁴ Forder J, Fernandez J-L. *What works abroad? Evaluating the funding of long-term care: international perspectives*. PSSRU Discussion Paper 2794. Canterbury: London School of Economics and Bupa Care Services; 2011.
- ⁵⁵ Bundesministerium für Gesundheit. *Zahlen und Fakten zur Pflegeversicherung*. Berlin: 2017. Available from: https://www.bundesgesundheitsministerium.de/fileadmin/Dateien/3_Downloads/Statistiken/Pflegeversicherung/Zahlen_und_Fakten/Zahlen_und_Fakten.pdf (accessed 16 May 2018).
- ⁵⁶ Schulz E. *The long-term care system for the elderly in Germany*. ENEPRI (European Network of Economic Policy Research Institutes) Research Report No. 78. Berlin: ANCIEN Project (Assessing Needs of Care in European Nations); 2010. Available from: http://www.ancien-longtermcare.eu/sites/default/files/ENEPRI%20_ANCIEN_%20RRNo78Germany.pdf (accessed 13 May 2018).
- ⁵⁷ Nadash P, Doty P, von Schwanenflügel M. The German long-term care insurance program: evolution and recent developments. *The Gerontologist*. 2017;57(5): 1007. doi:10.1093/geront/gnx018 (accessed 13 May 2018).
- ⁵⁸ Cos. Pflege: Zweifel an Vorsorgefonds. *Der Spiegel*. 5 May 2014.
- ⁵⁹ McLeary W. The earmarking of government revenue: a review of some World Bank experience. *The World Bank Research Observer*. 1991;6(1): 81-104.

- ⁶⁰ Courbage C, Roudaut N. Empirical evidence on long-term care insurance purchase in France. *The Geneva Papers on Risk and Insurance – Issues and Practice*. 2008;33(4): 645-658.
- ⁶¹ Department of Health. *Public perceptions of the NHS and social care – an ongoing tracking study for the Department of Health*. London: Ipsos MORI, Social Research Institute report. 2015. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/444783/NHS_tracker_acc.pdf (accessed 16 May 2018).
- ⁶² Goecke H, Pimpertz J, Schäfer H, Schröder C. *10 Jahre Agenda 2010; ein Faktenpapier*. Köln: Institut der deutschen Wirtschaft; 2013.
- ⁶³ German Council of Economic Experts. Annual Report 2016/17. Wiesbaden: GCEE; 2017. Available from: https://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/gutachten/jg201617/kurzfass_eng_2016_17.pdf (accessed 13 May 2018).
- ⁶⁴ Bundesministerium für Gesundheit. *Finanzierungsgrundlagen der gesetzlichen Krankenversicherung*. Bonn: 2016. Available from: <http://www.bundesgesundheitsministerium.de/themen/krankenversicherung/finanzierung/finanzierungsgrundlagen-der-gesetzlichen-krankenversicherung.html#c2376> (accessed February 2017).
- ⁶⁵ Cylus J. *Slovenia: Health system expenditure review*. Ljubljana: European Observatory on Health Systems and Policies, WHO and Slovenian Ministry of Health; 2015.
- ⁶⁶ Thomas S, Thomson S, Evetovits T. *Making sense of complementary health insurance (CHI): analysis of the health system in Slovenia*. Ljubljana: European Observatory on Health Systems and Policies, WHO and Slovenian Ministry of Health; 2015.
- ⁶⁷ American Association for Long-Term Care Insurance (AALTCI). 2017. Website. Available from: <http://www.aaltci.org/> (accessed 20 May 2017).
- ⁶⁸ KF Foundation. *Long-term care in the United States: A timeline*. Fact sheet. San Francisco: The Henry J. Kaiser Family Foundation; 2015. Available from: <https://kaiserfamilyfoundation.files.wordpress.com/2015/08/8773-long-term-care-in-the-united-states-a-timeline1.pdf> (accessed 23 February 2017).
- ⁶⁹ Fédération française des sociétés d'assurances (FFSA). *Assurance dépendance: 7,3 millions de personnes couvertes à la fin de l'année 2014*. Paris: Fédération française des sociétés d'assurances; 2016.
- ⁷⁰ Doty P, Nadash P, Racco N. Long-term care financing: lessons from France. *The Milbank Quarterly* 2015;93(2): 359-391.

- ⁷¹ Schokkaert E, Van de Voorde C. User charges. In: Glied S, Smith P. (eds.) *The Oxford Handbook of Health Economics*. Oxford: Oxford University Press; 2011. Chapter 15, 329-353.
- ⁷² Department of Health. *Department of Health annual report and accounts 2016/17*. London: Department of Health; 2017.
- ⁷³ Manning WG, Newhouse JP, Duan N, Keeler EB, Leibowitz A. Health insurance and the demand for medical care: evidence from a randomized experiment. *American Economic Review*. 1987;77(3): 251-277.
- ⁷⁴ Kiil A, Houlberg K. How does copayment for health care services affect demand, health and redistribution? A systematic review of the empirical evidence from 1990 to 2011. *European Journal of Health Economics*. 2014;15(8): 813-828.
- ⁷⁵ Chandra A, Gruber J, McKnight R. The impact of patient cost-sharing on low-income populations: evidence from Massachusetts. *Journal of Health Economics*. 2014;33: 57-66.
- ⁷⁶ Li X, Anis AH. Cost sharing of prescription drugs and demand for health-care utilization among seniors with rheumatoid arthritis. *Applied Economics Letters*. 2013;20(1): 23-27.
- ⁷⁷ Ziebarth NR. Assessing the effectiveness of health care cost containment measures: evidence from the market for rehabilitation care. *International Journal of Health Care Finance and Economics*. 2014;14(1): 41-67.
- ⁷⁸ Shigeoka H. The effect of patient cost sharing on utilization, health, and risk protection. *American Economic Review*. 2014;104(7): 2152-2184
- ⁷⁹ Forder J, Allan S. *Competition in the care homes market*. London: Office of Health Economics Commission on Competition in the NHS; 2011.
- ⁸⁰ Nyman J. The private demand for nursing home care. *Journal of Health Economics*. 1989;8(2): 209-231.
- ⁸¹ Forder J. Mental health: market power and governance. *Journal of Health Economics*. 2000;19(6): 877-905.
- ⁸² Schwander H, Manow P. 'Modernize and Die'? German social democracy and the electoral consequences of the Agenda 2010. *Socio-Economic Review*. 2016;15(1);117-134. doi: 10.1093/ser/mww011 (accessed 13 May 2018).
- ⁸³ New Zealand Treasury. Statement on New Zealand's long-term fiscal position. Wellington: New Zealand government; 2016. Available from: <https://treasury.govt.nz/publications/lftp/he-tirohanga-mokopuna-2016-statement-new-zealands-long-term-fiscal-position> (accessed 16 May 2018).

