5 Financing of long-term care

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#### 5.1 Introduction

As more people live longer lives all over the world and as fertility decreases, the numbers and share of older people worldwide have been projected to grow from 10 per cent in 2022 to 16 per cent in 2050 (UNDESA, 2022). Increased longevity is a major achievement that also requires changes in labour policies and pensions, the orientation of health systems and, not least, ensuring that countries have welldeveloped and robust long-term care systems.

While for many increased longevity will be experienced as a longer period of life in good health, there will also be a very substantial increase in the numbers of people who will experience disabling health conditions such as dementia, and who will live longer with those conditions. Based on the current characteristics, health-related behaviours, and circumstances of the population who will be older in 2035, a study in the United Kingdom found that, while the prevalence and numbers of people with care needs will fall for young-old adults (those aged 65 to 74), the numbers with high dependency among people aged 75 and over will almost double, suggesting that the capacity of care systems will need to increase very substantially (Kingston et al., 2018).

In the Majority World, i.e. the areas in which most of the world's population lives and where most of the world's land mass is located (areas that have been referred to as 'the developing world', the 'Global South' and which encompass many LMICs), population ageing is occurring at unprecedented rates. Furthermore, population ageing is often correlated with functional decline, occurs disproportionately among women (with the gender gap increasing with age), and is negatively correlated with socioeconomic status (Aranco et al., 2022).

Although age is associated with increases in functional limitations, this relationship is not static. For example, some high-income countries have seen decreases in the proportions of people experiencing cognitive

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impairment and dementia over time; however, total numbers of people with dementia have still increased (Matthews et al., 2016; Langa et al., 2017), in part due to people living longer with the condition.

There are further opportunities to reduce the risks of needing care throughout the life course and to regain functioning through primary, secondary and tertiary prevention (Bennett et al., 2022). Harnessing these opportunities to reduce disability requires addressing wider (health) inequalities. Global evidence shows that the least affluent people spend more years living with disability (Valverede et al., 2021; Zhang et al., 2021), and that these inequalities have risen over time (Bennett et al., 2021).

This chapter discusses the multiple ways in which long-term care is financed. Financing is understood as the approaches used to raise funds for a particular activity or set of activities. In the case of long-term care, particularly if taking a global perspective, it makes sense to consider not just monetary resources, but also in-kind support from family members as well as OOP payments for care, tax-financed care, social insurance schemes, and private insurance products.

We start by describing the main forms of long-term care financing found internationally, first considering the mechanisms available for private and public financing. By private financing we refer to all the monetary and non-monetary resources contributed by individuals and their families to the care process, whereas we use public financing to cover all government-managed programmes (whether at national, regional or local level) that ensure pooling of funds from different sources in support of long-term care services and benefits provision. Within public financing, we look at the main approaches to raising funds, policy choices in terms of public care coverage, and also consider the financial protection provided by long-term care financing approaches. We include short case studies as illustrative examples of how these different financing mechanisms function in practice. We then consider long-term care expenditure in the context of trends in population ageing.

# 5.2 Private long-term care financing

Private long-term care financing includes unpaid care (provided in kind by informal caregivers), direct purchase of services by care recipients using their own income and wealth (their savings or assets), co-payments for services that are partially publicly funded, private long-term care insurance products and charitable spending on long-term care.

# Private in-kind resources: unpaid care

In most countries, most long-term care is provided in kind by unpaid carers such as family, friends and neighbours. While the reliance on family care is the norm in the global Majority World (see for example WHO, 2017), it is also the case even in countries with relatively high levels of public expenditure on care (Spasova et al., 2018). While typically there is no monetary exchange for care, the economic contributions of unpaid carers to care systems are enormous across all countries (Folbre, 2014; Dong & An, 2015) and the economic impact on families can be very substantial. For many carers, there are opportunity costs in terms of lost earnings from employment, impact on health and wellbeing, forgone leisure time - every aspect of a carer's life can be affected by their caring role. There is concern, for example, about the impact of caring obligations in hindering efforts to increase education, employment and economic opportunities for young women and girls in Sub-Saharan Africa (WHO, 2017). In high-income countries there is evidence that reduced labour force participation as a result of providing informal care reduces carers' lifetime earnings and pension entitlements, contributing to poverty in later life, particularly among women (Korfhage, 2019; Skira, 2015). These effects are discussed in more detail in chapter 10 (in relation to the effects on the wider economy) and chapter 8 (in relation to the effects on families). The complexity of these economic impacts means that it is important to ensure that the economic costs of unpaid care are measured fully, so that resource allocation decisions do not lead to additional burden on carers (Comas-Herrera et al., in press).

Unpaid care is provided in kind, mostly by women, and it is provided more intensely among people with lower socioeconomic status or minority ethnic populations (Bauer & Sousa-Poza, 2015). Intense unpaid care provision has been shown to increase economic inequalities (Gammage et al., 2019; Korfhage, 2019), particularly for younger carers (Brimblecombe et al., 2020) and to negatively impact the health and wellbeing of carers (Bom et al., 2019). In some countries, such as Denmark, Sweden and Finland, relatives and other carers with

a personal connection are formally recognised and can receive cash benefits, compensation for lost earnings or a carers' allowance (WHO, 2019; Ylinen et al., 2021; Johansson & Schön, 2017). In the countries of the Majority World, families usually have to bear the costs of care with little support (Govia et al., 2021).

Access to unpaid care is unequal, determined as it is by having family or friends able and willing to provide care. Also, not all families are able to provide enough care, nor to provide care of adequate quality. This is particularly the case for families in contexts of poverty and vulnerable employment and may result in very negative outcomes for people in need of care (Schröder-Butterfill & Fithry, 2014; WHO, 2017).

Historically, public involvement in long-term care in most countries has begun with the state providing support to people without family and without the financial means to pay for care. Reliance on family care as the main form of support is common, with unpaid carers comprising a sizeable proportion of the population in many countries. Estimates vary according to the methods used but the share of the population who provide unpaid care has been estimated to range from 21.3% in the United States to 4.5% in Taiwan, China according to the International Alliance of Carer Organizations (IACO), 2021). This reliance on family care will become increasingly problematic due to demographic changes and decreasing availability of family carers, increased migration and increased female participation in the labour force (WHO, 2015; UNDESA, 2020).

#### Case study: Jamaica

In Latin America and the Caribbean, the rate of change in the proportion of the population aged 60 years and older is occurring markedly faster between 2015 and 2050 than it took to happen in Europe and North America (Cafagna et al., 2019; Aranco et al., 2022). Jamaica is one of the countries in the region where this ageing process will be particularly pronounced. By 2050, 28% of the population will be aged 60 years and older (compared to 13% in 2015 and 19% by 2030), and 6.5% of the population will be 80 or more years old (compared to 2.5% in 2015 and 3% by 2030); approximately 26% of persons aged 60 years and older were living alone in 2014 (Cafagna et al., 2019). At least 71% of the population lives with one chronic health condition. Similar to other countries in the region, need of care in Jamaica rises with age, occurs disproportionately with women (with this gap

increasing with age), and is negatively correlated with socioeconomic status (Aranco et al., 2022).

