OECD Health Policy Studies

Is Care Affordable for Older People?



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BETTER POLICIES FOR BETTER LIVES

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Foreword

Demand among older persons (65 years and over) for long-term care (LTC) – that is, for assistance with everyday activities – is gradually increasing throughout OECD countries as populations grow older and household structures change. At the same time, there are rising expectations for quality, affordable, and widely available LTC services. Population ageing and societal changes will lead to significant increases in LTC expenditures. On average, LTC spending is projected to at least double by 2050.

Growing demand for care and the associated costs present a significant challenge for social protection systems throughout the OECD, as they need to ensure that LTC needs do not go unmet while balancing fiscal sustainability. Currently, there is little comparative information on how LTC spending matches individuals' actual costs of care. This report seeks to shed light on the adequacy and effectiveness of public social protection systems in reducing the burden of the high costs of LTC on the individual and the associated increase in poverty risk. To do so, the report defines a set of "typical cases of LTC needs". The typical cases describe an older person in terms of the types and severity of their LTC needs, based on their limitations in performing basic activities, such as bathing, dressing, cooking, and cleaning. The typical cases also describe the amount of time of professional services they require to provide help. This approach allows to compare the level of public benefits and services in different countries for a defined level of LTC needs.

This report examines the generosity of public systems in helping older people meet the costs of care. It provides a comparison of the share of LTC costs that are covered by the public system and what is left for individuals to pay out-of-pocket, for different degrees of needs and means (income and wealth). It points to gaps in generosity, with a number of countries leaving individual with severe needs and low incomes with high out-of-pocket costs. The report also assesses how effective systems are in reducing poverty risks due to LTC and how this is related to different aspects of the LTC system. While public social protection reduces the poverty risks associated with LTC, it is not enough in many countries. Finally, the report also assesses the implications of population ageing in terms of expenditures and of possible ways to raise funds. Additionally, it examines the impact policy reforms seeking to improve affordability for users, and those looking at the implications of improved targeting, promoting healthy ageing and productivity improvements.

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Executive summary

Population ageing is accelerating, putting further pressure on the fiscal capacities of countries to provide adequate long-term care (LTC). According to the OECD report *Health at a Glance 2023*, more than 242 million people were aged 65 and over across OECD countries in 2021, including more than 64 million who were at least 80 years old. The share of older people will continue to increase, with the OECD average share of those aged 80 and over projected to double from 4.8% to 9.8%. As individuals age, their physical and mental health often decline. They develop difficulties in performing everyday tasks or so-called activities of daily living (ADLs), such as bathing, and instrumental activities of daily living (IADLs), such as managing finances and cleaning. These individuals require services to assist with such activities. Ageing-driven LTC demand is further intensified by the declining supply of informal or family caregivers, as smaller households, relatives living far away, and increased female labour market participation limit the pool of potential informal carers available to older people.

The total cost of LTC can be very high compared to an older person's disposable income. In the absence of public benefits and services, most older people would not be able to afford adequate formal LTC. Costs can be particularly high for individuals with severe needs, with the total costs of LTC representing between one to almost seven times the national median income across countries. Older people on lower incomes may struggle to afford care, even though more than half of the countries covered in this report have progressive income-testing mechanisms designed to ease the burden on these individuals.

Despite public benefits and services, the out-of-pocket costs in some countries can be substantial, especially for those with severe needs and low income. High out-pocket costs for individuals leave little flexibility to pay for other costs, such as housing expenses, clothing, and food. For individuals earning a median income with severe LTC needs, institutional care would be unaffordable in six countries since the out-of-pocket costs are higher than their income. To pay for home care, an older person with severe needs would have to devote more than half of their income in 16 countries, leaving less than half of their remaining income to cover the basic living expenses. In seven countries, out-of-pocket costs for older people with low income and moderate needs exceed half of their income. This number increases to ten countries for those earning a median income. Additionally, around 40% of the analysed countries expect individuals to use part of their wealth to cover LTC costs. In 11 of these countries, individuals earning the median income are expected to pay more than their income for institutional care.

Public benefits and services reduce poverty risks associated with LTC costs but not always significantly. Without such services, between 42% and 95% of the old age population with LTC needs would be at risk of poverty due to high out-of-pocket costs. LTC benefits and services reduce poverty risks by almost 30 percentage points across countries. The LTC systems of Denmark, the Netherlands and Finland reduce poverty risks through public benefits and services by more than 70 percentage points. However, poverty reductions can be close to zero in other countries. Additionally, close to 50% of older people with needs would still be at risk of poverty even after receiving public benefits and services in half of the countries analysed in this report. The poverty rates for individuals with LTC needs (even after receiving social protection) are more pronounced among those aged 80 years and over, compared to those

aged between 65 and 79 years. Similarly, women face higher poverty rates after paying for LTC, even with public benefits and services, compared to the average poverty rates among older people. Overall, countries with higher public LTC expenditure, less stringent means-testing and in-kind benefits achieve a greater reduction in poverty risks related to LTC.

With demand for LTC increasing, budget pressures will intensify in OECD countries, especially when considering additional expenses to fund better access and adequacy of benefits. The demand for LTC is projected to increase by more than one-third until 2050. Based on the projections of older people needing care and pressures to deliver access to more people, current expenditures across the OECD are expected to multiply by 2.5 times by 2050. If countries additionally improved the generosity of their LTC systems to reduce the current high out-of-pocket costs for individuals and the significant risk of poverty, this could result in quadrupling LTC expenditures by 2050.

Policy options are needed to ensure fiscal sustainability while addressing current gaps in adequacy. Three non-mutually exclusive options are available to countries:

- **Seek additional sources of funding for LTC**. Expanding the sources to fund LTC systems beyond labour income is worth consideration, while ensuring an adequate intergenerational sharing of the burden. Exploring innovative private contribution options and pre-funding mechanisms are also good starting points. For example, Slovenia initiated a LTC reform in 2023, which will introduce a LTC insurance to fund new benefits and services. Both Germany and Luxembourg incorporated an element of pre-funding into their LTC systems. In France and the United States, life insurance and LTC group insurance is available.
- **Improve the targeting of LTC benefits and services.** Targeting individuals with high needs and fewer resources can promote adequacy in a context of limited resources. In a number of countries, making cost-sharing more progressive along the income distribution can lead to lower spending compared with the current situation, without an increase in poverty. In other countries (Italy, Slovenia, Spain, Greece) targeting public benefits towards those with higher needs reduces poverty while spending increases are much smaller compared to policies focused on reducing out-of-pocket costs only.
- **Improve efficiency and contain the costs of LTC.** Both promoting healthy ageing and productivity improvements could lead to 13% lower expenditures by 2050. Improved prevention, smarter use of technology and task delegation among workers are some of the options that countries are promoting to improve efficiency. Countries like Denmark and Norway have introduced home visits to foster healthy ageing while Australia, Japan and New Zealand have also promoted reablement to help older people recover autonomy loss. Japan and the Nordic countries have improved labour productivity through the use of technology, while the Netherlands sets expenditure targets for LTC and adjusts maximum prices for services and providers accordingly.

1 Assessment and policy solutions for affordable long-term care

This introductory chapter provides an overview of the entire publication, drawing on the analyses carried out in the four subsequent chapters. It documents the high prevalence of long-term care needs across OECD countries and highlights further expected increases over the next decades. The chapter flags that while public support for long-term care tends to be higher for the most vulnerable, gaps in generosity remain. In a number of countries, users face high out-of-pocket costs (especially users with severe needs) and public benefits and services do not decrease poverty risks sufficiently. The chapter concludes with policy options to improve affordability for users, while discussing options to address possible concerns about the sustainability of long-term care funding.

Introduction

Population ageing in the OECD is occurring at a rapid pace, primarily driven by advancements in life expectancy and a decline in fertility rates. As individuals age, their physical and mental health tends to decline, leading to potential challenges in performing routine tasks, including getting dressed, shopping, or even taking a walk. Consequently, older people will require a range of personal care and assistance services, commonly referred to as long-term care or LTC (a definition is given in Box 1.1). Increasing demand for LTC in old age further exacerbates the existing structural challenges to the well-being of older people across countries, as population ageing is coinciding with shortages of formal and family caregivers (OECD, 2023[1]; OECD, 2020[2]; Rocard and Llena-Nozal, 2022[3]) and rising expectations on the availability, affordability, and quality of LTC.

Publicly funded formal care is usually available across OECD countries but differs widely in terms of its scope and reach. Across OECD countries, an average of 11.5% of people aged 65 and older received LTC in 2021 (OECD, 2023[4]) and more than 20% of people in this age group received LTC services in four OECD countries (Lithuania, Israel, Switzerland and Germany). Similarly, across OECD countries 1.8% of gross domestic product (GDP) was allocated to LTC on average, ranging from more than 3% of GDP in the Netherlands and the Nordic countries to around 0.5% of GDP or less in Greece, Poland and Latvia. This variation partly mirrors differences in the population structure, but mostly reflects the stage of development of formal LTC systems, as opposed to more informal arrangements based mainly on care provided by unpaid family members.

In many countries, an important share of care is indeed provided by so-called informal carers who can be spouses, children, friends, and neighbours. Families and friends who provide support to dependent older individuals may suffer physical and mental stress and are more likely to drop out of the labour market or reduce working hours (Colombo et al., 2011[5]). As such, countries that rely heavily on informal carers may face sustainability challenges in the future as the supply of informal carers is likely to decline. Providing care informally is becoming more challenging as older people live longer with compounding chronic conditions, households are becoming smaller on average, relatives live far away and female labour market participation is increasing. All these developments are likely to further limit the pool of potential informal carers available to older people.

Designing effective publicly funded formal social protection (in cash or in-kind) – or public support for simplicity – for LTC is not only about availability and coverage but also about the generosity of the system. If the amount provided through benefits and services is insufficient, there is a risk that people face high out-of-pocket costs, that needs will go unmet, or that the pressure on the general health system increases in terms of higher hospital admission rates or longer stays in hospital beds for people who cannot afford to pay for LTC (Costa-Font, Jimenez-Martin and Vilaplana, 2018[6]; ESRI et al., 2019[7]). Across the OECD, all countries have user cost-sharing for LTC, although the extent varies significantly across the OECD. In several countries, limited public formal support and tight eligibility criteria pose challenges to the affordability of LTC (Oliveira Hashiguchi and Llena-Nozal, 2020[8]).

The purpose of this report is to provide cross-country comparable information to assess public support for LTC in old age in OECD countries. The report measures the generosity and effectiveness of public LTC systems for a number of scenarios of severity of LTC needs, and income and wealth levels. The analyses focus on the extent to which public support is providing effective protection against the total costs of LTC across the older population, and especially for the least well off. This chapter specifically summarises the results on the generosity and effectiveness discussed in the remaining chapters and discusses options for reform to improve affordability and maintain the sustainability of funding. This includes assessing options to raise additional funds in view of growing demand, but also how countries can improve targeting or improve the efficiency of LTC.

Key findings

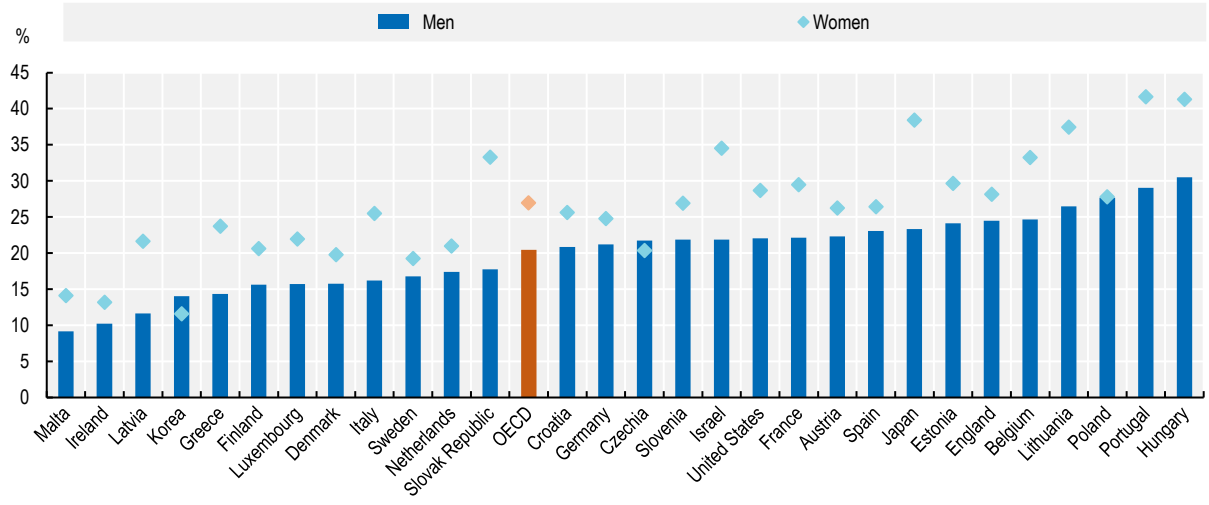
- **Demand for long-term care (LTC) is high and will continue to grow.** Close to one in four older persons across the OECD have LTC needs, that is, they need help with their daily activities. The demand for LTC is projected to increase by 30% by 2050. Older people with LTC needs are concentrated among the most vulnerable and will likely need more public support in the future: They are more likely to be 80+ years old, live in single households, and have lower incomes. There is also an important gender dimension as women are more likely to have needs for longer periods.
- **Without public support, the total cost of LTC for an individual is high and unaffordable for most people.** The cost can represent between one and up to almost seven times an older person's median income. Even for as little as 6.5 hours of home care per week for people with low needs, the total costs would represent more than two-thirds of the disposable income of an older person with a low income. When older people develop more severe LTC needs even those with high incomes (at the 80th percentile of the income distribution) could not cover the costs anymore by relying on their income alone.
- **Significant gaps in public support remain in many countries. Out-of-pocket payments are large for the most vulnerable older people.** Out-of-pocket costs, that is the cost of care left to pay after receiving public benefits or services, represent more than 40% of median income for people with moderate needs and more than 70% for those with severe needs on average across the OECD. Older people with moderate needs on low incomes also face high out-of-pocket costs in eight countries.
- **Public support reduces the poverty risks associated with LTC costs but not sufficiently.** After receiving public support, the risk of poverty for older people with LTC needs is still significantly higher than for those without needs. Poverty risks are reduced by 27 percentage points but remain 33 percentage points higher than for older people without LTC needs. There is great heterogeneity across the OECD: in five countries, the share of people with poverty risks decreases by more than 50 percentage points while in eight countries the decrease is less than 10 percentage points. Poverty reduction tends to be greater in countries that also spend more on LTC, have in-kind benefits and income-testing.
- **Countries face challenges to ensure the sustainability of their LTC systems.** These challenges are particularly severe in countries that want to improve the affordability for older people but face rapid population ageing at the same time. When considering the growing number of older people needing care and the increasing pressure to expand access to services, current expenditures across the OECD are projected to increase by nearly 2.5 times by 2050. If, in addition, countries improved the generosity of the system to ease people's high out-of-pocket costs, LTC expenditures would increase by more than 4 times by 2050.
- **Public policies can help steer LTC systems towards a generous and sustainable future.** Countries can rely on three non-mutually exclusive policy options to ensure better and more sustainable social protection for LTC. Firstly, countries that need to look for additional resources could consider more broad-based funding sources that are less reliant on labour income only; ensure intergenerational fairness; and look for innovative funding options also from the private sector. Secondly, countries can target better their existing LTC funds, e.g. by making cost-sharing across the income distribution more progressive and by targeting better those with more severe needs. While a number of countries might consider wealth-testing, thresholds used to target public support should be designed to not miss the most vulnerable as they often have savings well below median wealth. Finally, countries can look into policy options that promote efficiency and help contain costs by investing in healthy ageing, redesigning their pricing systems, promoting a more efficient use of human resources, and developing innovative approaches to LTC provision more broadly.

1.1. High demand for and high costs of LTC

1.1.1. An estimated one in four older people have LTC needs

Among OECD countries, almost one in four older persons (those aged 65 and above) have LTC needs with notable differences across countries and by gender (see Box 1.1 for the definition of needs). In general, women tend to age in worse health and have more needs. Their prevalence of LTC needs is 27% while it is 20% for men (see Figure 1.1). In all countries but Korea, Czechia and Poland, there is a higher prevalence of needs for women; in countries like Japan, the Slovak Republic and Israel prevalence for women is more than 10 percentage points higher than for men. Needs also vary widely across the OECD: close to 40% of women have LTC needs in Portugal, Hungary, Japan and Lithuania, while less than 14% have needs in Korea and Ireland. Certain socio-demographic groups have a higher chance of experiencing LTC needs. Low-income earners, people living in single households, and the oldest age groups (80 years and older) are more likely to have LTC needs (see Chapter 2).

Figure 1.1. Prevalence of LTC needs among older people, by gender

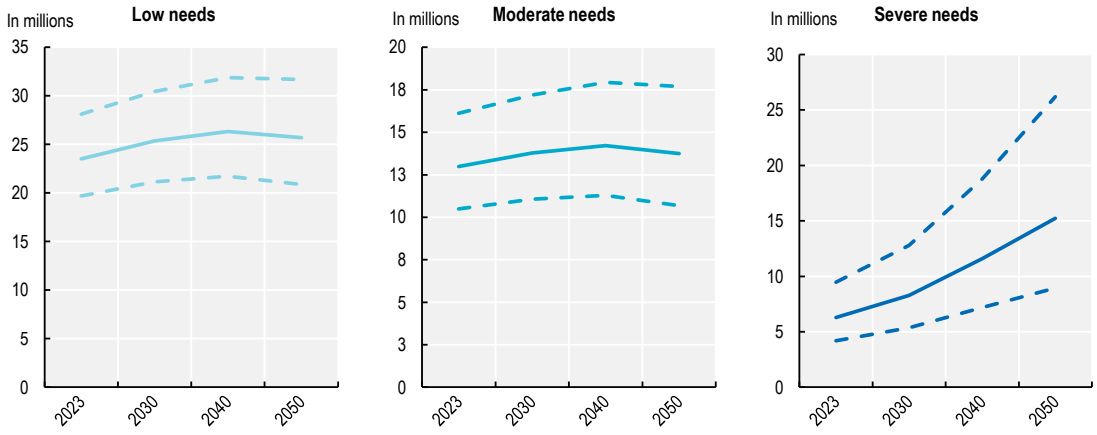


Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). The figure includes an unweighted OECD average.
Source: OECD analysis based on responses to surveys listed in Annex A.

The demand for LTC is set to increase significantly in the coming decades. By 2050, the number of individuals requiring such care is expected to rise by close to 30% in the OECD, driven primarily by a growing proportion of older adults (see Figure 1.2). This translates to an increase from 42.8 to 54.7 million individuals needing LTC services in 2050. These numbers show a similar trend as other estimates including from the European Joint Research Centre that projects an increase in the number of people aged 50+ with severe LTC needs by approximately 21% until 2070 (Belmonte et al., 2023[9]). Estimates for European countries, the United States and Israel suggest demand for LTC will increase, with the share of a country's population with at least two ADLs or IADLs growing by 47% by 2040 (Kotschy and Bloom, 2022[10]). Healthy ageing can partially offset the growth in severe LTC needs, forecasted to reduce the growth by 64% by 2050. In contrast, without improvements in healthy ageing and with prolonged life expectancies, the projected increase in people with severe LTC needs could escalate to 157%.

Figure 1.2. Projection of the number of people with low, moderate, and severe needs

Sum of projected population across 27 OECD and 2 non-OECD countries. Solid line represents point estimates, while dashed lines represent the upper and lower limit of the forecast



Note: The projection of the number of older people with LTC needs (average of two matching methods X and Y, see Annex) is obtained followed the methodology by Oliveira & Martins (2013[11]). The share of people with low, moderate, and severe needs is regressed on life expectancy at birth, public health spending and age group dummies. The estimates are then used to create a projection for 2023, 2030, 2040 and 2050. Lower and upper dashed lines define a 90% forecast confidence interval.
Source: OECD analysis based on responses to surveys listed in Annex A, OECD Population projections database, UN World Population Prospects, and Global Burden of Disease Collaborative Network. Global Expected Health Spending 2020-50, Institute for Health Metrics and Evaluation (IHME).

Box 1.1. Long-term care definition and methodology

Long-term care (LTC) services help people live as independently and safely as possible when they can no longer perform everyday activities on their own. The focus is on the services that people require to meet three types of needs. First, ADLs, or activities of daily living, are a set of personal care tasks, such as bathing, dressing, and using the toilet. Second, IADLs, or instrumental activities of daily living, are tasks necessary for someone to be able to live independently in the community. They include shopping, housekeeping, and preparing food. Thirdly, in addition to ADL and IADL, some people are not able to maintain social activity independently (e.g. meeting with friends, going to the movies, etc.). This can lead to social isolation, which can lead to depression and deterioration in physical health.

As there is no single internationally accepted and standardised definition of what constitutes LTC needs, it is not possible to make meaningful comparisons across countries and subnational areas using administrative data on LTC recipients and out-of-pocket spending, as differences in eligibility, scope and depth will all be confounded. As such, a set of eight typical cases of LTC needs were developed to describe an older person in terms of the types and severity of LTC needs, and the professional services they would require. These typical cases are based on number of hours of need for help with ADLs, IADLs, and social activities, and span different levels of care severity (low, moderate, and severe) and different ways in which these needs can be met (professional home care, informal care, and institutional care). Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. Information was collected from countries on what would be the total costs of meeting the needs described in the typical cases, available LTC benefits and schemes, and rules that determine the level of support depending on the older person's income and wealth. Low income refers to the upper boundary of the 20th percentile, and high income to the upper boundary of the 80th percentile.

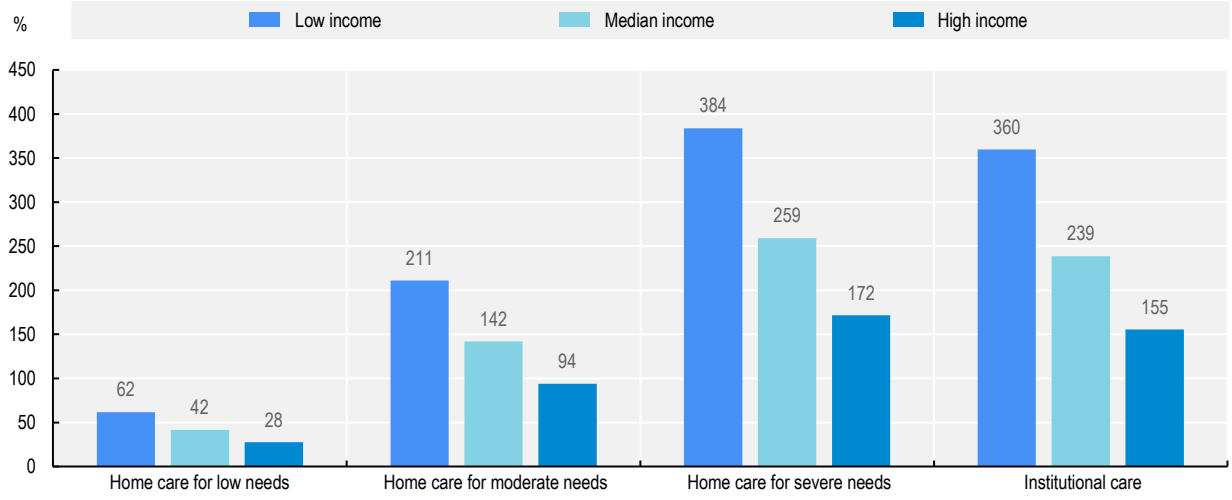
For more information on the methodology refer to Annex A and the working paper written by Cravo Oliveira Hashiguchi & Llena-Nozal (2020[12]).

1.1.2. Older people's care costs can be as high as seven times the median income

The costs of LTC that older people would face if there were no public social protection would constitute a substantial financial challenge, often consuming a sizable portion of their disposable income. Across the OECD countries, the total costs of LTC for older people range from one to almost seven times the median disposable incomes for people in old age across countries (see Chapter 3). Even for an individual with low needs of only 6.5 care hours per week, the total costs of care would represent two-thirds of the income of a person with low income (see Figure 1.3). An individual with moderate needs (22.5h per week), earning a median income would already face costs that are nearly 1.5 times their income. Finally, an individual with severe needs (41.25h per week) could not afford care costs from their income alone even if earning a high income. Without social protection systems for LTC, the majority of older people would not be able to afford LTC unless they have savings to draw on.

Figure 1.3. Costs of LTC without social protection, by income

As a share of median income, in different settings and for different levels of needs, unweighted average across 30 OECD and 2 non-OECD countries and subnational areas



Note: Bars show unweighted averages for 30 OECD and 2 EU non-OECD countries and subnational areas (see Annex A). Low income refers to the upper boundary of the 20th percentile, and high income to the upper boundary of the 80th percentile of the income distribution among older people. Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. Detailed descriptions of care recipients' needs are available in Annex A. The costs of institutional care include the provision of food and accommodation, so are overestimated relative to home care. Median income refers to the country disposable median income of older people.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database,* and the *OECD Wealth Distribution Database*.

1.2. There are gaps in public support for LTC

1.2.1. Despite public support, the out-of-pocket costs of LTC are large

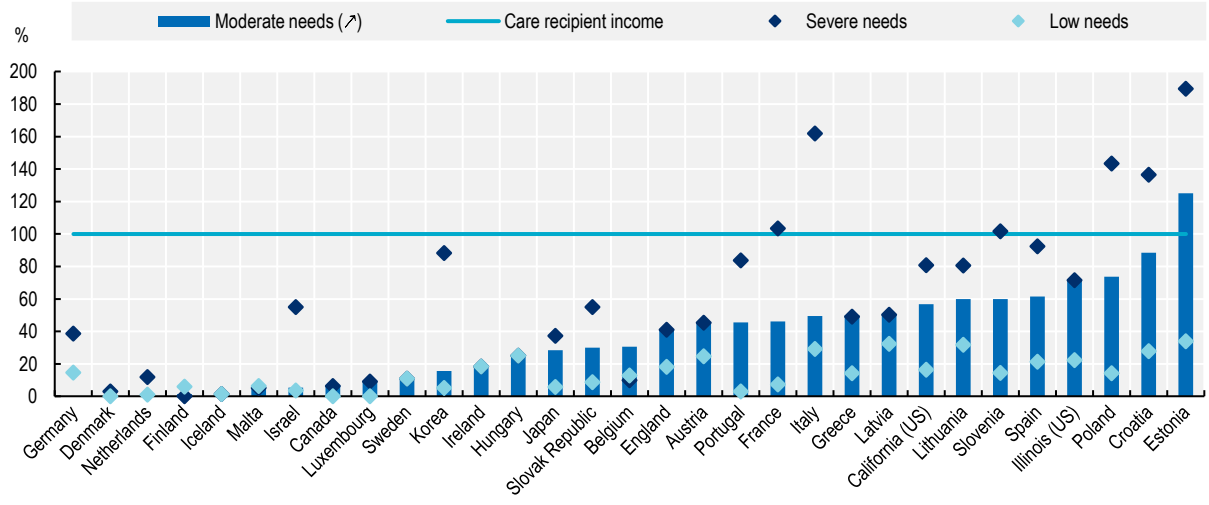
All countries provide some public support for LTC, but its generosity varies widely across countries. On average, public systems in the OECD cover 62% of the total costs of LTC services for people with moderate needs – requiring 22.5 hours of care per week – receiving care at home. The degree of public support is above 90% of total LTC costs in ten countries and below 50% in another ten countries (see Chapter 3). In Northern Europe, Canada, Luxembourg, Malta and Israel, public systems cover almost the full costs of home care. In contrast, in Estonia, Greece, the United States (California and Illinois), Czechia and Croatia,

less than 10% of home care costs are covered by public systems for an individual with moderate needs. On average, public social protection systems across the OECD provide greater support for older people with more severe LTC needs and lower incomes, and less generous support for those with median wealth compared with individuals without wealth.

In spite of targeting support to the most vulnerable parts of the population, out-of-pocket costs remain large in many countries for those who need it most, that is, those with severe needs and low income. Out-of-pocket costs (the share of the total LTC costs that is left for older people to pay, after receiving public support) are high when compared to disposable incomes. In ten countries, an older person with moderate needs would have to devote more than half of their income to pay for receiving care at home, leaving less than half of their income to cover basic living expenses (see Figure 1.4). In 16 countries, out-of-pocket costs for individuals with severe needs at home represent more than half of the median income of an older person and in seven countries the costs are higher than an older person's median income itself. For an individual with severe needs receiving care in an institution, the out-of-pocket costs will be above the median income in six countries. Older people with low incomes also face high out-of-pocket costs.

Figure 1.4. Individuals' out-of-pocket costs for LTC at home after having received public support

As a share of the median income, after receiving public support, for individuals with median income and zero wealth



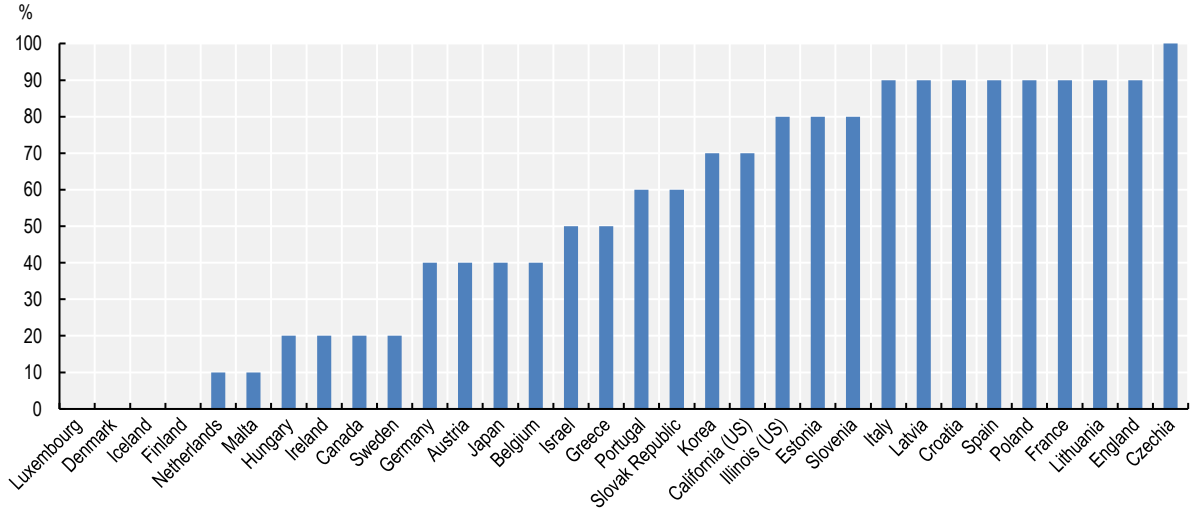
Note: Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. Detailed descriptions of care recipients' needs are available in Annex A. The estimates assume older people with LTC needs would seek formal home care. Estimates for Czechia are an outlier – cost of home care is 82%, 276% and 482% for low, moderate, and severe needs respectively – and are removed from the figure. Median income refers to the country disposable median income of older people.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database,* and the *OECD Wealth Distribution Database*.

1.2.2. Because of high out-of-pocket costs, many people may need to rely on their wealth to pay for care

In the majority of countries and subnational regions covered in this report, at least 50% of the population may have to rely on their wealth to pay for LTC even after receiving public support (see Figure 1.5). In 17 countries, individuals in at least the lowest five income deciles will have to use their wealth and in eight countries, all individuals will rely on their wealth except for those in the highest decile of the income distribution. Only in four countries (Iceland, Denmark, Luxembourg and Finland) individuals would not need to rely on their wealth to pay for LTC costs independent of their income.

Figure 1.5. Share of older people who need to use their wealth to pay for LTC at home

After receiving public support, for individuals with median wealth, across the income distribution, assuming covering at least basic cost of living



Note: Estimates computed by income decile using the assumption that average duration of low needs is 6.1 years, moderate needs is 1.25 years, and severe needs 1.25 years. The estimates assume older people with LTC needs would seek formal home care. Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. Detailed descriptions of care recipients' needs are available in Annex A. The basic cost of living representing food and other expenses is equal to the poverty level (50% of a country's median income). Median income refers to the country's disposable median income of older people.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database,* and the *OECD Wealth Distribution Database*.

1.3. Public systems do not always reduce poverty risks associated with LTC cost

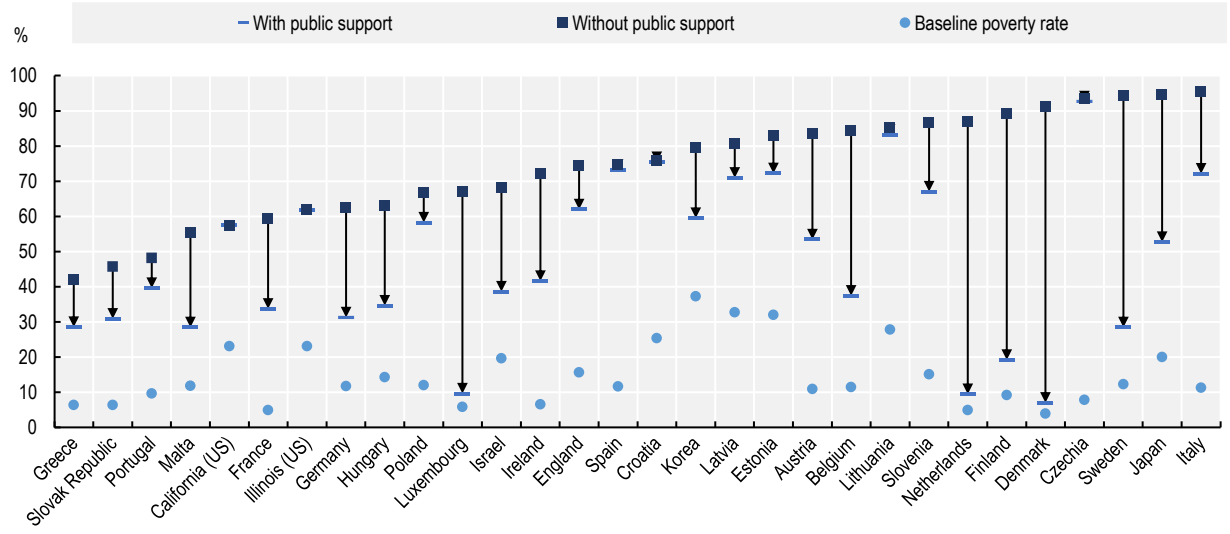
1.3.1. Public support reduces poverty risks associated with out-of-pocket costs for LTC only to some extent

Benefits and services help reducing poverty risks significantly, by an average of 27 percentage points in the OECD. If it were not for public social protection for LTC, the majority of older people in the OECD would not be able to pay the out-of-pocket costs of care from their incomes alone without being at risk of poverty. In 13 countries, the share of the population at risk of poverty would be above 80% and only in three countries less than 50% of the individuals with LTC needs would be at risk of poverty (see Figure 1.6). The impact of benefits and services on reducing the poverty risks associated with LTC varies between countries. When using home care services this impact is largest in Denmark, the Netherlands and Finland where public support decreases poverty risks by at least 70 percentage points (see Figure 1.8). In the majority of countries, the share of people at risk of poverty is reduced by between 15 and 30 percentage points after receiving benefits and services. In a few countries the reduction thanks to benefits and services is below 5 percentage points (Croatia, Czechia, Lithuania, Spain and the United States).

Yet, social protection measures in most countries fail to reduce the risk of poverty for older people with LTC needs to the level of baseline poverty rates observed in the general older population. The share of individuals at risk of poverty among older people with LTC needs is 33 percentage points higher than in the total older population. In all but three countries public support is not sufficient to reduce poverty risks to the baseline poverty rate. They remain between 20 percentage points to 50 percentage points higher in most countries.

Figure 1.6. Risk of poverty among older people with LTC needs, before and after receiving public support

Compared to the baseline poverty rate for all older people



Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

1.3.2. Poverty reduction is greater in countries that spend more, have less stringent means-testing and in-kind rather than cash benefits

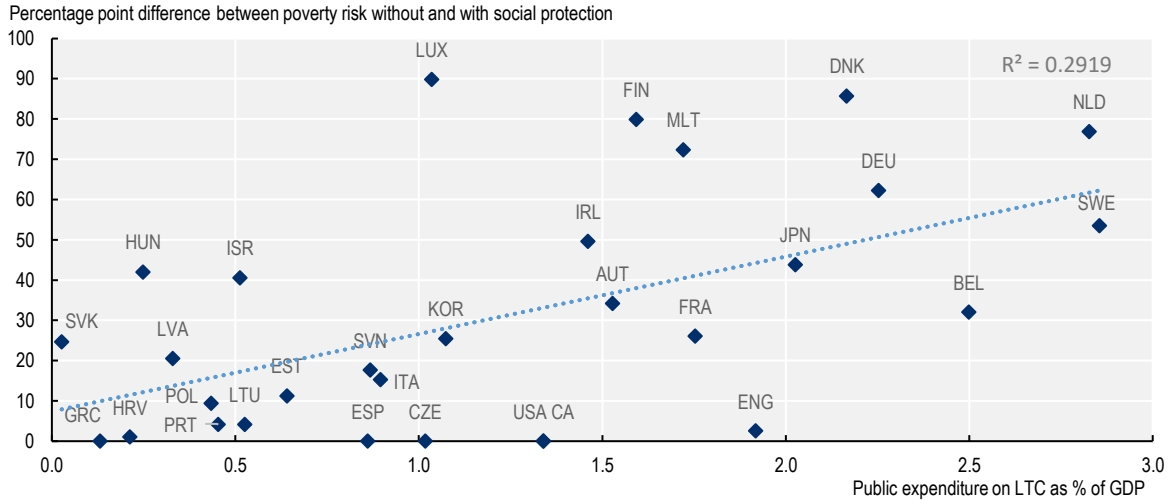
More LTC spending is associated with greater poverty reduction

Public social protection is efficient when gains in well-being and reductions in poverty and economic vulnerability are achieved at minimum cost to the public purse. One way to analyse efficiency is to compare the costs of public social protection (the inputs) with poverty reductions (the effects). In the case of LTC this could be, for example, comparing poverty reductions due to public benefits with public LTC spending, providing a proxy measure of efficiency.

In countries where public LTC spending is higher, the impact of social protection is greater in reducing the poverty risks associated with LTC (see Figure 1.7). This impact is measured as the difference between the poverty risk with vs. the risk without social protection. There is however significant variation in public spending for the same impact on poverty risk reduction: for instance, Denmark and Germany spend significantly less than the Netherlands but manage to limit poverty to a similar degree. At the other end of the scale, England spends more than e.g. Poland but with a similar impact on poverty reduction.

Figure 1.7. The relation between public LTC spending and reduction in poverty risks thanks to social protection

Public spending on LTC as a share of GDP and percentage point differences between poverty rate among the older people with moderated needs using home care before and after receipt of benefits



Note: Poverty risk estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. Moderate needs correspond to 22.5 hours of care per week, respectively. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire, *OECD Health Expenditure* database and responses to surveys listed in Annex A.

Countries with less stringent means-testing and in-kind systems fare better in poverty reduction

Public social protection systems employ diverse approaches to organising their LTC benefits. One of the most important decisions countries have to take is whether they want to apply any kind of means-testing, use a universal approach, or find a balance to design some kind of targeted universalism. As there are advantages to both options, many countries choose blending different forms of means-testing with non-means-tested benefits. For home care, countries can be divided in three groups: i) not using any means-testing, ii) using income testing only and iii) using both, income, and wealth testing (see Chapter 4).

Countries with income testing only are the most efficient ones in reducing the risk of poverty (see Table 1.1). They reduce poverty risks by an average of 33 percentage points with public support (the average across low, moderate, and severe needs), while countries without means-testing reduce poverty by 32 percentage points The smallest reduction in poverty is achieved in countries that test for income and wealth where the difference is only 16 percentage points on average. However, all three groups of countries are quite heterogenous.

Table 1.1. Reduction in poverty risk by use of means-testing

Among older people with low, moderate, or severe needs, receiving care at home.