- ⁸⁴ Allin S, Rodoler D. *The Canadian health care system*. International health care system profiles. New York: The Commonwealth Fund; 2017. Available from: <http://international.commonwealthfund.org/countries/canada/> (accessed 23 March 2018).
- ⁸⁵ Ferré F, de Belvis AG, Valerio L, Longhi S, Lazzari A, Fattore G *et al*. Italy: Health system review. *Health Systems in Transition* 2014;16(4).
- ⁸⁶ Donatini A. *The Italian health care system*. International Health Care System Profiles. New York: The Commonwealth Fund; 2017. Available from: <http://international.commonwealthfund.org/countries/italy/> (accessed 23 March 2018).
- ⁸⁷ Arntz M, Sacchetto R, Spermann A, Steffes S, Widmaier S. *The German social long-term care insurance: structure and reform options*. Discussion Paper Series, IZA DP No. 2625. Bonn: Institute for the Study of Labor; 2007. Available from: <http://ftp.iza.org/dp2625.pdf> (accessed 20 December 2017).
- ⁸⁸ Joël, M-E; Dufour-Kippelen, S; Duchêne, C; Marmier, M. *The long-term care system for the elderly in France*. ENEPRI (European Network of Economic Policy Research Institutes) Research Report No. 77. Paris: ANCIEN Project (Assessing Needs of Care in European Nations); 2010. Available from: <http://www.ancien-longtermcare.eu/sites/default/files/ENEPRI%20 ANCIEN %20RR%20No%2077%20France.pdf> (accessed 23 February 2017).
- ⁸⁹ Dilnot A. Commission on Funding of Care and Support. *Fairer care funding – the report of the Commission on Funding of Care and Support*. (The Dilnot Report). London: The Stationery Office; 2011. Available from: <http://webarchive.nationalarchives.gov.uk/20130221130239/http://dilnotcommission.dh.gov.uk/files/2011/07/Fairer-Care-Funding-Report.pdf> (accessed on 10 October 2016).
- ⁹⁰ Olivares-Tirado P, Tamiya N. *Trends and factors in Japan's long-term care insurance system: Japan's 10-year experience*. Dordrecht: Springer Netherlands; 2014.

Appendix A: Expert Reference Group

The members of the Expert Reference Group are:

Professor David Bell – University of Stirling

Anita Charlesworth – The Health Foundation

James Lloyd – Formerly Director of the Strategic Society Centre, London

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

Professor Nicholas Mays – London School of Hygiene and Tropical Medicine

Professor Ciaran O'Neill – Queen's University Belfast

Appendix B: Analytical framework

The configuration of health and social care systems of financing can be organised along the following dimensions:

Coverage and benefits	Basis for entitlement to publicly funded system
	Benefits covered by publicly funded system
	Degree of coverage
	Generosity of benefits from public system
Cost-sharing for publicly financed services	For each type of provider/service:
	Type of user charge
	Level of user charge
	Exemptions
	Cap on user charge
Collection	Public funding sources (and % of total expenditure)
	Private funding sources (and % of total expenditure)
	% of population with private insurance coverage (and type)
	Progressivity of financing
Pooling	Who is responsible for risk-pooling?
Provision	For each type of provider/service:
	Public/private
	Payment mechanisms
Governance	For each type of provider/service:
	Who is responsible for decision-making?
	Are decisions integrated with health/social care?
Other	Have there been attempts at financing reform recently?
	To what extent does macroeconomic policy drive the approach to health/social care financing?

Appendix C: Key informant interview topic guide

Identifying options for funding health and social care in the UK: learning from international experience

In light of the projected gap between funding and demand for health and social care services in the UK and elsewhere, there is a need for evidence to improve understanding about the pros and cons of the many options that are available. Informed by the international literature and the perspectives of representatives of policy, academia and the public, this study seeks to explore the acceptability of different options for the future funding of health and social care in the UK. By reviewing the international evidence around reforms to funding arrangements, and by engaging expert opinion via interviews, we aim to analyse current thinking about funding options and their implications. We hope that the interviews will also inform our understanding of the potential transferability of funding models and approaches to the UK.

For interviewers:

Remember to:

- ask for permission to audio-record
- ask for permission to acknowledge their contribution by name in final publication
- **clarify terminology:** we are interested in the health/social care funding model in their country; ie how funds are raised from citizens/taxpayers/service users/patients. By 'social care' we are referring to the equivalent of what is termed 'long-term care' in most SHI systems.