In this high-risk context, the long-term care system is unsustainably reliant on informal care, both unpaid and paid. Unpaid care is provided mostly by female relatives (regardless of household income), and paid care by domestic workers, often low-income migrants from rural communities. Domestic workers are crucial to the provision of long-term care but are paid for general household work and not specifically to provide long-term care (without employment contracts). Further they are not trained for the caregiving duties they end up assuming in these households, assisting with ADLs, for example, without formal training to do so. They also support unpaid carers from higher socioeconomic groups (Govia et al., 2021). This untrained workforce bears the burden for long-term care. Community-based long-term care services (such as respite care, home visits or assistance) are limited, and mostly provided by volunteers from charities or churches (Govia et al., 2021). The formal care system consists of nineteen state-funded residential homes for older people who are unable to care for themselves, and over 200 unregulated private care homes (Govia et al., 2021; Ministry of Health, 2015). There is some long-term care provision through public general hospitals, where people with mental health and older people with dementia may need to stay if they have no family care available. There is no government strategy for long-term care, and service development has not been encouraged either through tax breaks or other forms of financing.

#### Case study: India

According to the International Alliance of Carer Organizations (IACO, 2021), there are an estimated 138 million unpaid carers in India, which accounts for approximately 10 per cent of the population. The long-term care system in India relies primarily on care provided by these unpaid or family caregivers. There are some residential care facilities (e.g., nursing homes, day care centres) which may be supported by private organisations, not-for-profit organisations or the government. (Johnson et al., 2018; Tripathy, 2014; UNESCAP, 2016). There are also paid home-based care services offered by private organisations in certain cities and states (Agarwal & Bloom, 2022; Ponnuswami & Rajasekaran, 2017). Independent of availability and accessibility of services, residential care arrangements in particular are unlikely to be

popular in the Indian context where legislative and socio-cultural factors place the responsibility on adult children to care for their older parents and contributes to a preference for care to be provided at home by the family (Brijnath, 2012).

Unpaid care provided by families has a substantial impact on overall wellbeing of caregivers. A recent study (Chakraborty et al., 2023) analysing data from the Longitudinal Ageing Study in India (LASI) wave 1 reported that among unpaid caregivers that provided full-time care (over 40 hours per week), 49 per cent had symptoms of depression.

In addition to impacts on health and wellbeing, the economic impact of caregiving on families is considerable. Taking care for dementia as an example, evidence has demonstrated that the costs of care for dementia are relatively high in India (Rao & Bharath, 2013). Indirect costs especially contribute substantially to dementia related costs in LMICs (Mattap et al., 2022). Family carers of persons with dementia in India have reported experiencing a range of indirect costs including impacts on earnings, employment and higher education opportunities because of their caregiving role (Rajagopalan et al., 2022). Given the impacts of unpaid care provision on families and also considering the factors contributing to reduced availability of family care arrangements for older persons in India (e.g., changes to family structures, internal and external migration, increasing female participation in the service sector, etc.), this system of long-term care provision may not be sustainable in the long run (Agarwal & Bloom, 2022; Costa-Font & Raut, 2022).

# Private monetary resources without risk sharing: income, savings and assets

Income, savings and assets are a key source of OOP financing for long-term care and can be used to purchase services directly or to meet the costs of co-payments for publicly organised care services, depending on the system. In some countries (e.g., United States, England), people with income or assets over a certain threshold are not entitled to publicly funded social care and need to cover their costs in full from their own financial resources (Hashiguchi & Llena-Nozal, 2020). It is very difficult to estimate the size of private spending on long-term care as most countries do not monitor long-term care service use and spending by self-payers (Angrisani et al., 2022). In England a recent

estimate from the Office for National Statistics found that nearly 35 per cent of care home residents were self-funders in 2021–2 (ONS, 2022a).

As a form of long-term care financing, over-reliance on private resources is not optimal for several reasons. From an individual perspective, using private resources is only possible for those with sufficient income, savings and assets to cover the costs of their care. This leads to large inequities in access to long-term care services in primarily privately funded care systems, in the absence of any means of sharing the risk of high costs of care with others through an insurance mechanism (Guillén & Comas-Herrera, 2012). As discussed above, there is a risk that people may rely excessively on unpaid care, which can act as a vehicle for intergenerational transmission of inequalities and exhaust the totality of their income and assets, putting them at significant risk of poverty in old age. In particular, low-income individuals who do not have access to informal care will have unmet care needs. From a macroeconomic perspective there is also the risk that people may over-save to protect themselves and reduce consumption, which could dampen economic growth as the population ages, as discussed by Katherine Swartz in chapter 10 of this volume. On the other hand, there are concerns that people may not save enough due to underestimating the risk of needing long-term care in the future, underestimating the cost of long-term care, or mistakenly believing that costs will be covered by health insurance (Barber et al., 2021).

In practice, most high-income countries have some form of long-term care publicly funded support, and even countries with a more familialist or residual public care system where access is means-tested (Horstman et al., 2023) tend to have some form of social assistance to cover people with lower income or assets. It is important to note that, in countries where people with income or assets above a means-tested threshold have no government support in accessing long-term care, private payers may be disadvantaged in terms of the prices they have to pay, as the public authorities are able to negotiate more favourable terms. For example, the fees for self-funded places in care homes in England were on average 41 per cent higher than the fees paid by local authorities when they commissioned publicly funded long-term care provision in the same homes (Competition and Markets Authority, 2017).

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# Private resources with risk sharing: private insurance schemes

Insurance products provide a mechanism for pooling risks with others, so that the risks of everyone covered by a scheme are shared collectively, and resources pooled between members of a scheme are used to cover the costs of their care. This implies that some people pay more than, and some people less than, the actual costs of their care. Individuals can purchase coverage voluntarily from private providers by paying an insurance premium, which is based on the estimated risks of the individual making the purchase, the group risks estimated for all insurers, and the benefits to which they will be entitled. Whereas private health insurance products are typically purchased for immediate coverage, long-term care insurance products are typically purchased when individuals are younger, to cover the future costs of long-term care should they need it. This makes the pricing of long-term care insurance products particularly challenging, as insurance companies need to factor in the group probability of individuals living to advanced age, the probability of their needing care, the length of time that care will be needed, future costs of services and investment returns, all of which are subject to significant uncertainty (ABI, 2010).

The experience of the United States, where voluntary private long-term care insurance was expected to insure against the full costs of care for those who were not eligible for the means-tested public system, shows that in practice voluntary private insurance for long-term care faces major difficulties. A key difficulty is affordability, particularly as, at younger ages when people's incomes tend to be higher and insurance policies are thus more affordable, people face competing financial demands and long-term care may not seem to be a high priority. Other demand-related factors include a tendency to underestimate the probability of needing long-term care and the (erroneous) assumption that there is public coverage in place to which they will be entitled (Frank et al., 2013; Brown et al., 2012). Private long-term care insurance also poses many problems to insurers due to the potential for adverse selection, in which people who know that their risks will be higher tend to buy in more often than those who consider their risks to be lower, thus increasing the risks to the scheme (Feng & Glinskaya, 2020) and also due to the costs of care increasing faster than projected (Frank et al., 2013).