Type of system / severity of needs	Percentage point differences between the poverty risks among older people before and after receiving care at home		
	Low needs	Moderate needs	Severe needs
No means-testing	20	44	33
Only income-testing	29	33	37
Both, income, and wealth testing	23	11	14

Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Presented estimates are the unweighted average across 30 OECD countries and subnational models by means-testing type and level of needs. Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. The estimates assume all older people with LTC needs would seek formal home care.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

Countries that offer only in-kind benefits show lower risks of poverty associated with out-of-pocket costs of home care (see Table 1.2). On average, the reduction in poverty risk is of 40 percentage points for countries having only in-kind benefits. Countries combining the two types of benefits also protect a high share of people from poverty risks and achieve a reduction in poverty of 29 percentage points Countries with cash benefits alone protect older people with LTC needs only to a very limited extent from the added risk of poverty: the reduction in poverty risks is as low as 6 percentage points, on average.

Table 1.2. Reduction in poverty risk by form of public support

Among older people with low, moderate, or severe needs, receiving care at home.

Form of public support / severity of needs	Percentage point differences between the poverty risks among older people before and after receiving care at home		
	Low needs	Moderate needs	Severe needs
Both cash and in-kind benefits	22	32	34
Cash benefits only	9	10	0
In-kind benefits only	41	42	37

Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Presented estimates are the unweighted average across 30 OECD countries and subnational models by form of public support and level of needs. Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. The estimates assume all older people with LTC needs would seek formal home care. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

1.4. There are policy options for fiscally sustainable LTC systems that are affordable for older people

With ageing populations, countries will continue to face pressures on LTC spending. A societal debate is needed to balance solutions between financial sustainability and affordability for the older people with LTC needs. Countries have a range of options at their disposal that are not mutually exclusive: they can look for options to raise additional funds, they can look into targeting better and they can also look for solutions to spend better and contain costs.

1.4.1. Ageing and greater demand for care will lead to higher expenditures

The growing need for LTC has significant funding implications. Currently, LTC expenditure in the analysed OECD and non-OECD countries accounts for USD 0.39 trillion. This figure is projected to nearly double by 2050 (see Figure 1.8: Ageing scenario; see Table 1.3 for overview of different scenarios analysed in this report). This projection could well be an underestimation, as the availability of family carers is expected to decline, exacerbating the expected increase in LTC spending. Moreover, if countries aim to expand the availability of LTC, e.g. by increasing the coverage to ensure that it meets the growing demand due to ageing and that 60% of people with care needs receive benefits and services in the OECD would result in a 45% increase from the level of LTC expenditures in 2022 (High coverage scenario). To achieve such coverage by 2050, the average annual increase in total LTC spending would need to exceed 4% of the GDP and represents nearly 2.5 times the initial expenditures in 2022. In comparison, LTC projections from the Ageing Report for the EU countries project an increase in expenditures by 1.5 in 2070 due to ageing and expenditures would be twice as high if, in addition to ageing, there were improvements in coverage (European Commission, 2024[13]).

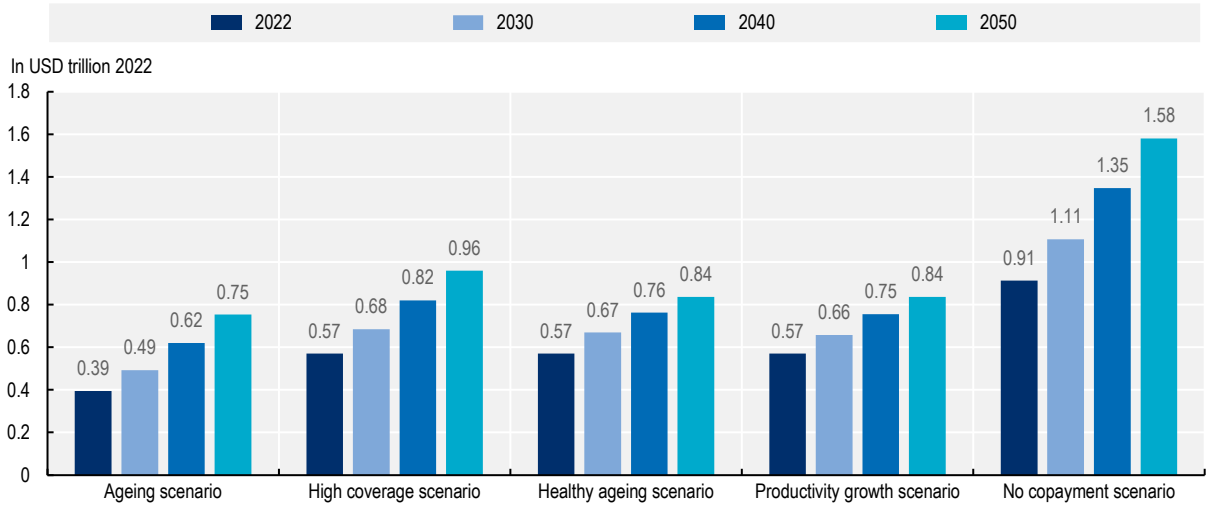
At the same time, there will be growing pressure on public systems to make care more affordable, which will have even greater implications for LTC expenditures. The OECD estimates the impact on public expenditures in a scenario where governments provide enough public support to fully eliminate the additional poverty risks caused by the private out-of-pocket payments for LTC (No copayment scenario). Results show that implementing the No copayment scenario would likely increase expenditures on average more than fourfold by 2050 compared to the Ageing scenario (see Figure 1.8: No copayment scenario).

Table 1.3. LTC expenditure projection scenarios

Scenario description	Name used in the text
Maintain the current level of coverage (the share of older people with needs receiving public support for LTC) and generosity (the share of an individual's LTC costs covered by social protection)	Ageing scenario
Increase coverage to 60% and maintain the current level of generosity	High coverage scenario
Increase coverage to 60%, maintain the current level of generosity, and assume all additional years of life due to higher life expectancy are lived in good health	Healthy ageing scenario
Maintain the current level of coverage and generosity, and set the average productivity growth rate equal to half of the average yearly productivity growth for the total economy in 2001-19	Productivity growth scenario
Increase the coverage to 60% and increase the level of generosity to the extent that out-of-pocket costs for all individuals are eliminated	No copayment scenario
Increase the coverage to 60% with out-of-pocket expenses capped at 60%, 40% and 20% of the LTC cost for older people with low, moderate, and severe needs, respectively	Reduced copayment scenario
Increase the coverage to 60%, no out-of-pocket expenses for older people below the national poverty line, and then gradually increasing along the quadratic function, until it reaches the cost for older people with income higher than the upper boundary of the 80th percentile	Income-testing scenario

Figure 1.8. Simulated government spending for LTC under different scenarios

Sum of all financial protection for LTC for older people who receive public social protection in trillions of 2022 USD



Note: Bars show the sum of the simulated LTC spending across 26 OECD and 2 EU non-OECD countries. Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Chapter 5 details the assumptions made for the simulation. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown.

Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, *OECD Population Projection* database, *OECD Purchasing Power Parities and exchange rate* database and responses to responses to surveys listed in Annex A.

1.4.2. Countries could seek additional sources of funding

There are equity and efficiency reasons for which a comprehensive public LTC system is desirable. Uncertainty about whether, when, and for how long an individual might need LTC services suggests that pooling the financial risk associated with LTC is a more efficient solution than relying solely on private out-of-pocket payments. Otherwise, the cost of LTC services and support can rapidly become unaffordable for the individual. The private sector provides only limited options for pooling the risk of high LTC costs (see Chapter 3).

To prepare for the increasing LTC costs in the future, this section discusses ways to increase funding for the long term that OECD countries have used to a certain extent and which include: 1) Tax-broadening measures, which means funding from sources other than labour income or incomes of the working-age population; 2) better pooling across generations, which implies redistributing the financial pressure between the young and older population cohorts to pay for LTC costs; 3) pre-funding elements, which imply setting aside some funds to pay for future obligations; and 4) innovative funding approaches.

Across the OECD, taxes are the most common source of funding for LTC. It is used for example in Austria, the Scandinavian countries and Spain. The main advantage of tax-based funding for LTC systems are that taxes can be broad-based. However, there are sometimes concerns about fluctuations in funding, especially during an economic recession, as well as a lack of transparency in the allocation of funds. Funding can also come from a mix of social contributions and taxes and, in this case, countries typically levy money on a base broader than the labour incomes. For example, in France, funding stems mostly from social contributions and taxes that cover a base that goes well beyond labour income.[1] Countries with a dedicated social insurance scheme for LTC are Germany, Japan, Korea, the Netherlands and Luxembourg, whereas parts of Belgium arrange coverage mostly within the health system.

Options for governments to fund growing needs include *broadening of funding sources* beyond payroll contributions and diversifying taxes. Funding through a rise in social security and payroll taxes would be a major challenge as in some countries taxpayers already feel overburdened. In the future, the pool of workers will decrease along with population ageing and further limit avenues for relying on taxable incomes among the working age population. Other forms of taxation outside of income taxes could be considered – for example, earmarking a fixed percentage of the value-added tax (VAT) to build up reserve funds or a percentage of the tax revenue of other taxes, such as local property taxes (as is the case in France) would in practice increase the tax base of LTC funding. Certain countries have considered the (re)introduction of a wealth tax or increasing the tax levied on the highest incomes as alternative options to finance LTC but these options are likely to be controversial.

In a number of countries, the debate about raising taxes has led to considerations about introducing contributions for a public LTC insurance. Slovenia is an example of country that decided to introduce a dedicated LTC insurance to fund a new and more comprehensive system with the introduction of the new Long-term care Act in 2023. The advantages of a dedicated insurance scheme include more transparency in managing funds and a possibility to prefund care instead of creating debts for the future. Disadvantages of such a scheme include its reliance on employee contributions, which can have negative impacts on employment and growth, and issues with respect to equity and intergenerational fairness. Unless the scheme was extended to the unemployed and the self-employed, it would have a limited tax base, which raises issues regarding equity.

Another related option is to ensure a *better pooling of funding across generations*. To ensure that the burden is not falling only on those of working age, the Japanese LTC insurance relies on premiums which are different for the people aged 40-64 and those aged 65 and over. Municipalities set the premiums every three years based on their projected expenditure. In Germany, the presence of children affects individuals' level of contribution to the public LTC system. The general premium is 3.4% of the gross wage and is shared equally between employees and employers, while those without children pay a surcharge of 0.6 percentage points. The rationale for the additional premium is that childless individuals are expected to use more in-kind LTC services, which are set at a more generous level than cash benefits, which again are more used by people with children.

Another strategy that could be adopted to address the fiscal-sustainability gap is the introduction of *pre-funding*, which essentially means building up wealth to ease future ageing-related cost pressures. Pre-funding is more feasible in countries that finance their LTC expenditure from dedicated revenue sources. In Germany and Luxembourg, the public LTC insurance scheme is mandated to accumulate a small reserve. In Germany a share of 0.1 percentage points of the LTC insurance contributions is invested each year in the LTC provident fund. Over a period of 20 years, money will be saved up to contribute to the stabilisation of the contribution rate.

In addition, countries could facilitate *innovative funding solutions* such as the development of financial instruments to pay for LTC costs, especially for the board and lodging costs of LTC provided in institutions. Options include bonds or equity release schemes (as in Australia and Ireland), public measures to defer payments (as in the United States and the United Kingdom), and private sector products, such as combinations of life and LTC insurance policies. Some insurance providers offer LTC insurance policies as part of life insurance policies, for example in the United States, France, Canada and Australia. One possibility for private co-funding is group insurance, which typically takes place in the context of employment and has the advantage of encouraging early subscription into a private LTC insurance plan. Group coverage can provide a number of benefits to enrolees, such as the ability to negotiate better coverage solutions and lower premia. For the insurance providers, group insurance mitigates the risk of adverse selection with the potential benefit of reducing the overhead costs associated with underwriting tests. Countries where such options are prominent include France and the United States. So far, the development of such products remains limited due to minimal interest from providers and citizens, as well as complex regulatory challenges.

1.4.3. Countries could consider more targeted universalism

Targeting to those with high needs and fewer resources would become more important with growing financial pressures on LTC. *Targeted universalism* was previously discussed as a way to strike a balance between the adequacy of social protection and fiscal sustainability (Colombo et al., 2011[5]). Such a concept means that while some degree of universal entitlement *for care costs* is warranted, universality does not mean that there is no room for targeting benefits on the basis of care need and resources. Means-testing – making the level of public support depend on the care recipient's income and wealth – is adopted to enable public social protection systems to use limited resources to maximise adequacy (anyone can access and afford the care they need), equity (the most vulnerable are adequately protected) and efficiency (a given level of results is achieved at the lowest cost to the public purse).

One option for countries is to support individuals exclusively with those services that are needed most, although this might have negative consequences in terms of adequacy for some countries. In the need to address sustainability challenges, countries could, for example, ensure that the costs of help with ADL are paid in full by the public social protection system while the costs of help with IADLs and social activities are charged in full to the care recipient. Previous OECD analysis (Cravo Oliveira Hashiguchi and Llena-Nozal, 2020[12]) concluded that such a policy might be appropriate in countries where the risk of poverty associated with LTC is currently high, as providing greater support for personal care (help with ADLs) leads to clear reductions in the risk of poverty. In other countries, adequate social protection for LTC should go well beyond support with ADLs and include help with IADLs and social activities, the costs of which can still push large shares of the old age population to relative income poverty.

Targeting resources better towards those with most severe needs and low income, without impoverishing those in the middle might be a policy worth considering in a number of OECD countries. Simulations for such policies are shown in Chapter 5 (Figure 5.3). The results show that designing public support in a more progressive way based on LTC needs results in lower spending in a number of countries without an increase in poverty. In other countries, poverty could even be reduced with small expenditure increases. Making cost-sharing more progressive along the income distribution can also be a promising avenue in some countries to avoid budget increases and limit poverty among care recipients. Improving targeting towards care recipients with lower income, while maintaining current maximum support and coverage can be beneficial in a number of OECD countries (Figure 5.4 in Chapter 5). In about one-third of countries, such improved targeting results in lower spending on LTC and reduced poverty among care recipients or reduces spending without changing poverty rates. In another third or more, poverty among recipients would decrease significantly, but it would come with a high increase in spending, although lower than fully eliminating the out-of-pocket costs of LTC. When targeting support, it needs to be ensured that individuals just above the threshold(s) who do not receive support are not worse off than those just below the threshold receiving support.

Wealth-testing, which ties public support to an individual's wealth, can effectively direct aid to those who most need it. However, it must be designed carefully to avoid discouraging savings and unfairly impacting those with limited wealth. Many older people in OECD countries own their primary residences, suggesting that wealth-testing or funding LTC through private properties could be feasible. To avoid forcing the immediate sale of homes, reverse mortgages – available in countries such as Canada, France, New Zealand, the United Kingdom, the United States and Germany – allow individuals to borrow against their home's value without losing eligibility for public benefits. These mortgages can be obtained regardless of health status and can ensure the borrower's debt never exceeds the property's value (Bonnet, Juin and Laferrère, 2019[14]). While reverse mortgages are well-developed in the United States, in other countries they are often seen as last-resort options rather than integral parts of retirement or healthcare planning (Knaack, Miller and Stewart, 2020[15]). A potential policy option to encourage their use is for public administration to act as lenders (Roberto Martinez-Lacoba, 2020[16]).

1.4.4. Countries could seek efficiency gains to reduce pressure on LTC cost

Increases in LTC costs can be partially mitigated by healthy ageing. When longer life is lived in good health (Healthy ageing scenario), the increase in LTC expenditures by 2050 could be 13% lower than in the Higher coverage scenario (see Figure 1.8: Healthy ageing scenario). Encouraging preventive and rehabilitation services to delay the onset of LTC needs is an important strategy to promote healthy ageing and contain costs. The examples below (and more extensively in Chapter 5) present policies already used by countries to achieve this goal.

A number of OECD countries have well-developed preventive systems that can contribute to improving quality of life and have shown to be cost-efficient. Australia, Denmark, Latvia and Norway have introduced dedicated home visits schemes for older people. Home visits in Denmark, Finland, Norway and Sweden were found to be cost-effective (Kronborg et al., 2006[17]; Liimatta et al., 2019[18]; Sahlen et al., 2008[19]). For instance, the introduction of the "Preventive Home Visits" scheme in Norway was found to reduce admissions to LTC facilities by 7%, hospital admissions among those aged 80 and above by the same rate, the average number of hospital days by 11%, and mortality of those aged 80 and above by 4% (Bannenberg et al., 2021[20]). In addition, New Zealand, Australia, Japan, the United States, and some European countries have introduced reablement or rehabilitation services for older people which also have potential to be cost-effective (Chen et al., 2022[21]). New models of care that are more people centred are also promoting enhancing autonomy for older people and have proved to improve on a number of outcomes. Such models of care focus on innovative living arrangements which include small-scale living, the green house model, shared housing arrangements, green care farms, dementia villages, group homes, intergenerational living (Brouwers et al., 2023[22]).

In addition to reducing LTC needs through healthy ageing, productivity gains could also help offset some of the costs. This could be undertaken through price controls or productivity improvements in the workforce which could reduce costs by handling repetitive tasks more efficiently. If productivity gains are half of those in the total economy, the increase in LTC expenditures could be 13% lower than in the High coverage scenario (see Figure 1.8, Productivity growth scenario).

Price controls for LTC services as well as setting targets for expenditures might be useful tools for sustainability. Certain countries such as the Netherlands rely on defined or maximum prices for services in each care setting. The 31 Dutch regional purchasing offices are in charge of contracting provision with providers, within the budget constraint, and respect the maximum prices set by the Dutch Health Care Authority (Nza) (Milstein, Mueller and Lorenzoni, 2021[23]). Maximum prices are based on empirical research using a survey that covered about half of the providers delivering care financed by social long-term care insurance in 2017 (Kelders and de Vaan, 2018[24]; Bakx, Schut and Wouterse, 2021[25]). In addition, the national government sets a macro budget for LTC using forecasting accounting for changes in wages, prices, demographics, and policies. Regional purchasing offices must adjust prices and/or volume of the contracted care to fit the regional budget restrictions (OECD/WHO, 2021[26]). An alternative is to use a point system to set prices and to control spending such as in Germany and France. Each service has a number of points, which have a base value. The points and the base values can be set at the national or subnational level, but providers can set up contracts with the public bodies. The pricing system also depends on the setting – home care, day care and residential care.

Improving LTC worker productivity is another possibility to help contain costs as their salaries are often one large component of the overall expenditures. There are two potential ways to attain this: one is by freeing professionals' time from automatable tasks, allowing them to focus on the activities that are most important for the people in need of care. Importantly, this may also help to promote better quality of care and reducing adverse events, thereby reducing over costs to the system. Innovation is slowly entering LTC in some countries, but evidence on its cost-effectiveness is scarce so far. Some studies point to an increase in labour productivity in the United Kingdom and Japan (OECD, 2023[1]) (see Chapter 5). New technologies can help improve work processes and reduce LTC workload – for instance, by helping to share care plans

and reducing the amount of repetitive and physically demanding tasks. Improving the workforce skill mix and promoting task delegation could also be a way to promote value for money. In home-based settings, the delegation of medication administration (pills, eyes-drops etc.) from nurses to personal care workers can lead to better efficacy when, for instance, it reduces unnecessary travel time and allows more time and effort to be dedicated to providing care to elderly people with complex needs (Osterman, 2017[27]).

Another mechanism that has been used is to control entitlements or reduce the availability of services in the care package (Gori and Luppi, 2022[28]). In a number of countries, the value of benefits is not necessarily updated annually nor indexed to inflation. Reducing care responsiveness by increasing waiting times or the length of the needs assessment has also happened in some OECD countries at times of fiscal constraints. Gori and Lupi (2022[28]) also point out that some Nordic countries, the Netherlands, England (United Kingdom) and Japan reduced the care packages while others reduced the care intensity by introducing caps to the number of hours that would be paid for by public support systems. However, such strategies might have unintended consequences. Failing to increase the value of LTC benefits can put some individuals at a greater risk of economic hardship. Similarly, limiting the number of beneficiaries or the scope of services provided may result in higher costs elsewhere within the system either immediately or in the future.

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Notes

[1] France's Generalised Social Contribution has relatively low rates and relies on a very broad base (labour income, capital income, pensions, unemployment benefits, etc.).

2 Growing long-term care needs across OECD countries

This chapter sets the scene for discussion on the adequacy and effectiveness of social protection for long-term care by presenting the current prevalence of long-term care needs in OECD and EU countries. A standardised classification of needs is used as it allows for cross-country comparison of the severity and distribution of older people's needs. The analysis shows that the level of needs is overall high while prevalence varies significantly by socio-demographic characteristics, such as age or gender. In the coming decades, long-term care needs will continue to grow across the analysed countries due to population ageing and healthy ageing will only partially mitigate the demand for long-term care in the future.

Introduction

Determining whether people are living in better health than before is important to predict the additional demand that will be put on long-term care (LTC) systems given population ageing. While life expectancy has increased in all OECD countries over the past half century, not all these years are lived in good health. In 2021, less than half the population aged 65 and over in 36 OECD countries reported being in good or very good health (OECD, 2023[1]). Older individuals in Europe are also more likely to suffer from chronic diseases with 60% of them having at least one chronic disease (OECD/European Commission, 2024[2]). The prevalence of limitations in everyday tasks or so-called activities of daily living (ADLs), such as bathing, and instrumental activities of daily living (IADLs) increases with age. The evolution of activity limitations among older people is uncertain, raising questions about whether people will age healthily: several OECD countries are observing an increase in the prevalence of the need for help with ADLs, such as the United States (Lin et al., 2012[3]), whereas others, such as Denmark and Sweden recorded a decrease (Badache et al., 2022[4]).

The demand for LTC is directly tied to the needs of older individuals measured by the amount of such limitations in activities. Those experiencing more severe limitations require more intensive services and possibly more qualified caregivers. Understanding the extent and severity of these care needs is essential for predicting both current and future demand for LTC, as well as the financial implications for care recipients and state budgets. Accurate predictions become increasingly relevant with an ageing population. It remains important to evaluate and predict future demand for LTC depending on the possible scenarios about how the health and limitations of older people could evolve.

This chapter first analyses the prevalence of needs across 27 OECD and 2 EU non-OECD countries, identifying the share of people with different level of needs (low, moderate, and severe as described in Chapter 1, Box 1.1). It then investigates the heterogeneity of needs across socio-economic characteristics, such as age, gender, or income, highlighting that people from more vulnerable groups are at higher risk of developing LTC needs earlier in life and face more difficulties in meeting them. The chapter also examines the coverage of formal and informal LTC, with a special focus on the role of gender. Women, partly due to their longer life expectancy, often outlive their partners and become caregivers. Although when they develop care needs, they frequently have to rely on external help. The chapter concludes with predictions of future needs and estimates of the future demand for LTC.

Key findings

- **The need for support among older people is high in OECD countries: nearly one out of four older individuals has long-term care (LTC) needs**, requiring help with daily activities. On average, an estimated 12% of older people in OECD countries have low LTC needs, 8% have moderate needs, and 4% have severe needs. The prevalence of LTC needs varies widely across countries: in Portugal, Hungary and Lithuania, more than one-third of older people have LTC needs, while less than half of this number have such needs in Malta, Korea and Ireland.
- **Older people with LTC needs are more likely to be 80+ years old, female, live in single households, and earn lower incomes**. The majority of older people with moderate and severe needs are 80 years old or older with 60% of those with moderate needs and two out of three older people with severe needs being aged 80 and above. Women make up two-thirds of older people with LTC needs independent of the level of care needed. An important share (45%) of individuals with LTC needs live in single households, that would not be able to find informal support in their own homes. Across the OECD, around 27% of older people with any needs earn low incomes, compared to 16% of older people without LTC needs. Women tend to accumulate disadvantage as they are more likely to suffer needs and also have low income.
- **In all analysed countries older people rely heavily on informal care.** Significantly more older people report receiving informal care than formal care, with substantial variations between countries. Nearly all older adults with severe needs in Latvia and Hungary receive informal care, while formal care is more common in the Netherlands and Belgium. These patterns are significantly influenced by the availability and affordability of formal care, along with cultural and family dynamics.
- **People with severe needs are more likely to receive all types of care, both formal and informal.** Across OECD countries, approximately 25% of older people with low care needs report receiving formal or professional care, compared to 44% with moderate needs and 53% with severe needs. In OECD countries, on average, 78% of people with severe needs receive informal care, while this is 71% for those with moderate needs and every second older person with low needs receives some informal care.
- The share of older people with LTC needs will rise in all OECD countries by 2050, though the increase will vary significantly across countries. On average, the share of those with LTC needs is expected to increase by 30% (or 1.2 percentage point). This increase ranges from 147% in Korea to an increase of less than 3% in Hungary. In a Healthy ageing scenario, the projected growth in the share of people with severe LTC needs is lower by an average of 64%. However, the share of older people with severe LTC needs is still anticipated to grow by 57%.

2.1. Prevalence and characteristics of older people with LTC needs

There is no single internationally accepted and standardised definition of LTC needs. Consequently, cross-country, and subnational area comparisons are challenging when using administrative data on LTC recipients. To address this limitation, researchers and analysts often rely on survey data (European Commission, 2021[5]; Scherbov and Weber, 2017[6]; Szenkurök, Weber and Bilger, 2024[7]). The most commonly used definition is based on reported numbers of ADLs and IADLs that a person needs help with. This approach focuses on the general level of needs without differentiating between levels of severity. It limits the analysis of the generosity and effectiveness of LTC systems, as individuals with varying levels of needs might face different costs. Additionally, countries often vary in their support based on the number of

limitations an older person faces. A few studies, such as (Kristinsdottir et al., 2021[8]), examine different degrees of needs but do not analyse the financial implications for care recipients and state budgets. Furthermore, their analyses are limited to six European countries.

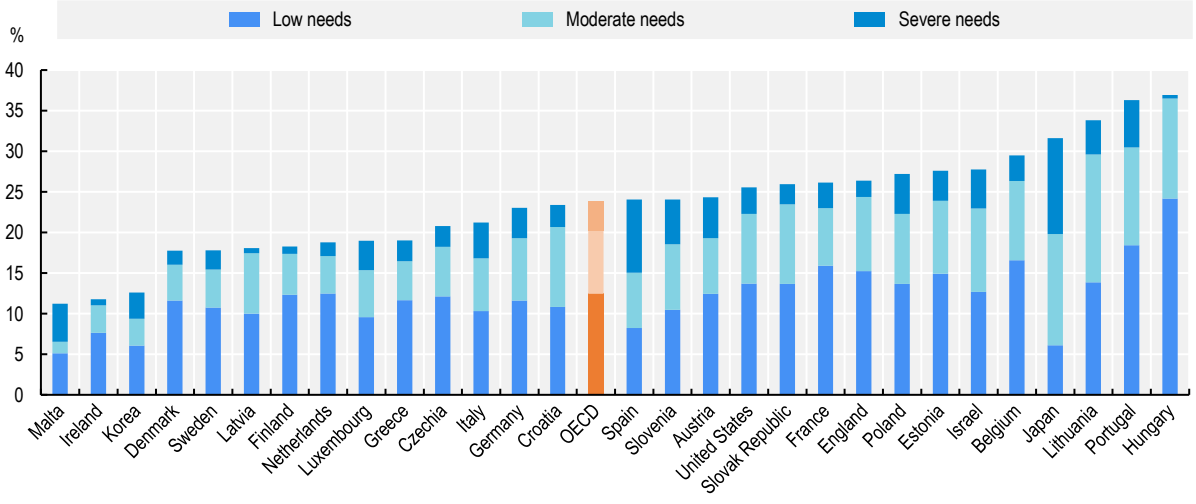
To fill this gap, the OECD has developed a set of typical cases to compare the prevalence and characteristics of older people requiring LTC. This methodology allows for the assessment of the effectiveness of social protection for LTC. The cases are based on activities described by the number of hours of need for help with ADLs, IADLs, and social activities (see Chapter 1, Box 1.1). These typical cases span different levels of care severity (low, moderate, and severe) and different ways in which these needs can be met (professional home care, informal care, and institutional care).

2.1.1. Almost one in four older people have LTC needs

On average, across OECD countries, 24% of older people have LTC needs. Figure 2.1 shows the prevalence of LTC needs among older populations, categorised by the severity of these needs. Most people with LTC needs have low needs (12%), followed by a smaller share with moderate needs (8%), and the smallest share with severe needs (4%). However, there are notable exceptions to this pattern. In Spain, the proportion of individuals with severe needs exceeds those with moderate needs. In Japan, the number of people with severe and moderate needs is higher than those with low needs. These exceptions can be partially attributed to the high proportion of individuals over 85 years old in these populations, as they are more likely to develop severe needs compared to those younger than 85.

The composition of older people with low, moderate, and severe needs varies significantly across countries. Japan has the highest share of the older population with severe needs, while the share is nearly zero in Hungary. The share of people with moderate needs ranges from 16% in Lithuania to 1% in Malta. Hungary also has the highest estimated prevalence of low needs among older people, whereas in countries like Malta, Korea and Japan, the share is six times lower.

Figure 2.1. Share of older people with low, moderate, and severe LTC needs



Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). The figure includes an unweighted average across 27 OECD countries.
Source: OECD analysis based on responses to surveys listed in Annex A.

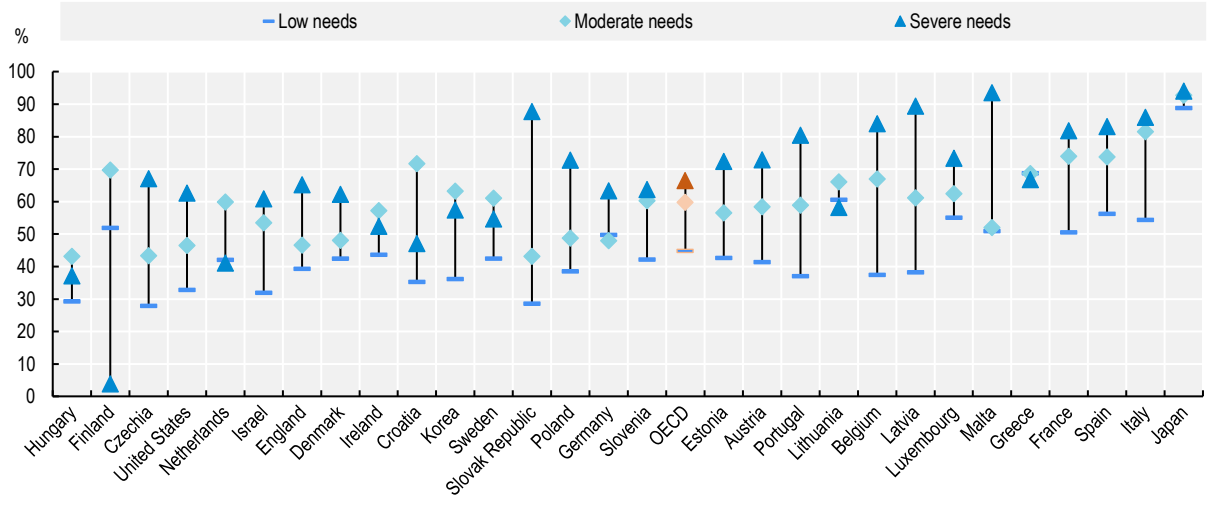
The distribution of needs is partly aligned with the age structure of countries, but other factors are also driving the differences. Portugal has one the highest share of older people needing LTC. This aligns with the fact that, despite a long overall life expectancy, the share of healthy life years in older ages is relatively small. Additionally, Portugal has a relatively high proportion of individuals aged 85 and older. Hungary has a similar share of people with LTC needs, but these are mostly low and moderate needs. This corresponds with Hungary's age structure, as it has one of the highest numbers of people aged 65-74, a group more likely to have low or moderate needs compared to older age groups. Lithuania, with the third highest share of older people with LTC needs, has one of the highest proportions of individuals aged 75-84, who are more likely to have moderate or severe needs compared to the younger age group in Hungary. Meanwhile, countries like France and Greece also have a large population of individuals aged 85 and older but show a smaller share of older adults with severe needs. This discrepancy could be due to cultural factors in self-assessment of LTC needs or existing support structures in terms of health and care.

2.1.2. People with LTC needs belong predominantly to more vulnerable groups

In the analysed countries, on average, most older persons with moderate or severe LTC needs are 80 years old or older (see Figure 2.2). As populations age, the prevalence of care needs increases, with adults over 80 years old more likely to require LTC compared to younger adults. While the experiences and needs of older individuals vary widely, data indicate that, on average, two out of three older people with severe needs are aged 80 and above. Among those with moderate needs, over half (60%) are also 80 years or older. Conversely, most older individuals with low needs are under 80 years old, with only 45% being 80 or older. However, there are some countries that deviate from this pattern and have a high share of older individuals with moderate needs among those aged 80 and above. Finland, in particular, has a very high share of older individuals with low and moderate needs who are 80 years or older, while the majority of those with severe needs are between 65 and 79. Finland has one of the highest shares of older people in international comparisons, with a particularly high share of people aged 65-74 and relatively few individuals aged 80 or more, which partly explains its distinct situation. The situation is similar in the Netherlands, Ireland, Croatia, Korea, Sweden, Lithuania and Greece.

Figure 2.2. Shares of people 80+ years old among older people with different levels of LTC needs

Among older people with low, moderate, and severe needs



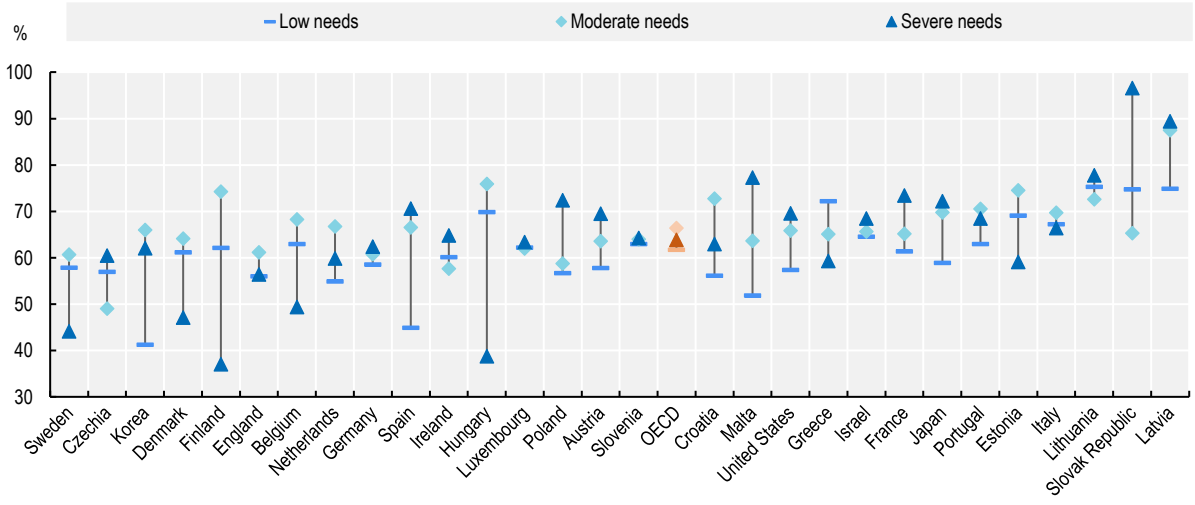
Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). The figure includes an unweighted average across 27 OECD countries.
Source: OECD analysis based on responses to surveys listed in Annex A.

The share of people aged 80 and above among those with needs varies significantly by country. Japan and Malta have the highest share of the older population with severe needs who are 80 years old or above, exceeding 90%. In Japan, a very high share of people above 80 exists among those with any level of needs, including moderate and low needs. This might be driven by Japan's relatively old society and high life expectancy. Conversely, in Hungary, Finland, the Netherlands and Croatia, over half of the older people with severe needs are between 65 and 79 years old.

On average across OECD countries, women make up around two-thirds of older people with low, moderate, and severe needs (Figure 2.3). There is no clear relationship between the share of women among older people estimated to have LTC needs and the severity of those needs. However, in almost all countries, the share of women among older people with low needs (except in Korea and Spain) and moderate needs (except in Czechia) is above 50%. This pattern is slightly less pronounced in the case of severe needs, but in the majority of countries – except for the three Scandinavian countries, Belgium and Hungary – the share of women among those with severe needs is also above 50%. This is partially driven by the fact that women generally have a longer life expectancy and that they are more likely to live longer with any level of needs (Kingston, Comas-Herrera and Jagger, 2018[9]).

Figure 2.3. Shares of women among older people with different levels of LTC needs

Among older people with low, moderate, and severe needs



Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). The figure includes an unweighted average across 27 OECD countries.
Source: OECD analysis based on responses to surveys listed in Annex A.

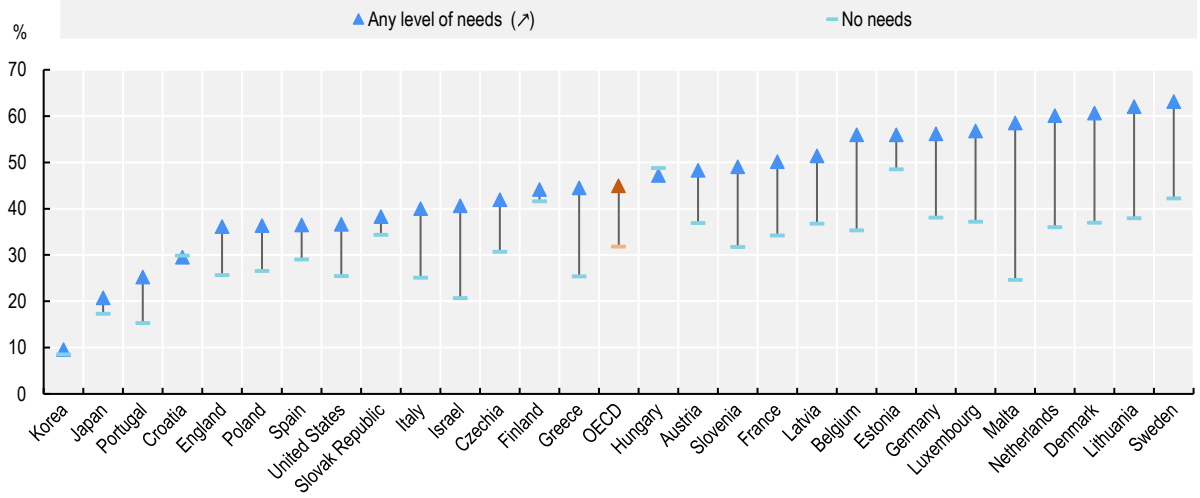
In addition to greater life expectancy, other factors drive this trend. For example. conditions of the musculoskeletal system, such as arthritis, joint replacements and backpain, are more common in women than men at old age (Woolf and Pfleger, 2003[10]). Hormonal changes, particularly after menopause, also contribute to health deterioration and autoimmune disorders, which disproportionately affect women, can lead to long-term health complications (Sammaritano, 2012[11]). Women are also more likely to experience poverty, especially in old age, due to lower lifetime earnings, career interruptions, and the gender pay gap (Gough, 2001[12]). This financial insecurity can limit access to healthcare, proper nutrition, and other resources that contribute to healthy ageing. Finally, women are more likely to suffer from mental health issues such as depression and anxiety (Behere et al., 2021[13]), which can exacerbate physical health problems as they age.

There is also heterogeneity in the share of women among older people with needs across analysed countries. On average, East and Central European OECD countries tend to have a higher share of women. At the other end of the spectrum are Scandinavian and Northern European OECD countries, which typically have a lower share of women among older people with needs, closer to or below 50%. This is clearly correlated with data on the gender gap in life expectancy across OECD countries, where East and Central European OECD countries generally have the highest gender gap in life expectancy (OECD, 2023[1]).