Under any question where relevant, consider prompting on:

- sub-national taxes
- sypothecation
 - sin taxes
 - employer/corporate payments and taxes
- compulsory insurance
- charges/deductibles/hotel charges
- tax and pension incentives

- welfare payments

Key questions

Introduction to the interview participant

Could you briefly introduce yourself and your role and describe your area of expertise?

Reforming health and long-term care funding: past experiences and ongoing/future proposals

- Please describe any key recent past or ongoing reforms of your country's health/long-term care funding system. NB: If the interviewer has a specific reform/set of reforms in mind, they should explore that instead of the generic question.
 - *(Prompt on what is funded, how it's raised, who's entitled to it).*
 - *Consider prompting on: sub-national taxes; hypothecation (sin taxes, employer/corporate payments and taxes); compulsory insurance; charges/deductibles/hotel charges; tax and pension incentives; welfare payments.*
 - Why were these reforms implemented? *(What were the expected outcomes?)*
 - Have there been particular barriers or facilitators that have had an impact on implementing financing reform?
 - Would you have implemented the reforms differently?
 - How well are the reforms working/meeting expectations?
 - What were some of the most important objectives when implementing these changes? *(Prompts: efficiency, effectiveness, minimising bureaucracy, equity, public acceptability, sustainability)*
- To what degree has health/long-term care funding reform influenced the accessibility and quality of services?
- What is the current thinking/debate about health and/or long-term care funding in your country? Are there any plans to further change health/long-term care funding arrangements and if so, how?
 - *Consider prompting on: sub-national taxes; hypothecation (sin taxes, employer/corporate payments and taxes); compulsory insurance; charges/deductibles/hotel charges; tax and pension incentives; welfare payments.*

- What are these proposed changes intended to address?
- To what degree, if at all, are schemes being considered that are designed to target service users more directly through, for example, providing tax credits for private insurance; cash benefits for providing informal care, etc?
- How likely is it that any of the above changes will be implemented? Why/why not?
- Are there particular options for health or long-term care funding that have been ruled out? Why? (*eg more charging, co-payments, hypothecation – see above list*)
- Have there been any funding reforms/consideration of ways to affect the behaviour of patients and/or service users? (*E.g enabling individual decision making, hypothecation, insurance, tax/pension incentives, encouraging supply of informal care*).
 - [France SC: in comparison with other OECD countries, France has a significantly large, voluntary, private long-term care insurance system. Recent proposals to expand the take-up of private insurance were unsuccessful. Why was this?]
- Have there been any funding reforms/consideration of ways to better enable people to pay for their own care? (*Eg welfare payments, equity release schemes*).
 - [Austria SC: a substantial amount of long-term care resources is provided in the form of cash benefits, which is in turn used to pay for informal care among other options. Are there plans to further promote use of informal care? (*eg assistance and training available to carers*)]
- Has the integration of health and long-term care funding been considered in your country?
 - What barriers or incentives are there for this?
 - Has this been reflected in any debates and reforms around the integration of health and long-term care provision?
 - [Finland SC: now looking at integrated provision of health and long-term care, what were the barriers and incentives found so far? How do you ensure adequate funding and provision of services are standardised across all municipalities?]

The role of taxes in health/long-term care funding *(if these questions have already been answered in response to earlier questions, do not repeat them)*

- [For SHI countries] What is the role of taxation for funding health/long-term care in your system?
 - What are the plans (if any) to change the degree to which health/long-term care is funded through taxation and why?
- [Sweden SC: social care in your country has been known to be quite decentralised for both funding and provision. How does the government deal with variation in local tax revenue that can potentially affect the availability of care across municipalities?]
- What is the nature of taxes that are being raised at the various levels in the system (national, regional, local) to fund/subsidise health/long-term care?
 - *[Prompts: income taxes, corporate taxes, sin taxes, etc.]*
 - Has this changed in recent years and if so, how?
 - Are there plans to change this in future and if so, why and how?
- Who decides at what level (national/regional/local) taxes for health/long-term care should be levied?
- What powers do the different levels have to decide how much to raise and how to allocate these?
 - Has this changed in recent years and if so, how?
 - Are there plans to change this in future and if so, why and how?

What is the current thinking (if any) to experiment with innovative forms of taxation in order to (help) fund health/long-term care?

The role of payments by service users in health/long-term care funding *(if these questions have already been answered in response to earlier questions, do not repeat them)*

- What is the role of co-financing – i.e. co-payments, deductibles and user charges by patients/service users – for funding health/long-term care in your system?
 - What are the plans (if any) to change the degree to which health/long-term care is funded through co-financing and why?

- What is the current thinking (if any) to experiment with innovative forms of co-financing in order to (help) fund health/long-term care?

Factors affecting decision-making on health/long-term care funding reforms

- How predictable is income or revenue for health/long-term care funding and how does this affect decision-making?
 - *[Prompt on macroeconomic constraints, demographic changes, other?]*
- How have decisions on health/long-term care funding been influenced by the considerations about the wider economy? (*Prompts: funding gaps, 2008 crisis and recovery (where relevant)*)
- What arrangements are in place to overcome or 'buffer' against fiscal pressures on health/long-term care funding?
 - When have these been introduced and what effect have they had?
 - If no such arrangements are in place, are there any plans to do so and what would these entail?
- Considering the various factors that will impact on decision making on health/long-term care funding, which ones do you believe have been most important and why?
 - public opinion *[prompt: trust versus expectations versus acceptability]*
 - political constraints/beliefs
 - interest groups
 - system goals and values *[prompts: fairness, intergenerational solidarity, etc.]*
 - other
 - *[Japan SC: premium contributions to long-term care insurance are made only by employees and pensioners 40 years or older. How was this decision made and are there any plans to change this? Why (or why not)?]*
 - *[Germany SC: childless workers contribute more towards long-term care insurance. What are the reasons for that?]*

Wrap up and close

- Can you suggest any documents or data sources which would help us answer the above questions?
- Would you recommend any other experts who we should talk to about health and social care funding in your country?