Due to affordability and market failure problems, relying on private long-term care insurance as a full solution to long-term care financing would require substantial subsidies and potentially compulsion, which overcomes the problems of adverse selection by requiring people to opt in regardless of their level of risk, real or perceived (Barr, 2010). However, in a few countries where there is a public long-term care system that provides partial entitlement to long-term care support and where there is clarity on the rules of entitlement to public long-term care and the levels of co-payments (such as Austria, Germany and France), there is a market for voluntary private insurance products that can be purchased to supplement public coverage (OECD, 2021b; Wiener et al., 2018b; Comas-Herrera et al., 2012). If regulated properly, this could potentially support the sustainability of public long-term care financing.

In some countries, private long-term care insurance products are also sold as part of other insurance products (usually health and life insurance). A report by the OECD identified examples of this in Belgium, Costa Rica, the Czech Republic, Finland, Israel, Japan, the Republic of Korea and Switzerland (OECD, 2021b). The same report also identified countries where there is currently no market at all for private long-term care insurance: Australia, Chile, Colombia, the Netherlands and the United Kingdom (OECD, 2021b).

### Case study: United States

In the United States, the majority of total long-term care expenditure is publicly financed, primarily by Medicaid (a means-tested welfare programme for people with low income and disabilities that covers health and long-term services and supports), with the rest funded by private sources. Medicare (an entitlement health insurance programme for people age 65 and older and certain younger adults with disabilities) covers short-term post-acute care but excludes long-term care. In 2020, total long-term care expenditure amounted to USD 475.1 billion, of which USD 343.5 billion (72.3%) were paid for by public sources and USD 131.6 billion (27.7%) by private sources (Colello, 2022). Among the public sources, Medicaid and Medicare accounted for 42.1% and 18.2%, respectively, of total long-term care expenditure, with the rest from federal Covid-19 pandemic assistance (6.3%) and other public payers (5.7%). Among the private sources, direct OOP payments accounted for 13.5% of total long-term care

expenditure, private insurance for 7.8%, and other private sources for 6.5% (Colello, 2022).

There are both demand and supply factors that have limited the appeal of private long-term care insurance. The costs of such insurance are high and many people who are not eligible for public support through Medicaid or Medicare cannot afford private insurance either (Wiener et al, 2018b), as a result of which only about 10 per cent of adults purchase long-term care insurance (Gusmano & Grafova, 2018; Khatutsky et al., 2017). The private market for long-term care insurance in the United States has been contracting, with new stand-alone policies falling from 372,000 in 2004 to just under 70,000 in 2017 (Upadhyay & Weiner, 2019).

It has been estimated that about 75 per cent of people who need long-term care in the United States rely on unpaid carers, and that 41 million Americans are unpaid carers (Upadhyay and Weiner, 2019). Thus, the cost of long-term care represents a significant financial risk for older people and their families. A study estimated that, on average, an adult child providing care to an older parent faces financial losses equivalent to USD 100,000 a year primarily as a result of lost employment (Coe et al., 2018). Among those who do purchase private long-term care insurance, there is evidence that this improves their financial wellbeing, potentially by reducing incentives to dispose of assets to become eligible for Medicaid, providing incentives to save more and reducing intergenerational wealth transfers (Dong et al., 2019).

The Covid-19 pandemic prompted renewed calls for a comprehensive and universal approach to financing long-term care in the United States that supports both home-based care and the improvement in quality and affordability of residential care options (Werner et al., 2020). In the United States where the current approach to financing long-term care is quite fragmented, it is suggested that the introduction of a new long-term care benefit at the federal level could aid in reducing disparities in services coverage across states and in rates of payment (Werner & Konetzka, 2022).

# Co-payments where public schemes cover part of the costs of care

The use of co-payments for publicly organised care is common in many countries, including in social insurance-based systems. The

size of co-payments vary between countries, with some being meanstested. In some countries means tests may take into account income alone, whereas in others both income and assets are considered (Hashiguchi & Llena-Nozal, 2020). For example, in Japan copayments range from 10 per cent to 30 per cent based on income, although 90 per cent of users pay only 10 per cent. In Korea, copayments differ between home and community care (15 per cent) and residential care (20 per cent) (Wyse & Walker, 2021). In Spain the size of co-payments has been estimated to be 24 per cent of all direct costs of services nationally, but there are important differences between regions, ranging from an estimated 15 to 33 per cent (Rodríguez Cabrero et al., 2022). In contrast, in Germany, there is mandatory long-term care insurance where people are entitled to a fixed amount of benefits from the social insurance system taking into account their level of need, and thus have to cover the difference between the amounts provided by the social insurance benefit and the actual costs of the services themselves (Frisina Doetter & Rothgang, 2017). People are usually required to contribute to residential care, and even in the countries with the most generous publicly funded care systems, food and board costs tend not to be covered. For example in Denmark home-based care is free at the point of use, whereas there are copayments for residential care (WHO, 2019).

# Charitable funding

Charitable funding plays a role in long-term care, particularly in countries with less developed public long-term care systems. Charitable funding may be provided to offer care and support to people who have no family or economic resources. There are many examples of international nongovernmental organisations (NGOs) such as HelpAge International, Red Cross and Caritas (in Europe) and national NGOs involved in delivering care, often relying on volunteers to deliver care and support, such as in Ghana, South Africa and the United Republic of Tanzania (WHO, 2017). Religious institutions often provide care that is resourced both in kind by volunteers and through donations, as per Jamaica (Govia et al., 2021) or Malta and Gozo (Fenech et al., 2020). There are also examples of government schemes that organise volunteers to provide home care in Costa Rica (Progressive Attention Network for Integral Elder Care established in

2010) and Thailand (Home Care Service Volunteers for the Elderly programme established in 2003) (Lloyd-Sherlock et al., 2017).

In some high-income countries, charities have an important role in both providing and funding aspects of care that are not covered by the public long-term care systems. One example is the United Kingdom, where palliative care, support for social participation and community engagement, cultural and artistic activities, peer support and community building activities are all provided by charities. In 2020, total long-term care expenditure on personal care in the United Kingdom was estimated to be GBP 54.1 billion; of this, GBP 36.4 billion was government spending, GBP 13.0 billion was OOP expenditure and GBP 4.7 billion (8.7% of total long-term care expenditure) was from not-for-profit institutions serving households (Office of National Statistics, 2022b).

# 5.3 Public long-term care financing

In most countries the public sector has some involvement in long-term care, even if there is no explicit public long-term care system or policy. At the very minimum, public involvement may take the form of support for the long-term care needs of people who do not have family or financial resources, perhaps through the health system (long-stay hospital wards, support from community health workers) or through schemes for people with social needs, for example homes for people who are considered to be destitute, or community support through local governments. Pensions for older people and people with disabilities are also an important resource to support access to care in many countries without formal long-term care systems (Lloyd-Sherlock, 2019; WHO, 2017). In Poland for example there is a small 'nursing supplement' for all persons aged 75 years or more that is intended to help with potential costs of care (Golinowska & Sowa-Kofta, 2017).