Across all analysed countries, older people with LTC needs (low, moderate, or severe) are more likely to live in single households than older people without LTC needs (Figure 2.4). On average, 45% of older people with LTC needs live in single households, compared to 32% of those without needs. It is unsurprising that higher shares of older people with LTC needs live alone, as individuals with LTC needs are, within the 65+ age group, consistently older in all countries than those without needs and thus more likely to have outlived their partners. Exceptions of such pattern include Hungary, Croatia and Korea where there is little difference in the share of people with and without needs living in single households.

Living in a single household also has important consequences for the demand for formal LTC. These individuals constitute a significant share of the population that would not find informal support in their own homes and will have to either rely on formal care or seek help from outside their household (e.g. relatives, friends, and neighbours). In Sweden, 63% of people with LTC needs live alone, followed by Lithuania, Denmark and the Netherlands. In these countries, the demand for formal LTC might be the highest.

Figure 2.4. Share of older people with and without LTC needs living in single households



Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). The figure includes an unweighted average across 27 OECD countries. Estimates for Ireland are missing as data for Ireland contain only observation from non-single households.
Source: OECD analysis based on responses to surveys listed in Annex A.

Related to this, the difference between the number of older people living alone with care needs and those without care needs is indicative of the type of LTC in the country (formal versus informal). A large difference suggests that older people have lost their household members and that developing LTC needs does not lead to moving in with family members or to an institution. Examples of countries with a large difference include Malta (34 percentage points), Lithuania, the Netherlands and Belgium (each 24 percentage points). Possible explanations are that there is accessible and affordable formal home care, that families care for them without co-residing, or that there is no support, and their needs are unmet. Conversely, in Hungary,

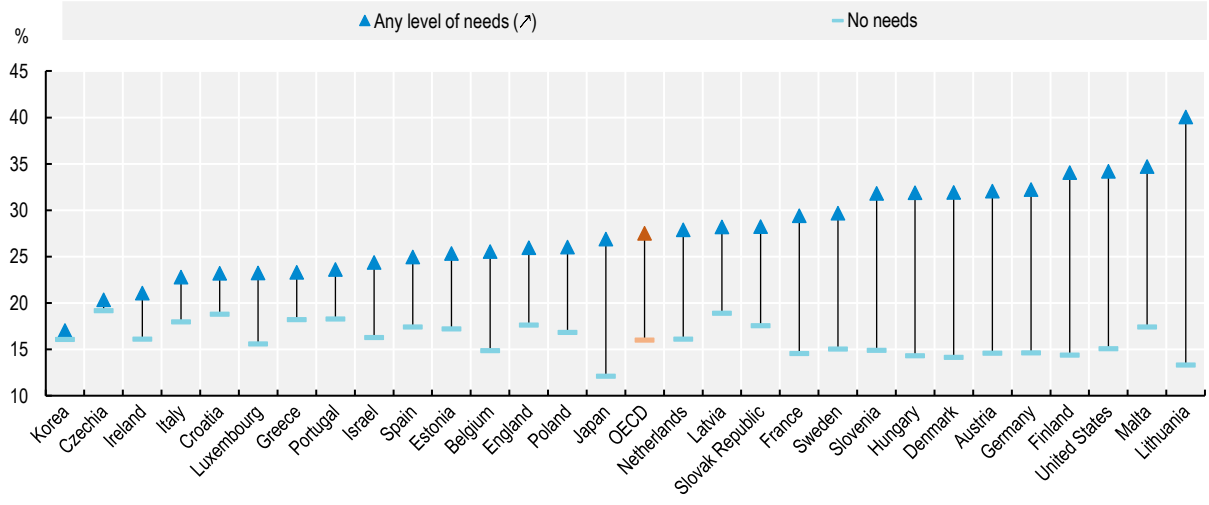
Croatia and Korea, the difference in living situations between older people with LTC needs and those without is insignificant. In these countries, older people who lose their household members and develop LTC needs may move in with family.

On average, older women are almost twice as likely to live in single households compared to men (Eurostat, 2020[14]). While living alone generally tends to have a positive effect on women's well-being as there is no caregiving burden on them, this changes once they develop care needs and require help with daily activities (Sakkeus, Rudissaar and Abuladze, 2023[15]). In such cases, women are more likely to rely on formal care or care provided by informal carers living outside the household.

In all analysed countries, older people with any level of needs are more likely to be on low income, compared to those without LTC needs (Figure 2.5). On average, around 27% of older people with any level of needs have low income, compared to 16% of older people without LTC needs. The difference in the share of people with low incomes between older people with and without care needs varies significantly across countries. Differences are particularly large in Lithuania and Finland, where the difference exceeds 20 p.p. Conversely, in Korea, Czechia and Croatia, the difference is less than 5 percentage points

The higher share of people with low incomes among those with LTC needs suggests that they face even greater barriers to covering out-of-pocket expenses than the average older person. This disparity has implications for the affordability of LTC services for older individuals and the projected total spending at the government level. Across countries, the level of public support for LTC would need to be targeted on income to address concerns about affordability for that group. Yet, Chapter 3 would still highlight that challenges in affordability might still be apparent for those with median income.

Figure 2.5. Share of people with a low income among older people with and without LTC needs



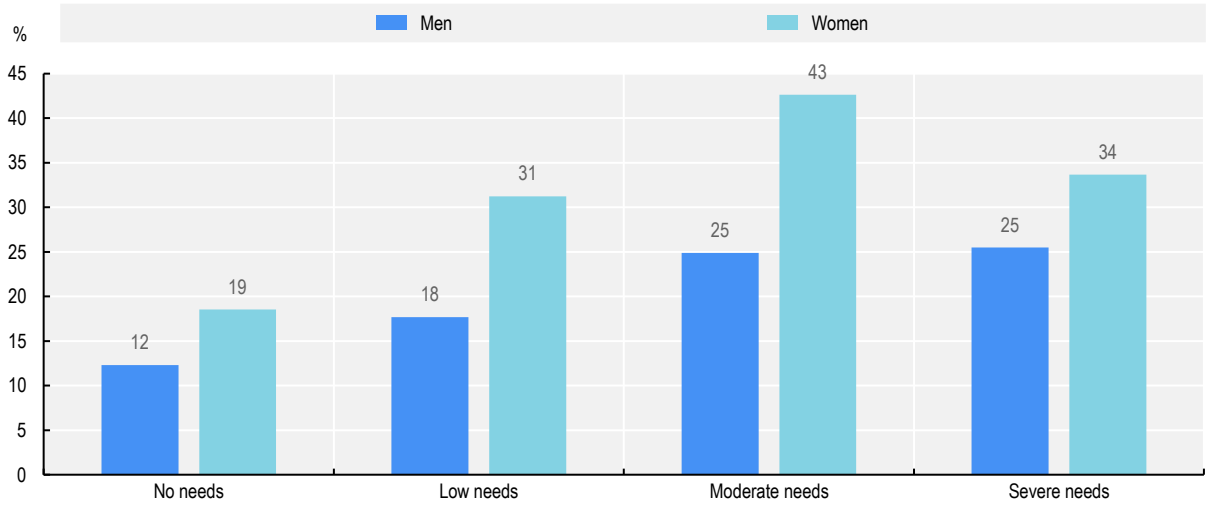
Note: Low income refers to the upper boundary of the 20th percentile of the income distribution among older people. Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). The figure includes an unweighted average across 27 OECD countries.
Source: OECD analysis based on responses to surveys listed in Annex A.

The gender gap in income is higher for those having LTC needs (Figure 2.6). The share of women with low income among older people without LTC needs is higher than among men (19% vs. 12%), and this disparity becomes more pronounced among older people with needs, especially for low and moderate needs. The gap between men and women without needs is 7 percentage points, while it increases to 14 percentage points for those with low needs and 19 percentage points for those with moderate needs. The reduction in the gap (to 9 percentage points) for people with severe needs is primarily driven by the

lower share of older women with severe needs and low incomes. This could be attributed to the fact that many women with severe needs receive survivor pensions, which are designed to protect widows or widowers from the risk of poverty (OECD, 2018[16]).

Figure 2.6. Share of people with a low income among older people with and without LTC needs by gender

Unweighted OECD averages



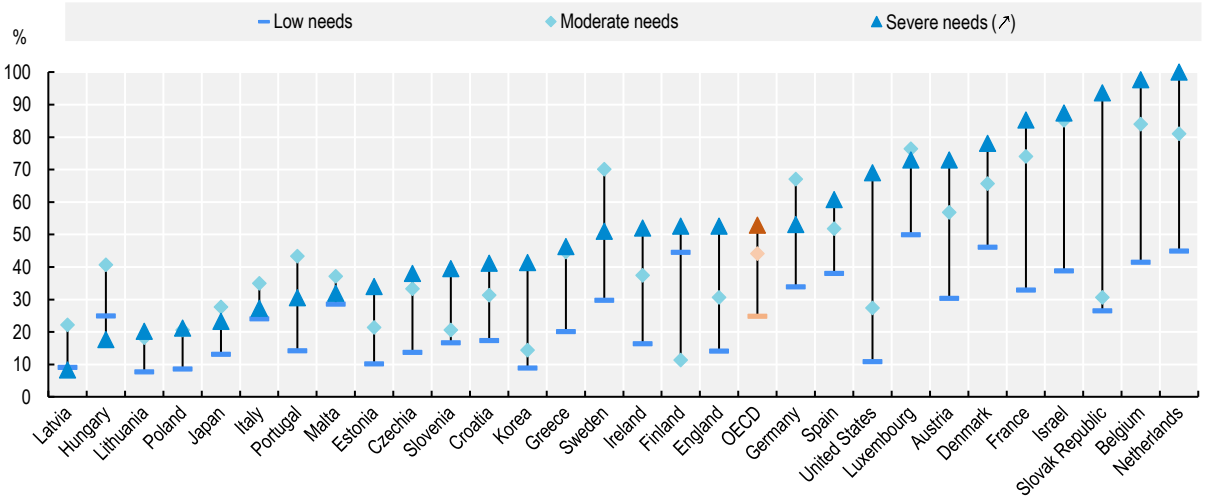
Note: Low-income older people are defined as those with a disposable income below the second decile of the income distribution among older people. Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Presented estimates are the unweighted average across 27 OECD countries.
Source: OECD analysis based on responses to surveys listed in Annex A.

Older people with severe LTC needs more likely to report receiving care

On average, formal care receipt is higher among individuals with severe care needs than among those with moderate and low needs but there is heterogeneity. Across OECD countries, approximately 25% of older people with low care needs report receiving professional care, compared to 44% with moderate needs and 53% with severe needs (Figure 2.7). Notable exceptions include Hungary and Sweden, followed by Latvia, Japan, Italy, Malta, Germany and Luxembourg. There are striking differences across analysed countries. For instance, only about 8% of older Latvians with severe LTC needs report receiving professional or formal care, followed by Hungary (18%), Lithuania (20%) and Poland (21%). On the other end of the spectrum, nearly all older Dutch and Belgian adults with severe needs report receiving professional care. The greatest differences between individuals with low needs and those with severe needs reporting to receive formal care are found in the Slovak Republic (27% vs. 94%), the United States (11% vs. 69%), Belgium (41% vs. 98%), and the Netherlands (45% vs. 100%). Conversely, there is almost no difference in reporting by level of care needs in Latvia, Italy and Malta.

Figure 2.7. Share of older people with different level of LTC needs receiving *professional* care

Based on self-reported information, among older people with low, moderate, and severe needs



Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). The figure includes an unweighted average across 27 OECD countries.
Source: OECD analysis based on responses to surveys listed in Annex A.

Similarly, overall use of informal care tends to be higher for greater severity of needs (Figure 2.8). In OECD countries, on average, every second older person with low needs receives some informal care. The country where most older people with low needs rely at least partly on informal care is Hungary (75%) and the lowest number is found in Malta, where one out of five people with low needs receive informal care. For people with moderate needs, the overall use of informal care is higher and differences between countries are smaller. Fewest users can be found in the Slovak Republic (56%) and most in Finland (94%). The share of people receiving informal care is highest for individuals with severe needs while differences between countries are also high. The lowest share of people with severe needs receiving informal care is reported in Estonia and Malta (50% each), and the highest is in Hungary, Finland and Latvia at almost 100%.

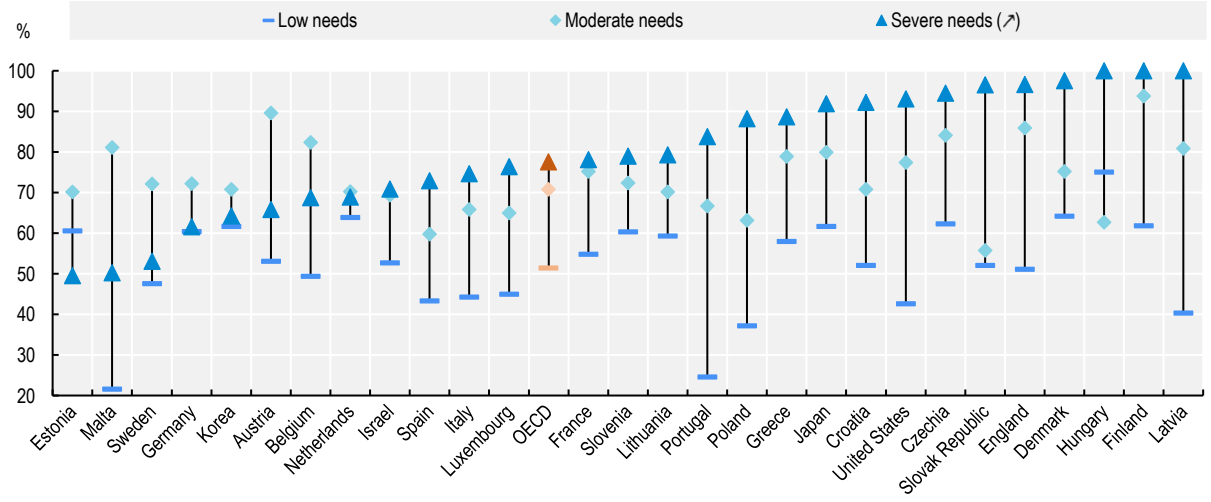
Significantly more older people report receiving informal care than formal care at all levels of need (see Figure 2.7 and Figure 2.8). Only in two countries (Malta and Luxembourg), older individuals with low needs are more likely to receive formal care than informal care. For those with moderate needs, this is the case in four countries (Belgium, the Netherlands, Israel and Luxembourg). Among those with severe needs, four countries (Austria, Belgium, the Netherlands and Israel) also follow this pattern. The difference among older people with severe needs is most pronounced in Latvia (92 percentage points) and Hungary (82 percentage points), where the use of formal care is very low, but nearly all recipients receive some informal care. In some countries like Denmark or the Slovak Republic, the share of people receiving formal and informal care is very high, suggesting complementary between these two forms of care.

Several factors contribute to the differences in care use by needs. A possible explanation for the increasing reliance on informal care as needs become more severe is that older individuals manage their daily life for as long as they can, until it becomes impossible to manage daily activities on their own. Another important factor is the availability and affordability of formal care. Especially in countries where formal home care is less common, such as in Latvia and Hungary, access to formal care might be more limited for individuals with low care needs. They would need to rely on their own funding, rely on informal care instead or forego the necessary care, increasing the gap in the use of formal care between people with different levels of needs.

In addition, the main providers of informal care are children and spouses. Especially female relatives are more likely to provide informal care than men and bear most caregiving duties. Informal care availability differs across countries depending on labour market attachment, gender wage gaps and life expectancy, as well as cultural norms that determine children's willingness to act as caregivers. In countries where formal care is scarce, becoming a caregiver leads to lower labour market participation (Vangen, 2020[17]; Barszczewski et al., forthcoming[18]) and higher mental and physical health risks (Bauer and Sousa-Poza, 2015[19]).

Figure 2.8. Share of older people with different levels of LTC needs receiving *informal* care

Based on self-reported information, among older people with low, moderate, and severe needs



Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). The figure includes an unweighted average across 27 OECD countries.
Source: OECD analysis based on responses to surveys listed in Annex A.

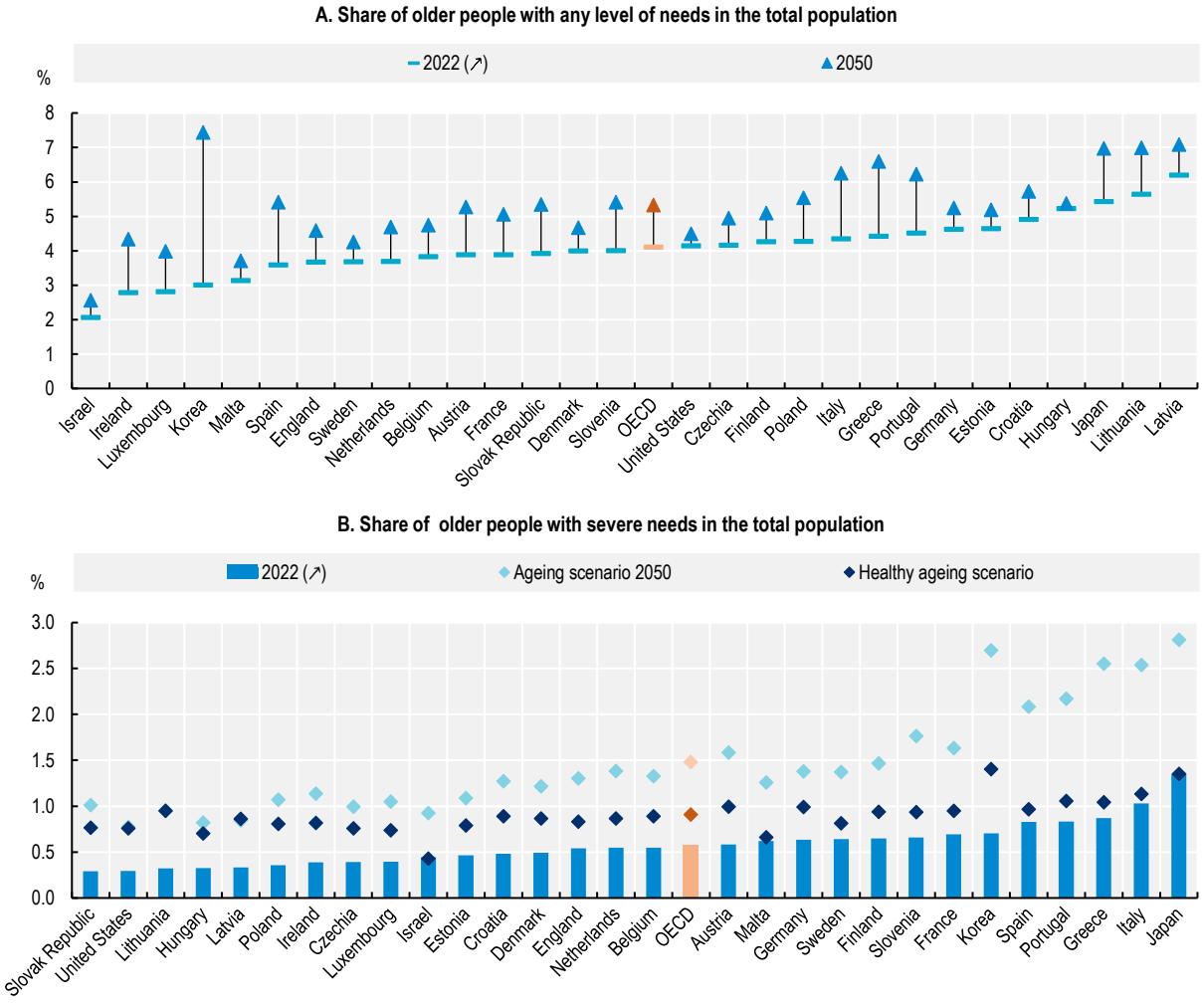
2.2. Projected changes in the share of older people with needs

Population ageing will bring significant challenges to LTC systems, but the degree of challenge depends on how people's health evolves with age. Over the past decades, countries have recorded impressive gains in the number of years people can be expected to live. While there is hope that individuals will age better and the level of LTC needs will be lower for given ages than for previous generations, there are a number of factors that may run against this hypothesis. A decline in healthy lifestyles, fewer gains from medical improvements prevent populations from reaching the full potential of healthy ageing. In addition, an increase in inequalities in education and socio-economic status leaves some population groups to be particularly worse off. This section estimates future demand for LTC based on projections on the evolution for levels of needs for different scenarios.

On average, the share of older people requiring care is expected to rise across all analysed countries. This share is expected to increase by 30% by 2050 or 1.2 percentage points (Figure 2.9, Panel A). However, the magnitude of this increase varies widely between countries. Korea will see the highest rise (4.4 percentage points), followed by Greece (2.2 percentage points) and Italy (1.9 percentage points), primarily due to faster population ageing. On the opposite end of the scale, Hungary and the United States will experience the smallest increases (0.15 percentage points and 0.35 percentage points respectively). The method for predicting LTC needs follows the methodology proposed by de la Maisonneuve and

Oliveira Martins (2013[20]). The severity of needs (low, moderate, and severe) is determined by factors including the importance of each age group (65-79 or 80+), expected life expectancy at birth, and public spending on health (see Box 2.1 for details). Older individuals are more likely to develop LTC needs compared to younger ones. As life expectancy at birth increases, resulting in longer periods of good health, the onset of LTC needs may occur later in life. Additionally, increased health expenditures can lead to higher longevity across all age groups, particularly among older people, thereby affecting the prevalence of LTC needs.

Figure 2.9. Projected shares of older people with needs in the total population



Note: The figure presents the points estimates (average of two matching methods X and Y) for the share of people with needs in the total population (see Annex A). The figure includes an unweighted average across 27 OECD countries. The Healthy ageing scenario assumes that all additional years of life due to higher life expectancy are lived in good health.
Source: OECD analysis based on responses to surveys listed in Annex A, OECD Population projections database, UN World Population Prospects, and Global Burden of Disease Collaborative Network. Global Expected Health Spending 2020-50, Institute for Health Metrics and Evaluation (IHME).

The increase in the number of people with severe needs could be partially mitigated by healthy ageing (see Box 2.1 for the definition of healthy ageing applied here). In the Ageing scenario (see Chapter 1, Table 1.3), the share of older people with severe needs will nearly triple, rising from 0.6% to 1.5% by 2050 (see Figure 2.9, Panel B). Korea is expected to see the largest increase (2 percentage points), followed

by Greece and Italy (over 1.5 percentage points each). Only the United States will see an increase below 0.5 percentage points Healthy ageing could reduce this increase by an average of 0.6 percentage points through a lower increase in the share of individuals with severe needs. Gains from healthy ageing vary widely between countries, with minimal impact in e.g. the United States and Lithuania, but significant benefits in Japan, Korea, and Southern European OECD countries, where severe needs and ageing populations are more prevalent.

Box 2.1. Projection methodology

The methodology employed in this report to estimate the number and share of older people with LTC needs in the total population in 2050 closely follows the methodology proposed by de la Maisonneuve and Oliveira Martins (2013[20]). In order to predict the evolution of the number of people with needs, its past determinants have been investigated using variation across countries. $Need_{nac}$ is defined as the number of older people with n being the level of needs (low, moderate, or severe) in the age group a living in country c. age is a dummy variable for each age bracket (either 65-79 or 80 and above), he_c are the total real public health expenditures per capita in country c, and le_c is life expectancy at birth in country c. With these variables the following equation was used:

$$\log(Need_{nac}) = \beta_{0n} + \beta_{1n} \times age + \beta_{2n} \times \log(he_c) + \beta_{3n} \times \log(le_c) + \epsilon_{nac}$$

In the Healthy ageing scenario, all additional years of life are spent in good health, resulting in no impact from the increase in life expectancy. Methodologically, this translates into setting the coefficient for life expectancy to zero.

In the main specification, as anticipated, the dummy variable for the age group 65-79 is significant and negative, indicating that younger individuals are less likely to develop care needs. The magnitude of this parameter decreases with increasing levels of needs, suggesting that individuals aged 65-79 are more likely to develop low needs rather than moderate or severe needs. The impact of increasing life expectancy is significant and negative for low and moderate needs, indicating fewer years spent with these levels of needs. Conversely, the coefficient for severe needs is significant and positive, implying that higher life expectancy may extend the period of living with severe needs. Lastly, the impact of health expenditures appears to be insignificant.

The projection method used in this paper relies on a reduced form equation, in contrast to the macro-simulation models used in some works, such as the Ageing Report (European Comission, 2023[21]). This approach has the advantage of requiring only a limited number of assumptions and being primarily data driven. However, this advantage also comes with drawbacks. Macro-simulation models typically allow for simulating more advanced scenarios and incorporate a wider range of factors that can influence future levels of needs.

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3 Cost-sharing and the current adequacy of LTC systems

This chapter presents the costs of long-term care and discusses the generosity of public support in covering those costs. In the absence of public support, the costs of long-term care to be borne by an individual would be extremely high. For that reason, public systems cover a share of the costs but there is great heterogeneity in the generosity across OECD countries. Public long-term care systems tend to cover a higher share of the cost for more vulnerable individuals, that is, people with high needs and low income. However, gaps in public support remain, leaving individuals with high out-of-pocket costs. While many countries apply income and wealth-testing in their eligibility assessments, income thresholds currently still leave the most vulnerable population with insufficient public support.

Introduction

Populations are increasingly concerned about access to long-term care (LTC) and the financial costs it entails. LTC needs can persist for many years, with lifetime costs potentially reaching catastrophic sums. According to the OECD Risks that Matter survey (OECD, 2023[1]), 56% of respondents worry about securing good-quality LTC for older relatives. Looking ahead to the next decade, 67% and 65% of respondents worry about accessing good-quality LTC for themselves and for older family members, respectively.

In this context, public schemes play an important role in mitigating the financial burden of LTC to prevent old-age poverty and unmet needs. The private sector provides only limited options for pooling the risk of high LTC costs. In most countries, there are few private insurance options available, because of a variety of reasons. Market failures may be important, such as adverse selection. People may not plan sufficiently due to hyperbolic discounting (i.e. valuing immediate smaller rewards much more than larger long-term gains) or a myopic view of risk. Evidence shows that few people protect themselves from the potentially high costs of LTC. Only a small percentage of older households purchase insurance against these costs or accumulate savings (Webb, 2001[2]; Jensen and Theisen Cramer, 2006[3]; Cremer, Pestieau and Ponthiere, 2012[4]; Ameriks et al., 2020[5]).

This chapter provides cross-country comparable evidence on the actual cost of LTC that individuals face as they develop LTC needs. The first section examines the full LTC cost that older people would incur in the absence of any public social protection, to fully grasp the financial burden on older people with LTC needs seeking professional care. Comparing these costs to an individual's income highlights the potential financial challenges of developing LTC needs. In the second section, LTC costs are compared to the public support available for each level of needs. This gives crucial insight into the generosity of public support across countries. Next, the remaining share of the cost is calculated to show the part of the cost that individuals have to pay for, i.e. the out-of-pocket cost. Finally, the chapter describes how the variation in the generosity is related to the set-up of public social protection systems sharing the costs of care with older people and their families.

Key findings

- **For the majority of older people, the costs of long-term care (LTC) services would be unaffordable in the absence of public support**. In virtually all the 32 OECD and EU countries and subnational areas covered in this report, median-income-earning older individuals with severe needs would have to spend more than their income on home care or institutional care, were it not for any public support. For instance, in Denmark, Finland, the Netherlands and Sweden, the total costs of home care or institutional care for severe needs are at least triple the median disposable income of older individuals. This is precisely why most countries adopt some form of public support to ensure the financial accessibility of LTC services.
- **Countries differ widely in how much benefits and services cover the overall costs of long-term care.** For a person with moderate needs, ten countries cover more than 90% of the costs, while in 11 countries public systems cover between 50% and 90% of the costs and in 10 countries less than 50% of the costs are covered by public systems. In three countries, none of the costs of LTC are covered by public support for individuals with moderate needs.
- **Public support tends to be higher for older people with more severe needs**. For a person with severe needs, public social protection systems cover more than 50% of the home care costs in 22 countries and over 90% in 11 of them. For someone with low needs, 19 countries cover at least 50% of the home care costs and 6 countries more than 90%, while in 7 countries public support is below 10% or even zero. Public support for someone with severe needs tends to be higher at home than in institutional care but there is a lot of variation across countries.
- **Informal caregivers are often not financially compensated by public support**. In half of the countries, there is no public support if care is provided by an informal caregiver, such as a child or a spouse. Even if there is public support, this represents a lower compensation than if formal care is provided. On average, only 14% of the costs of care are covered in case of informal care compared with just over 60% for formal care.
- **The out-of-pocket costs in some countries remain large despite public support.** For individuals with moderate needs, in 11 countries out-of-pocket costs would be at least 50% of median income. In 16 countries, for individuals with severe needs, out-of-pocket costs for home care exceed 50% of median income while they are above median income in seven countries.
- **In most countries, generosity for older people with a low income would be greater than for those with higher incomes** but progressivity across the income distribution can be improved. In 17 countries and subnational regions, public share of the cost is higher for those on low incomes than for those in the top 20th percentile of the income distribution. In a number of countries, public coverage decreases sharply as income goes above a certain threshold. In others, public support decreases only for incomes which are already high above the median income while several public support decreases progressively along the income distribution. At the same time, **there are some gaps in public support for individuals with low income**. In seven countries, an older person with moderate needs and low income would have to devote more than half of their income to pay for home care, leaving less than half of their already lower income to cover basic living expenses.
- **While only 40% of countries perform wealth-testing, this has a high impact on out-pocket costs for such individuals.** In 11 countries that implement wealth-testing, individuals with median income and median wealth will have out-of-pocket costs that exceed their income. This means that such people would need to cash their wealth to pay for long-term care. Wealth-testing could be better designed to achieve a more efficient use of public LTC systems without causing the risk of financial distress.

3.1. Older people would face high care costs in the absence of public social protection

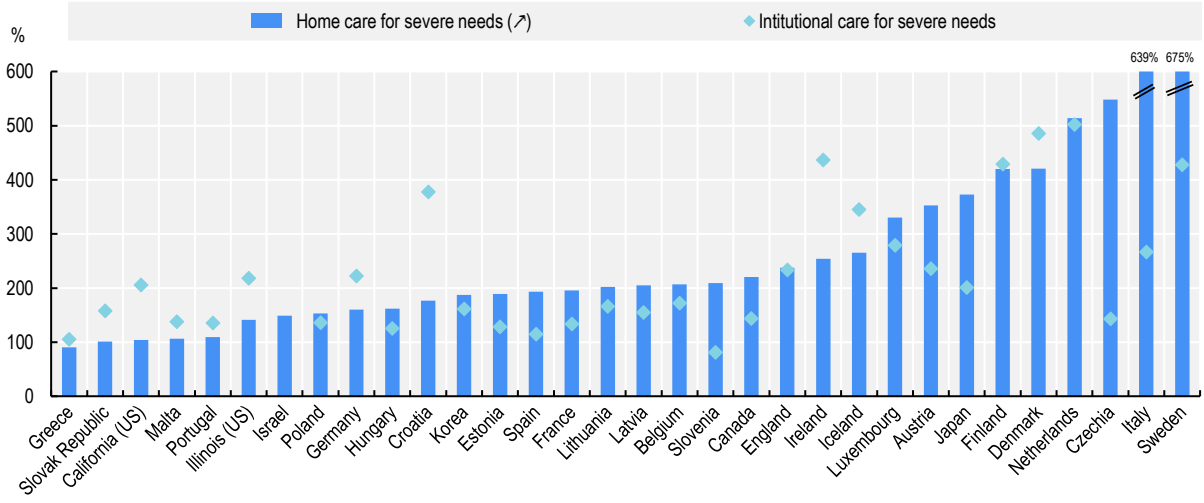
This section gathers information on LTC costs from both national and sub-national authorities through a detailed survey. The costs covered include all forms of care, from direct services in Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) to addressing social needs. The costs refer to care costs that individuals would face without any governmental social protection measures if they had to pay for it themselves. These expenses, referred to as the costs of LTC, are examined in relation to individuals' income to assess potential financial challenges as they develop LTC needs. To allow for cross-country comparisons, it relies on a methodology of typical cases of need (Cravo Oliveira Hashiguchi and Llena-Nozal, 2020[6]) which are described briefly in Chapter 1, Box 1.1.

3.1.1. Total costs of formal long-term care are high, especially for care provided at home

Without public support, the costs of LTC for older people would be unaffordable in most countries. The costs of LTC can pose a substantial financial challenge for older people, often consuming a large portion of their disposable income. For individuals with severe needs, equivalent to 41.25 hours of care weekly, these LTC costs can be almost seven times the median disposable income of people aged 65 years and more, depending on the country (see Figure 3.1). The highest LTC costs are observed in Sweden, Italy (South Tyrol), and Czechia. Conversely, in countries like Greece, the Slovak Republic and California (United States), the cost of care is more affordable for someone with the national median income. However, even in these countries, the cost of LTC is almost equal to or higher than the median income.

Figure 3.1. Costs of LTC care for older people with severe needs, by care setting

Compared to the national median disposable incomes for older people, without public support



Note: Severe needs correspond to 41.25 hours of care per week. Detailed descriptions of care recipients' needs are available in Annex A. An older person with severe needs receiving LTC at home is assumed to live with a spouse who can provide 24-hour supervision, help with taking medicines, and manage the finances, but cannot provide any other ADL/IADL care. Data on the cost of institutional care for severe needs in Israel is missing.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database,* and the *OECD Wealth Distribution Database*.

In the majority of OECD countries, the cost of home care is higher than the cost of staying in a nursing home for an older person with severe needs. Even when including the costs of board and lodging, Figure 3.1 illustrates that, in a number of countries, institutional care may be an overall less costly way to meet more severe LTC needs in old age. For example, in Italy (South Tyrol), Czechia and Slovenia, the total cost of providing 41.25 hours of home care per week is more than double that of institutional care. Formal home care can thus be very expensive when needs are severe and involve many hours of care each week. Professional carers must travel between care recipients' homes, which in some countries can take significant amounts of time during which they are not providing care. This limits the number of older people they can care for at any given time.

3.2. Public support eases the burden of large LTC costs but varies greatly across countries

To protect older people against these potentially high costs, public social protection systems cover a certain share of the total costs. The generosity of these systems varies both between and within countries, depending on a person's needs, income, and wealth. This section explores the extent to which public long-term care systems are generous to older individuals with different levels of long-term care needs.

3.2.1. Public support tends to be greater for older people with more severe needs

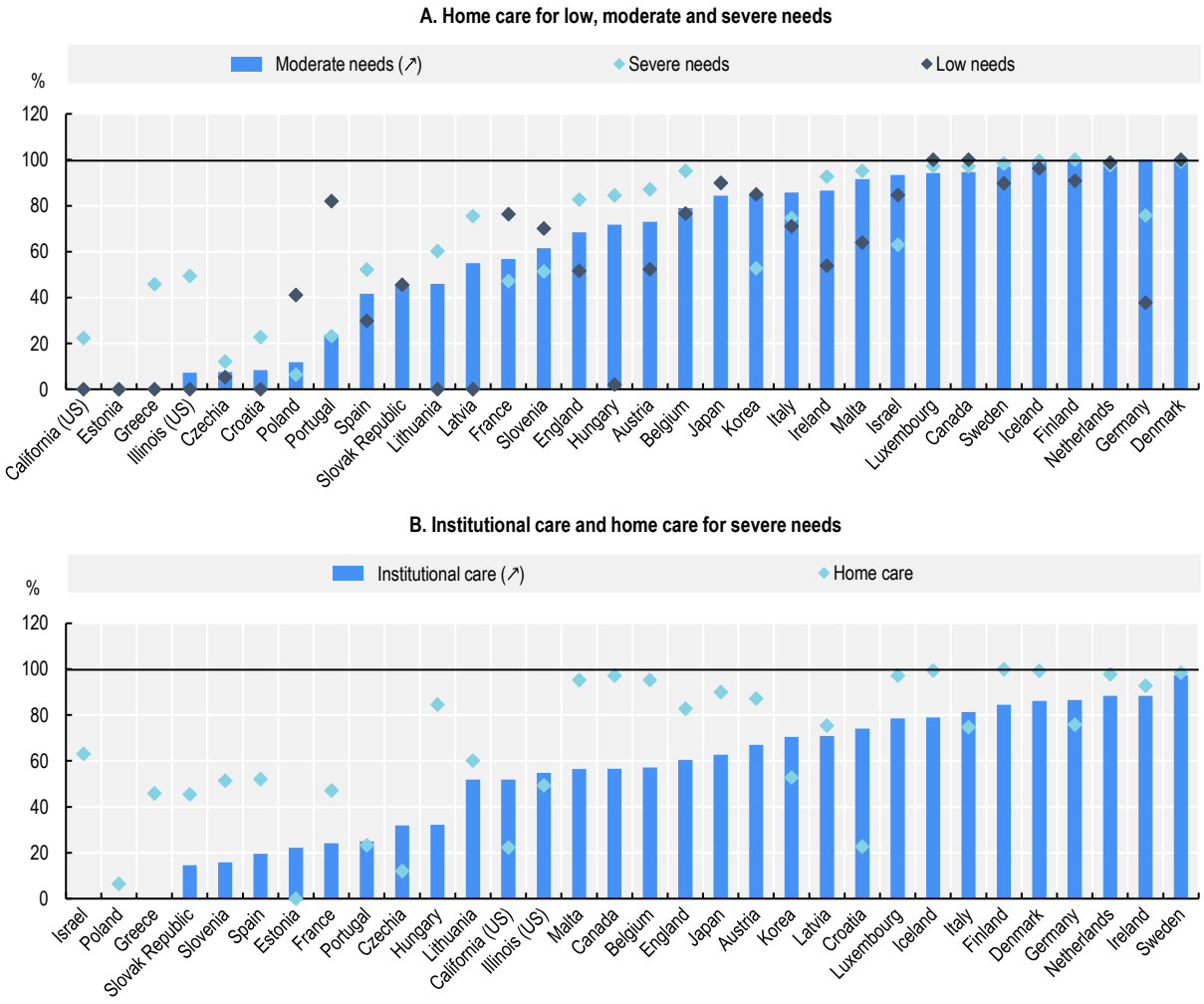
Public support varies greatly across countries. All OECD and EU countries covered in this report provide some public support for individuals with LTC needs. For a person with severe needs, public social protection systems cover more than 50% of the costs in two-thirds of countries and over 90% in one-third of them and one-third cover less than 50% of the costs. Similar proportions hold for those with moderate needs. The highest generosity for all levels of care need is granted by systems in the Nordic countries (Denmark, Finland, Iceland, Sweden), as well as Luxembourg, Canada (Ontario) and the Netherlands. Generosity is more limited for a person with any level of needs and median income in Estonia, Czechia and Croatia.

Most support is granted to individuals with more severe needs, for whom care is usually more expensive and more likely to be unaffordable (see Figure 3.2). In the United States (California and Illinois), Croatia and Greece, public support is limited for low and moderate needs, but more generous for people with severe needs. In ten countries, the relative generosity is greater for individuals with low needs than for those with more severe needs. Limits to the number of hours of care that can be covered through public LTC benefits can contribute to this pattern, especially in France, Korea and Slovenia. In Latvia and Lithuania, social protection is more generous with individuals with median income but only when they have at least moderate needs.

On average, the generosity of public benefits is greater for care provided at home, compared with institutional care (Figure 3.2, Panel B). On average, around 66% of home care costs are covered, while the average covered cost of institutional care is over 10 percentage points lower. By contrast, the share of costs covered by public LTC systems is higher for institutional care in Estonia, Portugal, Czechia, the United States (California and Illinois), Korea, Croatia, Italy and Germany. The public support for institutional care is the highest in Sweden, Ireland, the Netherlands, Germany and Denmark. At the other end of the scale, there is no public support for institutional care for a person with median income in Israel, Poland and Greece. The support is also very limited (below 20%) for older people in the Slovak Republic, Slovenia and Spain. This large difference is partly due to the design of the LTC systems, some of which aim at covering all costs, while others are designed to provide partial support with the expectation that older people organise most of their support themselves.