Appendix D: Entitlement and coverage for publicly funded health and social care

Publicly funded health care: entitlement and coverage

Basis for entitlement to publicly funded health care benefits

The majority of countries included in the review provide (almost) universal coverage, with citizenship and/or legal residence in the given country being the most common basis for entitlement to health care. For example, in Australia, entitlement includes Australian citizens, residents with a permanent visa, and New Zealand citizens, following their enrolment in Medicare and confirmation of identity. In statutory insurance systems, entitlement is typically tied to employment status, with dependents included free of charge as noted above. For example, in France SHI coverage is almost universal (99.9% of the population in 2013). Those with an annual household income of under €9,534 (2013/14) are covered (free of charge) by CMU (universal health insurance); transitory foreigners and undocumented migrants who have lived in France for at least three months are eligible for free coverage under state medical assistance (AME) for those whose income is below the CMU threshold. At the end of 2014, there were 294,300 beneficiaries of AME and related expenditure equated to about €720m (0.5% of total expenditure of SHI of €146.2b). Other beneficiaries must pay an annual premium equal to 8% of revenues above the ceiling.¹¹

Likewise in Germany, anyone legally residing or working in Germany who holds a legal employment contract enters the SHI system and contributes monthly payments. SHI costs for the unemployed and for those on benefits are paid for by the state. In Japan, all residents are required to enrol in one of two schemes: the health insurance system for employees and their families (60% of the population) or the national health insurance (NHI) system for the self-employed, retired and unemployed (40%), which is administered by local government. In Korea, the majority of the population is covered by compulsory national health insurance while the very poor are covered by the medical aid programme.

The US has so far been an outlier in that it did not offer universal access to health care; instead entitlement to publicly funded services was dependent on certain conditions, with Medicare providing healthcare for those aged 65 years and over, Medicaid for those under a certain income threshold or the Veterans Health Administration for veterans of the armed forces. However, with the 2010 Patient Protection and Affordable Care Act (ACA), health care coverage is gradually being expanded, requiring all residents to obtain health insurance or pay a financial penalty if they do not. Under the ACA, from 2014, Medicaid coverage has been extended to low-income adults in states that have opted to expand eligibility, and tax credits have been made available for middle-income people who purchase private coverage.

Benefits covered by the publicly funded health care system

The scope of services covered under the statutory system is fairly similar among countries included in the review, with all systems offering a basic basket of services, including general practitioner and specialist care, and hospital inpatient and outpatient services. There is, however, variation in relation to services such as mental health care, rehabilitation, dental care and optometry. For example, in France, patients are entitled to access a comprehensive set of health care services, including hospital care and treatment in public or private facilities providing health care, rehabilitation or physiotherapy; outpatient care; diagnostic services and care; pharmaceutical products, medical appliances and prostheses prescribed and included in the positive lists of products eligible for reimbursement; and prescribed health care-related transport.¹¹ In Germany, health care covered under SHI includes preventive services, ambulatory and hospital care, mental health care, dental care, optometry, physical therapy, prescription drugs, medical aids, rehabilitation, hospice and palliative care, and sick leave compensation.¹² A similar range of services is also offered in Japan, with all insurance plans providing the same national benefits package, covering hospital care, ambulatory care, mental health care, approved prescription drugs, home care, physiotherapy, and most dental care. Some preventive measures are publicly provided to those aged 40 and older, including screening, health education and counselling.¹⁴

In Canada there is no nationally defined statutory benefits package although provinces and territories must provide coverage of medically necessary physician, diagnostic, and hospital services (including inpatient prescription drugs) for all eligible residents in order to qualify for federal financial contributions.⁸⁴ Most public coverage decisions are made by provincial and territorial governments in conjunction with the medical profession. Provinces and territories provide varying levels of additional benefits, such as outpatient prescription drugs, non-physician mental health care, vision care, dental care, home health care, and hospice care.

A number of countries explicitly exclude selected services from coverage under the public systems. For example, in Italy the public benefits basket does not include dental care and it also operates negative lists defining what is not covered at all, such as cosmetic surgery, services that are covered only on a case-by-case basis (for example, orthodontics and laser eye surgery) and services for which hospital admissions are likely to be inappropriate (for example, cataract surgery).⁸⁵ Regions can choose to offer services that are not included in a nationally defined benefits package (essential levels of care) but must finance them themselves.⁸⁶ Korea also excludes patient transportation, glasses and contact lenses along with services that are not considered essential to daily living such as plastic surgery and high-cost services.¹⁵

Most systems include prescription drugs within the publicly funded basket of services but they usually require patient co-payment (see below).

Among the countries included in this review, access to specialist services tends to require referral. Most countries have assigned a gatekeeping role to general practitioners (GPs).

France, Germany, Switzerland and the USA have put voluntary gatekeeping arrangements in place, with the 'preferred doctor' scheme in France including financial incentives encouraging residents to sign up with the scheme. In Australia, specialists can claim a higher rebate when the patient is referred by a GP, while in France and Sweden, patients may access specialist care directly, although they must make a co-payment to do so. In the Netherlands, the basic basket of services covered under the statutory system includes GP care, maternity care, hospital care, home nursing care, pharmaceutical care and mental healthcare. The first €385 (in 2016) of expenditure from this package is paid out of pocket, except for GP consultations, maternity care, home nursing care and care for children under the age of 18.