Important motivations for the development of public long-term care systems are: awareness of ageing populations and of the decreasing availability of unpaid carers; increased understanding of the distortions to the economy created by individuals reducing consumption in order to save for their future care needs (Barr, 2010); the impossibility for many individuals to save enough (Barber et al., 2021); awareness that

lacking long-term care services may result in increased hospitalisation; and to missed opportunities for prevention (Wyse & Walker, 2021). There is also increased policy support for the development and design of long-term care services that are centred around a more rights-based approach that empowers older people to claim their rights and to hold states accountable in their role as duty bearers (Schulmann et al., 2019).

The main differences between public long-term care systems can be observed in the following:

- Coverage: The coverage of long-term care systems is a key question for financing public long-term care, with decisions about who in the population is covered, which services are covered (what will the eligible population be covered for), and the extent of financial coverage or protection (how much people pay out of pocket. (Wyse & Walker, 2021).
- How public funds are raised and allocated: Virtually all long-term care systems rely on a mix of public and private financing sources to raise revenues for needed care services. Public revenues are most commonly raised through taxation, social insurance or private insurance schemes, while private revenues encompass OOP payments and co-payments required from long-term care users.
- Financial protection: Long-term care schemes provide a mechanism to mitigate the risk of an individual being exposed to catastrophic costs of care, so that the financial risks are collectively borne by the scheme. This risk protection can take many different forms, ranging from contribution to a national public long-term care system, through general or local taxation, to social insurance contributions, to individual or group-purchased private insurance (Guillén & Comas-Herrera, 2012).
- Integration between the financing mechanisms in place for (medical) health care and long-term care: Policy choices for funding long-term care are greatly influenced by the system that countries already had in place for funding health care. High-income countries that finance health care through taxation have tended to fund long-term care in the same way, and countries with social insurance for health have tended to use social insurance for long-term care as well, with the exception of Austria (Trukeschitz et al., 2022).

The remainder of this section looks at each of these issues in turn.

# 1. Coverage of public long-term care

The choices governments make in relation to coverage in effect determine the division of financial responsibilities between individuals, families and the state (Wyse & Walker, 2021).

Eligibility is based on criteria related to care needs (determined by a care assessment and benefit package). A key mechanism for controlling costs is the threshold for care needs deemed eligible for publicly funded long-term care (Wyse & Walker, 2021).

# Universal long-term care coverage

Systems with universal long-term care coverage usually provide publicly funded care to all eligible individuals according to their care needs. The systems may cover mainly older populations (e.g., Japan, the Republic of Korea), or everyone with care needs irrespective of age (e.g., the Kingdom of the Netherlands).

In universal systems everyone is eligible for long-term care according to their needs, regardless of financial status (Wiener et al., 2018a), creating an entitlement to care which is usually similar to the entitlement to medical care. This ensures equitable access and eliminates the stigma of means-tested long-term care (Feng & Glinskaya, 2020). Universal coverage is only available in a few countries, and it is financed mainly through public social insurance (e.g., Germany, Japan, Luxembourg, the Netherlands, Republic of Korea) and/or general taxation (e.g., Denmark, Finland, Sweden, Spain). The premise for universal long-term care coverage is that the financial risks resulting from long-term care needs require a collective arrangement for social protection (Feng & Glinskaya, 2020) and countries that have adopted this principle, such as Spain, refer to the public longterm care system as the fourth pillar of the welfare state (Peña-Longobardo et al., 2016). It is important to note that there are important differences between countries with universal longterm care coverage in the generosity of the entitlements and the size of co-payments. In addition, universal or generous long-term care systems may also need to increase the strictness of their eligibility criteria when faced with financial pressures. For example, in Denmark needs assessments were made more stringent and home care hours allocated were decreased due to concerns over the financial sustainability of the public scheme (Rostgaard et al., 2022).

#### Means-tested long-term care coverage

In means-tested long-term care financing systems, sometimes referred to as 'safety net' systems, publicly funded long-term care is only available to people with the greatest needs and with the least financial means, subject to certain eligibility criteria, usually determined by income and/or assets. People whose income or assets are above a certain threshold (the means test) need to cover the costs of their care in full and they often have no support in finding and arranging suitable care. Means-tested systems are in place in England, the United States and in some Eastern European countries.

The use of stringent eligibility thresholds creates concerns about fairness and equity in access to long-term care; for example in many countries there is a large 'squeezed middle' between those on the lowest incomes and those who can comfortably afford the costs of long-term care and who usually miss out on public support (Feng & Glinskaya, 2020). Particularly where eligibility criteria are very stringent, fear of high costs and lack of affordability may result in unmet needs and very high unpaid care costs (Barber et al., 2021). A 2020 OECD report found that even among older adults with moderate care needs, the cost of home care is likely to be unaffordable when considering the average disposable income of older people (OECD, 2020a).

As discussed earlier, in some universal long-term care systems there may be means-tested OOP payments; however the key difference is that in a universal system everyone who meets the needs-based eligibility criteria is entitled to some public long-term care support.

# Case study: England

England is an example of a means-tested approach to long-term care financing. Although health care is free at the point of use, social care is means-tested, and individuals and their families with income or assets above the means-tested threshold pay in full for the cost of care. In England all the services not delivered by a health professional are considered to be social care, even if the needs are the result of health conditions. This distinction between health and social care creates inequity as people whose needs are recognised as 'health' may be able to access long-term care via the National Health Service (NHS) continuing health care scheme (which is not means-tested), but people with personal needs and no recognised medical requirements are subject to

a means test to access long-term care (Byrd et al., 2022). Under means testing, unpaid carers still provide a large share of resources for long-term care in England. For example, it has been estimated that the public sector funds only around one third (32.6%) of the costs of dementia, and users and families have to cover the rest of the costs through care fees and unpaid care (Wittenberg et al., 2019).

Public social care provision in England is funded through a combination of grants from central government to local authorities and local revenue raising mechanisms (such as a tax on housing). Local authorities organise and fund social care for eligible people. Local authorities set their own eligibility criteria for publicly funded care and commission services. The funding for social care is not ringfenced so local authorities can decide how much of their budget they allocate to care. Prior to the Covid-19 pandemic local authorities had suffered 50 per cent funding cuts over the preceding decade, and thus faced pressure to spend less on care. This led to variation in care eligibility between local areas (NAO, 2018).

Access to social care is determined by need and means assessments, i.e. regardless of need, people with property, savings or income in excess of a threshold must pay for their care, and only individuals with severe care needs whose income or assets are below the threshold may be eligible for part or full state funding (Bottery et al., 2022). Thirty-five per cent of care home residents in 2021–2 were self-funders (paying for their care in full) (Office of National Statistics, 2022a). Recent research has shown that older people who self-fund their social care in England receive little help in seeking and arranging their care, that many of them do not consider themselves rich, that they are reluctant to spend what they consider to be large amounts of money on care, and furthermore that they feel they are treated unfairly compared to people who qualify for coverage under means testing because they have been less frugal (Baxter et al., 2020).

A number of plans to reform long-term care financing have been discussed since the early 1990s, including a 1.25% payroll tax rise and new eligibility rules to raise the assets limits for public funding for long-term care. Most recently, the government announced a reform that would place a cap on lifetime individual personal care costs, irrespective of person's age or income; however in late 2022 these reforms were delayed for two years (Foster & Harker, 2023).