Figure 3.2. Share of total LTC costs that would be covered by public social protection

For individuals with median income and zero wealth



Note: Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. An older person with severe needs receiving LTC at home is assumed to live with a spouse who can provide 24-hour supervision, help with taking medicines, and manage the finances, but cannot provide any other ADL/IADL care. Detailed descriptions of care recipients' needs are available in Annex A. Data on the cost of institutional care for severe needs in Israel is missing.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database,* and the *OECD Wealth Distribution Database*.

3.2.2. Financial public support for the provision of informal care is limited

Informal care is widespread in many countries.[1] Providing care involves a substantial investment of resources for family and friends and has manifold effects on their health, labour market outcomes and social life. Adequate public support for these informal carers is not always forthcoming in OECD countries (Rocard and Llena-Nozal, 2022[7]). Indeed, they often receive little or no training and psychological support, likely resulting in a lower quality of care for recipients. While most OECD countries provide some financial support to informal carers through cash benefits, these rarely constitute a remuneration for the carers' investment and neither comes close to the full costs of formal care.

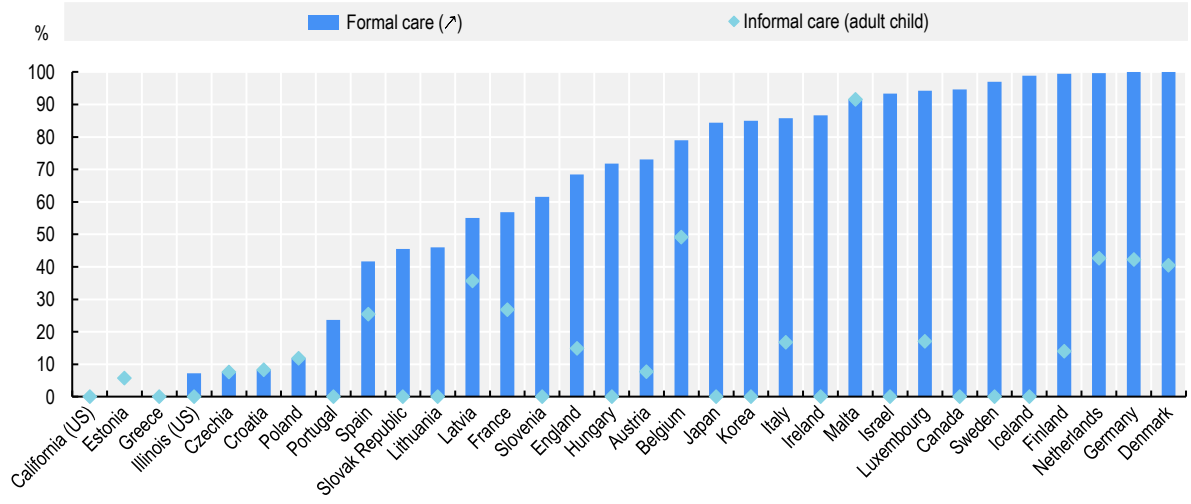
Most countries see the support for informal carers as a recognition that providing care involves costs for carers and as a (partial) compensation for the opportunity costs of providing care – that is, for lower incomes caused by reduced working hours. Low support for informal carers is partially explained by the risk that high compensations could trap carers in a role that is comparatively low-paid, informal (e.g. with no social security contributions) and for which they have no training. In addition, countries are reluctant to make informal care too attractive because care could have been provided even without compensation, also because many older people prefer to be cared for in their own homes by their relatives and friends. It is difficult to strike a good balance between adequately compensating informal carers and avoiding incentivising informal employment.

Public support for the provision of informal care is limited, especially compared with formal care and tends to be low (Figure 3.3). In nearly half of the countries, an adult child providing 22.5 hours of care to an older parent would receive no public support, even though the adult child would have to reduce working hours or even resign from work to provide care. Even some countries with generous support for formal care like Iceland and Sweden do not provide support for informal carers.

On average, only 14% of the costs of care are covered in case of informal care compared with just over 60% for formal care. The most generous support for informal carers is estimated for Malta (more than 90% of formal care cost), followed by Belgium, the Netherlands, Germany and Denmark, with their informal carer support covering more than 40% of formal care cost. In the meantime, Greece and the United States (California and Illinois) provide limited support not only for formal care but also for informal care.

Figure 3.3. Public support for formal and informal home care

As share of formal home care costs for older people with moderate needs, median income and zero wealth



Note: Moderate needs correspond to 22.5 hours of care per week. Median income refers to the country disposable median income of older people. The care is provided by adult child who earns country median income of the entire population. Detailed descriptions of care recipients' need, and the informal carer's characteristics are available in Annex A.
Source: OECD analyses based on the OECD Long-Term Care Social Protection questionnaire, the OECD Income Distribution Database and the OECD Wealth Distribution Database.

3.3. Out-of-pocket costs can be substantial despite public support

While public social protection systems tend to provide greater support for those with higher needs, even small out-of-pocket payments can represent a large proportion of the incomes of older people with limited financial resources. This section looks more in detail at these out-of-pocket costs – the shares of the total LTC costs that are left for older people to pay even after considering public support relative to the older people's income.

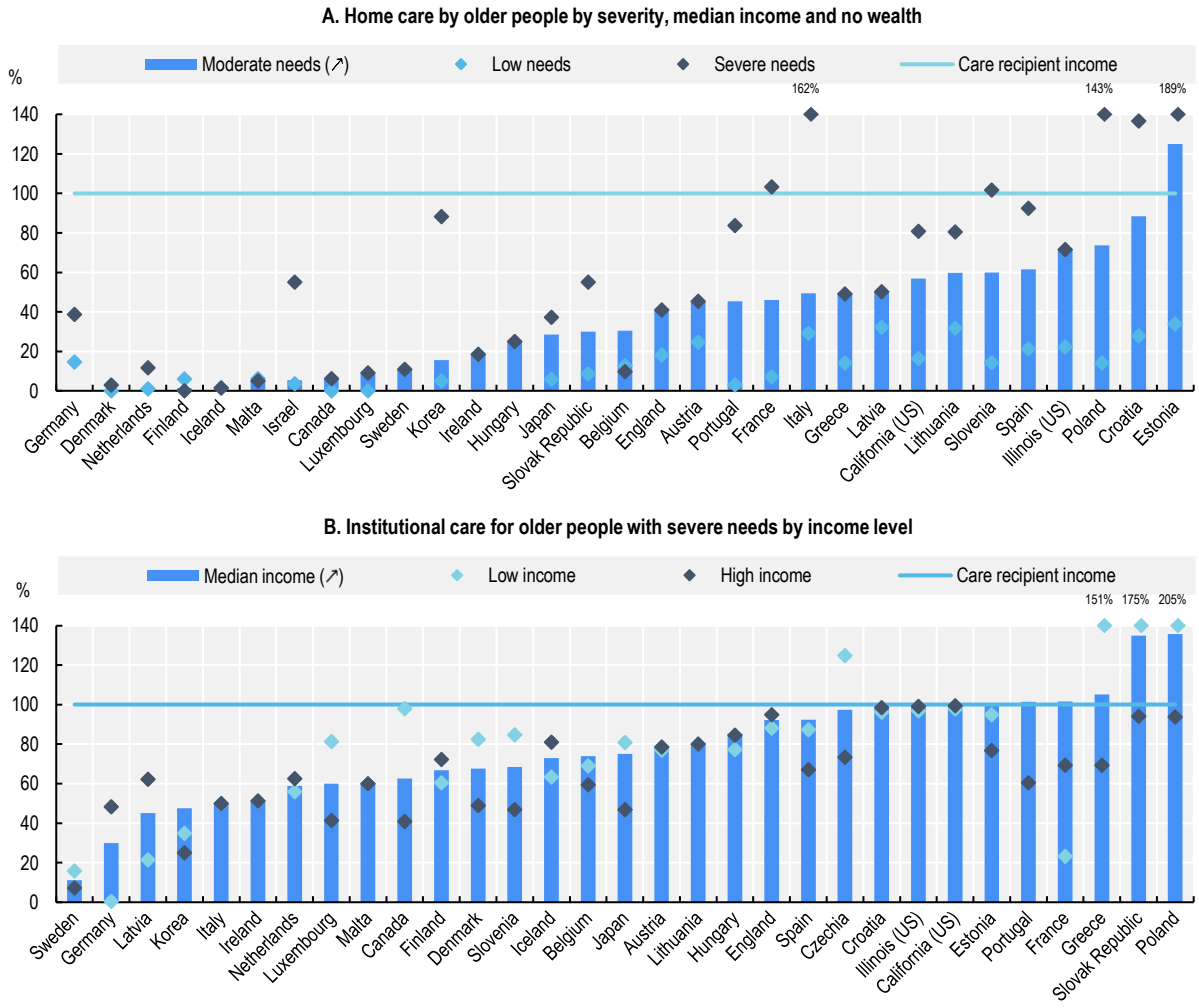
3.3.1. Even with public support, home care for severe needs could be too costly

Out-of-pocket costs remain limited for individuals with low needs in most countries and for moderate needs in two-thirds of the countries. For individuals with low needs, in all countries, out-of-pocket costs are below the median income (Figure 3.4, Panel A). The median income is taken as a benchmark because, if costs are higher, this would mean that the remaining disposable income left might not be enough to cover basic living costs such as rent or utilities, food, or clothing. For individuals with moderate needs, in 11 countries, out-of-pocket costs would be at least 50% of median income (i.e. relative poverty line). Given that old persons' median income is generally lower than that of working-age individuals, it is unlikely that they can afford these basic living costs after spending a significant part of their income on LTC.

Out-of-pocket expenses are high in a majority of countries for individuals with severe needs at home. In 16 countries and subnational regions, out-of-pocket costs exceed 50% of median income while they are above median income itself in seven countries and subnational regions. On the other hand, in Denmark, Canada, Finland, Iceland, Luxembourg, Malta and Belgium, out-of-pocket costs for those with severe needs at home are below 10% of the median income.

Figure 3.4. Individuals' out-of-pocket costs after having received public support

As a share of median income, after receipt of public support



Note: Low, median and high incomes mean the bottom 20th, 50th and 80th percentile of net disposable income among individuals aged 65 years and over, respectively. Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. An older person with severe needs receiving LTC at home is assumed to live with a spouse who can provide 24-hour supervision, help with taking medicines, and manage the finances, but cannot provide any other ADL/IADL care. Detailed descriptions of care recipients' needs are available in Annex A. In Panel A, an estimated out-of-pocket cost for home care for severe needs is 468% for Czechia, which is very high compared to other estimates and thus suppressed for better readability. In Panel B, estimated out-of-pocket costs for institutional care for low, medium, and high-income individuals were 1 107%, 579% and 338%, respectively and thus they are suppressed for better readability.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database,* and the *OECD Wealth Distribution Database*.

3.3.2. The financial burden of institutional care is unevenly distributed

In most countries, out-of-pocket costs for institutional care are below the national median income. Only in six countries (Estonia, Portugal, Greece, the Slovak Republic, Poland and Israel), the out-of-pocket costs of institutional care for people with severe needs are estimated to be greater than their median income – see Figure 3.4, Panel B. This out-of-pocket cost already includes the costs for board and lodging, so it is safe to assume that older people in institutions do not have many other additional costs. At the same time,

some countries do consider that a minimum amount of income equivalent to 10-20% of median income might be necessary to face other expenses such as clothing and other. In 17 OECD countries, individuals would not be able to afford these other purchases, as their out-of-pocket costs for institutional care would be above 80% of median income.

While institutional care tends to be affordable for those in the top income quintile across nearly all OECD countries (with the exception of Israel), individuals with low income face challenges to afford institutional care. In just over half of the OECD and EU countries, an older person with low income may need to spend around 80% of their disposable income on institutional care. This raises significant concerns and underscores the need for policy measures to mitigate poverty among the older individuals (see detailed discussion on poverty reduction in Chapter 4).

Many countries make people's out-of-pocket expenditure dependent on their income. Requiring older people with higher incomes to contribute more to the cost of their care is a good way to increase efficiency and effectiveness of LTC systems. Notably, in France, Germany, Latvia, the Netherlands, Finland, Iceland, Austria, Hungary, the United Kingdom (England), Croatia and the United States (California and Illinois), individuals with higher incomes are expected to spend a greater proportion of their income on care compared to those with lower incomes.

3.4. Cost-sharing can be better designed not to adversely affect people with limited means to fend for themselves

In ensuring that public support contributes to mitigating the financial burden of LTC services (see Section 3.2), OECD countries employ a wide range of methods to fund their public LTC systems: e.g. taxation (general or earmarked tax revenues reallocated to LTC), health insurance, long-term care insurance, and various combinations thereof (OECD, 2020[8]; Lee, Chon and Kim, 2023[9]) – see Chapter 5). At the same time, some mechanism of cost-sharing with care recipients is implemented by almost all countries covered in this report, where LTC beneficiaries contribute to a portion of the costs for LTC services they are expected to receive. Cost-sharing with care recipients typically involves a process to assess their financial capacity in determining the level of support from the public system and out-of-pocket costs from the care recipients. This procedure is widely known as means-testing, and it is implemented in many jurisdictions to impose a higher level of cost-sharing from individuals with a higher level of income and/or wealth.

3.4.1. Means-testing is widely used aiming to efficiently allocate support

Income-testing is the more common form of means-testing. Table 3.1 summarises public LTC systems in OECD countries or subnational areas covered in this report, including details regarding whether any income-testing and wealth-testing are conducted. Czechia, Denmark, Germany, Poland and Portugal are the exceptions where neither type of means-testing is conducted in determining the degree of public support. There is a general tendency with countries (and regions) only implementing income-testing, such as Austria (Vienna), Canada (Ontario), Estonia (Tallin), Finland, France, Iceland (Reykjavik), Israel, Latvia, Malta, the Slovak Republic and Sweden. Meanwhile, wealth-testing appears to be more extensively used to assess the financial standing of institutional care residents. This is the case with Estonia, (Tallin), Greece, Hungary, Ireland, Italy (South Tyrol), Japan, Lithuania, Spain, the United Kingdom (England) and the United States (California, Illinois).

Table 3.1. Means-testing used for formal long-term care benefits and schemes in the OECD

Countries and subnational areas	Benefits and schemes	Income-tested?	Wealth-tested?
Austria (Vienna)	Pflegegeld (Care Allowance)	No	No
	Fonds Soziales Wien (Vienna Social Funds)	Yes	No
Belgium (Flanders)	Federal Public Health Insurance (NIHDI)	Yes	No
	Home care organisations	No	No
	Service vouchers	Yes	Yes
	Care budget for elderly with care needs Incontinence allowance	No	No
	Flemish Care budget for adults with heavy care needs	No	No
	Allowance for the chronically ill	No	No
Canada (Ontario)	Home and Community Care Support Services (home care)	No	No
	Home and Community Care Support Services (institutional care)	Yes	No
Croatia	Subsidised home care for low income	Yes	Yes
	Allowance for assistance and care	Yes	Yes
	Personal disability allowance	Yes	No
Czechia	Care allowance	No	No
Denmark	Hjemmehjælp (Home Help)	No	No
	Plejehjemsboliger (Nursing Home Housing)	No	No
Estonia (Tallin)	Domestic care service	Yes	No
	Institutional care	Yes	Yes
Finland	Home care services	Yes	No
	Care allowance	No	No
	Informal care benefit	No	No
France	Allocation Personnalisée d'Autonomie	Yes	No
	Aide sociale à l'hébergement	Yes	No
	Targeted tax reductions	Yes[1]	No
Germany*	Pflegegeld (Care Allowance)	No	No
	Pflegesachleistungen (Care Benefits In-Kind)	No	No
	Hilfe zur Pflege (Assistance for Care)	No	Yes
Greece	Subsidies to chronically ill patients (for home care)	Yes	No
	Subsidies to chronically ill patients (for institutional care)	Yes	Yes
Hungary	Assistance at home	Yes	No
	Homes for the elderly	Yes	Yes
Iceland (Reykjavik)	Social home service	Yes	No
	Nursing home	No[2]	No
Ireland	Home support service	No	No
	Nursing home support scheme	Yes	Yes
Israel	Long-Term Care Insurance	Yes	No
Italy (South Tyrol)	Care allowance	Yes	Yes
	Home care services	Yes	Yes
	Residential services	Yes	Yes
Japan	介護保険制度 (Long-Term Care Insurance System)	Yes	Yes[3]
Korea	노인장기요양보험제도 (Long-Term Care Insurance for the Elderly)	Yes	Yes
Latvia	Home care services	Yes	No
	Care allowance	Yes	No
	Institutional care	Yes	No
	State social maintenance benefit	No	No
Lithuania	Social care	Yes	No
	Social assistance	Yes	No
	Institutional care	Yes	Yes
	Municipal support	Yes	Yes
Luxembourg	Long-term care insurance	No	No
	Complément accueil gérontologique	Yes	No[4]

Countries and subnational areas	Benefits and schemes	Income-tested?	Wealth-tested?
Malta	Commcare	No	No
	HomeHelp	No	No
	Carer at home	No	No
	Institutional care	Yes	No
Netherlands	Wet langdurige zorg (Wlz)	Yes	Yes
	Zorgverzekeringswet (Zvw)	No	No
	Wet Maatschappelijke Ondersteuning (Wmo)	No	No
Poland	Zasiłek pielęgnacyjny	No	No
Portugal	Complement por Dependência (for home care)	No	No
	Estrutura residencial apara pessoas idosas (for institutional care)	No	No
Slovak Republic	Compensation allowances	No	No
	Institutional care	Yes	No
Slovenia	Municipality-subsidised care	Yes	Yes
	Attendance allowance	No	No
Spain	Ayuda al domicilio	Yes	Yes
	Antención Residencial	Yes	Yes
	Prestación económica vinculada al servicio	Yes	Yes
	Prestación económica de asistencia personal	No	No
Sweden	Home care	Yes	No
	Institutional care	Yes	No
United Kingdom (England)	Attendance allowance	No	No
	Social care	Yes	Yes
United States (California)	In-Home Supportive Services (IHSS)	Yes	Yes
	Medi-Cal Institutional Care	Yes	Yes
United States (Illinois)	Home and Community Based Services Waiver	Yes	Yes
	Illinois Medicaid Institutional Care	Yes	Yes

Note: Benefits and schemes that are not applicable to the typical cases of LTC needs used in this report are not included in this table. Benefits that are marked as income- or wealth-tested, if income- and/or wealth-tested are taken into account for at least one of the typical cases of LTC needs in this report. * In Germany, means-testing can be used for other services, but it is not applied to the provision of long-term care services.
1. In France, tax reductions depend on income.
2. In Iceland, there is no income-testing for institutional care but a specific ceiling is placed on out-of-pocket costs.
3. In Japan, wealth-testing is applied to determine the eligibility of food and accommodation fee reductions at nursing homes.
4. Although the benefit is not wealth-tested when it is given in Luxembourg, all sums paid through this benefit can be recovered from the care recipient's estate upon death.
Source: OECD analyses based on the OECD Long-Term Care Social Protection questionnaire.

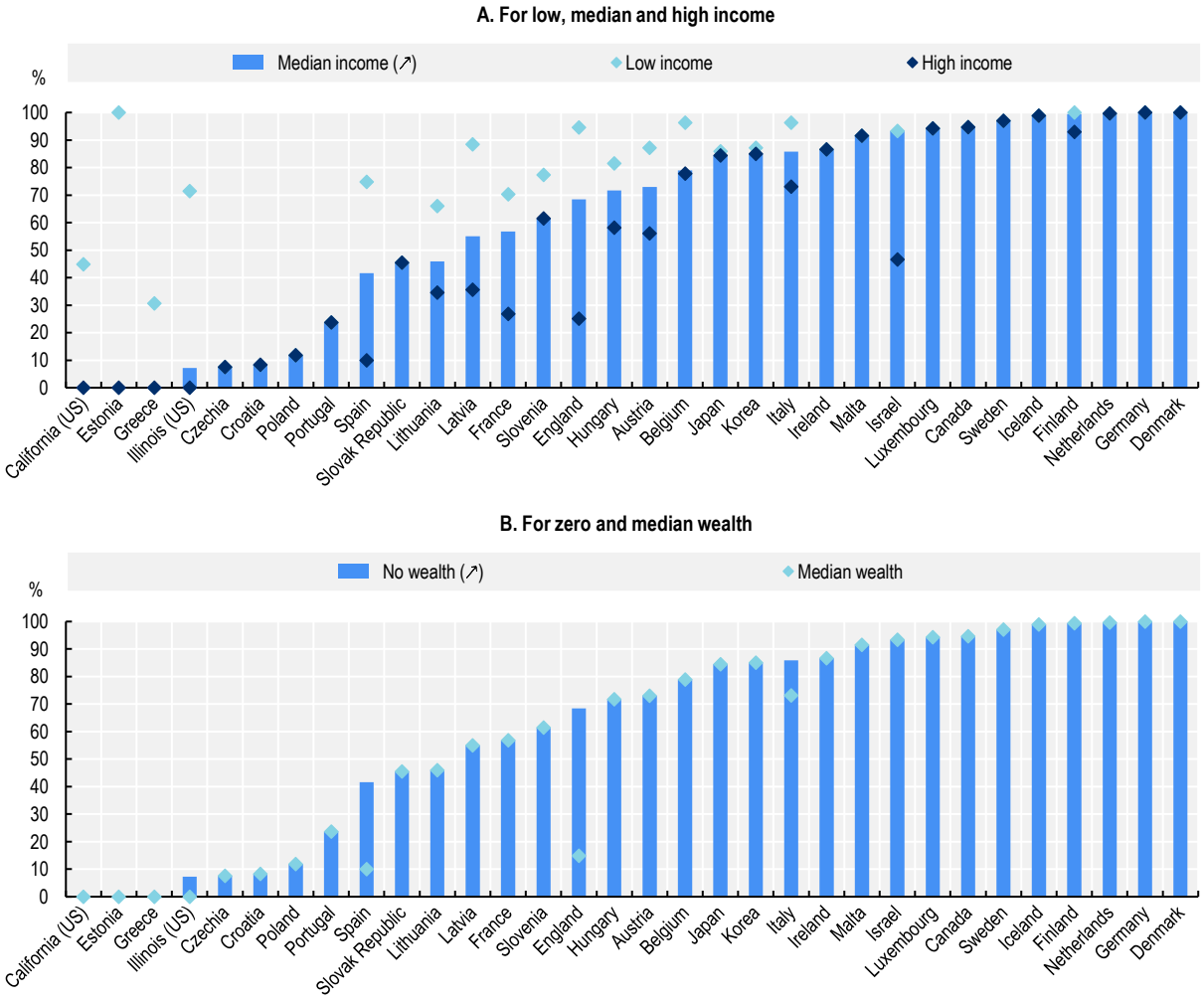
3.4.2. Public support is generally lower for older people with higher incomes but it is less so for people with greater wealth

Of the 32 OECD and EU countries and subnational areas covered in this report, at least 28 use income-testing so that care recipients with higher incomes have less public support and those with lower incomes greater public support. The conventional design of income-testing directs people with higher income (defined by particular thresholds) to pay more towards the total costs of care and thereby contribute more of their higher income to easing the fiscal burden of LTC support systems.

In 18 countries, the generosity of public systems measured by the share of the LTC costs covered by public support (for home care) is higher for those on low incomes than for those in the top 20th percentile of the income distribution (Figure 3.5, Panel A). Differences in the level of public support for low-income and high-income individuals are significant in Estonia (100 percentage points) and the United States-Illinois – (72 percentage points), England, the United Kingdom (69 percentage points) and Spain (65 percentage points). Additionally, the generosity of public systems in these countries moderately differs between low-income and median-income individuals, albeit with great variance including those observed for Finland (1 percentage point) and Estonia (100 percentage points).

Figure 3.5. Generosity of LTC systems by income and wealth levels of care recipients

Share of total home care costs that would be covered by public social protection, for respondents with zero wealth, by income, and for respondents with median income, by wealth, for older people with moderate needs



Note: Low, median, and high incomes refer to the upper boundary of 20th, 50th and 80th percentile of the income distribution among older people, respectively. Median wealth refers to the upper boundary of 50th percentile of the wealth distribution among older people. Moderate needs correspond to 22.5 hours of care per week. Detailed descriptions of care recipients' needs are available in Annex A.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database*, and the *OECD Wealth Distribution Database*.

By contrast, in the other 14 countries, our estimation indicates that the public coverage for home care is the same for all income groups. This can be partially explained by the absence of income-testing (e.g, Czechia, Denmark, Germany, Poland, Portugal) or by the fact that income-testing only applies to institutional care residents (e.g. Canada (Ontario), Ireland, Luxembourg, Malta, the Slovak Republic). Iceland, the Netherlands and Sweden do have income-testing for home care but are still relatively indiscriminate with respect to LTC beneficiaries' income.

When it comes to wealth-testing, more than half of the OECD countries and subnational areas incorporate it into their LTC systems but changes in the generosity are rather limited. In fact, gaps in the estimated public support between people with no wealth and people with median wealth noticeably change only in four countries (Figure 3.5, Panel B): namely, the United States (Illinois), Italy, Spain and the

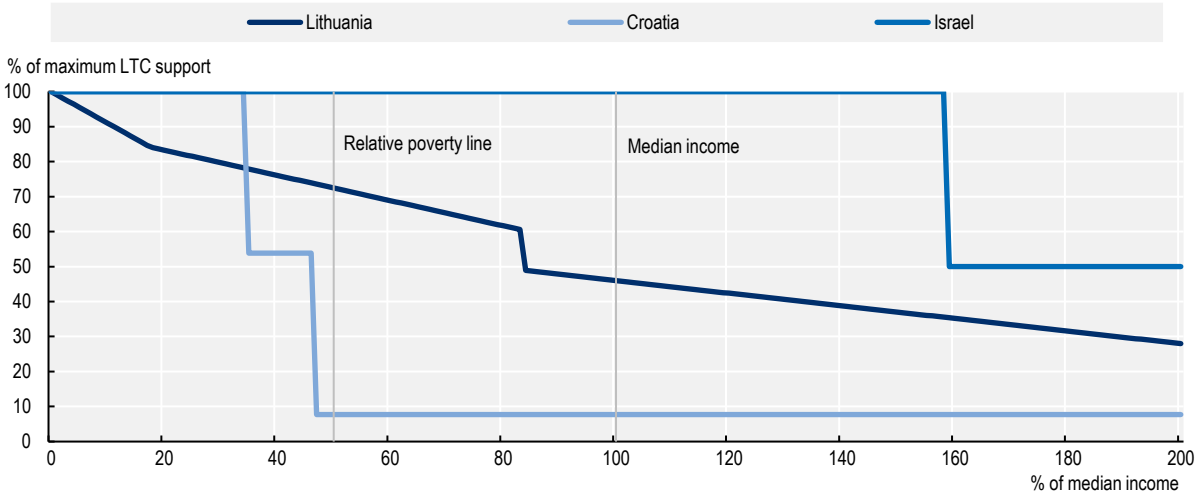
United Kingdom (England). Generally speaking, these differences are small compared to those from income-testing – ranging from 7 percentage points (Illinois) to 54 percentage points (England). The underlying cause of these outcomes may be related to the setting of thresholds for wealth-testing – see more discussions in 3.4.4.

Conversely, the existing setting of income-testing thresholds greatly affects the extent to which public support can be provided (Section 3.4.4 explores the specific details of such thresholds). To visualise the effect of income-testing thresholds on public support and to best recapitulate three different approaches to threshold setting, Figure 3.6 illustrates curves of public support coverage relative to income for home care in Croatia, Israel and Lithuania. Note that the subsequent analysis generally excludes countries that do not conduct income-testing at all or do so only for institutional care.[2]

First of all, in countries such as Croatia, Estonia, Greece, Latvia, Slovenia and the United States (California and Illinois), individuals with low income receive the maximum level of public support, but for people with median income, the level of public support is significantly reduced. In Croatia, for instance, an older individual with median income sees 8% of the total LTC costs of home care covered by the state (Figure 3.5, Panel A). Those who earn less than one-third of the median income would be fully covered, although this threshold effectively excludes people around the poverty line (see Figure 3.6).

Figure 3.6. Generosity of public long-term care systems along the income distribution

For an older person with moderate needs and zero wealth, receiving care at home, as a share of the maximum social protection for three example countries (Croatia, Lithuania and Israel)



Note: Moderate needs correspond to 22.5 hours of care per week. Detailed descriptions of care recipients' needs are available in Annex A. Median income refers to the country disposable median income of older people.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database,* and the *OECD Wealth Distribution Database*.

In the second approach, public support for home care is at the maximum level or nearly so for people with median income and remains generous for high-income individuals with a reimbursement rate of approximately 50% or above. The public LTC systems of Israel, Finland, Iceland, Italy (South Tyrol), Japan, Korea, the Netherlands and Sweden share this feature and the generosity of their public systems are high across all income levels. Almost the same can be also said about the coverage of institutional care costs, except for Israel since there is no public support for institutional care.

Lastly, in countries like Lithuania, France, Spain and the United Kingdom (England), the share of public support declines in proportion to income and people receive limited public support once they acquire high income. In Lithuania, for instance, the coverage of public support progressively declines from 72% for those whose income is 50% of the national median income, to 46% for median income earners and to less than 30% for those with double the median income (Figure 3.6).

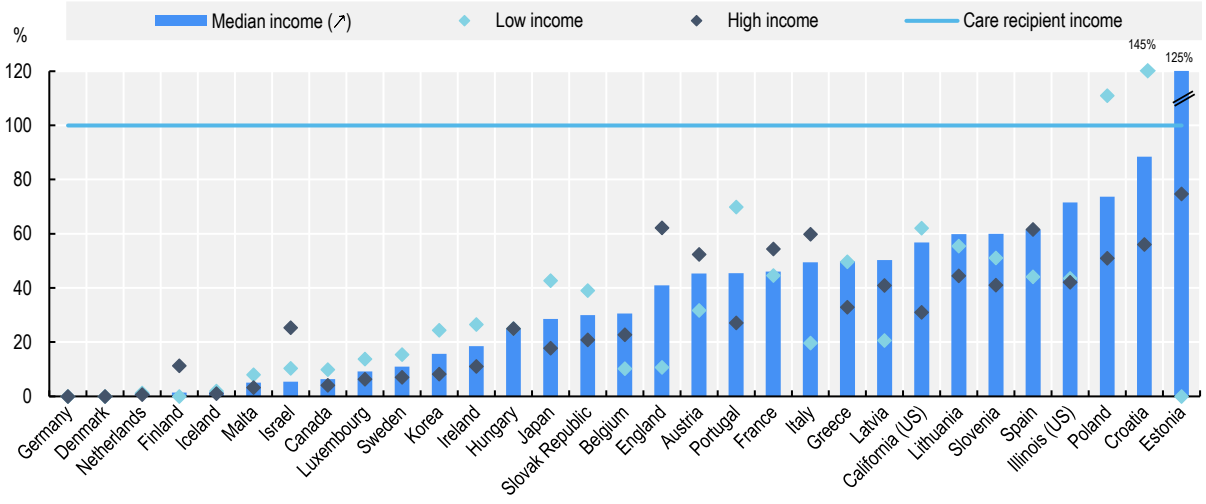
3.4.3. Out-of-pocket costs can still be substantial despite means-testing

Despite the prevalence of income-testing, public support occasionally fails to identify low-income individuals and disadvantages low-to-median-income individuals. For example, out-of-pocket costs for low-income earners exceed 50% in seven out of 32 OECD and EU countries and subnational areas (Figure 3.7). This result may be expected for countries with no income-testing (Croatia, Czechia and Poland), but it suggests that, even for countries that do conduct income-testing (United States-California, Croatia, Czechia, Lithuania and Slovenia), their public support falls short of supporting people with low income.

Moreover, ten countries see out-of-pocket costs for median-income earners surpassing 50%. Except for Lithuania and Spain, the LTC systems of these countries are typically designed to target low-income people (see Section 3.4.2). Indeed, the share of out-of-pocket costs is substantially lower for people with low income than for people with median income in Estonia, Latvia and Illinois. However, in the United States (California), Croatia and Czechia, there seems to be some room for improvement on the income-testing and generosity of their public LTC systems.

Figure 3.7. The out-of-pocket costs of home care, by income level

As a share of disposable income after public support, for older people with moderate needs and zero wealth

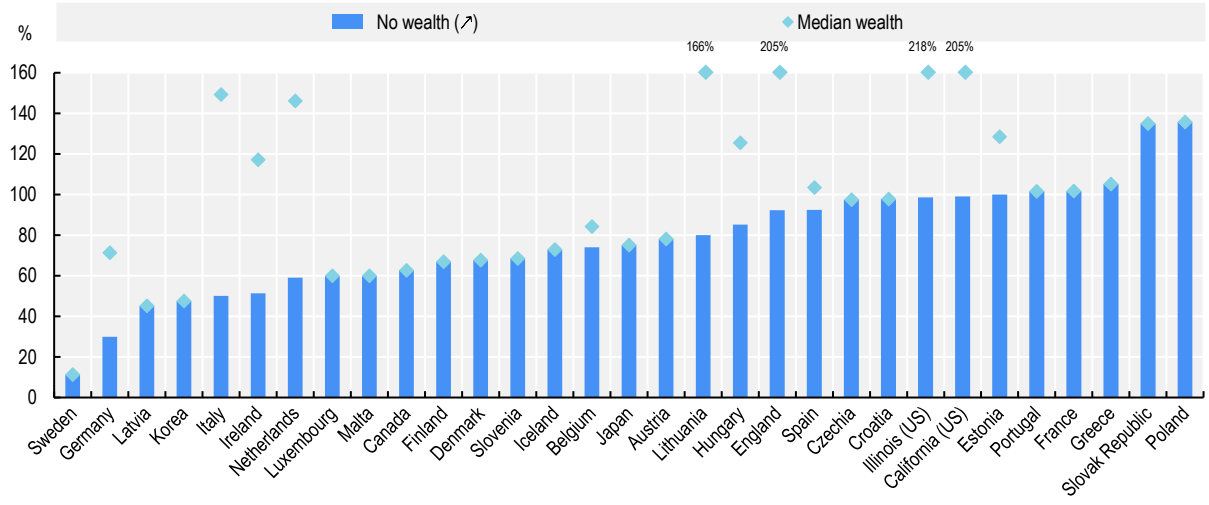


Note: Low, median, and high incomes refer to the upper boundary of 20th, 50th and 80th percentile of the income distribution among older people, respectively. Moderate needs correspond to 22.5 hours of care per week. Detailed descriptions of care recipients' needs are available in Annex A. For Czechia, estimated out-of-pocket costs are 354% for low-income, 276% for median-income and 208% for high-income earners, which are very high compared to other estimates and thus suppressed for better readability.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database*, and the *OECD Wealth Distribution Database*.

About 40% of the countries adjust the generosity of public systems with respect to a person's wealth for institutional care (Figure 3.8). The impact of this wealth testing tool is on average resulting in out-of-pocket costs being 54 percentage points higher for individuals with median wealth. There is great heterogeneity on differences in out-of-pocket costs, depending on wealth with differences being small for Belgium (Flanders) and Spain but being particularly large for England (112 percentage points) and the United States (approx. 110-120 percentage points). Moreover, out-of-pocket costs for those with median wealth exceed median income in the eleven countries that perform wealth-testing for institutional care. At the same time, Croatia, Greece, Japan and Slovenia have a wealth-testing scheme but there is no change in the estimated out-of-pocket costs, which may be affected by how wealth-testing thresholds are set in these countries.

Figure 3.8. The out-of-pocket costs of institutional care, by wealth level

As a share of disposable income after public support, for an older person with severe needs



Note: Median wealth refers to the upper boundary of 50th percentile of the wealth distribution among older people. Severe needs correspond to 41.25 hours of care per week. Detailed descriptions of care recipients' needs are available in Annex A. For Israel, estimated out-of-pocket costs are 579% for people with no wealth and people with median wealth due to the lack of information on support for institutional care, which is very high compared to other estimates and thus suppressed for better readability.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database*, and the *OECD Wealth Distribution Database*.

3.4.4. Thresholds should be better set for cost-sharing without harming the vulnerable

The setting of means-testing thresholds should ideally achieve, i) general accessibility and affordability, ii) the identification of those who have low income and/or limited wealth to reduce their out-of-pocket costs, and iii) the targeting of people who have sufficient income and wealth to pay more for LTC services so that the fiscal sustainability and efficiency of public LTC systems can be reinforced (Oliveira Hashiguchi and Llena-Nozal, 2020[10]). As discussed in the previous section, however, out-of-pocket costs for the provision of care are rather substantial for people with low-to-median income earners and people with median wealth.

Figure 3.7 indicates that the estimated relative user contributions are 50% higher for people with median income than people at the top 20th income distribution, in 12 out of 32 OECD and EU countries and regions. As for income-tests, it may be worth considering setting a threshold for high-income individuals to target public support at low-income counterparts in a more efficient manner. Imposing such thresholds does not immediately compromise the adequacy of public systems. For instance, the co-payment rate for high-income

individuals (who accounted for 9.6% of old-age population in 2015-16) changed from 10% to 20% in Japan, which statistically significantly reduced the intensity of LTC services but only by 0.46% (Sano et al., 2022[11]).

Wealth-tests can also contribute to better targeting social protection but there is a risk of incentivising distortionary saving behaviour around wealth-testing thresholds (Oliveira Hashiguchi and Llena-Nozal, 2020[10]). The current wealth-test criteria for institutional care in England, for example, requires an older individual with a capital of GBP 23 250 or more to be fully self-funded. This might induce eligible individuals to stop saving or transfer their capitals elsewhere (although the risk will be lower as the planned threshold of GBP 100 000 is significantly more generous). English local councils can charge more if institutional care residents are found to be engaged in such purposeful wealth depletion, but establishing the causal link is not straightforward (Foster, 2024[12]).

That being said, well-designed wealth-testing could incentivise a more efficient usage of LTC services without a significant risk of financial distress. The 2012 Dutch co-payment reform which includes increasing user contributions for those with a taxable amount of wealth resulted in a less intensive use of institutional care and a small decrease in public expenditure, while average lifetime out-of-pocket costs significantly increased (Tenand, Bakx and Wouterse, 2021[13]). To avoid the risk of disproportionately high care costs, countries could consider a lifetime cap on user contributions.

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Notes

[1] The cost of one hour of informal care is assumed to be equal to each country's average wage. It does not necessarily correspond to the cost of one hour of formal care.

[2] Canada (Ontario), Czechia, Denmark, Germany, Luxembourg, Malta, Poland, Portugal and the Slovak Republic.

4 The net effects of social protection

This chapter discusses the effectiveness of public systems in protecting older people from poverty risks associated with long-term care. It does so by comparing poverty risks due to out-of-pocket costs among older people with and without long-term care support. The analysis shows that public support reduces poverty risks associated with long-term care costs, but not sufficiently. It also highlights equity challenges in public support, particularly by sex and age. Finally, the analysis shows how the effectiveness of social protection varies across different features of long-term care systems.

Introduction

Social protection systems are at the heart of boosting human capital and empowering people. If they are well designed, these systems can contribute to reducing inequalities, building resilience, and ending inter-generational cycles of poverty. Public social spending across OECD countries is high with more than 20% of GDP spent on social services. It is widely acknowledged that everyone should have access to social protection that ensures an adequate standard of living, particularly in case of shocks related to unemployment, sickness, disability, widowhood, or old age. At the same time, recent OECD work has identified that there are gaps in coverage for social benefits (OECD, 2024[1]). Recently, the International Labour Conference (ILC) called on Member States and the International Labour Organization (ILO) to consider long-term care (LTC) as an integral part of social protection systems (ILO, 2024[2]).

The OECD has defined social protection systems as effective when they are adequate, equitable and efficient (OECD, 2018[3]). A system is adequate when those who need LTC can both access and afford it. Public social protection systems should provide coverage for the entire population at risk (to ensure access) and provide sufficient financial support to limit out-of-pocket spending (to ensure affordability). Social protection is equitable when it contributes to reducing the risks of poverty and addressing inequities across socio-economic groups. Older people who are poor, or vulnerable to poverty, are more likely to need care and least likely to be able to afford it. As such, an assessment of the effectiveness of social protection for LTC must consider the distribution of costs and benefits. Finally, public social protection is efficient when gains in well-being and reductions in poverty and vulnerability are achieved at minimum cost to the public purse.