Publicly funded social care: entitlement and coverage

Countries vary widely in terms of who is covered by publicly funded social care and for what types of service; and there is active consideration given in many countries to changing entitlements to publicly financed social care and the benefits it covers. With some notable exceptions, many countries which historically have, as the UK still does, operated with safety net or means-tested public funding of social care (with a heavy reliance on private family or charitable solutions) have seen important changes. A trend has been the introduction of social insurance systems to fund LTC; this is discussed in more detail in section 4. Germany, Japan, France and Korea are examples of countries that have implemented mandatory long-term care insurance (LTCI) systems in the last 20 years or so. One of the key rationales – as expressed particularly in the German case – was concern about the potential for indignity and stigma associated with people having to seek means-tested social assistance to meet care needs.⁸⁷ The introduction in 2002 of the French LTC insurance system (the *Allocation Personnalisée d'Autonomie*, APA) was precipitated by the view that the risk of developing LTC needs should be addressed collectively.⁸⁸

Other countries have also made attempts to implement a mandatory LTCI scheme or had this as a core recommendation from various public commissions or other inquiries into the funding of LTC. Both in the USA and Australia, public commissions have put forward options for mandatory LTCI: the 2011 Productivity Commission on Disability Care and Support in Australia, and the 2013 Federal Commission on Long-term Care in the USA. However, concerns about the political acceptability of potentially expensive LTCI programmes remain effective barriers to the implementation of these reforms.

A number of countries continue to operate with safety net means-tested arrangements for social care, including the USA, Australia and Ireland, as well as the four countries of the UK. Eligibility for publicly funded social care is conditional on income and in some cases, income and assets. People with insufficient financial means to afford care are supported, although the threshold for eligibility varies between countries and sometimes between sub-national localities. There is widespread recognition of the limitations of safety net systems and all of these countries have had public commissions and inquiries of various sorts, which have

proposed alternative, more universal recommendations. Central to the debate are tensions between the benefits and costs. On the one hand, the benefits of LTCI through publicly funded risk-pooling (recognising that private market solutions tend to fail in this area) and improved fairness/dignity from reduced means-testing are identified. On the other hand, there is the perceived issue of the impact on public finances of these alternatives. Nonetheless, pressure to reform towards systems with more universal entitlement clearly remains significant (and this pressure will potentially grow, given the ageing of the population and concerns about expansion of morbidity).

While we can identify the pressure to move away from means-testing, in countries with high degrees of universal coverage we can also see concerns about the continued affordability of these systems. Approaches to addressing the perceived cost pressures appear to be through reducing benefits and increasing co-payments or by increasing contribution rates in hypothecated systems, rather than by more fundamental reform. In Germany and Japan, for example, LTCI contribution rates have been increased over time.

As regards the basis for entitlement to publicly funded social care support, all systems, including in the UK, involve needs-testing with assessment of physical and cognitive functioning to some degree. Need-severity thresholds of various sorts limit entitlement or eligibility. An important consideration is whether the availability of informal care support is (or should continue to be) included in the needs test. For example, in England, public authorities can reduce benefits if some needs are being met with the help of an informal carer, although changes to the eligibility framework in 2014 have altered how far this can be done. The mandatory public LTCI systems are mainly 'carer-blind' in that the availability of informal care does not affect entitled benefits.

Direct payments to care users from public funds are available in England and are meant to provide more care options for users according to the Care Act 2014, and therefore should be enough to purchase LTC services similar to the ones provided by local authorities. Scotland has a similar arrangement of cash benefits according to the Social Care (Self-directed Support) Act 2013. In Germany, beneficiaries can opt to take a cash payment – principally to support (informal) carers – valued at half of the cost of the in-kind services option. Also, those without children are required to pay a slightly higher LTCI contribution rate. As such, the German system does take some account of the availability of informal care.

A recent innovation as regards entitlement and eligibility is for public funding support to be provided on the basis of accumulated or lifetime care needs, not just current need. The Dilnot Commission's capped risk model (proposed but not implemented) for England is an example.⁸⁹ In short, eligibility is determined not only on the basis of the current level of need but also on the cumulative assessed cost of meeting an individual's needs over the person's lifetime. This is very similar to the Australian lifetime cap on LTC costs borne by any individual. Once that expenditure limit is reached, care is publicly provided free of charge to the care recipient. In Germany, a slightly different system applies where annual thresholds

are in place, set at 2% of annual gross household income, but only for care covered by the mandatory LTCI.¹²

With regard to types of care services covered by publicly funded social care/LTC, most systems include home-based personal care. However, most systems, including the UK (apart from Scotland), do not fully cover 'practical' or domestic care costs, even if that need is linked to disability, which means that care users have to meet these extra costs. Furthermore, accommodation costs for residential forms of care are often not covered by public funding, although in all countries of the UK some support in paying such costs is currently available: care users and local authorities can negotiate how they share the costs of care if the user is not able to afford it.

The generosity of publicly funded social care benefits differs between countries. In Germany, benefits from the LTCI system are relatively modest, covering as little as a half of the total assessed costs of care. Similarly, in France the APA system is not expected to cover the full costs of care (covering on average around two-thirds of the cost). In Japan, on the other hand, benefits are more generous. In the means-tested systems, the principle is generally to provide the full amount of assessed care and support levels, although subject to charges.

A recent pattern across a number of countries – particularly in those with entitlement-based systems – is a tightening of the needs test: reducing access for people with lower levels of need and placing more reliance on private funding. For example, reforms in Japan in 2005 redefined, and in doing so reduced, levels of publicly funded support for lower needs groups. Before 2005, people with lower levels of need received care services, whereas now they receive (lower cost) preventive services instead, such as home visits by nurses, the purpose of which is to avoid or delay demand for more expensive care services.⁹⁰ Furthermore, with these reforms the costs of accommodation in care homes, which were covered in the original scheme, have become subject to a means test, reducing effective coverage by the LTCI system to around half the costs of accommodation.