# 2. Raising revenue for public long-term care systems

While the share of private and public revenues varies greatly between countries, typically most countries include some form of taxation in mechanisms used to raise funds for long-term care. Taxation may be the main financing approach, or it may have a smaller role if the country has a social insurance mechanism in place to finance long-term care. OOP payments (through co-payments for publicly arranged services) supplement the revenue raised for public long-term care systems, but are themselves a private financing mechanism.

### Tax-funded financing

Taxes levied by governments are the main form of public financing of long-term care globally. Taxes may be raised at local, regional or national level, and may be levied on income, capital or consumption. Special taxes may also be levied (for example, windfall taxes on private utility companies). The redistributive nature of taxes varies; for example, taxes on income and capital gains tend to be more progressive and thus equitable at a societal level, whereas indirect taxes on consumption such as value-added tax tend to be more regressive (van Doorslaer et al., 1999). Local taxes may result in territorial inequalities as some localities can raise more resources than others, so there are often national mechanisms to equalise revenue (see for example the Danish case study below). Despite these mechanisms, pronounced differences in access persist when long-term care services are financed and organised at local level in many countries (Comas-Herrera, 2020).

Tax-based systems have the advantage of a broader range of revenue sources and a wider population base compared to social insurance (Wyse & Walker, 2021; Rothgang & Engelke, 2009; Rodrigues 2019), and are more adaptable in terms of generating revenues and flexibility in providing benefits (Comas-Herrera et al., in press).

However, tax-based systems are subject to fiscal and political pressures and are more vulnerable to cuts as other areas of public policy compete for funding (Rothgang & Engelke, 2009). The lack of transparency in funding allocation may impact citizens' willingness to pay higher taxes, but allocating taxes specifically to finance social care (e.g., taxes levied on gambling in Portugal; see Rodrigues, 2019), or enhancing the link between taxes paid and entitlement to benefits could lead to potential solutions (Comas-Herrera et al., in press).

#### Case study: Denmark

The long-term care system in Denmark is universal and primarily funded through taxation. It is a relatively well-funded system, with public spending on long-term care amounting to 3.5 per cent of GDP in 2019 (European Commission, 2021). This high level of spending is attributed to long-term care having strong public and political support (Rostgaard, 2020). Denmark has one of the lowest shares of OOP payments for long-term care in the European Union (European Commission, 2021).

While the national government determines the overall principles of the system, the ninety-eight municipal governments are responsible for the financing and delivery of long-term care. The municipalities allocate resources from the national government and from local taxes and, in order to reduce the potential for geographical inequalities, they can also receive taxes from other municipalities through an equalisation mechanism (European Commission, 2019).

Access to home care is free at the point of use and equally provided, regardless of income, wealth, age and household situation. Eligibility is entirely based on needs assessment and availability of informal care is not taken into account when assessing needs entitlements, a question that is discussed in more depth in chapter 3. There are no means-tested thresholds for in-kind or cash benefits, and no co-payments for long-term home-based care, but people can purchase additional services. There are no cash benefits; however, family carers can be formally recognised and can be employed by the municipality or compensated for lost earnings.

The approach to residential care homes in Denmark is based on the principle that these are people's homes, usually in the form of apartments with a kitchen, own bathroom and living area. People pay rent for the units where they live and cover the costs of services such as laundry and meals. Individuals who cannot afford the rent and fees can receive a housing benefit. Unlike in other countries, in Denmark's residential care the principle is that residential care homes are private dwellings (Rostgaard, 2020; WHO, 2019).

#### Social insurance

Social insurance is a mandatory tax on employment (with contributions from employees and employers) that raises funds for a specific purpose (Comas-Herrera et al., in press). It is most commonly used to

fund pensions and some countries also use this to fund health care and long-term care. Compared to voluntary private insurance, it has the advantage of maximising the risk pool across a much larger population and addressing market failures such as adverse selection (Barr, 2010). Social insurance systems are usually somewhat redistributive, so people generally pay according to their means (although, rather than being progressive, payments may be proportionate to income, or even regressive, particularly where there are ceilings for contributions in place) and obtain benefits according to their needs, and contributions are not related to risk (Karagiannidou & Wittenberg, 2022; Wyse & Walker, 2021). They usually rely on other public funding sources, such as taxes, to cover the contributions of those who are not in the labour market or do not earn enough, in order to cover the whole population (Wyse & Walker, 2021).

Although some social insurance systems were set up to operate a surplus in the initial years to fund future demands on the system, in practice they are typically financed by the current generation of workers paying for the care of the current population in need of care, i.e. 'pay as you go'. This raises concerns about their sustainability as the share of the working population is decreasing in many countries.

Access to benefits is based on contribution records and eligibility criteria (in practice, most countries ensure that all citizens or residents are covered), and on assessment of needs, as discussed in more detail in chapter 3 of this volume.

In contrast to taxation, resources from social insurance are guaranteed for long-term care without having to compete with other public services. The advantages of social insurance systems include clear eligibility and benefit packages (Karagiannidou & Wittenberg, 2022). The governance framework provided by social insurance systems also increases the buying power of governments and has been credited with expanding the number of care service providers in Japan and the Republic of Korea (Wyse & Walker, 2021). However, even in social insurance funded care systems (e.g., Belgium, Germany, the Kingdom of the Netherlands and Luxembourg), taxation is important for covering the contributions of the non-employed population. For example, in Japan and the Republic of Korea there is a relatively even split between tax funding and social insurance contributions (Wyse & Walker 2021).

Social insurance can reduce the economic burden on families. For example, after the introduction of long-term care insurance in Japan, welfare losses for families with disabilities were reduced (Yamada et al., 2009); medical costs decreased in the Republic of Korea (Choi et al., 2018); and hospitalisation costs, length of stay and medical insurance costs decreased in China (Feng, J. et al., 2020).

Compared to funding from general taxation, social insurance tends to be a more regressive form of financing, as wealthier people tend to contribute the same or a smaller share of their overall resources compared to people with lower financial means; social insurance also draws on a narrower source of resources (income from formal employment) than general taxation which also includes capital gains, and some social insurance schemes have ceilings above which income is disregarded and contributions are no longer required (van Doorslaer et al., 1999; Comas-Herrera et al., in press). Other disadvantages of social insurance include the risk that employers may evade their responsibilities, limited access of the unemployed population, and the risk of higher employment costs which reduce the competitiveness of the economy as a location for employment or investment (Dixon & Mossialos, 2002; Comas-Herrera et al., in press).

The revenue-generating capacity of social insurance is also sensitive to labour market fluctuations. In countries with large shares of informal (or illegal) employment, ensuring people's participation and contribution payments is challenging. Also, ageing populations present a sustainability issue, as social insurance is funded only by working age adults, and the ratio of younger (working) age groups to older age groups is shrinking. In Germany, however, people who have retired from employment also pay social contributions (Holdenreider, 2006).