Previous OECD work highlighted the gaps in social protection for LTC in adequacy, equity, and effectiveness (Cravo Oliveira Hashiguchi and Llena-Nozal, 2020[4]). This chapter builds on previous work by presenting more countries and using a unique methodology to match cases of needs with survey data to generate population-level estimates for social protection (see Annex A). Building on the findings on the adequacy of the LTC systems presented in Chapter 3, this analysis goes one step further by exploring the effect of social protection on poverty in the older populations. To do so, it estimates older people's poverty levels depending on whether they have LTC needs, how severe these needs are and whether they receive public support or not. Comparing these different poverty levels gives insight in whether the systems in place adequately protect older people from poverty risks associated with LTC costs. The chapter also provides an overview of the extent to which people deplete their wealth to pay for LTC. Finally, estimates of the efficiency of social protection for LTC systems are measured as the relation between public LTC spending and increases in poverty risks on the one hand and between spending and the generosity of public benefits on the other hand.

Key findings

- **Without social protection, most people with long-term care (LTC) needs would be in poverty**. Across countries, the share of people at risk of poverty due to the out-of-pocket costs of LTC would be between 90 to 100% for individuals with severe needs in 24 countries and subnational regions, were it not for public social protection. In the remaining countries, that share would still be at least 80%.
- **Public support generally reduces the share of people at risk of poverty due to LTC costs, but not sufficiently in most countries.** The share of people at risk of poverty due to high out-of-pocket spending even is 30 percentage points lower across countries for people with severe needs after receiving public support. In 14 countries, the reduction in poverty risk is lower than 10 percentage points while in seven countries, the reduction will be at least 60 percentage points.
- **Poverty risks for people with LTC needs remain substantially higher than for older people in general**. For individuals with severe needs, the share of people at risk of poverty after public support is 50 percentage points higher than for all older people. Only in four countries, the share of people in poverty is the same for those with needs after public support and for all older people. In 11 countries, the share of people at risk of poverty with social protection is at least 70 percentage points higher than for older people on average.
- **Public support might not adequately protect some vulnerable groups, such as women, and older people.** Women and individuals who are at least 80 years old might compound vulnerabilities with a higher probability of more severe needs and lower incomes. For that reason, poverty risks for women and the 80+ tend to be higher than for men and younger groups, even after receiving public support: poverty risks for women are up to 28 percentage points higher than for men and those 80+ have poverty risks that are 27 percentage points higher than those 65-79 years old.
- **Poverty reduction is associated with different characteristics of LTC systems across countries.** First, countries that spend more on LTC tend to have a greater reduction in the share of people experiencing poverty risks due to the out-of-pockets costs for LTC. Second, countries with in-kind benefits and only income-testing also fare better in offsetting the poverty risks of LTC.
- **Well-developed LTC systems generally provide better protection from poverty risks.** Countries that perform better across other dimensions of LTC systems such as funding, governance and quality also fare better in poverty reduction. In some countries there are trade-offs between poverty reduction and access or availability.
- **In almost all countries, individuals with low incomes would have to use parts of their wealth to pay for care.** To cover the remaining out-of-pocket costs that are not paid for by public social protection, individuals with low incomes would need to use their accumulated wealth in all but six countries. In the other countries, the amount of wealth which is used varies: in some countries, individuals would have to use only small parts of their wealth (e.g. in Ireland or Germany) and, in others, their entire wealth (e.g. in Latvia and Czechia).

4.1. Public social protection for LTC does not adequately protect older people from poverty

If there were no public social protection for LTC in old age, the majority of older people would not be able to pay the out-of-pocket costs of care from their incomes alone without being pushed into poverty[1] (see Chapter 3). To prevent this, all countries included in this report provide some public support with LTC costs to older people. However, as suggested in the previous chapter, this support is insufficient in many cases. The following sections provide a more in-depth analysis of the effectiveness of public social protection for LTC in old age and the risk of poverty for people with different levels of needs. The chapter uses a methodology to compare countries across levels of needs (Chapter 1, Box 1.1).

4.1.1. LTC needs increase poverty risks despite public support

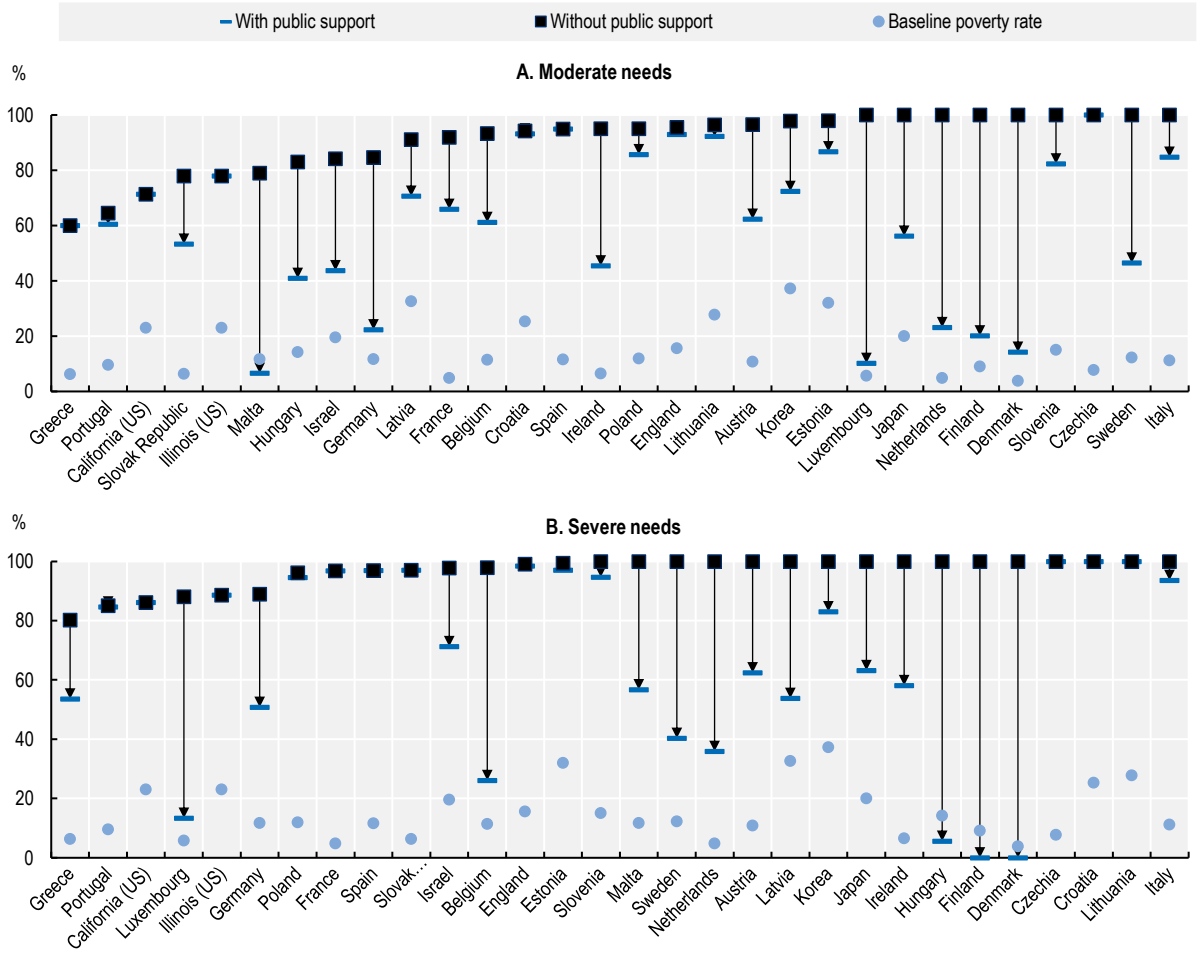
Without any social protection, most older people with LTC needs would be at risk of poverty. Individuals with severe needs face the highest total LTC costs and therefore are at highest risk of poverty without public support.[2] Between 80% and 100% of individuals with severe needs would be at risk of poverty, with Greece and Portugal having the lowest risks due to lower unit costs of care (Figure 4.1, Panel B, "without public support"). For individuals with moderate needs the risk of poverty without any social protection is slightly lower due to lower total costs: between 60% and 100% (Figure 4.1, Panel A). The most significant share of people at risk of poverty due to the use of LTC is in Denmark, the Netherlands and Luxembourg. In these countries care costs are particularly high compared to people's incomes. More moderate shares of people at risk of poverty due to LTC can be observed in the United States, Greece and Portugal, but the risk remains high.

Differences between countries are large concerning the impact of social protection on the poverty risk. On average, the reduction in the share of people at risk of poverty is 30 percentage points for both severe and moderate needs. In Luxembourg, Denmark and Finland public support leads to a reduction in poverty risks of at least 80 percentage points while in the United States, Greece and Ireland the reduction is zero or nearly zero. In 14 countries, benefits do not seem to have a big impact on the poverty risk caused by LTC needs (less than 10 percentage points). In some of these countries the generosity of the systems is more limited, while in others the benefits may be generous and still insufficient to reduce poverty risks due to the high out-of-pocket costs.

All LTC systems help to reduce the risk of poverty, but do not fully offset the risk caused by LTC needs in most countries. Figure 4.1 includes the baseline poverty level, defined as the poverty level among all individuals who are 65 years and older. Only in Finland, Denmark and Hungary public support fully reduces the poverty risks for older people with severe needs to bring it to the level of individuals in the age group 65+. On average, the share of people at risk of poverty after public support remains 50 percentage points higher than for older people in general in the case of severe needs and 45 percentage points higher for those with moderate needs. In 11 countries, for individuals with severe needs (and in five countries for those with moderate needs) the share of people at risk of poverty is more than 70 percentage points higher than for older people in general.

Figure 4.1. Share of older people with LTC needs in poverty with and without public support

Share of older people with moderate (Panel A) and severe (Panel B) LTC needs at risk of poverty with and without public support compared to the baseline poverty rate for all older people



Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Moderate and severe needs correspond to 22.5 and 41.25 hours of care per week, respectively. Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

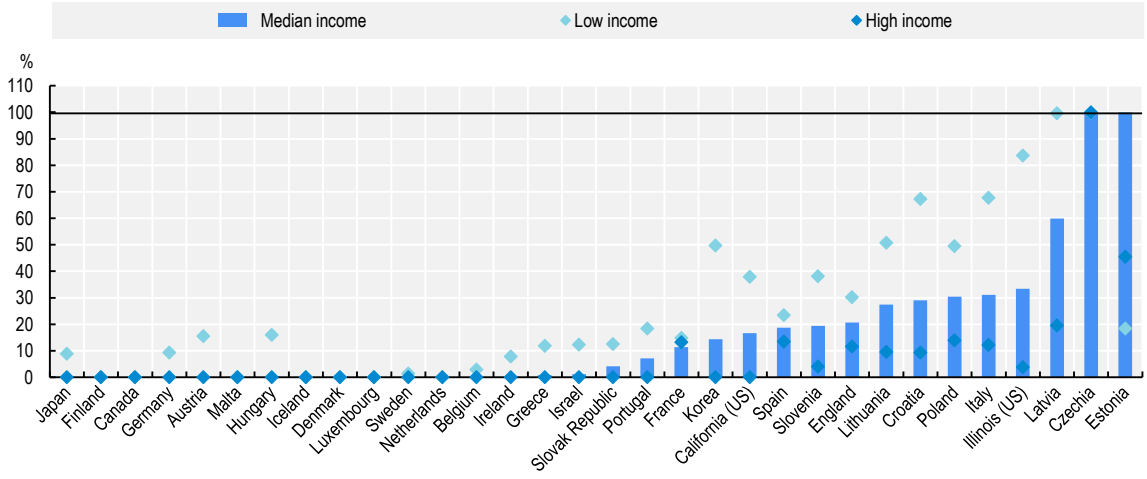
4.1.2. The risk of full wealth depletion is overall small but high in some countries

While income-testing is used widely, wealth-testing is less widely used but many people might still need to use their wealth to pay for care. Eight countries use wealth -testing: they make the receipt or level of public support dependent on a person's wealth. At the same time, in countries where wealth -testing is not built into the benefit schemes individuals may still have to use their wealth to pay for care if the combination of their income and public support is insufficient to cover the cost of the care they need. Chapter 1 highlighted in most countries, at least 50% of the population may have to rely on their wealth to pay for LTC even after receiving public support. To further complement this picture, the analysis of this section looks to what extent people will need to use all of their wealth or assets.

While, on average, full wealth depletion is not significant for most people across the OECD, it can be very high in some countries. On average, older people with a high income (80th percentile) would have to deplete 8% of their wealth to pay for care, those with a median income 16% of their wealth and those with a low income would deplete 26% of their wealth at the end of an average period of 8.6 years lived with needs[3] (Figure 4.2). Individuals with high and median incomes do not have to deplete any wealth in half of the analysed countries as they can pay for their care using their income and public support. However, in the other half of the countries, even individuals with median and high income would have to deplete large parts of their wealth and up to 100% for those living in Czechia and Estonia. Older people with a low income would need to rely much more on their wealth in most countries and use even half of their wealth or more in Czechia, Latvia, Illinois, Italy, Poland, Croatia, Lithuania and Korea. In Czechia and Latvia, they would have fully depleted all their wealth by the end of the 8.6 years period.

Figure 4.2. Share of median wealth needed to pay for LTC care needs

For older people with low, median, and high income, assuming covering at least basic cost of living



Note: Low, median, and high incomes refer to the upper boundary of 20th, 50th and 80th percentile of the income distribution among older people, respectively. Estimates computed using the assumption that average duration of low needs is 6.1 years, moderate needs is 1.25 years, and severe needs 1.25 years. The estimates assume older people with LTC needs would seek formal home care. Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. Detailed descriptions of care recipients' needs are available in Annex A. The basic cost of living representing food and other expenses is equal to the poverty level (50% of country median income).
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, the *OECD Income Distribution Database*, and the *OECD Wealth Distribution Database*.

4.2. Most countries' LTC systems have room for improvement in terms of equity

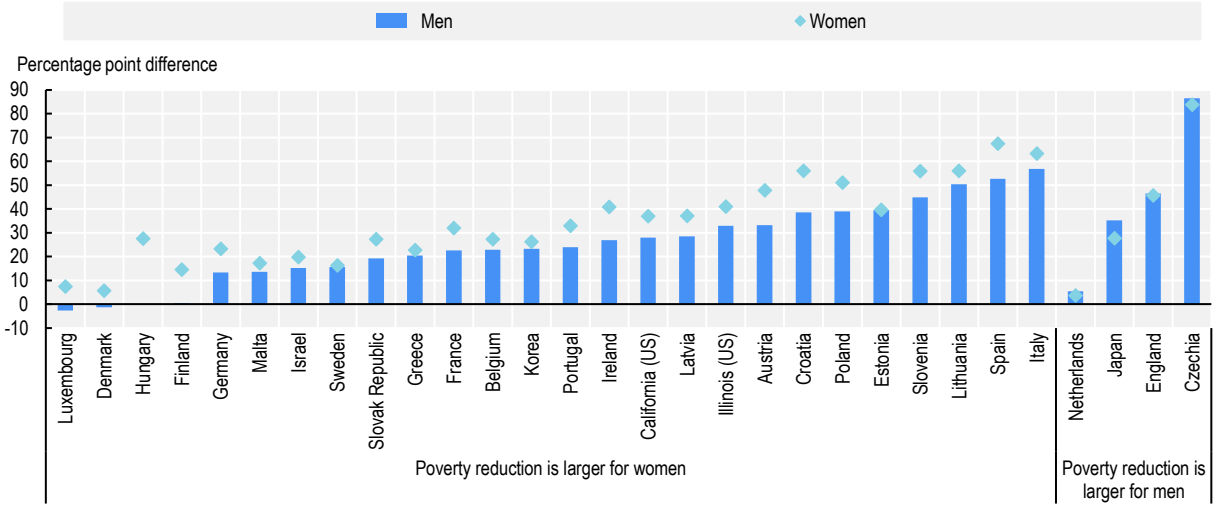
Equitable social protection systems for LTC should aim to reduce disparities in the financial risks associated with developing care needs. Public benefits designed to promote equity should be targeted towards older individuals who face greater financial vulnerability, providing them with proportionate support. This is particularly important since people with LTC needs belong predominantly to more vulnerable groups (see Chapter 2). Several studies consistently highlight that individuals with lower incomes not only have a greater chance of requiring LTC compared to their wealthier counterparts but are also more likely to be unable to afford LTC services (Beltz et al., 2022[5]; Kekäläinen, Luchetti and Terracciano, 2022[6]; del Pozo-Rubio et al., 2019[7]). Other factors such as sex and housing situation also play significant roles in the loss of autonomy and increased financial risk. The findings from this section point to the lack of targeted interventions that address the multiple vulnerabilities tied to the poverty risks that arise from facing LTC costs.

4.2.1. Women, the oldest individuals and those living alone face higher risks of poverty

Across all analysed countries, women experience a higher risk of poverty after paying for LTC even with public support, compared to the baseline rate among all older adults. Figure 4.3 illustrates the different impact social protection has on poverty risks for men compared to women who receive care at home. In countries such as Luxembourg, the Netherlands and Denmark, where public support generally covers greater parts of the LTC costs, gender differences in poverty rates are relatively low. Differences are also small in Czechia and Italy, where public support is generally least effective at reducing poverty levels compared to the other countries. The largest differences by gender can be observed in Hungary (28 percentage points), Croatia (17 percentage points), and Spain and Austria (both 15 percentage points). In countries like Hungary the differences can partly be explained by the large income disparities between men and women. Note that, on the other hand, in a handful of countries men are more likely to be at risk of poverty than women, e.g. in Czechia and the Netherlands.

Figure 4.3. Percentage point differences between baseline poverty risks and poverty levels after the use of LTC with public support, by sex

Older women and men with LTC needs, receiving care at home

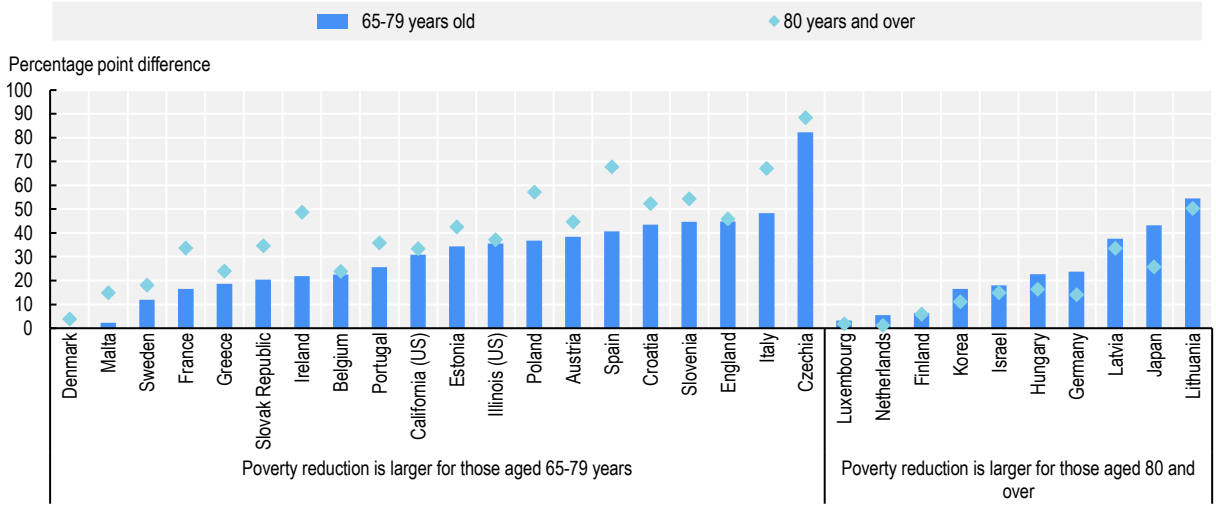


Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

Poverty rates for individuals with LTC needs, even after receiving support, are more pronounced among those of 80 years old or older, compared to those aged between 65 and 79 years. Figure 4.4 shows that this effect is more pronounced in some countries than in others. In Belgium and England, social protection has a relatively uniform effect across age groups. In contrast, in countries such as Ireland and Spain, the oldest age groups remain at a much higher risk of poverty after receiving benefits (27 percentage points higher than the baseline rate). In ten countries, poverty rates for older people with LTC needs after receiving social protection are higher among the younger age group (aged 65 to 79 years) than among the oldest age group (aged 80 years or older).

Figure 4.4. Percentage point differences between baseline poverty risks and poverty levels after the use of LTC with public support, by age group

Older people with LTC needs, receiving care at home



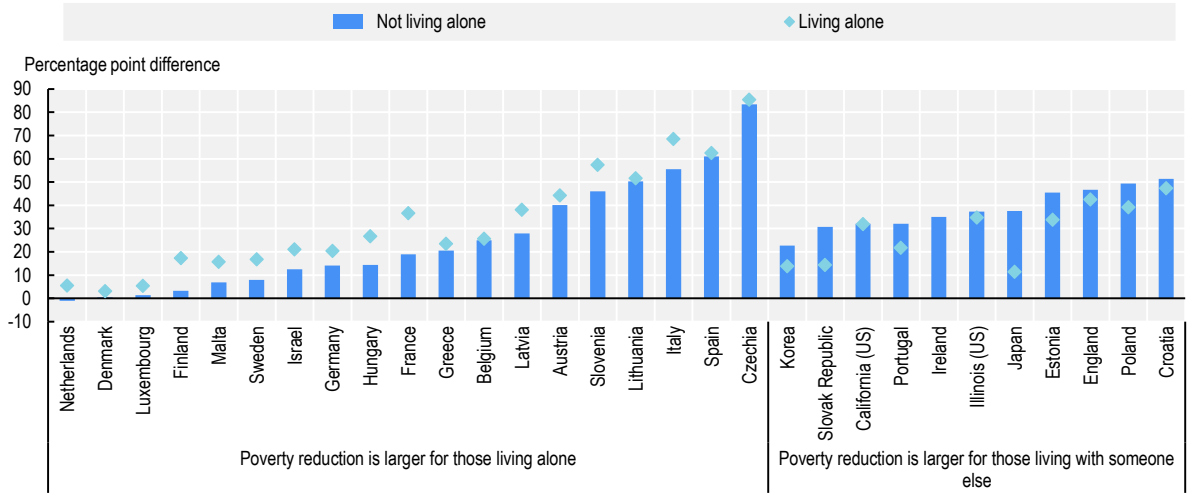
Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. The poverty level is equal to 50% of country median income.

Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

In the majority of the analysed countries, older individuals living alone are more prone to poverty caused by the costs of LTC compared to those not living alone, even after accounting for public support (see Figure 4.5). Although this observation aligns with expectations based on the use of household equivalised income to determine poverty levels, the marked disparities suggest additional influencing factors, including sex, geographical location, and age, among others. Some countries demonstrate notable differences in LTC social protection outcomes between older residents living alone and those cohabiting. Especially in Japan, the poverty risk for older people living alone is significantly higher than for those living with someone (21 percentage point difference), followed by France (17 percentage points) and the Slovak Republic (16 percentage points). In contrast, in the other half of the countries older individuals living alone are less prone to poverty after accounting for public support, compared to those living alone. In some countries, like Belgium, Lithuania or the United States (California), there is (almost) no difference in the risk of poverty, regardless of their living situations.

Figure 4.5. Percentage point differences between baseline poverty risks and poverty levels after the use of LTC with public support, by household composition

Older people with LTC needs, receiving care at home



Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. The poverty level is equal to 50% of country median income. Ireland is removed for "Living alone", as the survey data only contain coupled households.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

The effectiveness of social protection decreases when vulnerability compounds across the different factors such as age, sex, and living conditions. Table 4.1 shows that women over 80 years old who live alone are at the highest risk of poverty when confronted with LTC costs, even with public support. The average risk of poverty among them, across the OECD, is 71%; that is five times higher than the average baseline poverty rate for all older people (65+), which is 14%. Age is a significant risk factor that intensifies vulnerability to poverty after LTC expenses across living status and sex. The differences in the effectiveness of social protection between men and women are accentuated by living status; women living alone, regardless of their age, face significantly higher poverty rates than men of the same age. However, as previous sections have illustrated, the rates after accounting for LTC costs and public support, increase notably, underscoring potential shortcomings in current social protection.

Table 4.1. Poverty rates after the use of LTC with public support, by age and gender

Older people with low, moderate, or severe needs, receiving care at home

Sex / Housing situation	65 to 79 years old		80 years old or more	
	Not living alone	Living alone	Not living alone	Living alone
Men	29%	58%	43%	59%
Women	33%	69%	48%	71%
All	31%	66%	45%	69%

Note: Estimates represent the unweighted average of all analysed countries. Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

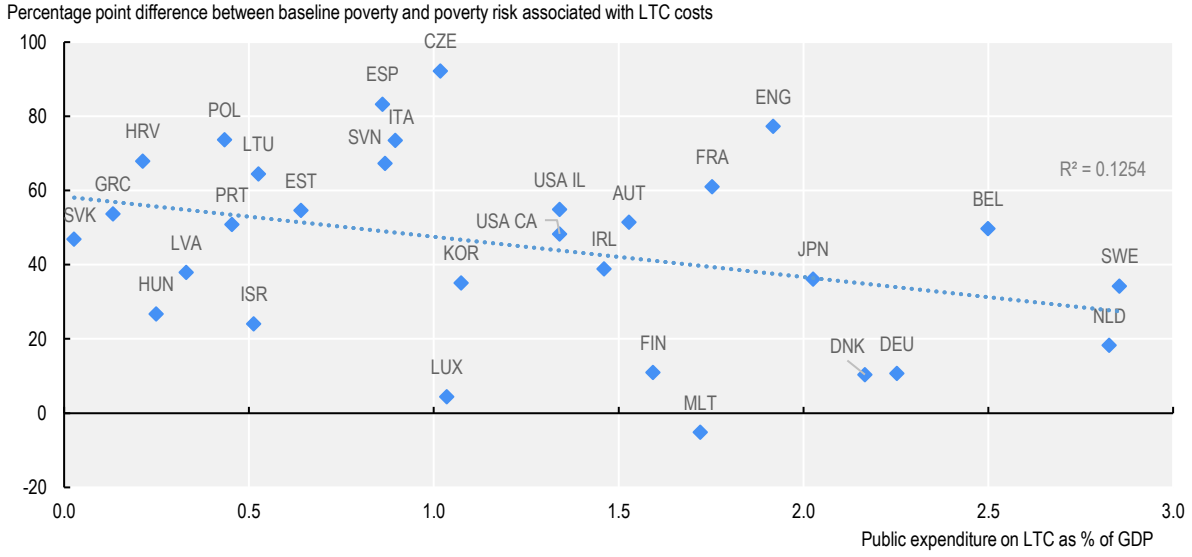
4.3. The efficiency of social protection for LTC varies widely by country

Public social protection is efficient when gains in well-being and reductions in poverty and economic vulnerability are achieved at minimum cost to the public purse. The objective should be to maintain a balance between effectiveness and efficiency. One way to analyse efficiency is to compare the costs of public social protection (the inputs) with poverty reductions (the effects). In the case of LTC this could be, for example, comparing poverty reductions due to public benefits with public LTC spending, providing a proxy measure of efficiency. As mentioned before, this comparison should be interpreted with caution as poverty reductions are estimates that do not consider real-world access and utilisation, and public LTC spending statistics include expenses that go sometimes beyond the components of LTC included in this report.

In countries where public LTC spending is higher, increases in poverty risks associated with LTC costs are generally lower (Figure 4.6). These risks are calculated as the difference between the baseline poverty risks among all individuals who are 65 years and older and the poverty risks faced by older people with moderate needs receiving public support. There is significant variation in public spending with similar outcomes in terms of poverty risks: for instance, Finland, Denmark and Germany spend significantly less than the Netherlands but manage to limit poverty risks to a similar degree. At the other end of the scale, France spends more than e.g. Poland but with a similarly small impact on poverty risks.

Figure 4.6. The relation between public LTC spending and increases in poverty risks

Public spending on LTC as a share of GDP and percentage point differences between baseline poverty rate among the older people and poverty rate among the older people with moderate needs using home care after receipt of benefits

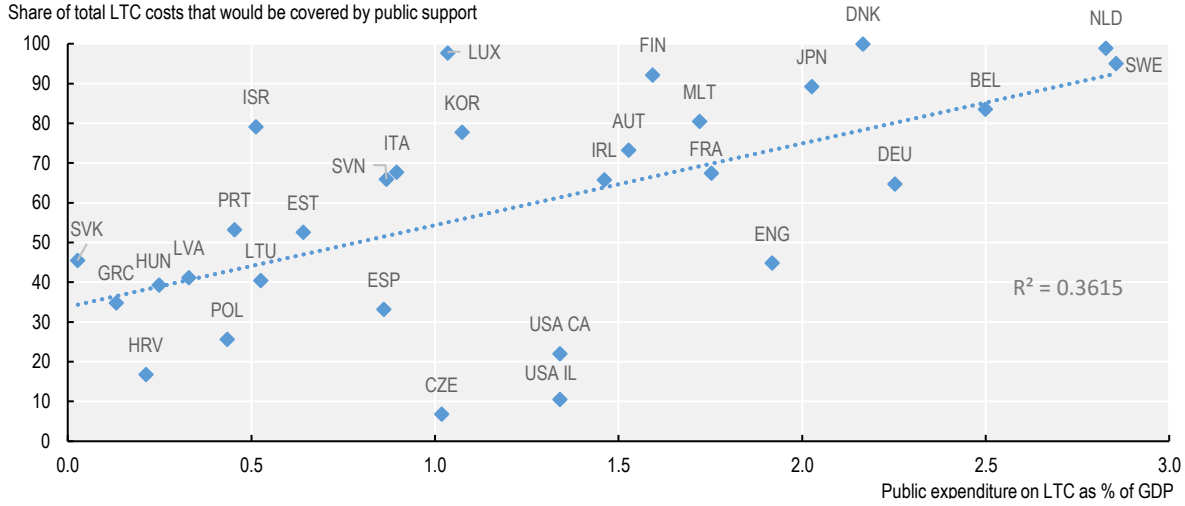


Note: Poverty risk estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. Moderate needs correspond to 22.5 hours of care per week, respectively. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire, *OECD Health Expenditure* database and responses to surveys listed in Annex A.

Another way to analyse the efficiency of public social protection is to look at a person's out-of-pocket costs after receiving public support. The more these costs can be reduced at a minimum investment of public expenditure the more efficient the benefits are. Figure 4.7 shows countries' public LTC spending as a share of GDP, and the share of the LTC costs that would be covered by public benefits for an older person with moderate needs receiving care at home. The estimates suggest that countries with higher LTC expenditure cover a higher portion of the costs of care faced by older people with moderate needs, on average, than countries with lower LTC expenditure. The relation is similar for low and severe needs (results not shown). The comparison of Figures 4.6 and 4.7 shows that some countries may cover a high share of the LTC costs with public support (high ranking in Figure 4.7), but the remaining out-of-pocket costs still put the person at a significant risk of poverty (lower ranking in Figure 4.6).

Figure 4.7. The relation between public LTC spending and the generosity of public benefits

Public spending on LTC as a share of GDP and share of total LTC costs that would be covered by public support for older people with moderate needs receiving care at home

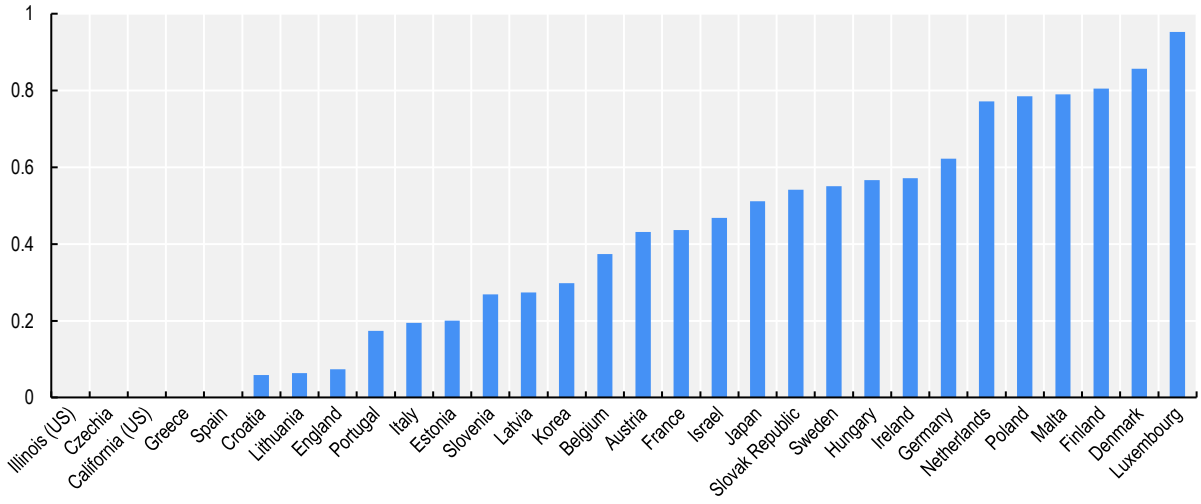


Note: Poverty risk estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. Moderate needs correspond to 22.5 hours of care per week, respectively. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire, *OECD Health Expenditure* database and responses to surveys listed in Annex A.

Finally, Figure 4.8 gives insight in the efficiency of countries' LTC systems by comparing their generosity with the poverty reduction they achieve. Poverty reduction in this context refers to the extent to which a country's social protection system limits older people's risk of poverty due to LTC costs and generosity is the share of the total LTC costs that is covered by public support. The comparison shows that countries like Denmark, Finland, Luxembourg and the Netherlands cover almost 100% of an individual's cost of LTC and thereby prevent additional poverty risks that might be caused by these costs. As such, while they have a high investment, they also have very good outcomes. At the same time, countries like Sweden, Israel or Ireland have quite generous systems as well but are less efficient in keeping older people with LTC needs out of poverty. On the other hand, there are countries like Poland, that only cover around 5% of the costs of care for a person with moderate needs but keep poverty levels low to a similar extent as e.g. Latvia that covers more than 50% of these LTC costs.

Figure 4.8. The efficiency of LTC system in reducing the poverty risk

Ratio of reduction in poverty risk 1) due to the social protection for a person with moderate needs, and 2) due to the total support as a share of total LTC cost (average across all people with moderate needs)



Note: Poverty risk estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. Moderate needs correspond to 22.5 hours of care per week, respectively. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

4.4. System specific features impact poverty prevention

Some characteristics of LTC systems seem to facilitate, and others to hinder the reduction of poverty for older people who need LTC services. One of these characteristics analysed in this report is the use of means-testing. In most countries, people have to use their income and sometimes wealth to pay for parts of their care costs, as these costs are higher than the benefits, they receive in almost all countries (see Chapter 3). Another characteristic is the way that a benefit is delivered – either in cash or in-kind. Most countries choose to combine both in-kind and cash benefits and only a few rely exclusively on one or the other.

4.4.1. Means-testing has an impact on reducing poverty risks

As there are advantages to both – means-testing and universal – options, many countries choose blending different forms of means-testing with non-means-tested benefits. As described in Chapter 1, countries use means testing to strike a balance between affordability of care for the older people and the sustainability of the LTC systems. The amount of the benefit thus depends on a person's income and wealth, which affects the out-of-pocket payments people have to contribute themselves. If these out-of-pocket payments become too high, their risk of poverty increases. For home care, countries can be divided in three groups: i) not using any means-testing, ii) using income testing only and iii) using both, income and wealth testing (see Table 4.2 and Table 1.1 in Chapter 1 for the overall average). The table also illustrates the association between the three different types of systems and their effectiveness in reducing poverty for older people requiring LTC.

Although there are likely no silver bullets for designing the best LTC benefits, countries that use income testing only, on average, are more effective in reducing poverty associated with use of LTC. Nevertheless,

Table 4.2 shows that, the difference in poverty reduction between countries with no means testing and those with income testing is small. Countries with both income and wealth testing are the least efficient in reducing the poverty. However, all three groups are quite heterogenous. Across all groups, there is at least one country that would not seem to adequately protect older people with LTC needs from the added risk of poverty. This is in line with the findings in the broader literature (Greenstein, 2022[8]; Mkandawire, 2005[9]). Beyond merely combining different types of benefits, it is important to combine them appropriately and ensure their continuity. Means-tests must be well-designed (e.g. with thresholds that target the most vulnerable) and non-means-tested benefits should cover all relevant costs (e.g. help with IADLs).

Table 4.2. Use of means-testing and in-cash and in-kind benefits in LTC systems and potential poverty risks associated with care

Country	Means-testing	Form of public support	Percentage point differences between the poverty risks among older people receiving care at home with and without public support		
			Low needs	Moderate needs	Severe needs
Austria	Both	Only income	24	34	38
Belgium	Both	Income and wealth	52	32	72
Croatia	Both	Income and wealth	0	1	0
Czechia	In-cash	No testing	2	0	0
Denmark	In-kind	No testing	81	86	100
England	Both	Income and wealth	20	3	1
Estonia	In-kind	Only income	13	11	2
Finland	Both	Only income	63	80	100
France	In-kind	Only income	30	28	0
Germany	Both	No testing	8	62	38
Greece	Both	Only income	16	0	27
Hungary	Both	Only income	20	42	94
Ireland	In-kind	No testing	21	50	42
Israel	Both	Only income	22	41	26
Italy	Both	Income and wealth	35	15	6
Japan	In-kind	Only income	46	44	37
Korea	In-kind	Only income	19	25	17
Latvia	Both	Only income	0	20	46
Lithuania	Both	Only income	0	4	0
Luxembourg	Both	No testing	32	90	75
Malta	Both	No testing	0	72	43
Netherlands	Both	Only income	80	77	64
Poland	Both	No testing	11	9	2
Portugal	In-cash	No testing	14	4	0
Slovak Republic	In-cash	No testing	10	25	0
Slovenia	Both	Income and wealth	29	18	5
Spain	Both	Income and wealth	4	0	0
Sweden	In-kind	Only income	73	53	60
United States	In-cash	Income and wealth	0	0	0

Note: Poverty risk estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). Estimates assume all older people with LTC needs would seek formal home care. For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. Low, moderate, and severe needs correspond to 6.5, 22.5 and 41.25 hours of care per week, respectively. The estimates assume all older people with LTC needs would seek formal home care. The poverty level is equal to 50% of country median income.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

4.4.2. The impact of in-kind vs. cash benefits on poverty risks

Countries that offer only in-kind benefits seem to be associated with stronger reduction in poverty risk caused by LTC expenses. Most of the analysed countries combine both in-kind and cash benefits while few rely exclusively on cash benefits or purely on in-kind services. The reduction in poverty is slightly lower in the case of countries that use both in-cash and in-kind benefits. This group of countries is also the biggest and there are significant differences across them. Finally, the poverty reduction is very small or even close to zero in the countries that use only in-cash benefits. However, as in the case of means-testing, it is difficult to establish the direct relationship between the form of support provided and the reduction in poverty risk, as it seems to be more driven by the generosity of LTC system (see Table 4.2 and Table 1.2 in Chapter 1 for the overall average).

4.5. Countries with more comprehensive LTC systems tend to achieve higher poverty reduction

The OECD developed a typology to classify LTC systems based on five dimensions and performed a comprehensive clustering analysis to classify countries (Barszczewski and Llena-Nozal, forthcoming[10]). The information and data collection were conducted along the following five comparative dimensions: governance and organisation; funding; quality; availability; and access. The data used in this analysis are taken from the existing OECD indicators of LTC, from previous OECD questionnaires on LTC and from relevant literature. The study includes a total of 30 countries.