A further option for social care is the provision of publicly supported private financing solutions as non-care benefits, in addition to conventional care and service benefits. Publicly backed financing solutions can help people to pay for the care they need, a benefit that is especially relevant in systems with significant out-of-pocket payment requirements. Examples include publicly operated and underwritten equity release schemes. Care users can benefit from the relative security of a publicly operated system and preferential interest rates. England's deferred payment arrangements (DPAs) system is an example.* There are

* DPAs for social care are offered to people who have local authority-arranged care in England, and to people who arrange their own care, provided their eligible needs are to be met by care provided in a care home. A person can delay paying the costs of their care until death; or can choose to use the deferred payment as a 'bridging loan' to give them more flexibility in deciding when to sell their home. The 2014 Care Act made it obligatory for local authorities to offer DPAs, although they had already been made available by some local authorities before 2014.

also proposed innovations that seek to more closely align the benefit/pension system with the self-funding of LTC. An example is a disability-linked annuity in the pension system.*

* A disability-linked annuity means that regular annual pension payments received by an individual are reduced a little, eg 10%, but in return the pension payments will be greatly increased, eg doubled or trebled, at the point that the individual develops a need for social care (eg is no longer able to perform certain activities of daily living) or reaches a particular age (eg 85).

Appendix E: Cost-sharing arrangements for selected service areas internationally

Table E1: Cost-sharing arrangements for selected service areas in 13 countries

	Primary care/GP services	Specialists outside hospital /specialist outpatients	Inpatient care	Dental care	Comment
Australia	<p>GP visits are subsidised at 100% of the Medicare Benefits Scheme (MBS) fee</p> <p>GPs can choose whether to charge above the MBS fee (in 2014/15, ~83% of GP visits were provided without charge to the patient)</p> <p>Patients who were charged paid an average of AUD 31</p>	<p>Visits are subsidised at 85% of the MBS fee</p> <p>Specialists can choose whether to charge above the MBS fee.</p>	Free for public Medicare patients in a public hospital	Full payment required for most services except some selected procedures	<p>New safety net arrangements for GP and outpatient specialist costs are subject to passage of legislation (2016). Medicare will reimburse 80% of out-of-pocket costs (up to a cap of 150% of MBS fee) for the remainder of the calendar year once annual thresholds are met:</p> <ul style="list-style-type: none"> - AUD 400 for concessional patients (including low-income adults, children under 16, certain veterans); - AUD 700 for parents of school children and singles; - AUD 1,000 for all other families
Canada	None	None	None	Full payment required for most services; about half of privately funded dental care is funded	Those receiving social assistance and First Nations or Inuit are exempt from

	Primary care/GP services	Specialists outside hospital /specialist outpatients	Inpatient care	Dental care	Comment
				through VHI, the majority of which is through employment-based plans	or are entitled to reduced co-payments for dental care
Finland	€13.80 per visit; a single primary care centre cannot collect this co-payment more than three times per year Annual cap on costs	€27.50 per visit Outpatient surgical procedures: maximum of €90.30 per procedure Annual cap on costs	€32.60 per day in somatic care; €15.10 per day in psychiatric care Annual cap on costs	€7.50 with a dental hygienist, €9.60 with a dentist, €14 with a specialised dentist, plus procedure-specific co-payments	Children are exempted from co-payments for dental care and prostheses
France	30% of cost plus €1 co-payment Annual cap on user charges of €50 Exemptions: preventive services incl. mammography, cervical screening, compulsory/recommended immunisations; ante/postnatal care)	Outpatient treatments: €18 for treatments with a tariff over €120 (can be charged only once per visit)	20% + €18/day for accommodation SHI covers all costs from day 31 of hospital stay Exemptions: maternity care from the last four months of pregnancy until 12 days postpartum; newborns in the first 30 days	Data not available	Beneficiaries of CMU-C and AME are entitled to free vision care and free dental care Exemption from co-insurance apply to: - those with any of 32 specified chronic illnesses (ALD) for treatment of these conditions - CMU-C and AME beneficiaries - beneficiaries of invalidity and work-related injuries insurance - disabled children under age 20 living in institutions

	Primary care/GP services	Specialists outside hospital /specialist outpatients	Inpatient care	Dental care	Comment
					Children and people on low incomes (CMU, AME) are exempt from paying non-reimbursable co-payments
Germany	A charge of €10 per quarter for first-contact care [GP, specialist in ambulatory care; dentist] and for visits of other physicians without referral during the same quarter was abolished in 2012	See GPs	€10 per calendar day for maximum of 28 days per calendar year	Co-insurance for crowns and dentures at 35-50% of cost; co-payment reduced for those who can demonstrate regular dental check-up	Children under age of 18 years are exempted from co-payments for inpatient and dental care
Italy	None	Varies according to region but with a ceiling per visit (2014: €36.15 plus €10 per prescription i.e. per separate service provided)	None	Full payment of costs required	Children under age six; people aged 65+; people with severe disability; those on low incomes; the unemployed; prisoners; people with chronic or rare diseases are exempt from co-payments for outpatient services, as are those with HIV and pregnant women, who are exempt only for services related to their condition Children under age 14, people with severe disabilities, those on low incomes and other vulnerable groups are exempt from payment for dental care
Japan	30% of costs	See GPs	30% of costs	30% of costs	People over 65 with disabilities and all people over 75 are entitled to reduced co-payments for medical services for physical disabilities and mental