It is important to note that, when insurance is compulsory, the distinction between public and private provision of insurance becomes less relevant (e.g., in Germany the system is designed and regulated by the public sector, but the sickness funds that run the system and the majority of insurance providers are not public). Furthermore, public social insurance schemes are not incompatible with private long-term care insurance. Often the public schemes provide basic benefits, and care recipients have the option to purchase private long-term care insurance or pay for additional services directly (Feng & Glinskaya, 2020).

Case study: Japan

Public long-term care insurance has been available in Japan since 2000 and is among the most generous systems globally (Ikegami, 2019). As a result, the provision of long-term care has expanded rapidly, currently placing Japan among the OECD countries with the highest long-term care public expenditure per capita (Del Pozo-Rubio & Jiménez-Rubio, 2020). The system emphasises a 'preventive approach' to long-term care, as it focuses on helping people maintain their independence and reduce the need for more intensive care in residential and institutional care settings (Wyse & Walker, 2021). The financing of long-term care is based on tax, social insurance and individual co-payments, and its revenue raising mechanisms are flexible and allow for extra top ups in difficult times. About 50 per cent of funding is from mandatory insurance contributions from all Japanese residents aged 40 and older, and other 50 per cent from taxation (Ikegami, 2019).

An assessment of need determines a budget for care, and eligible people receive services rather than cash benefits (Chen et al.,2020). Services available include home care services, community-based services and services at facilities (Ping & Oshio, 2023). Availability of informal care is not taken into account to encourage the use of formal services and to limit the care burden on families (although there is some reliance on unpaid care). Service users pay co-payments (10–30 per cent), which are capped according to income (Ping & Oshio, 2023).

The impact of the ageing population in Japan has been greater on long-term care costs than on health care costs; per capita health expenditure for people aged 90 or over is only 2.4 times that of those between 65 and 69, but long-term care insurance expenditure is 44 times higher, reflecting a well-documented trend of long-term care support needs increasing with age (Ikegami, 2019).

In response to financial pressures and affordability issues, the generosity of long-term care entitlements has been reduced over time (Curry et al.,2018). The main adjustments include:

- 2003, 2006: provider fees were reduced;
- 2005: bed and board charges for residential care residents were introduced, with the exception of those on low incomes (40 per cent of the total);

- 2006: eligibility criteria for those with the lowest levels of needs were made stricter and benefits were reduced;
- 2015: assets and income were taken into account, with high-income residents (those with an income of USD 90,000 or more) no longer eligible for the waiver on bed and board charges;
- increase in co-insurance rates: from 10 per cent for all, to 20 per cent in 2015, and to 30 per cent in 2018 for those with the highest income and/or assets. In practice, fewer than 10 per cent pay 30 per cent co-insurance because a high proportion of older people have low incomes (Ikegami 2019).

### Case study: China

In China, informal family caregivers continue to be the mainstay of long-term care for older people, following the age-old Confucian tradition and practice of filial piety (Feng, 2017). Over the past 30 years, formal long-term care services have emerged to meet rising consumer needs among older adults with disabilities. For the majority of older people, however, access to formal long-term care services is dependent on the ability to pay because these services are usually expensive and paid directly out of pocket. Public financing for long-term care is limited and largely tied to China's social welfare system. Eligibility for publicly funded long-term care is strictly means-tested, covering a relatively small number of older adults who qualify as social welfare recipients only if they have no ability to work, no source of income, and no family members to provide support (Feng, Z. et al., 2020).

At the national level, there are no dedicated budgetary resources for long-term care services. Instead, public financing for long-term care is mainly from social welfare lottery funds and from local government budgets, in roughly equal amounts (Glinskaya & Feng, 2018). It goes mainly in the form of subsidies to service providers to encourage private sector investments in China's fledgling long-term care system and, to a much lesser extent, directly to service users. Both the eligibility for and the mix of publicly subsidised long-term care services are determined locally, resulting in wide variation in their accessibility across the country.

Increasingly, Chinese policy makers have recognised the lack of a systematic approach to financing as a major barrier to further growing long-term care services and making them affordable and accessible for all in need of such services. In 2016, China launched long-term care insurance pilot programmes in fifteen cities (Ministry of Human Resources and Social Security, 2016) and subsequently expanded the pilots to forty-nine cities in 2020 (National Healthcare Security Administration, 2020). The overall policy objective of these pilots is to explore the feasibility of establishing a social insurance-based long-term care financing scheme. The central government provides overall guidance, and individual pilot cities are responsible for formulating and implementing specific long-term care insurance policy measures (Feng et al., 2021).

Although the pilots vary in their design, a common feature is that all of them are financed by earmarking a certain percentage or fixed amount per person from the existing risk-pooled social health insurance funds. They are designed on the principle of social insurance to spread and maximise the risk pool for broad-based long-term care financing. Operationally, all these pilots build on China's nearly universal social health insurance system, with the potential advantage of increasing efficiency and reducing administrative costs of the newly introduced long-term care insurance programme (Feng et al., 2023). Key features of the pilots are outlined below, primarily based on information available from the original fifteen pilot programs.

Target insured population: Currently, five of the original fifteen pilot cities cover Urban Employee Basic Medical Insurance (UEBMI) enrolees only, and the remaining ten cities also cover Urban or Rural Resident Basic Medical Insurance (URRBMI) enrolees (Feng et al., 2023).

Sources of financing: In all pilot cities, the majority of the long-term care insurance funds comes from a yearly transfer from the UEBMI pooled funds. Individual contributions are largely nominal. Employer contributions are absent from the majority of the pilots. Ten of the fifteen pilot cities include local government subsidies as a long-term care insurance financing source (Feng et al., 2023).

Eligibility criteria for benefits: To be eligible to receive benefits, generally an insured person must have severe disability for at least six months, with eligibility criteria varying across the pilot cities. Needs assessment for eligibility determination is not standardised, though all pilot cities use measures of physical impairment based on limitations in performing ADLs. As currently applied across the pilot cities, the

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eligibility criteria are rather stringent, implying that long-term care insurance can only serve a small proportion of people with disabilities in need of services (Feng et al., 2023).

Benefit Design: Across the pilot cities, long-term care insurance currently covers a varied combination of three broad categories of services, including services provided at designated health care facilities, residential care or nursing facilities, and home- and community-based services. The reimbursement rates also vary by service provider and across the pilot cities. All pilot cities set a ceiling for long-term care insurance reimbursement for each service type. Any expenses exceeding these reimbursement caps are paid by beneficiaries out of pocket. In all pilot cities, long-term care insurance covers institutional services provided at residential care or nursing facilities. In all but two pilot cities, the insurance covers some form of home or community-based services, although the benefit package varies.

As of 2021, government statistics (National Healthcare Security Administration, 2022) report that over 144.6 million individuals participated in the programme across all forty-nine pilot cities; among them, just under 1.1 million people received long-term care insurance benefits. Systematic evaluation of the implementation, impact and sustainability of China's long-term care insurance programs is lacking, partly due to the paucity of empirical data. There is an emerging body of research on these programs. Some early evaluation studies reported promising evidence of positive impacts on individual health experiences and outcomes, such as reducing medical utilisation and expenses (Deng et al., 2022; Ma & Xu, 2022; Tang et al., 2022), improving self-rated health (Fan et al., 2022; Lei et al., 2022; Liu et al., 2023; Ma & Xu, 2022; Wang et al., 2022), and reducing informal care use to alleviate family caregiver burdens (Chen & Ning, 2022). However, it is premature to draw firm conclusions about the impacts of the pilots.