4.5.1. The OECD's typology of LTC systems

The OECD's typology has advantages in the data collection compared with previous LTC system typologies. The dataset employed in this report is more comprehensive compared to those used in the LTC typology literature. (Kraus et al., 2010[11]) use eight indicators to cluster countries and (Ariaans, Linden and Wendt, 2021[12]) use 12 indicators. In contrast, the dataset used in this report consists of 20 indicators. Moreover, the quality of the constructed typology is affected not only by the number of indicators but also the diversity of dimensions they cover. The indicators used in this report can be grouped into five dimensions: governance, access, funding, availability and quality. While (Kraus et al., 2010[11]) built a dataset covering governance, access, funding and quality, they did not include indicators measuring availability of LTC. On the other hand, (Ariaans, Linden and Wendt, 2021[12]) include indicators covering governance, funding, and access, but lack indicators measuring the quality of provided services as well as availability and support for informal care.

Governance and organisation

Including a dimension on the governance of public LTC provision helps to understand the organisational depth and cohesion of the systems. Four variables are used to classify countries: The first variable measures whether countries have a legislation on LTC that unifies the provision of benefits and services belonging to LTC, as these might span between the responsibilities of the health and social policy ministries. The second variable in the analysis quantifies the level of decentralisation within LTC systems. The third variable captures the degree of public versus non-public provision of LTC. It considers the percentage of providers that are public versus those which are either private for profit or private not for profit. Finally, a fourth variable measures the degree of care integration between the LTC sector and the healthcare sector, particularly through the use of guidelines, care pathways and multidisciplinary teams between the two systems.

Funding

This dimension of the typology aims to capture the degree of public funding and cost-sharing among countries. It is assessed using three variables discussed in previous sections of the report. The first variable measures the share of LTC costs covered by public funds for an older person with severe needs and a median income. The second variable measures the out-of-pocket expenses for LTC of a person with severe needs as a share of a median income. Finally, the third variable measures the poverty reduction thanks to the social protection among older people with severe needs.

Quality

The third dimension uses five variables to measure different aspects of quality. The first variable looks in particular at whether staff-to-resident ratios are in place in the countries. The second variable aims to capture the quality of staffing by identifying whether there are minimum education requirements for LTC workers. The third and fourth variables within this dimension are designed to assess the level of quality assurance and regulation in the LTC sector. The third variable indicates whether there is mandatory accreditation in place for either both institutions and home care services, for only one of them, or for neither. The fourth variable indicates the presence or absence of any quality assurance framework within the LTC system. The fifth variable in the quality dimension looks at outcomes of care.

Availability

The dimension of availability aims to look first at the supply of formal care. This includes a proxy for the supply, the number of beds and the total number of LTC workers (both at home and in institutions) with respect to the number of individuals aged 65 and above using OECD data and country-specific data when it is not available in the OECD database. Secondly, this dimension also looks at reliance and support of family carers by creating a variable on familialism. It looks at the existence of leave schemes for carers and cash benefits for cares and can be coded 0 to 4 for when all four types of support exist (cash benefits for carers, cash benefits for the care recipients which can be used for carers, paid leave and unpaid leave). In addition, another variable looks at supply measured as the reliance on informal carers or more specifically the percentage of care provided by informal carers.

Access

The dimension on access focuses on the extent to which needs are covered by the current system, the degree of targeting and to what extent countries rely on in-kind services or cash benefits. The first and second variable capture the degree of targeted access based on needs and income and compare to what extent out-of-pocket expenditures are high for more disadvantaged groups. The third variable calculates a coverage rate by relating the share of individuals aged 65+ with LTC needs to the share of recipients among the 65+, based on the reporting of needs for help with ADLs and IADLs and, if possible, using the OECD measure of needs based on typical cases. The fourth variable looks at the degree to which a country provides services directly through in-kind services, relies only on cash benefits or provides a choice of both, in kind and cash benefits, which is assigned to the highest value.

4.5.2. More funding and poverty reduction go along with better LTC governance, quality, fair access, and availability

Cluster analysis was performed for countries, resulting in five clusters (see Table 4.3 for allocation of countries to clusters). The objective of the cluster analysis is to divide a dataset into groups (or clusters) such that the data points within each group are more similar to each other than to data points in other groups across the five dimensions described above. The final clustering is the outcome of synthesising several algorithms and has the advantage of being more robust (see Box 4.1). More details on the

methodology and results can be found on (Barszczewski and Llena-Nozal, forthcoming[10]). The funding dimension included the degree of poverty reduction and the generosity of the LTC system. Cluster 1 had the highest average scores across all dimensions, while Cluster 5 had the lowest.

Countries that perform better across other dimensions of LTC systems such as governance and quality also fare better in poverty reduction (included in the funding dimension) but across countries there are sometimes trade-offs between poverty reduction and access or availability. Countries in Cluster 1 excelled in poverty reduction and also tended to score high in the remaining dimensions: governance, availability, access, and quality of LTC. There was also a monotonic decrease in the capability of public LTC systems to reduce poverty from Cluster 1 to Cluster 4. In contrast, some other country groupings showed mixed results across the different dimensions. For example, countries that showed worse outcomes in terms of poverty reduction were in Cluster 5 but they had better results in the dimension of availability including number of beds per 1 000 older people (see Figure 4.9) than those in Cluster 4. The results also indicate that developments across the different dimensions of LTC systems might be uneven, e.g. some countries perform well in terms of poverty reduction but less well in availability and vice versa. Means-testing which is used to capture the access dimension is most common among countries in Cluster 3, which have limited financial resources and attempt to increase efficiency by restricting access based on means.

Table 4.3. Allocation of countries to clusters according to the OECD typology

Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Austria	Canada	Croatia	Greece	Czechia
Belgium	Estonia	Hungary	Poland	Portugal
Denmark	France	Italy	Slovenia	Slovak Republic
Finland	United Kingdom	Lithuania		United States
Germany	Ireland	Latvia		
Iceland	Japan	Spain		
Luxembourg	Korea			
Netherlands	Malta			
Sweden				

Note: Cluster allocation based on syntheses results of four algorithms.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

Figure 4.9. Different measures of the LTC systems by clusters

Country clustering using the OECD methodology



Note: The OECD methodology is described in Box 4.1. Unweighted average of three measures of LTC systems: the difference between the risk of poverty among older people with severe needs before and after receiving the social support; the number of beds per 1 000 people 65+; the number of typical cases in which a person with low income (the upper bound of the 20th percentile) receives higher support than person with high income (the upper bound of the 80th percentile), ranges from 0 to 3.
Source: OECD analysis based on the Long-Term Care Social Protection questionnaire and responses to surveys listed in Annex A.

Box 4.1. Clustering methods

The clustering procedure uses the Principal Component Analysis (PCA) method due to the high number of variables. The PCA is used to analyse data with a high number of dimensions and increases the interpretability of the data while preserving the maximum amount of variation in the data. In a second step, each algorithm is executed to obtain country classifications. Since none of the implemented clustering methods has shown a clear advantage over the others, the final clustering results are derived from a synthesis of the outcomes from separate algorithms. Every country is finally assigned to the cluster it was assigned to in most cases.

Four clustering algorithms are used in this report. They belong to two broad categories of clustering methods: distance-based clustering and probabilistic clustering.

Distance-based clustering groups data points into clusters based on the similarity between them, which is calculated using a distance metric. The fundamental idea is to place data points that are close to each other in the same cluster, reflecting the proximity in the feature space. This report considers the following three type of distance-based clustering:

- *K-means* is one of the most widely used algorithms. It assigns data points to clusters such that the distance between a data point and cluster centroid is smallest. Initial centroids of a specified number of clusters are randomly selected. While the advantage is its simplicity, the algorithm is sensitive to the initial random selection of cluster centroids. Besides, finding the optimal number of clusters lacks a general theoretical solution.

- *Hierarchical clustering* groups similar data points into clusters that form a hierarchical structure, reflecting the order in which clusters are merged or divided. Unlike k-means algorithms, it does not require to specify the number of clusters beforehand and is not sensitive to the initial selection of cluster centroids. Yet, it can be sensitive to outlier observations and is influenced by the choice of distance metric and linkage method.
- *Self-Organizing Map (SOM)* is a type of artificial neural network designed to reduce the dimensionality of data while preserving the topological relationships between data points (Kohonen, 1982[13]). The algorithm is robust to noise and outliers in the data but can be sensitive to the initial configuration of neurons. Additionally, its outcome depends on the selection of parameters such as the grid size, learning rate, and neighbourhood size.

Probabilistic clustering is a clustering approach that assigns data points to clusters using probabilistic models or probability distributions. These methods assign probabilities to indicate the likelihood of data points belonging to each cluster. This approach is particularly useful when data points can potentially belong to multiple clusters or when there is uncertainty in cluster assignments.

- *This report uses the Gaussian Maximization Method (GMM) as a representative of probabilistic clustering.* The underlying assumption of this method is that data points are generated from a mix of several Gaussian distributions, each corresponding to one cluster. GMM employs an Expectation-Maximization technique to estimate parameters (the mean and the covariance) for each of these distributions. It allows for the calculation of the probability of belonging to each cluster. This makes GMM a more flexible approach compared to k-means. However, it also lacks a general theoretical framework for determining the optimal number of clusters and is sensitive to initial parameter guesses.

Prior to constructing clusters, it is essential to specify a number of clusters, as most clustering algorithms require this information beforehand. There is typically no universal theoretical solution to determine the optimal number of clusters. However, the literature offers various rules of thumb to assist in selecting the appropriate number of clusters, such as the elbow method for the k-means family of algorithms. Considering these rules, as well as stability of cluster assignments across different methods, the number of clusters is set to three.

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Notes

[1] Relative income poverty: Disposable net income after paying out-of-pocket costs below 50% of the population wide median equivalised income.

[2] It should be noted that individuals with severe needs tend to be older and more likely to have less means left to pay for care while individuals closer to 65 years old are less likely to face poverty risks.

[3] The analysis is based on two assumptions: 1) the average time an older person has to spend with LTC needs is composed of 6.1 years with low LTC needs, 1.25 years with moderate needs, and 1.25 years with severe needs, and 2) each older person has median wealth when they develop LTC needs independent of their income. It then compares the share of that median wealth that people have deplete to pay for LTC during this period of 8.6 years, depending on whether they have a low, median or high income.

5 Policy solutions for balancing affordability for users and fiscal sustainability

This chapter briefly discusses the impact of population ageing and increased access to long-term care on future expenditures as well as the impact of making care more affordable for people. The chapter outlines three possible policy options for countries for ensuring the sustainability of long-term care systems. It first discusses possible policies to raise funds for long-term care. Secondly, the impact of better targeting of long-term care benefits is presented. Finally, the chapter describes what countries are doing to achieve efficiency gains to contain rising long-term care expenditures.

Introduction

As populations age, the pressure grows to ensure the provision and affordability of long-term care (LTC) services for all older people who need support. Prior to the pandemic, LTC spending was the health spending category with the highest growth rate and was projected to outpace health spending growth again in coming years (OECD, 2023[1]). Upward pressures on costs, in addition to population ageing, are also expected due to increased expectations of quality of life in old age, driven by rising incomes. This situation will create significant budgetary pressures, requiring a re-evaluation of LTC financing in the future.

Previous OECD work highlighted certain policies which were deemed crucial to achieve resilient LTC systems (OECD, 2023[2]). Financial sustainability was highlighted as one of them and a discussion on how to increase the funding for LTC was considered as an important element for resilience. In addition to funding options, other OECD work highlighted the need to seek better value for money and promote targeted universalism (Colombo et al., 2011[3]). Targeted universalism is described as mechanisms within a universal system of entitlements where more funding goes towards those who need it most. As part of seeking options to improve value for money, policy gains in this labour-intensive sector need to be found (OECD, 2020[4]).

This chapter considers options for reform to improve affordability and maintain the sustainability of finances, including assessing public and private insurance versus tax-based options to raise additional funds in view of growing demand. It also assesses how countries can modify means-testing and target more according to people's needs to ensure better targeting of resources. To illustrate the impact of various policy options, the chapter refers to a series of scenarios, with detailed descriptions provided in Table 1.3 of Chapter 1. In addition, policy reforms to improve productivity and healthy ageing are also discussed. The chapter relies on the OECD LTC model of comparable social protection indicators and uses this model to assess the impact of reform options on public expenditures (Cravo Oliveira Hashiguchi and Llena-Nozal, 2020[5]).

Key findings

- **Demand for long-term care (LTC) will continue to grow and put pressure on the sustainability of LTC systems.** When considering the growing number of older people needing care and the increasing pressure to expand access to services, current expenditures across the OECD are projected to increase annually by over 4% until 2050. There are large variations across countries with countries such as Belgium, Hungary and France needing an annual increase below 2%, while others such as Poland and Slovenia facing much higher possible expenditures of more than 7% annual increases.
- **Improving the affordability of LTC for users will further exacerbate financial pressures for countries.** Currently out-of-pocket costs remain high in a number of countries and fully eliminating them will require increasing expenditures by 6% annually until 2050. In countries where systems are generous and the out-of-pockets costs associated with LTC are low, such as Belgium, Denmark and Finland, the annual increase would be slightly above 2%, driven mostly by ageing and increased coverage. In other countries, where gaps in social protection for LTC are large, the annual increase is likely to be more than 10%.
- **Countries are likely to seek additional sources to fund LTC but options to manoeuvre are tight.** LTC is mostly funded through either taxes or a mix of taxes and contributions. As the tax wedge on labour is often high, countries that need to look for additional resources could consider more broad-based funding sources that are less reliant on labour income, such as other taxes, or opt for creating an insurance dedicated to LTC as in Slovenia. It would be paramount not to place the entire burden of funding LTC on younger generations and ensure intergenerational fairness by also raising funds from older generations. In many countries, pension income is low which limits this option. Countries could look for innovative financing options also from the private sector, which are currently scarce due to regulatory barriers.
- **Countries could better target their existing LTC funds** to balance sustainability and affordability for users. Implementing more progressive income-testing and focusing on those with more severe needs can help achieve this balance. Improved income and needs targeting can reduce LTC spending and poverty among care recipients, with varied impacts across countries. While wealth-testing aims to reduce LTC spending while protecting the most vulnerable older people with needs, low thresholds can lead to strategic behaviours such as dissaving or bequests. To mitigate these risks, countries have adopted measures such as look-back periods. Progressive wealth-testing, as implemented in Spain and England, can further ensure equitable resource allocation, and prevent wealth manipulation.
- **Countries should look into policy options that promote efficiency and help contain the costs of LTC.** Both investing in healthy ageing and increasing LTC labour productivity through a more efficient use of human resources and innovative approaches to LTC provision can reduce the predicted growth of LTC expenditures by 31 percentage points in 2050. Nordic countries, Australia, the United Kingdom and Japan have promoted strategies to strengthen the prevention of LTC needs and/or reablement in order to recover autonomy loss. Innovative models of community living are also being developed in recent years. A number of countries, including Japan and some Nordic countries, have utilised new technologies to increase the productivity and reduce the labour costs of LTC. Countries like the Netherlands, Spain and Germany use pricing models for sustainable financing of LTC.

Public LTC systems will face large pressures

Public LTC systems across OECD countries are expected to face significant pressures in the coming years. The primary driver of these pressures is population ageing, which will substantially increase the number of people with care needs and, consequently, the demand for LTC services. Additionally, addressing existing gaps in affordability and coverage is crucial for reducing poverty among older people with LTC needs. Balancing the need for equitable, accessible care with sustainable funding will be a critical challenge for policy makers. Ensuring that LTC systems can meet the growing demand while maintaining financial sustainability will require innovative strategies and robust policy measures.

5.1.1. Population ageing will put pressure on funding for LTC

The number of older people with needs is projected to increase in all analysed countries due to population ageing, placing additional pressure on LTC funding. To maintain the current level of coverage (the share of older people with needs receiving public support for LTC) and generosity (the share of an individual's LTC costs covered by social protection) by 2050, OECD countries will need to increase their annual spending on LTC by nearly 3% on average (see Figure 5.1). This projected increase aligns closely with the pre-pandemic annual growth rate of health spending (OECD, 2019[6]).

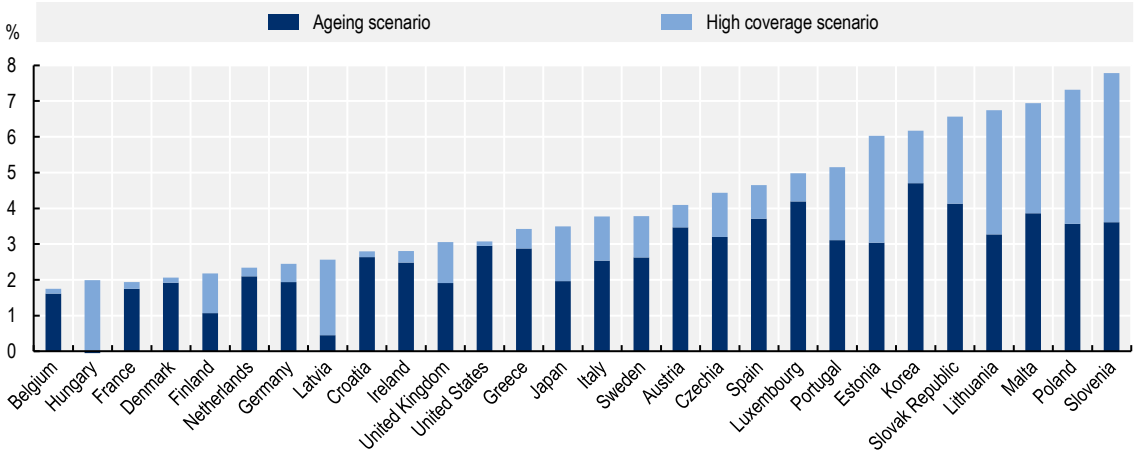
The pressure on LTC funding due to population ageing varies significantly across countries. In countries like Hungary, Latvia and Finland, the predicted average increase in LTC spending is 1% or less. This low number is primarily due to the low share of people in the oldest age groups and with severe needs in these countries. The cost of LTC for older people with severe needs, and consequently the public support invested in them, is the highest compared to other groups. Although they represent a small fraction of all older people with needs, changes in the size of this group have the most significant impact on total LTC spending. Conversely, in countries such as Korea, the Slovak Republic and Luxembourg, the average annual growth in LTC spending will need to exceed 4% to maintain the current level of generosity and coverage.

However, this increase merely sustains the current level of support and, in many countries, population ageing is likely to be accompanied by additional pressures to expand the share of people receiving support (coverage). To enhance the LTC systems' coverage, the growth rate of LTC spending must exceed the average health spending growth rate. While the average annual growth rate of LTC spending is projected to be 2.6% across OECD countries due to population ageing alone by 2050, enhancing the LTC coverage simultaneously would push up this rate to 4% (see Figure 5.1). This means that OECD countries will need to increase LTC spending annually by an additional 1.4 percentage points on average, beyond the increases required by population ageing. This goal may be particularly challenging for countries where LTC expenses are already projected to rise significantly due to population ageing.

The additional cost caused by increasing the coverage of public support for LTC to a minimum of 60% is influenced by the current levels of coverage and generosity. The projected increase is low in countries where LTC coverage is already high, such as Belgium, France, Denmark and the Netherlands, meaning that achieving 60% coverage does not require substantial additional expenditure in these countries. The additional increase in LTC spending is also low (below 0.25 percentage points) in countries like the United States and Croatia due to their highly means-tested and less generous systems. This suggests that while it is relatively easy to increase coverage, its impact on poverty reduction might be limited. The highest additional costs (more than 3 percentage points) are seen in countries with currently low coverage levels (i.e. Lithuania and Slovenia), and/or without means-testing (i.e. Poland and Malta).

Figure 5.1. Average annual change in public LTC spending considering the effect of population ageing and 60% public coverage

Assuming reaching the coverage and generosity target by 2050



Note: Coverage refers to the share of people with needs that receives public support for LTC. Generosity refers to the share of LTC cost that is covered by public support. Bars show the simulated minimum annual increase in public LTC spending if countries were to implement the Ageing scenario and High coverage scenario by 2050 (see also Table 1.3 of Chapter 1). Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). For countries with subnational models, these are applied to national-level survey data to produce the estimates shown.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, *OECD Population Projection* database, *OECD Purchasing Power Parities and exchange rate* database, *UN World Population Prospects*, Global Burden of Disease Collaborative Network, *Global Expected Health Spending 2020-50*, Institute for Health Metrics and Evaluation (IHME), and responses to surveys listed in Annex A.

5.1.2. Addressing gaps in affordability will reduce poverty if LTC expenditures increase but is likely to exacerbate the strain in public finances

Given the high costs of meeting LTC needs, it is challenging for many analysed countries to fully cover them with public support. If OECD countries aimed to fully eliminate out-of-pocket expenses for LTC by 2050, they would need to increase LTC spending by an average of 6%, which is twice the increase required to maintain the current level of generosity while also reaching 60% coverage (see Figure 5.2). This projected increase is also twice the average pre-pandemic growth rate of health expenditures, making it a difficult target to achieve.

For countries with currently generous LTC systems, implementing the No copayment scenario may be significantly easier than for those that currently cover only a small share of LTC costs according to the simulation presented in Figure 5.2. In Belgium, Denmark, Finland and the Netherlands, the predicted annual growth in LTC spending is below 3% under the No copayment scenario. Conversely, in countries like Poland, Czechia and the Slovak Republic, annual LTC spending growth needs to exceed 10%, which may far exceed the financial capacity of these countries.

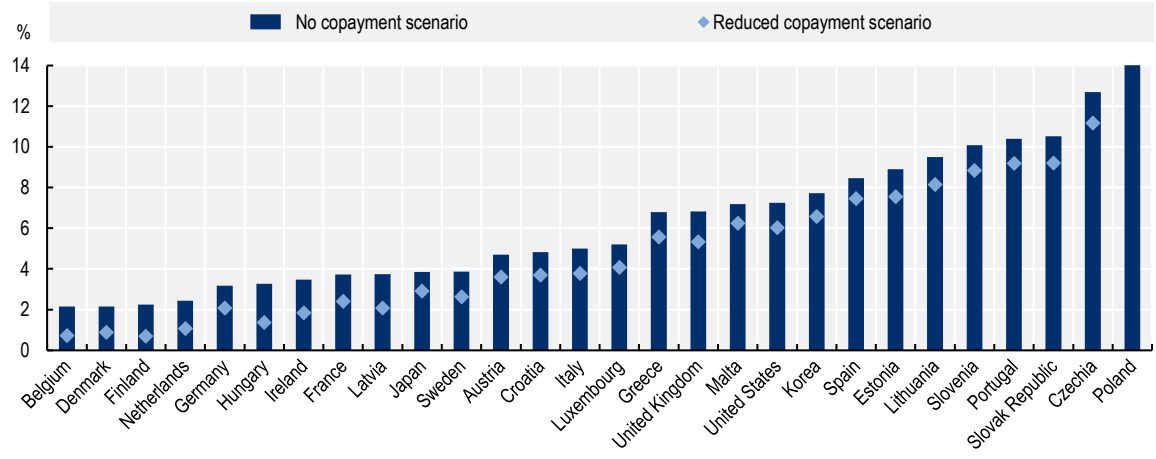
In response to these challenges, countries and policy makers are exploring alternative approaches, such as capping out-of-pocket expenses, which could positively impact poverty reduction while requiring lower levels of funding. An example of such a solution is proposed in the *Dilnot Report*, which suggested capping an individual's lifetime out-of-pocket expenses at an amount between GBP 25 000 and GBP 50 000 in England (Commission on Funding of Care and Support, 2011[7]).

In most countries, capping out-of-pocket expenses for LTC (Reduced copayment scenario) decreases the predicted growth of LTC expenditures while still offering better protection for older people compared to the

current situation. The Reduced copayment scenario presented in this chapter assumes a progressive increase of the cap on people's out-of-pocket payments as their LTC needs increase. It grants a greater reduction of copayments for those with more severe needs (countries aim to cap out-of-pocket expenses at 60%, 40%, and 20% of the LTC cost for older people with low, moderate, and severe needs, respectively). The reduction in overall public LTC spending growth compared with the No copayment scenario, is relatively consistent across all countries, ranging between 1 and 2 percentage points (see Reduced copayment scenario Figure 5.2). For countries like Belgium, Denmark and Finland, which already have generous LTC systems, this solution may not be particularly attractive unless they face serious financial challenges because it is likely to have negative implications on poverty. The Reduced copayment scenario is more appealing for countries with medium generosity and that would – under the No copayment scenario – face high projected annual increases in LTC spending, such as Hungary, Latvia and Ireland. The Reduced copayment scenario would allow these countries to reduce spending growth by up to 50%.

Figure 5.2. Average annual change in LTC spending in the No and Reduced copayment scenarios

Assuming reaching the coverage and generosity target by 2050



Note: Coverage refers to the share of people with needs that receives public support for LTC. Generosity refers to the share of LTC cost that is covered by public support. Bars show simulated minimum annual increase in public LTC spending if countries were to implement the No/ Reduced copayment scenarios by 2050. Under the Reduced copayment scenario, out-of-pocket expenses are capped to 60%, 40% and 20% of the LTC cost for older people with low, moderate, and severe needs, respectively (see also Table 1.3 of Chapter 1). Estimates of needs are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). For countries with subnational models, these are applied to national-level survey data to produce the estimates shown.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, *OECD Population Projection* database, *OECD Purchasing Power Parities and exchange rate* database, *UN World Population Prospects*, Global Burden of Disease Collaborative Network, *Global Expected Health Spending 2020-50*, Institute for Health Metrics and Evaluation (IHME), and responses to surveys listed in Annex A.

5.2. Countries will need to consider different options for sustainable funding

Many citizens are concerned about not being able to afford LTC services for themselves and their relatives and support greater spending on LTC services, even if this would mean increasing taxes and social contributions. In 2020, between about 45% and 90% of people reported that they were concerned about not being able to access good-quality LTC, according to the OECD Risks That Matter Survey (OECD, 2023[8]). The growing number of older people and current gaps in social protection mean that a significant share of older people risk being in poverty due to the out-of-pocket costs of LTC. Current evidence suggests that households are already experiencing harsh financial consequences due to LTC costs. In the United States, a survey showed 56% of adults, including older adults, who contributed financially to their

own or another's LTC or acted as a caregiver, had to cut back on spending on food, clothing or other basic household items to be able to afford LTC costs and one-third had trouble paying rent or other utilities (Hamel and Montero, 2023[9]). In addition, around 20-50% of people would be ready to pay an additional 2% of their income in taxes and social contributions to fund more public support for LTC (OECD, 2023[8]).

5.2.1. Ensuring broad-based funding

First, pooling existing funding can be a step towards better funding. LTC systems are sometimes spread out across health and social sectors, and different levels of government, which results sometimes in both overlaps and gaps in access and coverage, and possible cost shifting. Pooling existing funding to one well-defined budget can improve transparency and facilitate the distribution of existing funding in an effective and efficient manner. It would help to reduce unnecessary activities, overuse of services, duplication of effort or cost shifting (Lonsdale et al., 2015[10]).

Second, given population ageing, many countries would need to look for a variety of different options to raise public funds, including introducing a LTC insurance and/or expanding the role of certain taxes and ensuring a broad base for taxation. Currently, only a few countries rely mainly on a LTC insurance (Germany, the Netherlands, Belgium, Luxembourg, Japan, Korea), while the rest relies solely or mostly on tax-based systems or taxes complemented by social contributions.

Tax-funded LTC systems exist across many OECD countries, including the Nordic countries, Austria and Spain. Nordic countries typically have universal coverage under one single programme. The main advantage is that they have a broad tax-base and expenditure is matched to resources. The disadvantages of such systems are fluctuations in the size of the funding base, especially in the face of an economic recession as well as a lack of transparency in the allocation of funds because, most of the time, taxes are not necessarily earmarked to LTC. In addition, countries might use means-testing in tax-based funding to help target scarce formal care, but it may increase stigma, reduce take-up and increase administrative costs.

A LTC system that is purely tax-based can be a challenge as in some countries working-age taxpayers are already overburdened. Across the OECD, the average tax burden a single, average-wage earner faced in the OECD was 34.8% of pre-tax earnings in 2023 due to individual income taxes and payroll taxes (OECD, 2024[11]). In many OECD countries, the pool of workers will decrease along with population ageing and further limit avenues for relying on taxable incomes among the working age population. To counter such a trend, countries would need to implement policies aiming at increasing the working-age population to increase the tax base, for instance by reducing early retirement and promoting the employment of older workers or measures to reduce informality in the economy to broaden the tax base.

To avoid further burden on labour income, countries could consider other sources of taxation beyond personal income taxes. Strengthening the role of recurrent taxes on immovable property, in particular by ensuring that they are levied on regularly updated property values, could be an avenue to raise additional government funds which could be used for LTC. Having a fixed percentage of the VAT tax could be earmarked to increase the tax base of LTC financing. Reducing VAT exemptions in a number of countries could also contribute to raising overall revenues from VAT. France has also explored an original way of financing care for its ageing population: since 2004, the government introduced in the labour law a "solidarity day" in which employees work for free for a day and give their day-worth wage to the state for LTC. In addition, LTC is also funded since a decision in 2020 by levying an additional 0.15 points from the contribution for social security (Contribution Sociale Généralisée – CSG) which is taken from working age revenues but also pensions, wealth and capital gains. Other options of taxes to fund LTC that do not rely on labour income include using health taxes (excise on tobacco and alcohol) or taxes on lottery, as used in Portugal.

Slovenia is an example of country which decided to introduce an insurance-based system for LTC. In July 2023, the regulation of the new LTC insurance was introduced. All persons insured under compulsory healthcare insurance and their family members over the age of 18 have been included in compulsory LTC insurance. As of 1 July 2025, compulsory contributions in the amount of 1% of gross salary will be paid by employers and workers, 2% of the gross pension base by sole traders, and farmers, and 1% of net pension by pensioners. In addition, the state budget will allocate a maximum of EUR 190 million a year for LTC. Public expenditure on LTC is therefore expected to reach 1.40% of GDP in 2026. From 1 January 2028 onwards, the Act also allows for the possibility of introducing co-payments by users up to 10% of the service value if other funds are insufficient. Advantages of a LTC insurance include more transparency in managing the funds and horizontal justice and are important for the public opinion. The transparency is improved because the introduction of a LTC insurance links funds to specific policy.

In Germany, one perceived strength of LTC insurance is its horizontal justice; the services are the same for everyone, independent on the income of the people in need, while the contributions' level increase with the income of contributors. These advantages may make people more willing to pay to insure for unpredictable risks, although a negative public opinion is often the major hurdle for governments to fund more LTC. Financing LTC through an insurance framework is considered an effective way to manage costs and the utilisation of LTC services (Klimaviciute and Pestieau, 2020[12]).

A drawback of a LTC insurance is the reliance on employee's contributions, which can have negative impact on equity and employment. Unless the insurance is extended to the unemployed and the self-employed, it will have a limited tax base, which raises issues regarding equity. For those who are not working, the LTC insurance contribution would still need to be paid from taxes. A LTC public insurance also raises many questions about the amount of premiums to be paid and by whom to limit the possible negative impact on employment and take into consideration intergenerational fairness. A LTC insurance might also have little in-built cost controls. One important element to keep in mind is that the creation of a LTC insurance creates the entitlement that anyone should access LTC, at least up to a certain limit. If demand increases, people are entitled to the services.

5.2.2. Intergenerational sharing and pre-funding

Currently, there are significant intergenerational transfer mechanisms embedded within the current financing of LTC systems in a number of countries. In the Netherlands premiums are collected from everyone with taxable income from age 15 while in Japan contributions start from those aged 40, tilting the balance away from younger people. In Korea, younger people contribute but their eligibility for benefits is restricted which has resulted in a large intergenerational transfer.

At the same time, it is paramount that LTC does not shift too large a financial burden on future generations and that there is intergenerational fiscal equity. This has come to the forefront of policy discussions on LTC financing as a result of the expected reduction in the size of the working-age population compared to the older people. Concerns are often raised with respect to the funding of age-related expenses, such as LTC, by requiring a relatively smaller future generation to pay for a portion of the care of a relatively larger previous generation (that is, on a pay-as-you-go basis).

A common argument is that older people benefit from care and should perhaps contribute more towards its funding. One possibility is extending or increasing contributions for people beyond retirement age, but this could weaken work incentives for those seeking to work beyond retirement age (Bottery et al., 2018[13]). Contributions of retirees might also be limited in a number of OECD countries if pensions are low and might not provide enough additional funding. Another possibility is to determine co-payment levels according to the amount of wealth (including savings and home ownership), which may be an intergenerationally fair policy option than raising more funding from working-age population in countries where older people have significantly more wealth and less income. In 2024, Australia's Aged Care Task Force concluded not to introduce a new tax or levy to fund its LTC system and instead to seek more funding from accumulated

wealth. These recommendations are based on Australia's country context that the distribution of wealth is becoming increasingly skewed towards older people (Aged Care Taskforce, 2024[14]).

Furthermore, pre-funding can smooth the effects of demographic ageing by limiting the amount of debt that will be sustained by future generations, but full pre-funding is currently unexplored in most countries. In Germany, the First Act to Strengthen Long-Term Care (*Estes Pflegestärkungsgesetz*) in 2015 defined that annual amount of 0.1 "contribution rate points" (*Beitragssatzpunkte*), which corresponded to around 1.5 billion euros in 2019, be channelled from the contribution income into the new "long-term care provision fund" (*Pflegevorsorgefond*). The fund is intended to cushion future increases in contributions and secure LTC funding in the long term. It is structured as a special fund of the social LTC insurance scheme and is managed by the German Federal Bank. The funds were supposed to be saved until 2034 and from 2035, a portion of the accumulated capital should then have been used over a period of at least 20 years to mitigate the development of contributions and maintain the level of benefits (Deutscher Bundestag, 2023[15]). However, the annual payment of 1.9 billion euros into the fund has now partially been suspended – the allocation to the LTC provision fund for the years 2024 to 2027 will be reduced to EUR 700 million. The allocation of funds to the LTC provision fund will be suspended for 2023 and is to be made in 12 monthly instalments in 2024 (Deutscher Bundestag, 2023[15]). In Luxembourg, the reserve has to represent at least 10% of the annual LTC insurance expenses. In 2022, the reserve was equivalent to about 45% of annual LTC insurance expenses (CNS, 2024[16]).

5.2.3. Options for partial private financing

Given demographic challenges and limited resources, countries could look into the possibilities of complementing public and private funding and addressing the market failures of private funding to *leverage new financial resources towards LTC, thereby alleviating future potential pressures for governments to increase their support*.

The private sector currently provides only limited options for pooling the risk of high LTC costs. In most countries there are few private insurance options available, and even where they do exist, they remain a niche product covering only a small proportion of total LTC costs (Colombo et al., 2011[3]). As briefly mentioned in Chapter 3, there are a number of possible explanations for the lack of private insurance for LTC. Market failures may be important, such as adverse selection and moral hazard. Adverse selection would translate in only those with high-perceived LTC risk buying in or keeping the insurance policy, while moral hazard would translate in insures using more LTC services that they would have required because they are covered. Insurers face significant uncertainty regarding future costs, setting relatively higher premia or paying lower benefits. Challenges associated with the ability of insurers to control the covered LTC risk might also lead to premium volatility. Low demand for private LTC insurance may highlight that people may also not plan sufficiently due to a myopic view of risk. Voluntary private LTC pooling mechanisms are likely to remain limited to those with high income.

Governments can encourage the take-up of voluntary private LTC to serve as a complement to the existing public LTC pillar. Regulatory intervention and tax incentives can be used to foster broader access to private LTC coverage. Typical tax advantages include deductions or tax credits based on the level of private LTC insurance premium paid. Preferential tax treatment for private LTC insurance exists in the United States, Spain, Mexico or Austria. Preferential tax treatment needs to be considered carefully in terms of its effectiveness to affect demand and equity considerations. Analysis from the United States suggests that the average tax subsidy raises coverage rates by 2.7 percentage points, or 28%, but that this is concentrated among high-income individuals (Goda, 2011[17]). Alternatively, support towards the purchase of a private LTC insurance could be targeted to lower-income individuals thereby compensating for the repressiveness of risk-related premiums. Specific LTC regulations have been implemented in Germany as part of its compulsory private LTC insurance market, which specify that premia and benefits be established in line with those of the social compulsory LTC insurance. Compulsory LTC premia are also limited to

maximum premium paid under the public social LTC insurance system and providers generally cannot exclude or charge extra premia for those with pre-existing conditions.

Group insurance coverage typically takes place in the context of employment and has the advantage of encouraging early subscription into a private LTC insurance plan. Group coverage can provide a number of benefits to enrolees, including the potential ability to negotiate better coverage solutions, as well as lower premia. Group plans may also result in fewer exclusions, based on the spread risks within a large group. For the insurance providers, group insurance mitigates the risk of adverse selection with the potential benefit of reducing the overhead costs associated with underwriting tests. Private insurance in France is employer-sponsored and/or as part of supplementary health insurance. As a result, most of the LTC private insurance in France (75%) is group-based (Doty, Nadash and Racco, 2015[18]). Employer-sponsored plans are relatively inexpensive, coverage may continue even after a change of job in many cases and the insurance offers cash in the event of need, instead of reimbursement of services.

A number of initiatives in terms of mixed insurance products may have the potential to direct additional private resources towards LTC. Some insurance providers offer LTC insurance policies as part of life insurance policies, which tend to have a much larger diffusion. Typically, these provide cash advances in the event that the policy holder requires LTC for an extended period of time, paid out of the death benefit or the accumulated savings build into the policy. This type of life insurance policy is available in a number of OECD countries such as the United States, France, Canada and Australia.

Home equity programmes such as reverse mortgages might provide a solution to tap into household's wealth without having to cash it immediately but are also likely to remain small. In a reverse mortgage, someone can borrow money against the value of their home and receive funds as a lump sum, a fixed monthly payment, or a line of credit. The entire loan balance becomes due and payable when the borrower dies, moves away permanently, or sells the home (Bonnet, Juin and Laferrère, 2019[19]). Contrary to private LTC insurance, reverse mortgages can be purchased at very old age, regardless of the borrower's health status. At the same time, market failures constraint supply due to adverse selection and moral hazard as for private insurance and demand is also constrained due to high non-interest costs and abuse concerns (Martinez-Lacoba, Pardo-Garcia and Escribano-Sotos, 2020[20]).

Reverse mortgages are available in a number of countries such as Canada, France, New Zealand, the United Kingdom, the United States, and under certain conditions in Germany. In the United States, such products are more developed given the relative strict eligibility criteria of public systems and the fact that it has also one of the strongest regulations for the government-insured scheme. The insurance guarantees that the borrower's debt will never exceed the property value and that borrowers will receive regular payments from the loan even if the property loses value or the lender becomes insolvent (Paying for senior care, 2020[21]; Bridge et al., 2009[22]). In the United Kingdom, there is also strong regulation with the Financial Conduct Authority requiring prospective clients to seek independent counselling and the market has grown since 2008 with lower interest rates and more competitors (Knaack, Miller and Stewart, 2020[23]). The reverse mortgage market is still small, despite high elderly homeownership rates and high demand. This small market is concentrated in London, Southeast and Southwest, where house prices are high. This is partly because of the risks faced by suppliers – providers need high house price growth to make profit on reverse mortgages. In other countries, such programmes still seem to be more products of last resort than well-thought purchases as part of a retirement planning or a healthcare plan (Knaack, Miller and Stewart, 2020[23]). Estimates indicate that there are about 4 000 reverse mortgage loans sealed every year in France – a low number (Notre temps, 2015[24]) while it is estimated that 49% of dependent individuals could pay for LTC if they took out reverse mortgages on their main residence (Bonnet, Juin and Laferrère, 2019[19]). A potential policy option to stimulate the use of reverse mortgages would be for the public administration to act as lenders (Roberto Martinez-Lacoba, 2020[25]). For instance, a study of the potential for such products in Croatia suggests that a robust regulatory framework for reverse mortgages will be necessary as well as a strong role for the Croatian Government (Marijana Badun, 2020[26]).