	Primary care/GP services	Specialists outside hospital /specialist outpatients	Inpatient care	Dental care	Comment
	Monthly co-payment cap depending on age and income		Monthly co-payment cap depending on age and income	Monthly co-payment cap depending on age and income	<p>disorders. For these individuals, the co-payment for primary, outpatient and inpatient care per month is means-tested on household income, and is limited to 10% of the costs for a medical service</p> <p>Exemptions from or reduction of all co-payments including for dental care for patients covered by the social assistance programme and under a certain income threshold. Reductions on cost-sharing for children</p>
Korea	<p>30% of costs of service</p> <p>Expense limit for all cost-sharing is based on the average health insurance fee per year</p>	<p>Tertiary hospitals: 60% cost-sharing (100% for medical examination fee); general hospitals: 50% cost-sharing (45% in rural area); other hospital: 40% cost-sharing (35% in rural area); doctors' clinic: 30% cost-sharing</p> <p>Expense limit for all cost-sharing is based on the average health insurance fee per year</p>	<p>Co-insurance of 5-10% for medical services provided for severe diseases, 20% for other medical services; and 50% on meals</p> <p>Expense limit for all cost-sharing is based on the average health insurance fee per year</p>	<p>30-60% cost-sharing depending on level of referral of the facility</p> <p>Expense limit for all cost-sharing is based on the average health insurance fee per year</p>	<p>Patients with certain severe diseases are exempt from cost-sharing or pay reduced co-insurance</p> <p>Reduced cost-sharing for patients over 65 for primary care services: 30% when total cost exceeds KRW 15,000 and co-payment of KRW 1,500 if the total cost is lower. Reduced cost-sharing also for outpatient specialist services for seniors</p> <p>Medical Care Cost Support programmes provide subsidies to the high-risk patients, including 132 disease categories where their income is less than 300% of the minimum cost</p>

	Primary care/GP services	Specialists outside hospital /specialist outpatients	Inpatient care	Dental care	Comment
					<p>of living, or if they are enrolled in the Medical Aid programme</p> <p>Exemptions or reduction on all cost-sharing for primary, specialist outpatient, inpatient and dental care for patients under a certain income threshold. Children are exempt from cost-sharing for all services</p>
Netherlands	None	Varies Annual cap	Varies Annual cap	Full payment required	<p>As of 2015, every insured person over age 18 must pay an annual deductible of €375 for health care costs, including costs of hospital admission but excluding some services, such as GP visits</p> <p>Patients with an in-kind insurance policy may be required to share costs of care from a provider that is not contracted by the insurance company</p> <p>Children under age 18 are exempt from co-payments for all services including dental care.</p> <p>Low-income households are entitled to subsidies (health care allowances) subject to asset testing and income ceilings, to cover community-rated premiums</p>

	Primary care/GP services	Specialists outside hospital /specialist outpatients	Inpatient care	Dental care	Comment
New Zealand	Co-payments for GP consultation average between NZD 15 and NZD 45 but they vary significantly, as there are no limits to these set by GPs Exception in low-income areas, where a higher annual per-patient capitation rate is paid and where patient co-payments are capped at NZD 17.50 per visit	None	None	Data not available	Children under age six are exempted from cost-sharing for primary care; co-payments are reduced for children age six-18
Sweden	Per visit, level determined by county council, varies between SEK 100 and SEK 300 Annual cap of SEK 1,100 for all GP and outpatient visits	Per visit, level determined by county council, between SEK 200 and SEK 350 Annual cap of SEK 1,100 for all GP and outpatient visits	Co-payment varies by county-council, between SEK 80 and SEK 100 Reduced co-payment for low-income populations in some counties	Deductible, then co-payment Prevention: fixed general annual subsidy of SEK 150-300; dental care: deductible of SEK 3,000 and then 50% co-insurance up to SEK 15,000, then 15% co-insurance There is no cap on user charges for dental care	Children under the age of 18 are exempt from cost-sharing for most services including dental care in all counties (in most counties this extends to all those aged under 20) Patients with certain medical conditions and disabilities are exempt from cost-sharing for primary care but this can vary among counties Co-payments for inpatient care are reduced for people on low incomes in some counties
Switzerland	Co-insurance: 10% of cost after deductible Annual cap of CHF 700 for adults and CHF 350 for children	See GP services	10% co-insurance after deductible plus CHF 15 co-payment per day Annual cap of CHF 700 for adults and CHF 350	Full payment	Children have no or reduced deductible (depending on plan chosen). Pregnant women are exempt from all cost-sharing

	Primary care/GP services	Specialists outside hospital /specialist outpatients	Inpatient care	Dental care	Comment
			for children; cap does not apply to the daily co-payment of CHF 15		Children have no or reduced deductible (depending on plan chosen). Pregnant women are exempt from all cost-sharing. Young adults in training (under 26 years) are exempt from co-payments.
USA	Medicare Part B: deductible of USD 147 deductible and then 20% of Medicare-approved fees (plus 15% extra billing if the provider does not accept Medicare rates)	See GP services	Medicare Part A: deductible of USD 1,216 for each hospital admission; co-payment of USD 304 per day between days 60 and 90	Full payment required	Most Medicare and Medicaid programmes apply co-payments and deductibles, with exemptions for people who have paid for health expenditure above a certain threshold. Medicaid generally requires lower cost-sharing

Table E2: Cost-sharing arrangements for selected service areas in social care in 11 countries

Country	Nursing homes	Community-based services (home care)	Comment
Australia	The maximum basic daily cap is 85% of the single person basic old age pension. This is adjusted every 20 th March and 20 th September. Up until 20 th March 2017 this rate is AUD 48.44 a day [GBP 29.7]. The maximum accommodation supplement is AUD 54.39 [GBP 33.4]. Lower income earners are exempt after means test.	There is a smaller daily cap at AUD 9.97 [GBP 6.11], up to AUD 28.61 [GBP 17.55], depending on income.	Low-income earners have reduced daily fees and may be exempt from accommodation fees in case of admission to residential care.