For possible implementation of long-term care insurance nationally, one critical policy consideration is whether the insurance should be established as a stand-alone programme, particularly in its financing pool. Some researchers view the heavy reliance on the social health insurance funds as the main revenue source for long-term care insurance financing as suboptimal and unsustainable (Chen et al., 2022; Feng et al., 2023). It is also financially and politically challenging to increase both individual and employer contributions given the slowing

down of China's economy. In the long run, it will be desirable and necessary to establish an independent funding pool for long-term care insurance, with mandatory regular contributions from individuals and employers, supplemented by government subsidies (Feng et al., 2023).

# 3. Financial protection

In many OECD countries without public social protection over 90 per cent of older people with severe care needs may be driven into relative income poverty as a result of paying for home care out of pocket (OECD, 2020a). In most countries, public and private longterm care coverage protection systems co-exist and complement each other to different degrees (Guillén & Comas-Herrera, 2012). If eligibility for long-term care is means-tested, the risks for the population are not well covered; in particular, people miss out who are not of a low enough income to qualify for public funding and yet not rich enough to pay for care (Feng & Glinskaya, 2020). In many countries, publicly funded long-term care supports only people with the least financial means, and sometimes only those with highest needs (Wyse & Walker, 2021). Some countries provide some protection against catastrophic costs of care, but this may be challenging to implement equitably. For example, a cap on individual's lifetime expenditure liability in England has been proposed, but how the cap is reached is complicated with further 'built-in' inequalities depending on how different forms of expenditure, income and assets are taken into account.

As discussed in the private financing section, in many countries individuals are expected to make significant contributions to the costs of their care, even with a universal public long-term care system. Therefore, individuals who need care over a long time can face very high accumulated costs of care. As a result, private long-term care insurance can complement the coverage provided by the public system and provide additional risk protection (e.g., in Germany, France and Spain (see Guillén & Comas-Herrera, 2012; Comas-Herrera et al., 2012).

While private long-term care insurance includes some degree of risk pooling (but is limited in terms of both access and coverage), it can provide additional benefits not covered by public insurance (e.g., Belgium, France, Germany and Singapore). In practice the potential role for private long-term care insurance is dependent on the underlying public long-term care system in each country. In some countries,

the public long-term care system provides a safety net and covers only those who cannot afford to pay for their own care (e.g., England and the US). In those countries, private long-term care insurance can substitute for the lack of coverage by protecting against the probability of having to pay for care, or against potentially catastrophic costs if care is needed for a long time, preventing asset depletion (Comas-Herrera et al., 2012).

# 4. The relationship between health care and long-term care financing

The first country to explicitly cover long-term care services through social insurance was the Netherlands, through schemes that covered the costs of non-curative health care, such as the Dutch Exceptional Medical Expenses Act (AWBZ) established in 1968 (Schut & Van Den Berg, 2010). Since then, coverage for long-term care has been added to existing health insurance systems in some countries (for example Belgium and Switzerland), while other countries created new social insurance schemes particularly for long-term care (for example in Germany in 1996, Japan in 2000 (as per the case study above) and the Republic of Korea 2008). In contrast, Austria opted to develop a tax-financed long-term care system despite its social insurance tradition in other social protection programmes. In the countries where long-term care was covered by a health insurance system, this was complemented by tax-funded local social services, usually meanstested, creating complex systems with differently financed layers of coverage, which countries have sought to improve over time (Pacolet & De Wispelaere, 2018).

In countries where there is a universal right to publicly funded health care but long-term care is means-tested, such as in England, there is concern that this makes it difficult to progress towards better care coordination and that the different funding approaches translate into 'diagnostic inequity', as people whose health conditions are treated by the curative health care systems experience free care at the point of use, whereas people with chronic conditions for which there is no cure, such as dementia, often bear the majority of the costs of care (Alzheimer's Society, 2018).

In the United States, health care services (such as hospital stays, post-acute skilled care, physician services and prescription drugs) for people

age 65 and over and for younger adults with disabilities are covered by Medicare, a health insurance programme financed and administered by the federal government. Long-term care services are separately covered by Medicaid, a health insurance programme for low-income individuals jointly financed by the federal and state governments but managed by individual states, with eligibility criteria and benefit packages varying substantially between the states. As such, individuals dually eligible for Medicare and Medicaid coverage must navigate a complex system with often varying benefits, programme rules, and regulations mandated separately by Medicare and by state-specific Medicaid programme policies and procedures (Feng, 2018). In particular, beneficiaries with medical, behavioural or long-term care needs often experience fragmented and uncoordinated care across different providers and care settings, due to the misalignment of financing between Medicare and Medicaid programs (Grabowski, 2012).

Fragmented and misaligned financing schemes for health and long-term care services often translate into fragmentation of service provision, difficulties in accessing needed care in a timely manner and as a result poorer care outcomes and experiences of care. This was made evident during the Covid-19 pandemic, during which the poor integration between health and long-term care contributed towards challenges in providing suitable medical care for persons receiving long-term care (OECD, 2021c). In addition, fragmented financing can lead to numerous other systemic inefficiencies and poor incentive structures, including prolonged hospital stays (so-called 'bed-blocking'), a lack of investment in preventive and rehabilitative care, and competition for limited funding between health and long-term care providers.

# 5.4 How do different long-term care financing systems compare?

Comparing long-term care financing systems is complex. In all countries multiple financing systems are involved in long-term care and different financing approaches may reflect different cultural and religious values, differences in economic development, labour markets, strength of public sector institutions, which may be expected to result in differences to the extent of formalisation of care provision, and different degrees of involvement of the public sector. In practice, all financing approaches have certain trade-offs, which have to be weighed

against the policy goals prioritised in each specific setting, as well as the institutional and legislative structures already in place. However, existing evidence points to the need for significant public involvement in long-term care financing and provision to ensure equitable access and adequate financial protection.

In countries of the Majority World, the public sector plays a residual role in financing long-term care, supporting the care of people without family support or economic resources to pay for care. However, governments in these countries are increasingly aware of the need to respond to the fast ageing of their populations, as shown in the examples of China and Thailand.

While discussing the advantages and disadvantages of each of the mechanisms used to finance long-term care, it is important to consider that the long-term care system's performance will be affected by aspects other than financing, from its governance and regulatory frameworks, to the approaches for procuring and managing service provision. A key role of the financing system is raising enough revenue to ensure that the long-term care system can function well.

Comparing spending on long-term care between different countries is challenging, as in many countries there are no information systems that gather data on private spending on long-term care, and, as discussed in the introductory chapter of this volume, there are differences between countries in how long-term care is defined, particularly in relation to the boundaries with the health care system (OECD, 2020b). Estimating the total resources used for long-term care would also require having accurate estimates of the total amount of unpaid care provided, as well as a consensus on how to value that care (van den Berg et al., 2006).