5.3. Countries could also consider universality with better targeting

To ensure the financial sustainability of LTC systems, countries could consider a strategy that combines universality with better targeting of resources. This approach aims to provide universal access to LTC services while focusing support on those who need it most. By improving the targeting of LTC benefits, countries can ensure that limited public resources are allocated more effectively, helping to protect the most vulnerable populations without exacerbating budgetary pressures. This strategy involves assessing the income, wealth, and LTC needs of older people to determine the level of support required. It balances the goals of broad accessibility and financial prudence, potentially reducing the growth of LTC expenditures while ensuring that those with the greatest needs receive adequate support. Such an approach could also mitigate the impact of population ageing on LTC expenditures.

5.3.1. Ensure that those with higher needs get better social protection

One potential solution to improve targeting is considering a progressive "needs-testing" system, where the level of benefits is adjusted according to the level of needs. It ensures that public support relative to the cost of LTC is most generous for individuals with severe needs and least generous for those with low needs. This approach allows countries to protect the most vulnerable group (older people with severe needs), who are most likely to face the highest care costs, while limiting LTC expenditures by lowering support for those with low needs. As seen in Chapter 3, all countries currently have some differentiation of the level of benefits depending on needs since public support tends to be greater for severe needs. However, countries vary in this differentiation, and, for some, differences are small, while in others there is a steep differentiation and people with low needs do not receive any public support.

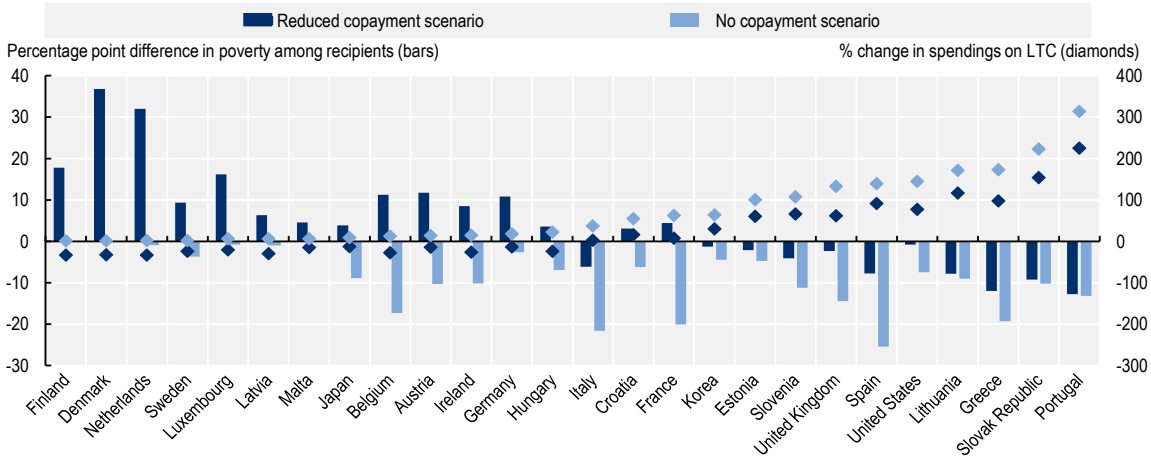
In some analysed countries, progressive targeting of public support based on people's LTC needs is less costly compared to the No copayment scenario with almost no difference in the impact on poverty levels. Figure 5.3 compares the impact of the Reduced and No copayment scenarios on public LTC spending and the poverty rate among recipients. In the Reduced copayment scenario, countries use needs-testing to reduce LTC spending by capping out-of-pocket expenses to 60%, 40%, and 20% of the cost for older people with low, moderate, and severe needs, respectively.

According to these assumptions, in countries like Latvia, Malta and Hungary, where LTC costs are lower, introducing needs-testing would reduce LTC spending without significantly increasing the poverty risk among recipients. In Italy, needs-testing marginally increases LTC expenditures while reducing poverty among care recipients, making it an attractive alternative. In countries like Lithuania, the Slovak Republic, and Portugal, introducing needs-testing leads to a smaller increase in LTC expenditure than under the No copayment scenario, while achieving similar reductions in poverty risk.

Other countries need to weigh in the potential pros and cons of a more progressive needs-testing system in terms of trade-offs between expenditures and poverty reduction. In countries with relatively generous LTC systems, such as Finland, Denmark, the Netherlands, Sweden and Luxembourg, implementing a progressive needs-testing system can reduce LTC expenditures by 20%-30%. However, this also significantly increases the risk of poverty among care recipients (Reduced copayment scenario). In countries like Japan, Belgium, Austria, Ireland and Germany, implementing a No copayment scenario would result in a moderate increase in LTC expenditures (14% on average) while achieving substantial gains in poverty reduction among LTC recipients (9 percentage points on average). Conversely, the introduction of needs-testing can lead to savings in LTC expenditures but also increases poverty, making it a less attractive alternative compared to the No copayment scenario, although it may still be worth considering during periods of fiscal austerity. Finally, in countries like Spain and Greece, where the LTC system is not very generous, both scenarios result in significant increases in LTC expenditures (70% and over), with associated proportional reductions in poverty among care recipients.

Figure 5.3. Change in public LTC spending and poverty rates among care recipients under the Reduced and No copayment scenarios

Simulated difference compared from the current public LTC expenditure



Note: Dots show the simulated minimum increase in public LTC spending if countries were to implement the Reduced and No copayment scenarios. Bars show the simulated change in the poverty rate among recipients in comparison to the current level of public LTC expenditure. Under the Reduced copayment, out-of-pocket expenses are capped at 60%, 40% and 20% of the LTC cost of older people with low, moderate, and severe needs, respectively (see also Table 1.3 of Chapter 1). Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. The poverty level is equal to 50% of country median income.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, *OECD Population Projection* database, *OECD Purchasing Power Parities and exchange rate* database and responses to responses to surveys listed in Annex A.

5.3.2. Improve the progressivity of means-testing

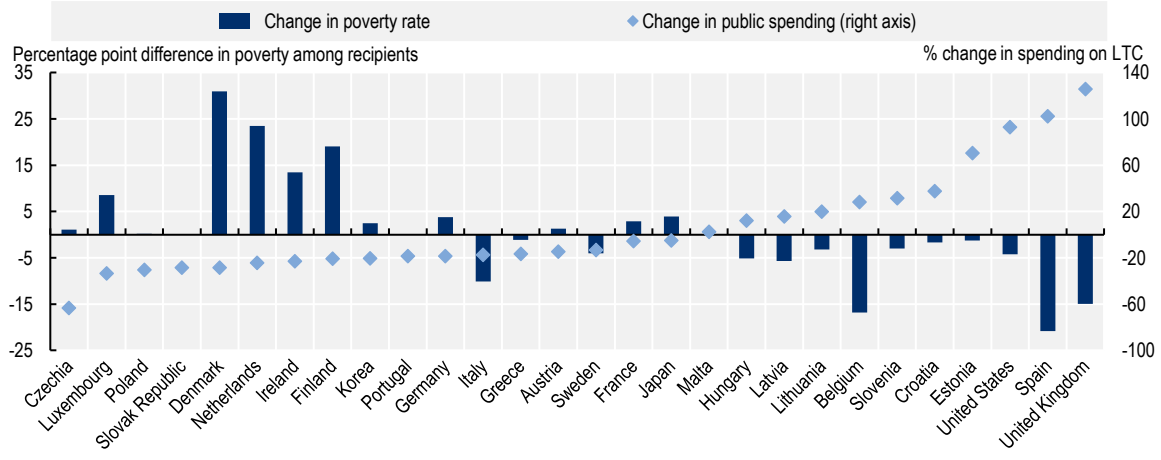
To enhance targeting, countries might consider introducing more progressive income-testing systems without necessarily compromising the accessibility of LTC. Currently, 28 out of 32 countries and subnational areas covered in this report have some form of income-testing. Among them, seven countries have systems that are smoothly progressive along the income distribution (see Chapter 3 for a detailed discussion). This progressive approach ensures that as older persons cross certain income thresholds, they do not immediately face significantly higher out-of-pocket expenses. In the remaining countries, thresholds are abrupt but differ greatly in the income level where they are set. In countries like Croatia and Estonia, thresholds are set low as they are seen as part of the social assistance services focused on supporting the most vulnerable groups. This approach helps limiting public LTC expenditures. In countries like Israel and Finland, thresholds are set at very high-income levels, aiming at providing relatively comprehensive, generous support to nearly all older people, regardless of their income. Contrary to the other two countries, this tends to push expenditures at a relatively higher level.

Figure 5.4 presents the simulation of a scenario where countries introduce a smooth and progressive income-testing system while maintaining current maximum support and coverage (Income-testing scenario). In this scenario, the system is designed to protect the most vulnerable older people with LTC needs: those with incomes below the poverty line receive the maximum public support granted under the Ageing scenario. The second goal of the proposed progressive Income-testing scenario is to limit public LTC expenditures. To achieve this, public support for LTC gradually decreases (following an inverse-quadratic function), from maximum support for individuals with incomes at the poverty level to zero support for those with incomes above the 80th percentile of the disposable income distribution for older people.

Introducing the Income-testing scenario brings advantages to the majority of countries, but the magnitude of the impact varies significantly. In a first group of countries (Italy, Greece and Sweden), it brings a dual advantage as it results in lower spending on LTC (16% on average) and reduced poverty among care recipients (by 5 percentage points on average). In a second group of countries (including Czechia and Austria) more progressive cost-sharing does not significantly change poverty rates among recipients but still reduces LTC spending (30% on average). This opens opportunities to increase the maximum support and decrease poverty rates among care recipients. In a third group of countries (such as Spain and England), poverty among recipients would decrease significantly, but it would come with an increase in public spending, although such increase in expenditure would still be much lower than in the No copayment scenario. Finally, the Income-testing scenario would increase poverty among LTC recipients in those countries with high support and high cost of LTC, like Denmark and the Netherlands, albeit with a reduction in spending.

Figure 5.4. Changes in poverty rates and government spending under the Income-testing scenario

Simulated difference compared from the current public LTC expenditure



Note: Dots show the simulated minimum increase in LTC spending if countries were to implement the Income-testing scenario. Bars show the simulated change in the poverty rate among recipients in comparison to the current level of public LTC expenditure. Under the Income-testing scenario, public support is equal to the cost of LTC for older people below the country poverty line, and then gradually decreases along the invers-quadratic function, until it reaches 0 for older people with income higher than upper boundary of the 80th percentile (see also Table 1.3 of Chapter 1). Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). For countries with subnational models, these are applied to national-level survey data to produce the estimates shown. The poverty level is equal to 50% of country median income.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, *OECD Population. Projection* database, *OECD Purchasing Power Parities and exchange rate* database and responses to responses to surveys listed in Annex A.

5.3.3. Enhance the effectiveness of wealth-testing

More than half of the analysed countries and regions use some form of wealth-testing to determine eligibility for LTC support, primarily in institutional settings. Linking public support for LTC to an individual's wealth is meant to help mitigate potential sources of inequality and to enhance the equity of the LTC system. While income, as measured for tax purposes, often determines eligibility for public assistance, it is an imperfect measure of the total resources available to older adults who may have acquired wealth throughout their lifetime. Many older individuals have a disproportionately higher share of income from capital and investments in total disposable income compared to the working population (10% vs. 4.5%[1]) (Woolley, 2023[27]). Additionally, some capital gains do not count towards taxable income, thereby not affecting declared taxable income.

At the same time, introducing wealth-testing with low thresholds may lead to unintended consequences, such as strategic behaviour by older individuals to fall below the threshold. To address this, countries have implemented preventive measures. For instance, in the United States, in 2016, the Deficit Reduction Act of 2005 was signed into law, extending the look-back period on wealth transfers to five years and shifting the penalty period from the time of improper transfer to the time of Medicaid application. This measure resulted in an 11% reduction in transfers to children and a decrease of USD 4 860 in the average total amount of transfers before application (Liu and Mukherjee, 2020[28]). Similarly, New Zealand has implemented a five-year look-back period for wealth flows, with exceptions for gifting wealth in recognition of care (Ministry of Social Development, 2024[29]). An alternative approach is to make an assumption on capital gains based on a given amount of wealth, as is already done in Flanders (Belgium) and the Netherlands, so that the distortionary effect of setting a certain threshold can be avoided. These approaches help to mitigate the risk of strategic behaviour and ensure that wealth-testing effectively targets those most in need of LTC support.

Countries might consider introducing progressive wealth-testing to better target the most vulnerable older people with needs and to discourage strategic behaviour around wealth thresholds. For example, Spain has implemented a system where 5% of the value of wealth (excluding the primary residence) is added to the income to determine the level of public support for LTC. Similarly, in England, support for older people with severe needs decreases gradually between a wealth of GBP 14 250 and GBP 23 500. These progressive approaches aim to ensure that public resources are allocated more equitably and that individuals do not decrease their wealth through bequests or intentionally reduce their savings accumulation to gain undue advantage.

5.4. Countries should seek to promote efficiency

Enhancing the efficiency of LTC systems is crucial for managing the anticipated rise in expenditures due to ageing populations and increasing expectations regarding LTC quality and availability. To achieve this, countries might implement strategies that promote preventive policies and healthy ageing, thereby reducing the incidence and severity of care needs among older people. Additionally, increasing labour productivity in the LTC sector through better use of human resources and innovative care approaches can significantly limit spending growth. Supporting more people-centred settings for older people ensures that care is delivered in a more effective and satisfactory manner. Moreover, introducing sustainable pricing of LTC services is essential to keep costs manageable for both individuals and public finances. A combined focus on these strategies will help mitigate financial pressures on public LTC systems, ensuring they remain sustainable and effective in meeting future demands.

5.4.1. Healthy ageing and higher labour productivity might reduce the increase in public LTC expenditures

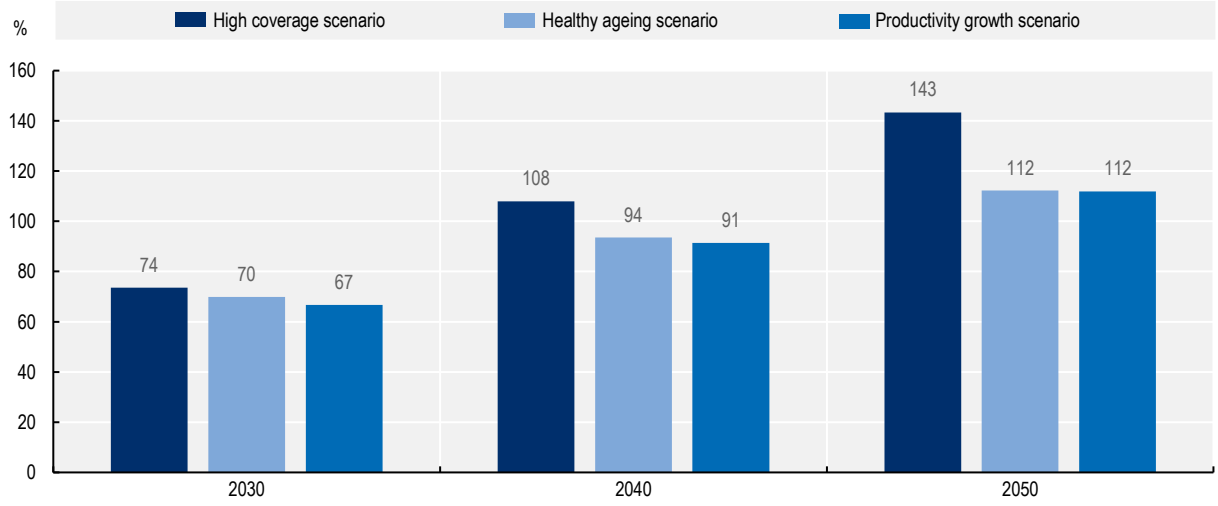
Promoting healthy ageing can significantly reduce the predicted growth in public LTC expenditures (see Figure 5.5). With life expectancy set to increase in all OECD countries by 2050 (United Nations, 2022[30]), prevention policies can help ensure that older people live these additional years in good health. To simulate this, the Healthy ageing scenario in this report assumes that the share of people with low, moderate, and severe needs remains constant. This scenario leads to a 4 percentage points lower growth in public LTC expenditures in 2030, 14 percentage points in 2040, and 31 percentage point in 2050. These substantial reductions demonstrate that promoting preventive policies can be an efficient tool to decrease the expected future financial burden on the LTC system.

Increasing labour productivity in the LTC sector can also reduce the predicted growth in public LTC expenditures (see Figure 5.5, Productivity growth scenario). The average labour productivity growth in the OECD from 2001 to 2020 is around 1% (OECD, 2021[31]). Given that productivity gains in the LTC sector

have historically been smaller, often close to 0 or slightly negative, the productivity scenario assumes that if countries implement the actions discussed in Section 5.4.4, they will achieve an average productivity growth rate equal to half of the yearly productivity growth for the total economy. Consequently, the predicted public LTC expenditures would be 7 percentage points lower by 2030, 17 percentage points lower by 2040, and 31 percentage points lower by 2050. These reductions are similar to those in the Healthy ageing scenario, highlighting the importance of introducing changes in the organisation of the LTC system to achieve significant cost savings and efficiency improvements.

Figure 5.5. Simulated changes in government spending for LTC under the Healthy ageing and Productivity growth scenarios

Change in the sum of all financial protection for LTC for older people who receive public social protection for LTC from 2022



Note: Bars show change in the sum of the simulated LTC spending across 28 countries from 2022. For the description of each scenario, see also Table 1.3 of Chapter 1. Coverage refers to the share of people with needs that receives public support for LTC. Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). For countries with subnational models, these are applied to national-level survey data to produce the estimates shown.
Source: OECD analyses based on the Long-Term Care Social Protection questionnaire, *OECD Population Projection* database, *OECD Purchasing Power Parities and exchange rate* database, *UN World Population Prospects*, Global Burden of Disease Collaborative Network, *Global Expected Health Spending 2020-50*, Institute for Health Metrics and Evaluation (IHME), and responses to responses to surveys listed in Annex A.

5.4.2. Promoting preventive policies and healthy ageing

The most obvious way to reduce cost in LTC systems would be to reduce potential dependency in later life through lifelong health promotion. As more people live longer, complex health and care needs become much more common, particularly among the oldest people. LTC systems need to move towards a model of care that is more tailored, person-centred, and better integrated with the rest of healthcare (OECD, forthcoming[32]). The lack of co-ordination between LTC and health systems increases the risk of unnecessary hospitalisation, long hospital stays and readmissions. For example, a study of six areas of England, the United Kingdom, found that care home residents experienced 0.78 emergency admissions each per year on average, compared with around 0.11 for England as a whole (although the areas were not representative of England overall). Even though residents have higher needs, the authors estimated that 40% of admissions from care homes were for conditions that could potentially be managed outside

the hospital setting or avoided altogether – such as pneumonia or urinary tract infections (Steventon et al., 2018[33]; Lloyd et al., 2017[34]).

A number of OECD countries have well-developed preventive systems that can contribute to improving quality of life and have shown to be cost-efficient. Australia, Denmark, Latvia and Norway have introduced dedicated home visits schemes for individuals aged 75 and older, and Norway for people aged 75 or 80 and above. In Denmark, municipalities provide preventive services, including preventive home visits and activities. Everyone aged over 75 years must be offered a home visit. The offer is also extended to people aged 65-75 years who are in a special risk group, including widows, people who live in a secluded area and those recently discharged from hospital. Finally, those aged 80 years and over are offered a visit every year. Municipalities can organise group visits for those who usually decline home visits. Municipalities also carry out preventive activities of varying scope and type (such as workshops, education, talks and physical activity) (Kvist, 2018[35]).

Home visits in Denmark, Finland, Norway and Sweden were found to be cost-effective (Kronborg et al., 2006[36]; Liimatta et al., 2019[37]; Sahlen et al., 2008[38]). For instance, the introduction of the "Preventive Home Visits" scheme in Norway was found to reduce admissions to LTC facilities by 7%, hospital admissions among those aged 80 and above by the same rate, the average number of hospital days by 11%, and mortality of those aged 80 and above by 4% (Bannenberg et al., 2021[39]).Preventive home visits to older people in Denmark, mainly by district nurses, are another example of good practice. A three-year prospective randomised controlled follow-up study showed that training of home visitors was associated with improved functional ability of older people (Hendriksen and Vass, 2005[40]).

A few countries – including France, Germany and the United Kingdom – have policies in place to guide health and care workers on how to help older adults live longer and healthier lives. These usually take the form of prevention measures as part of LTC policies or plans. For instance, in Germany, the 2015 Prevention Act introduced a new benefit for nursing care funds for prevention and health promotion in inpatient care institutions. The health insurance scheme has developed a guideline with health-promoting offers for this target group. It defines nutrition, physical activity, strengthening of cognitive resources, psychosocial health and violence prevention as necessary fields of action. In the United Kingdom, the NHS LTC Plan outlines interventions to help cut smoking and obesity and to double enrolment in type 2 diabetes prevention programmes.

The Active and Healthy Ageing Action Plan 2023-26 in Portugal focuses on promoting healthy ageing by addressing key areas such as health and well-being, autonomy, lifelong learning, and social participation. The plan emphasises preventive health measures and also supports independent living through initiatives like collaborative housing and home adaptations. Additionally, the plan promotes lifelong learning, with a focus on digital literacy, and encourages older adults' active participation in society through volunteer work and civic engagement.

Japan has developed an integrated community care system that emphasises preventive care and activities to promote longer healthy life expectancy. Since 2005, the Japanese Government has opened community-centres in every district. The centres are responsible for implementation of preventive care services, outreach and counselling for elderly people in need of care through the use of community health resources networks, and continuous and comprehensive care management support that includes supervision of "care managers" responsible for planning care services provided under LTC insurance (Hatano et al., 2017[41]). The government supports proactive efforts to organise exercise classes and community cafés to increase social participation and reduce isolation. Efforts to promote self-management are also increasing. From 2025, the government is making further extensions to this initiative with the with the establishment of the community-based integrated care system with the purpose of comprehensively ensuring the provision of healthcare, nursing care, preventive care, housing and livelihood support.

Countries can also strengthen LTC workers' role in health promotion and disability limitation for older people by establishing national prevention policies that guide LTC workers on how to help older people

stay healthy for longer, strengthen professional skills at the primary care level to keep elderly people out of institutions and improve geriatric knowledge among health and social workers working in the community.

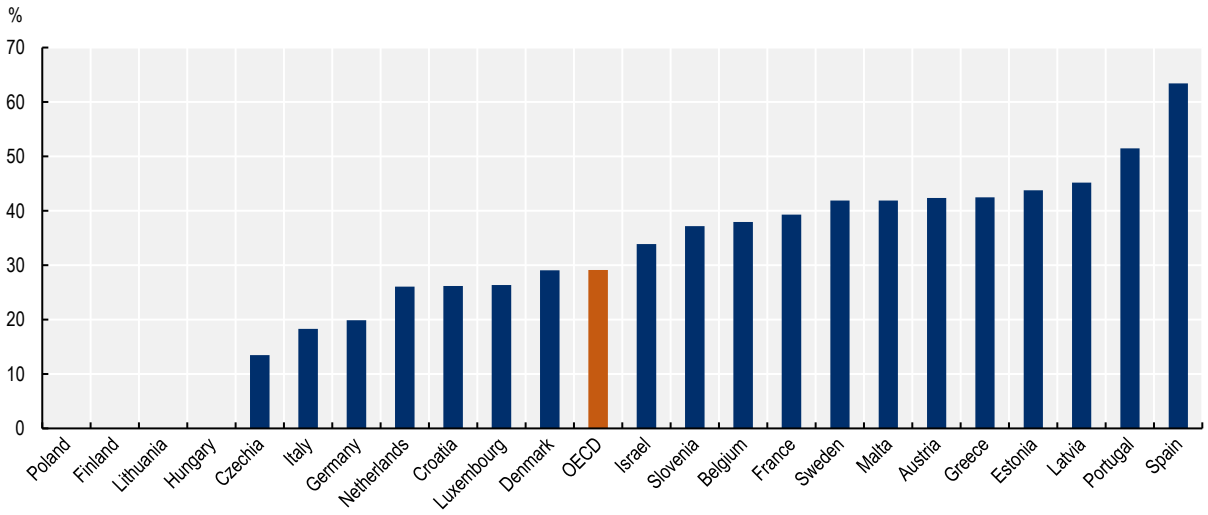
In addition, New Zealand, Australia, Japan, the United States, and some European countries have introduced reablement or rehabilitation services for older people which also have potential to be cost-effective (Chen et al., 2022[42]). For instance, Danish municipalities have to offer a rehabilitation programme prior to assessing the need for home care. The programme is short and intensive (4-10 weeks) and comprises one or more of the following elements: training in everyday activities (personal care), physical training, assistive devices and adaptation of the home (Kvist, 2018[35]). In 2018, 4.3% of people aged 65 years and over received rehabilitation services instead of – or alongside – home help (Rostgaard, 2021[43]). Danish evidence suggests improvement in functional ability, better evaluation of working conditions and motivation among staff. Local reports indicate good user outcomes, and some studies show a lower use of home care (Rostgaard, 2024[44]). The probability of receiving home care for frail people aged 67-87 years decreased from over 35% to about 25% (Rostgaard, 2021[43]). A modelling study in England suggest a very high probability of cost-minimisation thanks to reablement (Bauer et al., 2019[45]). More generally, a body of evidence shows that many specific rehabilitation programmes (e.g. for stroke) are cost-effective (Allen et al., 2018[46]).

5.4.3. Supporting more people-centred settings for older people

Older people across OECD countries prefer to age at home and in their community. According to evidence from the US, 77% of adults 50 and above wish to age at home (Binette and Farago, 2021[47]). While this might be preferable in terms of quality of life and well-being, in some cases, it might also be a more cost-effective option than institutional care, depending on the system. Between 2011 and 2021, the proportion of LTC recipients who received care at home increased slightly, from 67% to 69%. Increases were particularly large in Australia, Switzerland, Finland, Korea and Germany. While the proportion of LTC recipients living at home has increased over the past decade in most OECD countries, it has declined significantly in Estonia and, Lithuania. Making greater use of home-based, rather than residential, care may help to reduce per capita costs, although this is not clear cut, depending on the country. Chapter 3 shows that in a range of countries home-based care may involve higher costs for individuals with severe needs.

At the same time, reducing the share of older people with low and moderate needs residing in institutions could significantly lower LTC costs, as institutional care for these cases is generally more expensive than home care. On average, only 29% of older people in institutional care in OECD countries have severe needs (see Figure 5.6). In countries such as Poland, Finland, Lithuania and Hungary, this share is notably low, close to zero, while it exceeds 50% in Portugal and Spain. This indicates a substantial opportunity to promote home care, particularly for individuals with moderate and low needs. Home care for individuals with low and moderate needs is not only more cost-effective but also preferred by care recipients.

Figure 5.6. Share of people with severe needs among institutional care recipients



Note: Estimates are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates (see Annex A). The figure includes an unweighted OECD average. Survey data for England, Ireland, Japan, Korea, the Slovak Republic and the United States does not cover people living in the institution.
Source: OECD analysis based on responses to surveys listed in Annex A.

Some countries have actively promoted the use of home care to incentivise ageing in place. The United States has various authorities under which states may cover home and community-based services (HCBS) under Medicaid. States have flexibility to tailor coverage of HCBS in their Medicaid programmes through the use of Medicaid state plan options, waivers (e.g. 1 915(c) HCBS waivers), and demonstrations (e.g. 1 115 demonstrations). For example, under the "*Community First Choice Option*", states providing supports and services for home carers can receive higher federal funding. In addition, the United States has programmes, such as the "*Money Follows the Person*" Program, that provide states with support for transitioning individuals from institutions to the community.

In addition to promoting ageing in place, providing care in a broader range of settings could provide scope to manage down costs as demand increases. Countries are developing a number of innovative living arrangements which include small-scale living, the Green House model, shared housing arrangements, green care farms, dementia villages, group homes, intergenerational living (Brouwers et al., 2023[48]). Such innovative models of living aim to create a small-scale and/or homelike environment and overcoming the shortcomings of nursing homes in terms of being impersonal. One of the underlying ideas is that the physical, social, and organisational environment of living arrangements are important for achieving positive outcomes for residents. In addition, such living arrangements also have the goal of supporting autonomy, potentially delaying greater care needs, and improving quality of life for older people (OECD, forthcoming[32]).

The Green House model was introduced in the early 2000s in the United States with the goal of a more person-centred approach and has proved successful at identifying clinical changes of residents and improving their mental well-being. Green House model facilities are a small-scale design with private rooms, an open kitchen, and shared dining and outdoor space, where staff have more direct engagement with residents and promote independence. Adoption of Green House models is also associated with some partly reduction in spending from Medicare in terms of hospital costs and stays in skilled nursing facilities (the THRIVE Research Collaborative, 2016[49]). In addition, several studies reported improve quality outcomes for residents of Green House facilities which are likely to impact overall costs and staff monitoring: residents in Green House facilities had a lower fall rate, lower risk of pressure ulcers (1.9%) and using catheters (Williams and Joshi, 2023[50]).

In recent years, there is more discussion about promoting housing arrangements for older people which can promote a more efficient use of housing and also bring in other benefits to older people in terms of possibly delaying needs and costs. One option is a house sharing arrangement, often also named intergenerational housing. In such arrangement, an older person who needs a small amount of help to live independently in their own home is matched with someone who has a housing need and can provide support and companionship. Some EU countries has developed this option, such as Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Spain, Sweden and the United Kingdom. The United Kingdom might have the most advanced house sharing system (Homeshare International, 2020[51]).

In the United Kingdom, some associations offer to facilitate house sharing arrangements. For example, with the HomeShare association, the agreement implies that the older person provides a room and shared facilities rent-free to a home sharer, who, in return, provides 10 hours a week of help around the home. A home sharer does not provide personal care to the older person, such as bathing, medication administration, lifting and feeding but help with so-called instrumental activities of daily living like grocery shopping, cooking, cleaning. Both pay a fee to the association while the association links them with a network which offers advices and support to make house sharing safer and more widely accessible (HomeshareUK, 2020[52]).

A number of such living arrangements have proved to be particularly suitable for people with dementia. In 2021, across the OECD, an estimated 21 million people had dementia (OECD, 2023[1]). Population ageing will likely lead to an increase of people with dementia and could reach almost 32 million by 2040, a 50%-increase. The increase in dementia will put financial pressure on health systems, societies and individuals. In 2019, the global burden of dementia was estimated to amount to USD 972.3 billion in high-income countries (Wimo et al., 2023[53]). Promising results were found on the physical functioning, social participation, and quality of life for older adults living in small scale home-like facilities compared to those living in conventional nursing homes (Krier et al., 2023[54]). People with dementia displayed less aggressive behaviour in such settings and there was a lower use of antipsychotics which can have a significant impact on care costs (Verbeek et al., 2014[55]). Dementia villages and promoting people with dementia to live at home and at the community are important elements of a people centred approach. A study of an innovative dementia-friendly support in the community in Ireland showed that personalised care in the community resulted in lower costs than using residential care (O'Shea and Monaghan, 2016[56]).

5.4.4. Increasing labour productivity in the LTC sector

Another path to increasing the efficiency of LTC systems is by enhancing labour productivity within the sector. Currently, the LTC sector is highly labour-intensive. Many LTC services involve direct, hands-on care that cannot be easily automated or replaced by technology. Tasks such as bathing, feeding, and mobility assistance require a human touch and personal interaction, which limits potential productivity gains. Overcoming this limitation is crucial for increasing labour productivity in the LTC sector. Over the past decade, average labour productivity in the LTC sector across OECD countries has slightly declined, whereas the total economy experienced an annual growth rate of 1.5% (OECD, 2023[57]).

Decreasing the LTC workforce turnover

The LTC workforce is often underpaid and works in inadequate conditions (OECD, 2020[4]). Increasing basic pay to more competitive levels is a straightforward way to address these issues. Although this may initially raise the already high costs of LTC, lower turnover can lead to substantial savings, such as reduced recruitment and training costs, and higher productivity. The higher productivity stems from several factors, including improved job satisfaction, which enhances morale and motivation among staff; increased continuity of care, allowing caregivers to build stronger relationships with care recipients; and enhanced skills and experience, as caregivers accumulate more knowledge and proficiency, improving the quality and efficiency of care provided. These gains could potentially offset most, if not all, of the increased pay costs (Weller et al., 2020[58]).

Increasing training for LTC workforce

Previous OECD work has highlighted that LTC workforce is often inadequately trained while highlighting promising initiatives to provide more training associated with task delegation (OECD, 2020[4]). In home-based settings, delegating tasks such as medication administration (e.g. pills, eye drops) from nurses to personal care workers can enhance efficiency by reducing unnecessary travel time and allowing more time and effort to be dedicated to caring for elderly individuals with complex needs. The Enhanced Home Care pilot programme in California demonstrated that additional training for personal care workers in areas such as medication management, mental health, and nutrition resulted in lower medication non-compliance rates and improved health outcomes (Osterman, 2017[59]). Similarly, evidence from Australia suggests that appropriately trained and supervised care workers can assist nurses with medicine management in home care settings, particularly for those at low risk of adverse medication errors (Lee et al., 2015[60]). Additionally, Portugal's Active Ageing Competence Centre offers free training for both formal and informal caregivers, further underscoring the value of enhanced training. These findings highlight the potential benefits of better training in improving the efficiency of LTC services.

New technologies to boost productivity in the LTC sector

New technologies, especially robotic technologies and artificial intelligence (AI), offer substantial potential to alleviate the burden on LTC workers rather than replacing them (OECD, 2023[57]). These innovations can significantly reduce the strain of demanding tasks, allowing LTC workers to focus more on providing effective care. For instance, digital technologies such as sensors and tablets can streamline administrative tasks, co-ordination, monitoring, and transport, thereby maximising the time workers can spend on direct caregiving.

Moreover, new technologies could improve the conditions of care recipients and prevent additional interventions by caregivers. For example, in Denmark, a digital training tool for physical activities at home (called "DigiRehab") contributed to not only efficiently monitoring care recipients' physical ability but also reducing their needs of home care (Healthcare Denmark, 2019[61]). Similarly, in Finland, the telecare scheme called "Remote Care" helped LTC workers reduce travel time (OECD, 2023[57]). As the prices of advanced equipment like robots decrease, augmenting productivity with these new technologies to reduce LTC workers' strain should be prioritised.

Furthermore, AI-enhanced tools can facilitate independent living for older people, reducing the need for constant supervision and enabling LTC workers to manage their time more efficiently (Loveys et al., 2022[62]). For instance, AI technologies can be also employed to alleviate the burden of both formal and informal carers by managing medication regimens and systematically monitoring and recording health status of care recipients (Eurocarers, 2024[63]). Efficiency gains from these tools can be considerable, given that LTC workers tend to spend a significant amount of time on administrative tasks (NHS, 2019[64]). In Japan, for example, AI software is increasingly accepted to help LTC workers smoothly optimise travel plans to receive and drop off users for daycare and short-term institutional care. Additionally, the usage of AI is also considered or already implemented to avoid preventable harms in LTC settings. In particular, safety failures are widespread and research shows that more than 40% of hospital admissions due to falls in the LTC set-up are avoidable (de Bienassis, Llena-Nozal and Klazinga, 2020[65]). There is a case like Japan where the AI detection of falls helped reduce the burden of monitoring by LTC workers (OECD, 2023[57]). However, the overall evidence surrounding the effectiveness of AI (e.g. wearables) on avoiding falls is inconclusive at present and further development is to be expected (O'Connor et al., 2022[66]).

Notwithstanding the potential of these new technologies, investment in new technologies within the LTC sector remains limited. On average, IT investments in LTC across 12 OECD countries account for only 0-3% during the period of 2014 to 2018 (OECD, 2023[57]). The high cost of advanced technologies, such as robots, is a significant barrier, with only 1% of LTC providers in Japan and the United Kingdom currently

utilising them. Moreover, while cheaper technologies are being adopted more frequently, their implementation is hindered by concerns over privacy and data security, as well as a lack of awareness among LTC providers about available technologies. Additionally, the digital skills of LTC workers are often insufficient to effectively operate these new tools, further limiting their adoption.

For the successful integration of new technologies in LTC, several challenges must be addressed. Improving the digital skills of both LTC workers and older people is essential to ensure effective use of these technologies. Also, while AI-enhanced interventions show promise, more high-quality trials are needed to establish their effectiveness and support widespread implementation. In Japan, the Prefectural Conference for the Innovation of LTC Scenes and the Consultation Centre for Improving the Productivity of LTC are actively involved in the planning of digital skills training programmes for LTC workers and supporting care providers in introducing new technologies (MHLW, 2024[67]). By tackling these challenges, the LTC sector can better harness the potential of new technologies to enhance productivity and improve care outcomes.

5.4.5. Introducing sustainable pricing of LTC services

Prices have been used to respect the overall budget and redistribute resources for LTC among various providers. In the Netherlands, the national government sets a macro budget for all care financed through social LTC insurance for the coming year based using forecasting accounting for changes in wages, prices, demographics, and policies (Bakx, Schut and Wouterse, 2020[68]). The macro budget is then divided across the regional purchasing offices. The allocation of funds across regions is currently based on past trends. The regional purchasing office responsible for the procurement of care within their region comply with the lump-sum regional budget set by the government. This implies that regional purchasing offices must adjust prices and/or volume of the contracted care to fit the regional budget restrictions.

Spain relies on tariffs, rather than maximum prices, and co-payments decided at the regional level, within a national binding framework. In Spain, the regional Health Departments contract with both public and private providers in terms of number of services, quality and cost. In the case of public providers, the system is based on a contractual relationship between the financing body and the healthcare provider (Milstein, Mueller and Lorenzoni, 2021[69]). The central government sets the basic legislation that is common to all regions based on the recommendations from the Territorial Council. This includes minimum criteria for benefits and also reference costs of services. In many cases, tariffs and reference costs are static and based on historical values. The regions are free to set their own prices, but they have to finance the difference in case of higher costs.

Germany and France rely on a point system to set prices and to control spending. In Germany, each service has a number of points, which have a base value. Services are translated into points depending on the time intensity of the services provided and/or their complexity. Prices are negotiated individually on a regional or state level between a care setting, welfare organisations and LTC funds, whose enrolees contribute at least 5% of the residential home days (*Pflegesatzverhandlungen*) (Milstein, Mueller and Lorenzoni, 2021[69]). Residential homes can apply for negotiations on their care charges whenever they deem it necessary. Negotiations on care charges are limited to six weeks. If the parties fail to reach an agreement, an arbitration board decides. This board is composed of representatives of the LTCI funds (both public and private) and the residential home on equal terms, a nonpartisan chair and two non-partisan members. If they fail to reach an agreement, the State Ministry of Health makes the decision (Milstein, Mueller and Lorenzoni, 2021[69]). In France, the pricing method for nursing homes also use a point system for the medical care: the pricing method of care institutions is composed of the medical care package, the dependency care package and the accommodation fee (Or and Penneau, 2021[70]). The payment is calculated according to the average level of dependency for residents of the facility and the value of the departmental dependency level point fixed by the local council.

An interesting new development is the idea to link payments to quality and efficiency in so-called pay-for-performance schemes (P4P) but evidence so far on the potential impact of pay-for-performance and whether this can be cost-effective is mixed. In the United States, there has been experimentation with such P4P and several states adopted Medicaid-sponsored P4P programmes in nursing homes since the early 2000s. A study found, however, that although quality improved for three of the nine measures examined (use of physical restraints, pain control, and pressure sores), nursing home quality did not consistently improve in any of the states that implemented P4P. Likely, the incentives may have been too small to effectively motivate changes in performance (Werner, Konetzka and Polsky, 2013[71]). Similarly results from Japan were mixed with no evidence that P4P affects LTC outcomes and expenditures although, after P4P, care managers referred users whose care levels were more likely to improve to affiliated providers (Iizuka, Noguchi and Sugawara, 2017[72]).

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Notes

[1] Own calculations for year 2018 based on *OECD Income Distribution Database*.