Country	Nursing homes	Community-based services (home care)	Comment
Austria	In general, individuals are responsible for paying for their residential care out of their income/pension and assets. However, they are allowed to keep some of their pension (20%) and cash allowance (10% at grade level 3). The remainder of the cost is covered by the social assistance provider.	A similar arrangement is in place. The highest level of care need, level seven, entails a cash allowance of €1,688.90.	Care homes receive up to 90% of the service user's cash allowance plus up to 80% of their pension.
Finland	Fees are dependent on ability to pay and are agreed with the municipality, the client and the institutional care home that will provide the service.	A 1992 law sets the charges according to the user's income and how many people share the household. A user living alone will pay 35% of any monthly income above €520 as fees (i.e. the percentage is applied on the surplus income) while someone living with another five people will pay 11% of any monthly income above €2,585.	Fees should never be more than the cost of care and there are two caps indicated by another 1992 law. The fees cannot exceed 85% of the user's monthly income and there must be at least €90 left, per month, after fees are paid.
France	Depends on income. Users with income below €799.73 a month do not pay and the wealthiest in the income bracket (above €2,945.22 a month) pay 90% of care costs.	Individuals are expected to make their own arrangements for home care if they choose to live at home. Payment is agreed with the service provider, usually a close relative or professional caregiver. Spouses/partners cannot receive compensation from APA, but other relatives can be paid with the benefit.	Low-income care users do not have to make any financial contribution. In 2014 the threshold was a monthly income of €689.5. Elders with income below that amount did not have to pay user fees.
Germany	The LTCl funds repay the care user up to the limit according to the care level but accommodation costs are not covered. For grade 5, including cases of hardship, the maximum refundable cost is €2,005.	Any cost beyond the limits according to the level of care has to be paid by the care user.	Exemptions apply once a cap has been reached and the user is defined as in need of care grade II or III (the system was recently replaced in 2017 to a 5-point grade; current exemptions are unclear). For these individuals, if annual costs with co-payment have reached 1% of annual household income, then they are eligible for exemption from user charges.

Country	Nursing homes	Community-based services (home care)	Comment
Ireland	Payments vary according to income but never exceed the actual cost of care. Up to 80% of income and 7.5% of the value of any assets per year can be charged.	The home care package helps a person to be cared for in their own home. There is no charge for regular services (home care, nursing care, physiotherapy, etc) as they are part of the public health service.	There are caps on costs: 20% of the service user's income or 20% of the maximum rate of the state pension, whichever is greater, will be kept by the user. The first €36,000 of an applicant's assets are not considered. If the user has a spouse/partner at home, 50% of the couple's income or the maximum rate of state pension is kept, whichever is greater.
Japan	The co-payments are means-tested. Low-income users can be exempt from payment while high-income earners pay 20% of costs. General service users must pay 10% of total cost of LTC at nursing homes but the patients must pay full cost of accommodation and meals. These additional costs can raise total cost-sharing to 30% of total, on average.	The same fees apply.	Exemptions are available for low-income individuals. In 2014, caps were as follows: YEN 37,200 [USD 354.3] a month for standard users, YEN 24,600 [USD 234.29] for municipal tax-exempted households and YEN 15,000 [USD 142.86] for old age pensioners. A separate cap was used for meal costs which were, according to the categories, YEN 23,400 [USD 222.86], YEN 15,000 [USD 142.86] and YEN 9,000 [USD 85.71], respectively.
Korea	Charges for residential care are equal to 20% of cost of services.	Charges for home care are equal to 15% of cost of services.	There are exemptions for users with low-income under the National Basic Living Security Act. For them, co-payments are cut in half (i.e. 7.5% for home care and 10% for residential care).
Netherlands	Charges depend on duration of care and user's income. For the first six months of care, all users pay 12.5% of their income towards LTC costs; the remaining costs, if any, are covered by public funds. The minimum monthly payment is €159 and the maximum is €833 (in 2015). After six months, users with partners or dependent children at home continue to pay the low co-insurance, but all others start paying all of their taxable income plus 8% of their assets.	For home care, municipalities and care users agree on the charges. Municipalities cannot charge more than the maximum LTC Act contribution, which is 9.65% of income (2016), but they can set their own maximum out-of-pocket payments. Low-income individuals may have their fees waived by the municipality.	For residential care, the high co-insurance rate has a cap of €2,285 per year. There is also a minimum allowance that the user has the right to keep per year: €3,517 for singles and €5,471 for couples.

Country	Nursing homes	Community-based services (home care)	Comment
Sweden	The cost of care depends on the type of care needed and the user's income. They are decided by municipalities and respect the maximum national monthly cap of SEK 1,760 (2016).	The same rules and fees apply to home care.	There is a monthly minimum allowance of SEK 5,000 (USD 547.65), ie no fees should be charged if the care user earns less than this amount or will be left with less than this amount per month after paying fees.
USA	In April 2016, the monthly cost of a semi-private room in a nursing home was USD 6,844; a private room was USD 7,698. If using Medicare, 100% of expenses are paid by public funds for the first 20 days; for 21-100 days the user pays for their own care up to USD 140 per day. Medicare pays the remaining balance.	The average monthly cost for home care services was USD 3,813, the use of a home health aide providing assistance for personal care was USD 3,861 monthly and the average cost for spending the day at an adult day health care home was USD 1,473.	Exemptions are unclear on a national level as each state has different approaches to coverage by public funds, but on average there is a sliding scale available for low-income individuals that pay charges out of pocket.