On average, countries in the OECD spent 1.5% of their GDP on formal long-term care in 2019. The highest spenders were the Netherlands (4.1%), Norway (3.7%), Denmark (3.6%) and Sweden (3.4%); the lowest include Mexico, Chile, Greece and Türkiye (between 0.1% and 0.2% of their GDP; see OECD, 2020b). This variation is likely to reflect the stage of development of formal long-term care systems and does not include provision of in-kind long-term care by unpaid carers. There may be some underestimation in countries not recording total spending on long-term care (OECD, 2020b). Long-term care spending is low when compared to health care spending (around 8.8% of GDP in 2019; OECD,

2021a). In all OECD countries, public expenditure is greater than the estimated private expenditure (except Switzerland), excluding in-kind unpaid care (Wyse & Walker, 2021). The average long-term care spend is projected to rise to about 2.5% of GDP by 2050.

Demand for all forms of long-term care is expected to grow, even if there is progress in healthy ageing; however, responding to this increased demand for additional spending from public budgets is difficult, particularly given that long-term care is a sector with relatively low political visibility. Increases in taxation or social insurance contributions are unpopular, not only at times of economic hardship. However, long-term care insurance contributions are a revenue source to which people appear to be more willing to contribute than paying higher taxes (Ikegami, 2019). Establishing the link between higher contributions and better or more generous benefits can make it more acceptable to the public (e.g., in Germany, long-term care insurance contributions went up in order to increase coverage and benefits for people with dementia; Nadash et al., 2018).

# 5.5 The impacts of underfunding long-term care

The Covid-19 pandemic disproportionately affected people who rely on long-term care, particularly those living in residential care facilities (Comas-Herrera et al., 2020), and the difficulties countries faced when trying to mitigate the impacts of the pandemic on the long-term care population were exacerbated by structural features of long-term care systems. In particular, complex governance structures resulting in poor accountability and coordination, underfunding, underdeveloped regulatory systems and lack of information systems have been identified as key factors affecting countries' abilities to respond to the pandemic in the long-term care sector (WHO, 2020). In many countries the pandemic hit the long-term care sector at a time when concerns over sustainability and, particularly for some, the concurrent financial crisis moderated or even decreased long-term care spending (Deusdad et al., 2016; Albesa Jové, 2021) despite increases in need. This section discusses some of the potential impacts of underspending on long-term care, many of which became particularly challenging after the start of the Covid-19 pandemic.

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### Workforce shortages

Shortages of skilled care workers are common in many countries, resulting mainly from poor working conditions and low pay. For example, there is a care workforce crisis in the United Kingdom, with an estimated 100,000 vacancies out of a 1.6 million workforce (European Commission, 2022b). Other OECD countries such as Germany have introduced several regulations to improve conditions in the sector through increasing minimum pay for long-term care workers and funding additional long-term care jobs (European Commission, 2022a). Efforts have also been made in certain LMIC settings to address workforce shortages in the care sector. For example in China there are over 40 million older people with disabilities who need care (mostly provided by family carers) and only an estimated 300,000 registered long-term care workers. To improve care capacity, professional educational programmes for long-term care have been developed (increasing in number from 86 in 2015 to 186 in 2018), but interest has been low due to negative attitudes towards long-term care workers, low wages, demanding work conditions, limited opportunities for career development, and low job satisfaction (Feng at al., 2020).

# Unnecessary hospitalisations

There is a growing demand for long-term care as a result of ageing populations. The poor alignment of the financing framework between long-term care and medical care, however, is common and contributes to perverse incentives for hospitalisation (Phua et al., 2021). It is essential that services support older people's health and social care needs, help them maintain their independence and quality of life, and reduce the need for more expensive hospital care (Barber et al., 2021). Chapter 7 of this volume discusses the relationship between health care and long-term care in greater depth.

# Impact on unpaid carers

Support for unpaid carers is non-existent or underdeveloped in many countries. Due to the absence of formal support, informal carers bear the consequences of providing unpaid care, which includes an impact on their physical and mental health, as well as financial impacts such as lost earnings. There is increased awareness of the lack of sustainability of high reliance on unpaid care, particularly as decreases in the share of population of traditional working age and increased educational attainment among women increases political awareness of the opportunity costs for women in formal labour markets (Keating et al., 2021; Vos et al., 2022). These issues are explored further in chapter 8 of this volume.

# Impact on the economy

Unpaid care work contributes considerably to economies of countries. For example in Spain the total monetary value of unpaid care was estimated at 1.7–4.9% of GDP in 2008 (Oliva-Moreno et al., 2015). In Portugal, including unpaid carers among people aged over 55 years in employment figures would have increased the employment rate by almost 13% in 2014 (Cylus et al., 2018). In addition, older people who are not working still contribute to public revenue generation through taxation, for instance taxes on non-labour income and assets and consumption taxes (Cylus et al., 2018). Similarly, a lack of mechanisms to share the risk of high costs of care may result in people over-saving, which may decrease consumption-related spending and negatively affect economic growth (Barr, 2010), or if a means-tested residual public system is available, provide an incentive to dispose of assets (Mayhew, 2017). The relationship between long-term care and economic growth is explored in greater detail in chapter 10 of this volume.

# 5.6 Conclusion: long-term care financing reforms, sustainability and political will

A key challenge for policy makers in all countries is to find a comprehensive solution to financing long-term care services to make them widely accessible, affordable and equitable for all those in need (Feng & Glinskaya, 2020). An optimal system of long-term care would span both the public and private sectors, achieve a balance in access, cost and quality of care, and also cope with the increasing care needs of ageing populations (Phua et al., 2021). This optimal long-term care system can be expected to look different in each country, or within subnational systems in the same country, given the different political, social, cultural and broader health care and welfare system contexts.

The Covid-19 pandemic highlighted inadequacies in the governance, financing, regulation and labour policies in long-term care systems all over the world, showing that many countries lacked mechanisms to implement policies and measures to respond rapidly and effectively to the pandemic. These inadequacies in many cases stem from a lack of comprehensive system-wide reforms to both the governance and the financing of long-term care which has resulted in fragmentation of responsibilities and underinvestment in the long-term care workforce and infrastructure.

As older people represent an increasing share of populations world-wide, it may become politically unsustainable not to address long-term care financing, particularly given the implications this has for the sector being able to attract, train and retain staff in increasingly challenging labour market conditions, and increased awareness of the lack of sustainability and opportunity costs of relying excessively on unpaid care.

It is to be hoped that the tragic outcomes of the pandemic may have a positive side if, in increasing the visibility of the sector, more countries are galvanised into taking action to strengthen their long-term care systems. There are some early signs of this happening: for example the European Care Strategy recommends that member states draw up national action plans to make care more available, accessible and of better quality, and include as one of the key mechanisms to carry this out that countries mobilise adequate and sustainable funding for long-term care (European Commission, 2022c).

Ultimately, a well-functioning long-term care financing system would ensure that the amounts that are spent on long-term care match the value that the population attributes to care. While historically this value may been low, now that many more people are living longer with care needs and there is increased awareness of the importance of well-functioning long-term care systems, it can be expected that, at the very least, long-term care systems will be able to keep pace with population ageing.

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