Annex A. Data sources and methodology

Stylised cases of needs to enable cross-country comparisons

There is no internationally agreed-upon needs assessment for older people requiring long-term care (LTC). To facilitate meaningful national and international comparisons of the level of financial protection provided by LTC systems, a set of typical cases of LTC needs was developed. These typical cases address the challenge of comparing generosity and affordability using administrative data, as differences in eligibility, coverage and generosity can confound such comparisons. This approach allows for the determination of the level of public support in different countries for a defined level of LTC needs. The term "public support" is used throughout the report and refers to the public social protection – in-kind or in cash – that individuals receive to help them cover the cost of the LTC they need. Differences between countries and regions can then be identified, analysed and form the basis for policy recommendations.

The typical cases describe several fictional older persons in terms of the types and severity of their LTC needs, and the professional services they would require (Muir, 2017[1]). The cases are based on the number of hours needed for assistance with ADLs, IADLs, and social activities (see Oliveira Hashiguchi and Llena-Nozal (2020[2]) for detailed descriptions). The typical cases are categorised into three different levels of severity of needs (low, moderate, and severe) and different ways in which these needs can be met (professional home care, informal home care, institutional care and combinations). A total of eight cases are presented in Table A.1. Some countries offer support for individuals with severe needs that encompass 24-hour care, a more generous scenario than the severe cases modelled in this exercise. The OECD has collaborated with countries and subnational areas to map their needs assessments to the different typical cases. This process involved providing detailed descriptions of the abilities and limitations of the person in question, the services they require, and any other relevant assumptions.

Table A.1. Typical cases of long-term care needs defined for this report

Typical case	Needs	How needs are met
Typical case 1	Low	6.5 hours of professional home care per week
Typical case 2	Moderate	22.5 hours of professional home care per week
Typical case 4a	Moderate	22.5 hours of informal care (spouse) per week
Typical case 4b	Moderate	22.5 hours of mixed professional/informal care (spouse) per week
Typical case 4c	Moderate	22.5 hours of informal care (adult child) per week
Typical case 4d	Moderate	22.5 hours of mixed professional/informal care (adult child) per week
Typical case 3	Severe	41.25 hours of professional home care per week
Typical case 5	Severe	41.25 hours of institutional care

Microdata used in this report

The developed models of the social protection systems in each country codify the rules that determine the levels and eligibility for social protection for LTC. These models are used to determine the cost of LTC, the generosity of public social protection systems, and the effects of public social protection on people's out-of-pocket costs and poverty among LTC recipients. An important assumption is that people seek care from

the modelled social protection system. The models can also estimate total government spending at different levels of coverage. Analyses can focus on any subgroup of interest (e.g. women, economically vulnerable, asset-poor), depending on the availability of survey responses. The analysis covers OECD countries, including Austria (Vienna), Belgium (Flanders), Canada (Ontario), Croatia, Czechia, Denmark, Estonia (Tallinn), Finland, France, Germany, Greece, Hungary, Iceland (Reykjavik), Ireland, Israel, Italy (South Tyrol), Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, the United Kingdom (England) and the United States (California and Illinois).

The OECD uses information on the actual distributions of income and wealth from the *OECD Income Distribution Database* (OECD, 2024[3]) and the *OECD Wealth Distribution Database* (OECD, 2024[4]) to determine the cost, public support, and out-of-pocket expenses associated with LTC. To assess the impact of LTC systems on poverty reduction, the report uses data from surveys on ageing and retirement.

A survey-based methodology is used with acknowledgement of its limitations like self-reporting and other technical challenges (e.g. sampling issues). The selection of datasets for each country focuses on the inclusion of ADLs and IADLs, alongside other important factors such as income, net worth (the sum of fixed and liquid net assets), and household structure, which are crucial for evaluating LTC needs. Table A.2 presents details on the datasets employed in this report.

In addition to determining poverty reduction due to social protection for LTC, microdata described in Table A.2 are used to estimate the prevalence and intensity of LTC needs in populations aged 65 years and older, stratified by socio-demographic and economic factors. Different approaches to match survey responses to the typical cases are tested, relying on the intensity of reported difficulties, followed by a comparison of the outcomes. Various validity, sensitivity, and uncertainty analyses are conducted to enhance confidence in the robustness of the results. Concurrently, the OECD collected information from representatives in the OECD countries (or subnational areas, where applicable) on the LTC needs assessments and instruments in use. This provides additional context to evaluate the representativeness of the typical cases and the appropriateness of different matching methods.

Table A.2. Sources of microdata used in this report

Dataset	Countries	Wave	Year	Source	Comment
Survey of Health, Ageing and Retirement in Europe (SHARE)[1]	Austria, Belgium, Croatia (non-OECD), Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta (non-OECD), Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden	8	2019 or 2020	SHARE-ERIC (2024[5]). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 8. Release version: 9.0.0. SHARE-ERIC. Data set	
Survey of Health, Ageing and Retirement in Europe (SHARE)	Portugal	6	2015	SHARE-ERIC (2024[6]). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 6. Release version: 9.0.0. SHARE-ERIC. Data set.	The latest available wave for Portugal
Longitudinal Study on Ageing (TILDA)	Ireland	3	2014 or 2015	ISSDA (2019[7]), The Irish Longitudinal study on Aging (TILDA) Wave 3, 2014-15. Version 3.3.	Do not sample single households and people living in the institutions

Dataset	Countries	Wave	Year	Source	Comment
Japanese Aging and Health Dynamics Study (JAHEAD)	Japan	9	2017	Tokyo Metropolitan Institute of Gerontology, Institute of Gerontology (University of Tokyo) and University of Michigan (2024[8]), Japanese Aging and Health Dynamics Study (JAHEAD), Wave 9, 2017.	Do not sample people living the institutions
Korean Longitudinal Study of Aging (KLoSA)	Korea	7	2018	Korean Employment Information Service (2024[9]), Korean Longitudinal Study of Aging (KLoSA), Wave 7, 2006-18, Version D.2.	Do not sample people living the institutions
English Longitudinal Study of Ageing (ELSA)	United Kingdom	9	2018 or 2019	Banks et al. (2024[10]) English Longitudinal Study of Ageing: Waves 0-10, 1998-2023. [data collection]. 40th Edition. UK Data Service. SN: 5 050	
Health and Retirement Study (HRS)[2]	United States of America	14	2018	Health and Retirement Study (2024[11]), RAND HRS Products public use dataset. Produced and distributed by the University of Michigan with funding from the National Institute on Aging (grant number NIA U01AG009 740). Ann Arbor, MI..	

1. See Börsch-Supan et al. (2013[12]) for methodological details. The SHARE data collection has been funded by the European Commission through FP5 (QLK6-CT-2001-00360), FP6 (SHARE-I3: RII-CT-2006-062193, COMPARE: CIT5-CT-2005-028857, SHARELIFE: CIT4-CT-2006-028812), FP7 (SHARE-PREP: GA N°211909, SHARE-LEAP: GA N°227822, SHARE M4: GA N°261982) and Horizon 2020 (SHARE-DEV3: GA N°676536, SERISS: GA N°654221) and by DG Employment, Social Affairs & Inclusion. Additional funding from the German Ministry of Education and Research, the Max Planck Society for the Advancement of Science, the U.S. National Institute on Aging (U01_AG09740-13S2, P01_AG005842, P01_AG08291, P30_AG12815, R21_AG025169, Y1-AG-4553-01, IAG_BSR06-11, OGHA_04-064, HHSN271201300071C) and from various national funding sources is gratefully acknowledged (see www.share-project.org).
2. The HRS (Health and Retirement Study) is sponsored by the National Institute on Aging (grant number NIA U01AG009740) and is conducted by the University of Michigan.
Note: This report uses data or information from the Harmonised SHARE, ELSA, HRS, and KLoSA datasets and Codebook Version of June 2023 developed by the Gateway to Global Aging Data. The development of the harmonised datasets was funded by the National Institute on Aging (R01 AG030153, RC2 AG036619, 1R03AG043052). For more information, please refer to www.g2aging.org.

Matching methods to assign typical cases

To align typical cases with data on self-reported ADL and IADL limitations, the OECD uses a weighted average across two methodologies.[1] Table A.3 lists the specific limitations considered for identifying LTC needs, chosen for their comparability across various countries and datasets. This includes five ADL limitations and four IADL limitations, with the second limitation (walking across the room and getting in/out of bed) aggregating two separate ones to facilitate cross-country comparisons. Identification of a limitation is based on self-reported information, disregarding severity levels to avoid subjective bias.

Table A.3. Limitations used in the matching methods

Type	Description
ADLs	1. Dressing
	2. Walking across the room & getting in/out of bed
	3. Bathing/Showering
	4. Eating
	5. Using the toilet
IADLs	6. Preparing a hot meal
	7. Shopping groceries
	8. Telephone calls
	9. Managing money

Note: Korean data (KLoSA) contains only information on getting in/out of bed, the information on walking across the room is missing. Japanese data (JAHEAD) is missing two IADLs which are substituted with "Difficulties in doing small chores such as dusting off furniture, throwing away rubbish".
Source: Limitations as described in SHARE (Wave 8).

The two methods determine the level and intensity of needs based on the same set of reported limitations in performing ADLs and IADLs but apply different thresholds to determine severity. Table A.4 describes the criteria that each method follows to assign individuals to one of three levels of need: low, moderate, and severe. Both methods rely solely on difficulty scores, where a higher score indicates more limitations than a lower one. The definition of the thresholds between low, moderate, and severe needs influences the distribution of older people across these categories.

Table A.4. Description of matching approaches

Matching methods	Typical cases of LTC needs		
	Low needs	Moderate needs	Severe needs
Matching method X	Diff. Score: 1-2	Diff. Score: 3-6	Diff. Score: 7-10
Matching method Y	Diff. Score: 1-2	Diff. Score: 3-7	Diff. Score: 8-10

Note: Each responded is assigned only to one level of severity or has no needs.

In eight countries (Austria, Belgium, Canada, Estonia, Iceland, Italy, the United Kingdom, and the United States), LTC costs and benefits are decentralised, and data availability at the national level is limited. Consequently, their models have been set up at the municipal, regional, and state levels. Determining how representative these models for subnational areas are of the national public LTC systems is challenging. One approach to approximate representativeness is to compare key indicators such as total population, population aged 65 years and older, and GDP, as illustrated in Table A.5. These simple comparisons, while not exhaustive, provide an initial perspective on the extent of data and information gaps at the national level.

Table A.5. Overview of key indicators in subnational areas

Country	Subnational area	Share of country's population	Share of country's 65+ population	Share of country's GDP per capita
Austria	Vienna	34%	34%	106%
Belgium	Flandres	58%	61%	101%
Canada	Ontario	39%	38%	99%
Estonia	Tallinn	29%	26%	144%
Iceland	Reykjavik	40%	N/A	N/A
Italy	South Tyrol	1%	1%	161%
United Kingdom	England	85%	84%	97%
United States	California	12%	11%	117%
United States	Illinois	4%	4%	109%

Note: All data is for 2018.
Source: *OECD Regional Database* and *OECD Metropolitan Database*.

For all population-level estimates, it is assumed that the subnational LTC benefits and schemes apply nationally. All chapters in this report, including the figures and tables, use only the country names for better readability,[2] e.g. "Estonia" rather than "Estonia (Tallinn)". For better readability, this information is not repeated in the chapters.

Assumptions for the estimation of public support and out-of-pocket costs of long-term care

Survey data – like those used in this report – are not exhaustive, contain missing responses, and have limited information on important indicators. This is the case, for example, with data on access to and effective use of public support for formal care. There is also limited information on preferences for formal and informal care. Due to these and other data gaps, assumptions are made to assess the effects of public social protection for LTC in old age in OECD countries.

A key assumption is that *older people with LTC needs use formal LTC services and support from public social protection systems*. Based on this assumption, it is possible to estimate the public support they would be entitled to, the out-of-pocket costs they would face, their net disposable income after paying for the LTC costs, and consequently, whether they are at risk of poverty.

The graphs and estimates in this report should thus not be seen as representing the current situation in countries today. For example, the poverty rates associated with LTC shown in Chapter 4 are not current poverty rates, as many older people with LTC needs do not receive formal care in reality. Rather, the estimates presented in this report are intended to illustrate what different indicators would look like if everyone who is estimated to have LTC needs sought formal care.

Determining current coverage of public social protection for LTC

Determining the current availability and coverage of public social protection for LTC in old age in OECD countries is challenging due to limited detailed data on the existence, geographical location, and capacity of public social protection offices to handle support requests (e.g. conduct needs assessments). Even with assumed full availability of public social protection for LTC, effective use also hinges on the availability and distribution of providers, which is difficult to establish across OECD countries. Moreover, older people with LTC needs may opt not to use public sector services, further complicating the assessment of coverage.

Notwithstanding these challenges, estimating current coverage of public social protection for LTC in old age is essential for evaluating different policy scenarios in OECD countries (see Chapter 5). This can be achieved using self-reported survey data and/or administrative data from OECD countries. Since administrative data are scarce, this report estimates coverage using survey data only. For EU countries, coverage estimates were produced using EHIS data, based on the Eurostat definition of needs and OECD typical cases, then averaged. For non-EU countries and Greece, coverage estimates use data from surveys listed in Table A.2. Coverage is defined as the percentage of older people (aged 65+) with any level of needs who report receiving formal LTC services (help with ADLs, IADLs, meals on wheels, other types of care). For countries where survey data do not cover people living in institutional settings, the coverage was adjusted using administrative information on the split between institutional and home care.

Estimates for older people with severe LTC needs receiving formal care, either in institutions or at home, are primarily based on data from the Ageing Report (2021), supplemented by survey data listed in Table A.2 and OECD Health Statistics 2023 for non-EU countries. Initial assessments excluded the OECD Questionnaire on Social Protection for Long-Term Care in Old Age, survey data listed in Table A.2, and OECD Health Statistics 2023 as primary data sources due to limitations in data points, sampling, and comparability. This report follows Ageing Report (2021) and defines coverage of institutional care among those with severe needs as the ratio of recipients of institutional care to the total number receiving care both in institutions and at home.

The estimated coverage of formal LTC and the split between institutional and home care varies significantly across countries (see Table A.6). The average OECD coverage is 27%, with the lowest estimates in Estonia, the Slovak Republic, Lithuania and Latvia (below 15%), and the highest in Israel, France and Belgium (over 50%). The share of people receiving care in institutions among all formal care recipients is, on average, 36%, with the lowest values in Greece and Israel (below 10%) and the highest in Portugal and Croatia, where more than 60% of formal care recipients receive institutional care.

Older people with LTC needs may have differential coverage of public support for formal care due to varying preferences for formal versus informal care, and public versus private provision. On average, across OECD countries, around 27% of older people with needs receive formal care services. However, which older people access public support, and which do not? In the absence of empirical evidence, an assumption must be made to estimate coverage for specific individuals. Broadly, two possible ways to account for differential coverage of public formal care services include: 1) Assuming that older people with more severe needs and lower means (income and net wealth) have higher probabilities of receiving formal care than those with lower needs. 2) Assuming the probability of receiving formal care is the same for all older people with LTC needs.

This report adopts the first option: the probability of receiving formal care among older people with LTC needs is higher for those with more severe needs and lower means. This assumption is viewed as a best-case scenario where those older people who most need public social protection are the ones who are first in line to take it. While this best-case scenario is unlikely, a random allocation of older people with needs is also not realistic.

A similar issue arises when it comes to the division of patients between institutional and home care. As institutional care tends to be more intensive, this report assumes that only people with severe needs receive institutional care. Additionally, people with lower income and wealth are more likely to receive institutional care than those with higher income and wealth. The logic of this assumption aligns with the coverage assumption: it is a best-case scenario where care is received by those who most need public social protection.

Table A.6. Estimated coverage of formal and institutional care among older people with long-term care needs

Country	Share of older people with LTC needs receiving any formal care	Share of older people receiving care in the institution among older people with LTC needs receiving formal care
Austria	31%	43%
Belgium	53%	20%
Croatia	25%	65%
Czechia	15%	54%
Denmark	49%	23%
England	23%	38%
Estonia	11%	31%
Finland	28%	12%
France	51%	47%
Germany	37%	53%
Greece	30%	4%
Hungary	21%	54%
Ireland	36%	27%
Israel	64%	7%
Italy	28%	47%
Japan	28%	19%
Korea	26%	28%
Latvia	15%	44%
Lithuania	13%	53%
Luxembourg	31%	38%
Malta	22%	34%
Netherlands	44%	22%
Poland	18%	44%
Portugal	16%	66%
Slovak Republic	12%	52%
Slovenia	16%	50%
Spain	31%	25%
Sweden	23%	20%
United States	29%	23%
OECD	27%	36%

Note: Estimates for OECD typical cases are first calculated using adjusted survey weights separately for each matching method (X and Y) and then averaged to obtain the final estimates. The table includes an unweighted OECD average.
Source: OECD analysis based on EHIS (Wave 2, 2014; Wave 3, 2019), data survey listed in Table A.2, OECD Health Statistics, and Ageing Report (2021).

Adjustments to income variables in survey data

Comparing means of deciles of equivalised couple income in the survey data with the equivalent household-level metric from the OECD Income Distribution Database (IDD) reveals consistently lower incomes (82% of deciles) reported or imputed in survey data than in the IDD (see Table A.7). While using couple-level income would expectedly showcase these differences, the observed discrepancies cannot be fully attributed to the different unit levels. Previous research into income measurement errors suggests multiple drivers for differences across surveys and between surveys and administrative sources, leading to both overreporting and underreporting of income (Angel et al., 2019[13]; Moore, Stinson and Welniak, 2000[14]). Moore, Stinson and Welniak (2000[14]) note that survey respondents typically underreport their incomes, remarking that the "consistency with which the survey estimates fall below the benchmarks is striking."

In Table A.7, it is noteworthy that three outliers exist within the first decile of the income distribution for the Slovak Republic, Korea and Italy. These figures indicate that the mean of the lowest decile of household equivalent income in the OECD IDD is significantly higher than those reported in survey data for these specific countries. The particularly high ratios observed for Italy and Korea arise from an abnormal surge in zero income responses in the survey, compared to the previous two waves. This issue is addressed by imputing some of the zero income responses using a two-part model.

Firstly, the imputation of couple income involves using total household income[3] and other socio-economic characteristics such as age, gender, number of children, education level, self-reported health, and country fixed effect, following a probit regression specification. Secondly, a variable containing the conditional mean for each observation is predicted. Thirdly, the position of each individual in the income distribution generated by the reported income variable and the predicted value is evaluated. If an individual's position in the predicted income distribution is relatively similar to their position in the reported income within a maximum deviation of three deciles, and if the individual reports zero income in reported income while reporting non-zero income in total household income, the predicted value is assigned as the final income.

Table A.7. Ratio of mean household income in the survey data and in the OECD IDD, per income decile

A value over 1 indicates mean incomes in the OECD IDD are higher than in the SHARE/TILDA

Country	Ratio of income deciles among people aged 65 years and older									
	1st	2nd	3th	4th	5th	6th	7th	8th	9th	10th
Austria	1.60	1.28	1.24	1.25	1.24	1.24	1.22	1.20	1.18	1.16
Belgium	1.62	1.03	1.02	0.99	0.96	0.92	0.90	0.86	0.80	0.22
Croatia	2.76	1.63	1.50	1.48	1.54	1.53	1.52	1.51	1.48	1.34
Czechia	2.00	1.29	1.23	1.20	1.18	1.16	1.16	1.18	1.24	1.20
Denmark	1.83	1.34	1.30	1.28	1.25	1.19	1.09	1.03	0.99	1.16
England	0.84	0.91	0.91	0.90	0.91	0.91	0.91	0.90	0.90	0.94
Estonia	1.40	1.15	1.13	1.18	1.27	1.27	1.30	1.45	1.50	1.46
Finland	1.36	1.06	0.94	0.93	0.93	0.93	0.91	0.90	0.92	0.84
France	1.95	1.22	1.15	1.11	1.07	1.04	1.02	0.98	1.01	1.24
Germany	1.42	1.14	1.09	1.08	1.08	1.08	1.07	1.05	1.02	1.03
Greece	2.94	1.28	1.24	1.24	1.25	1.24	1.26	1.27	1.27	1.35
Hungary	1.05	1.05	1.11	1.21	1.19	1.23	1.26	1.27	1.33	1.58
Ireland	2.60	2.03	2.28	2.19	1.69	1.97	1.81	1.92	1.75	1.63
Israel	1.27	1.11	1.13	1.08	1.11	1.12	1.09	1.04	1.02	0.89
Italy	1 286.63	7.13	2.12	1.78	1.68	1.66	1.60	1.59	1.63	1.78
Japan	1.03	NA	0.94	NA	0.92	NA	1.01	NA	1.11	1.07
Korea	NA	65.16	7.27	4.20	3.11	2.42	1.98	1.76	1.59	1.37
Latvia	1.51	1.17	1.20	1.30	1.39	1.42	1.50	1.66	1.90	2.14
Lithuania	3.81	1.38	1.34	1.39	1.41	1.40	1.47	1.54	1.63	1.92
Luxembourg	4.50	1.96	1.36	1.26	1.25	1.21	1.18	1.12	0.93	0.47
Malta	7.88	1.99	1.86	1.94	2.04	2.08	2.14	2.12	2.07	1.24
Netherlands	2.06	1.31	1.29	1.25	1.16	1.04	0.96	0.87	0.66	0.48
Poland	1.33	1.27	1.29	1.32	1.35	1.35	1.35	1.39	1.40	1.47
Portugal	7.36	1.85	1.49	1.35	1.33	1.31	1.31	1.15	1.13	1.31
Slovak Republic	15.49	2.77	1.55	1.43	1.42	1.41	1.47	1.54	1.55	1.49
Slovenia	3.61	1.74	1.63	1.54	1.48	1.48	1.47	1.49	1.51	1.64
Spain	5.71	1.69	1.48	1.54	1.61	1.58	1.58	1.58	1.55	1.55
Sweden	1.64	1.18	1.09	1.06	1.03	1.01	0.98	0.96	0.94	1.17
United States	0.92	1.04	0.99	0.94	0.89	0.84	0.80	0.75	0.65	0.44

Note: Data for Japan is missing because income in the survey data is defined in intervals, resulting in gaps in some deciles. Data for Korea for the first decile is missing due to the high number of zero incomes in the dataset.
Source: OECD Income Distribution Database and survey data listed in Table A.2.

Due to lower reported incomes in survey data compared to the OECD IDD, median income in the OECD IDD is typically higher, as seen in Table A.8. The exception is the United States, where survey data show higher median income than the OECD IDD. Lower reported incomes across all deciles lead to higher calculated poverty rates using equivalised household incomes in survey data, which influences the analysis of poverty risks associated with LTC services. High baseline rates may diminish the perceived effect of public social protection systems on poverty risks.

To adjust for underreporting and ensure comparability with OECD IDD poverty risks, a stepwise approach is employed. First, deciles of household income in the survey data are determined for each country. Second, means and upper bounds are calculated for each decile. Third, ratios between survey data and OECD IDD means (or upper bounds) are calculated. Fourth, original incomes in survey data are multiplied by these ratios for each decile, creating adjusted income variables, including those adjusted by ratios of means and upper bounds. The process is repeated with winsorised incomes (at a 5% level), resulting in four new income variables: two for non-winsorised and two for winsorised incomes.

The differences between the poverty rates in OECD IDD and those in survey data, as well as those derived from the four new adjusted income variables, are then calculated. These differences are used to select the income manipulation that minimises discrepancies with OECD IDD poverty rates. Table A.8 shows that adjusted poverty rates are closer to those in OECD IDD. All analyses of public support, out-of-pocket costs, net incomes, and poverty risk in this report are based on the income variables that minimise these differences (see the last column of Table A.8).

Table A.8. Comparisons of median incomes and poverty rates in OECD IDD and survey data

Country	Median in IDD	Median in survey data	Poverty rate IDD	Poverty rate in survey data	Poverty rate in adjusted survey data
Austria	29 343	22 200	10%	19%	11%
Belgium	28 436	21 940	10%	12%	11%
Croatia	9 263	4 457	25%	53%	25%
Czechia	309 590	197 707	8%	24%	8%
Denmark	259 354	156 337	4%	28%	4%
England	20 044	18 219	15%	11%	16%
Estonia	13 829	6 585	34%	55%	32%
Finland	27 484	24 056	7%	12%	9%
France	23 840	22 350	4%	13%	5%
Germany	25 707	20 905	11%	16%	12%
Greece	9 954	7 637	7%	17%	6%
Hungary	2 358 790	1 667 358	13%	17%	14%
Ireland	25 219	11 180	6%	63%	7%
Israel	90 862	81 635	19%	25%	20%
Italy	19 252	10 993	11%	42%	11%
Japan	2 480 000	2 100 000	20%	20%	20%
Korea	28 750 000	5 939 697	43%	72%	37%
Latvia	10 113	4 582	34%	59%	33%
Lithuania	9 597	4 446	29%	53%	28%
Luxembourg	42 486	40 102	5%	20%	6%
Malta	15 381	8 866	13%	34%	10%
Netherlands	28 300	19 800	6%	25%	5%
Poland	35 732	22 766	13%	27%	12%
Portugal	9 930	6 790	11%	32%	10%
Slovak Republic	10 439	5 940	7%	37%	6%
Slovenia	16 591	9 348	13%	40%	15%
Spain	18 090	10 889	12%	35%	12%
Sweden	306 018	233 404	11%	21%	12%
United States	42 800	44 710	23%	23%	23%

Note: Median incomes are in NCUs. The poverty rate is set at 50% of the median income. Poverty rates are for 2019. Statistics from survey data are calculated using adjusted survey weights.
Source: OECD analysis based on OECD Income Distribution Database and survey data listed in Table A.2.

Adjusting weights for observations in institutional settings in the SHARE

While the SHARE sampling frame in most countries (except the Slovak Republic) includes persons living in nursing homes and residential care facilities, people living in institutions have a lower probability of being included in the survey (Bergmann, Scherpenzeel and Börsch-Supan, 2019[15]). According to De Luca, Celdoni and Trevisan (2015[16]), Belgium, Czechia and Italy excluded people living in retirement and nursing homes from their population registers for sampling purposes. The heterogeneity in the sampling frames used across countries may also lead to country-specific differences in representation (Bergmann, Scherpenzeel and Börsch-Supan, 2019[15]).

In this report, the underrepresentation of people living in residential care and nursing homes in the SHARE sample is adjusted ex-post, for the countries where it is possible, using adjusted sample weights. Based on the methodology used by Barczyk and Kredler (2019[17]), and in collaboration with researchers from the Center for Economic and Social Research at the University of Southern California, individual-level weights were constructed to align the shares of nursing home residents in the SHARE with the shares in *OECD Health Statistics 2023* (OECD, 2023[18]) for the relevant years. Table A.9 shows the results of survey weights adjustment.

Table A.9. Share of population age 65+ living in a nursing home, by sample weights

Country	Using SHARE weights	Using adjusted weights	Number of respondents interviewed in nursing homes
Austria	3.9%	7.8%	40
Belgium	4.5%	5.6%	54
Croatia	1.1%	2.3%	5
Czechia	2.1%	4.3%	49
Denmark	2.5%	3.4%	32
Estonia	1.4%	4.5%	30
Finland	0.8%	4.3%	6
France	2.4%	4.1%	46
Germany	2.1%	4.2%	26
Greece	0.2%	0.3%	2
Hungary	0.2%	3.0%	2
Israel	1.9%	1.6%	13
Italy	0.4%	0.8%	4
Latvia	0.5%	0.4%	2
Lithuania	0.5%	12.6%	4
Luxembourg	4.8%	5.4%	15
Malta	3.8%	7.6%	15
Netherlands	1.9%	4.2%	21
Poland	0.2%	0.8%	2
Portugal	2.0%	1.3%	19
Slovak Republic	0.0%	0.0%	0
Slovenia	1.9%	4.6%	32
Spain	1.8%	2.2%	29
Sweden	1.6%	4.2%	30

Source: OECD analyses based on the surveys listed in Table A.2.

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Notes

[1] Initially a broader set of matching methods was undertaken and, after an assessment of their performance, two were retained.

[2] Except of the subnational models for the United States.

[3] There is no household income data for Korea, so Korean data are not used in this procedure.

Glossary

Concepts related to care needs

Long-term care

This report uses the definition of long-term care as described in the council recommendation on access to affordable high-quality long-term care (European Commission, 2022[1]). It is understood as "a range of services and assistance for people who, as a result of mental and/or physical frailty and/or disability over an extended period of time, depend on help with daily living activities and/or need some permanent nursing care. The daily living activities for which help is needed may be the self-care activities that a person must perform every day (Activities of Daily Living, ADL, such as bathing, dressing, eating, getting in and out of bed or a chair, moving around, using the toilet, and controlling bladder and bowel functions) or may be related to independent living (Instrumental Activities of Daily Living, IADL, such as preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework, and using a telephone)."

For the purpose of this report, long-term care encompasses the services that people require to meet the two types of needs mentioned above: activities of daily living (ADLs) and instrumental activities of daily living (IADLs) as well as the additional social activities such as meeting with friends or going to the movies, prevalent for at least six months. In the System of Health Accounts manual, long-term care consists of a range of medical/nursing care services, personal care services and assistance services that are consumed with the primary goal of alleviating pain and suffering or reducing or managing the deterioration in health status in patients with a degree of long-term dependency. Medical/nursing care services are excluded from this report.

Instrumental activities of daily living

Instrumental activities of daily living, or IADLs, are tasks that are not part of someone's personal care but are necessary for someone to be able to live independently in the community. They include shopping, housekeeping, and preparing food. IADL need is often measured using the Lawton Instrumental Activities of Daily Living Scale, which gives a score between zero (totally dependent) and 8 (totally independent).This type of services is also described in the System of Health Accounts (OECD/Eurostat/WHO, 2017[2]):

> *Assistance services relate to care that enables a person to live independently in a house or apartment. They help with tasks of household management (*i.e. *instrumental activities of daily living, IADL), such as shopping, laundry, vacuuming, cooking, and performing housework, managing finances, using the telephone, etc. These services are typically provided under home help services, assisted living arrangements, etc.*

Social activities

In addition to ADL and IADL needs, some people are not able to maintain social activity independently (e.g. meeting with friends, going to the movies, etc.). This can lead to social isolation, which can lead to

depression and deterioration in physical health. Some people therefore need support to help them maintain some level of social activity if they are to live independently in the community. This type of services is described in the System of Health Accounts (OECD/Eurostat/WHO, 2017[2]):

> *Other social care services involve community activities and occupational support given on a continuing or recurrent basis to individuals, such as activities whose primary purpose is social and leisure.*

Concepts related to economic variables

Household

A household is either an individual person or a group of persons who live together under the same housing arrangement and who combine to provide themselves with food and possibly with other essentials of living. All persons living in a country belong to one, and only one, household. A person's place of usual residence is the basis for determining household membership.

Disposable income

Disposable income is sourced from different sources depending on the objective of the analysis. Disposable income for older people as a whole is sourced from the OECD Income Distribution Database. For analyses of public support, out-of-pocket costs and poverty risks at individual level, disposable income is sourced from responses in The Irish Longitudinal Study on Ageing (TILDA), for Ireland, and responses in the Survey of Health, Ageing and Retirement in Europe (SHARE) for all other EU Member States.

Disposable income in the OECD Income Distribution Database

The unit of observation of the OECD Income Distribution Database is the household, while the unit of analysis is the individual. Five main components of household disposable income are identified in the OECD questionnaire:

E: employee income, including wages and salaries, cash bonuses and gratuities, commissions and tips, directors' fees, profit sharing bonuses and other forms of profit-related pay, shares offered as part of employee remuneration, free and subsidised goods and services from an employer, severance and termination pay. Sick pay paid by social security should also be included.

KI: capital and property income, including income from financial assets (net of expenses), income from non-financial assets (net of expenses) and royalties. Regular receipts from voluntary individual private pension plans and life insurance schemes should also be included in this income component. In line with the 2011 Canberra Handbook (UNECE, 2011[3]), capital gains should not be included in KI.

SEI: income from self-employment, including profits and losses from unincorporated enterprises, as well as goods produced for own consumption (net of the costs of inputs). The inclusion of this latter variable aims to adjust the OECD income concept to the realities of middle-income countries (such as Brazil, South Africa, and others), where subsistence agriculture represents a significant income source for people at the bottom of the distribution. Countries that do not collect information on this income item should indicate so in the metadata sheet of the OECD questionnaire.

TRR: current transfers received, including transfers from social security (including accident and disability benefits, old-age cash benefits, unemployment benefits, maternity allowances, child and/or family allowances, all income-tested and means-tested benefits that are part of social assistance, including quasi-cash transfers given for a specific purpose such as food stamps); transfers from employment related social insurance; as well as cash transfers from both non-profit institutions and other households.

TRP: current transfers paid, including direct taxes on income and wealth, social security contributions paid by households, contributions to employment-related social insurance, current transfers paid to both other households and non-profit institutions. Taxes on realised capital gains should be excluded from wealth taxes when possible.

The income components defined above can be aggregated into various concepts of equivalised household income: individual primary, market, gross and disposable income per equivalent household member. Equivalised disposable income (**DI**), for each member of a household, can be expressed as the sum of the five main components of household disposable income listed above. Disposable income deducts from gross income the value of taxes on income and wealth paid and of contributions paid by households to public social security schemes.

Disposable income in SHARE and TILDA

In this report, due to limitations on the availability of income variables in the harmonised version of SHARE developed by the Gateway to Global Aging Data, the variable HwITTOT are used. HwITTOT is a variable that includes the sum of all income components after taxes and contributions at the couple-level economic unit, which comprises the respondent and the spouse, if any. This income variable undergoes adjustments to account for high response rates for zero incomes and the well-established underreporting of incomes in survey (Neri and Zizza, 2010[4]).

Household income in TILDA is based on a loop (ISSDA, 2019[5]): the respondent is asked to estimate the income of each household member aged 16 years or more, including himself/herself. Total household income is then derived as the sum of the income of each household member aged 16 years or older. Disposable income is then derived after taxes and deductions.

Equivalence scale

The sum of all income components for each analysis unit undergo adjustment based on a scaling factor: the square root of 1 for single respondents and 2 for couples. To illustrate, in a household where both the respondent and their spouse respond to the financial questionnaire, the total income is divided by two and then attributed to each of the two members of the household.[1] The equivalence elasticity serves to quantify the scale economies achievable by households. Ideally, this analytical approach should encompass both total household income and the overall number of household members. Regrettably, the latest harmonised questionnaire lacks data on total household income after taxes and contributions; therefore, equivalised scaling is computed exclusively at the level of couples and respondents.

Wealth (net wealth)

The unit of analysis to be used when compiling estimates on wealth is the household. It should be noted that the unit of analysis used for this data collection differs from the one used by the OECD for its collection on the distribution of household income, which refers to the individual. The concept of “wealth” generally refers to economic resources in the form of assets and liabilities.[2] For micro statistics on household wealth, confining the concept of wealth to assets and liabilities in a narrow economic sense – comprising items that have an economic value and are subject to ownership rights – is generally considered to be the most relevant and useful approach for most purposes as well as the most practical. This concept of wealth is often summarised in a net measure representing assets less liabilities. Wealth, or net worth, is the value of all the assets owned by a household less the value of all its liabilities at a particular point in time, and so it may be positive or negative.

An asset is a store of value representing a benefit, or series of benefits, accruing to the economic owner by holding or using the entity over a period of time; while a liability is established when one unit (the debtor) is obliged, under specific circumstances, to provide a payment or series of payments to another unit (the

creditor). Common types of financial assets held by households are currency and deposits, bonds, and other types of debt securities, listed and unlisted shares, equity in family trusts and partnerships, investment fund shares and units, and pension entitlements. Common types of liabilities are loans and credit card debt. Examples of non-financial assets held by households are their homes, land, other property, and valuables.

In the SHARE and TILDA, household net wealth (or net worth) is derived from responses to multiple asset categories. The SHARE also provides data on household real assets and net financial assets.

Liquid financial assets

The concept of liquid financial assets (i.e. cash, quoted shares, mutual funds, and bonds net of liabilities of own unincorporated enterprises) is the main measure used to capture asset-based poverty (see below), as this represents the assets that are relatively accessible by households if needed urgently. When net wealth is used, measures of asset-based poverty are around 2/3 lower than those based on the liquid financial wealth concept.[3]

Poverty (income)

Poverty is defined using relative thresholds. The relative poverty threshold is expressed as a given percentage of the median disposable income, expressed in nominal terms (current prices). Therefore, this threshold changes over time, as the median income changes over time. Two relative poverty thresholds are typically used: the first one is set at 50% of the median equivalised disposable income of the entire population, the second one is set at 60% of that income. This last one is the at-risk-of-poverty threshold used by the European Commission. This indicator does not measure wealth or poverty, but low income in comparison to other residents in that country, which does not necessarily imply a low standard of living. The relative income poverty threshold used in this report is set at 50% of the population-wide median disposable income, sourced from the OECD Income Distribution Database (see above).

Poverty (asset-based)

Poverty in OECD countries has traditionally been measured using household income. But what happens when a negative income shock occurs, perhaps due to unemployment, family breakdown or illness? What about unexpected expenses the household needs to deal with? Such events highlight the importance of considering not only whether people have low income now, but also whether their limited financial assets mean they are economically vulnerable and could experience significant economic difficulties if their income dropped suddenly.

There is no standard definition of asset-based poverty. The main measure used in this report – and other work by the OECD – is whether an individual belongs to a household with liquid financial wealth insufficient to support them at the level of the income poverty line for at least three months. Those asset-poor individuals who are not poor in terms of their income are described here as being economically vulnerable. By construction, this measure provides only a partial view of economic vulnerability, as it does not consider social transfers (e.g. unemployment benefits) that people may receive in the event of some types of shocks depending on their individual circumstances.

Different reference periods can be used, although most of the literature focuses on three, 6 and 12 months. The relative ranking of countries is insensitive to the reference period used (Spearman's Rho is 0.98 for 3- and 6-month measures, and 0.95 for 3- and 12-month measures). The reference period used in this report is three months.

Poverty (income and asset-based)

Household wealth data is used to consider how long an individual can maintain a minimum way of life by drawing on their accumulated wealth, should their income suddenly fall because of a sudden adverse shock (e.g. loss of employment, disability, family disruption). Taking wealth into consideration makes it possible to distinguish, within the income poor, those who have sufficient wealth to keep them above the poverty line for a given period of months (the "income poor only") from those who lack this buffer (the "asset and income poor"). Both groups experience low income, but the latter is clearly worse-off than the former. A third, and potentially much larger, group comprises the "asset poor only", i.e. those individuals who currently have sufficient income to achieve the minimally acceptable standard of living but do not have enough assets to protect them from a sudden drop of their income. This group is classified here as being "economically vulnerable".

Other concepts

Jurisdiction

Territorial unit within which some government functions and powers can be exercised. In the context of this report, the government functions and powers of interest relate to social protection for long-term care in old age. Depending on the EU Member State, these functions and powers may be exercised by the central government or by administrative regions, i.e. subnational governments (e.g. in states, provinces and municipalities, to name a few). When functions and powers are exercised by the central government, then the jurisdiction is the national territory as a whole. When the administrative regions exercise functions and power, then the jurisdiction normally covers the total area inside the borders of the administrative region. In summary, the term jurisdiction is used here to signify the territorial unit within which government functions and powers related to social protection for long-term care in old age are exercised.

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Notes

[1] See OECD (2013[6]) for more detail.

[2] See OECD (n.d.[7]) for more detail.

[3] See Balestra and Tonkin (2018[8]) for more detail.

OECD Health Policy Studies

Is Care Affordable for Older People?

With population ageing, the demand for helping older people with daily activities – so-called long-term care – is set to increase across OECD countries by more than one-third by 2050. Older people with long-term care needs are more likely to be women, 80-years-old and above, live in single households, and have lower incomes than the average. Currently, across OECD countries, publicly funded long-term care systems still leave almost half of older people with care needs at risk of poverty, particularly those with severe care needs and low income. Out-of-pocket costs represent, on average, 70% of an older person's median income across the OECD. This report suggests avenues to improve funding to make long-term care systems better able to meet the demand for their services, and suggests policy options to improve the targeting of benefits and seek efficiency gains to contain the costs of long-term care.

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