

# ASSESSING THE COMPARABILITY OF LONG- TERM CARE SPENDING ESTIMATES UNDER THE JOINT HEALTH ACCOUNTS QUESTIONNAIRE





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## Acknowledgements

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# 1. Introduction

1. Total spending on long-term care (LTC) in 2017 is estimated to have accounted for 1.5% of GDP or 730 USD per capita (after adjusting for differences in price levels) on average across 32 OECD countries.<sup>1</sup> With ageing populations and the rise of chronic conditions, such as dementia, the financing and provision of long-term care (LTC) services in a sustainable way is increasingly important.

2. A number of countries have implemented or are considering LTC reforms and, therefore, reliable comparisons of LTC spending with regard to peer countries are deemed important. Comparable LTC spending data is also needed for projections of future spending to assess the financial sustainability of health and LTC systems; for example, the 2018 Ageing Report by the European Commission (European Commission, 2018<sup>[1]</sup>). As such, LTC spending estimates have come under increased scrutiny in recent years.

3. The coverage and comparability of LTC spending estimates has continuously improved with the implementation of “A System of Health Accounts 2011” (OECD/Eurostat/WHO, 2017<sup>[2]</sup>) which provides a framework for the measurement of health and LTC spending and a demarcation between health and social spending. However, in-depth analyses of data submissions in 2015 and 2017 suggested that full comparability of LTC spending data across OECD countries is still hindered to some extent (Mueller, 2015<sup>[3]</sup>; Mueller and Morgan, 2017<sup>[4]</sup>). These studies point to persistent difficulties in clearly identifying and separating LTC activities into the health and social components, but also to differences in the interpretation of dependency among certain patient groups. Moreover, LTC spending estimates are generally more robust for public than for private spending.

4. A number of reasons help explain these issues. Firstly, there are country-specific notions of what long-term care entails; for example, what kind of activity should be classified as long-term care, which population groups should be considered as long-term care dependent, and what comprises the full range of providers delivering long-term care services. Secondly, national statistics and data systems on long-term care spending do not necessarily align with the boundaries established for international reporting – often requiring adjustments and/or assumptions to be made and frequently limited to the public sector. Finally, although extensive guidance on how to account for long-term care services under particular circumstances have been produced, there still exists room for different interpretation.

## 1.1. Defining long-term care in *A System of Health Accounts 2011*

5. Long-term care covers a range of medical and nursing care, personal care and assistance services. These services are provided with the primary intention of alleviating pain and suffering, or reducing or managing the deterioration in health status in persons with a certain degree of long-term dependency.

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<sup>1</sup> Based on submissions to the 2019 Joint Health Accounts Questionnaire (JHAQ).

6. According to *A System of Health Accounts 2011*, expenditure for **long-term care (health) (HC.3)** is composed of:

- *Medical or nursing care* (e.g. wound dressing, administering medication, health counselling, palliative care, pain relief and medical diagnosis with relation to a long-term care condition). This can include preventive activities to avoid deterioration in long-term health conditions or rehabilitative activities to improve functionality (e.g., physical exercise to improve the sense of balance and avoid falls);<sup>2</sup> and
- *Personal care services* which provide help with activities of daily living (ADL) such as eating (support with food intake), bathing, washing, dressing, getting in and out of bed, getting to and from the toilet and managing incontinence.

7. In addition, expenditure for **long-term care (social) (HCR.1)** consists of:

- *Assistance services* that enable a person to live independently. They relate to help with instrumental activities of daily living (IADL) such as shopping, laundry, cooking, performing housework, managing finances and using the telephone.
- Other cost items that are included include, for example, subsidies to residential services in assisted living facilities (as well as expenditure on accommodation).

8. **Total LTC expenditure** is the sum of health LTC (HC.3) and social LTC (HCR.1). Health LTC (HC.3) is composed of inpatient LTC (HC.3.1), day LTC (HC.3.2), outpatient LTC (HC.3.3) and home-based LTC (HC.3.4)<sup>3</sup>. Detailed guidelines have been published in the *System of Health Accounts 2011 Manual* (OECD/Eurostat/WHO, 2017<sup>[2]</sup>) and in the technical paper “Accounting and Mapping of Long-Term Care Expenditure under SHA 2011” (OECD, 2018<sup>[5]</sup>) to assist data compilers to better account for LTC in their health expenditure estimates and improve comparability across countries.

## 1.2. Objective of this document

9. The purpose of this document is manifold and the remainder of this document is as follows:

- First, it aims to provide an overview of the most recent data submission on LTC spending analysed from the functional, financing and provider perspectives. It also highlights countries where important gaps in the reporting of LTC spending continue to exist (Chapter 2).
- Second, current LTC spending estimates are compared to other LTC indicators such as number of LTC recipients, LTC beds and LTC workforce. These comparisons can help assess the validity of LTC spending estimates and the coherence of the current data collections on LTC (Chapter 3).
- Third, key results of the 2019 OECD Survey on LTC activities and dependent populations are analysed. This should provide a qualitative assessment of the reporting practices in countries and help identify countries that incorrectly classify certain activities or transactions related to LTC spending, thus potentially under or over-estimating some or all of the components (Chapter 4).
- Finally, for some countries where significant reporting gaps exist, there is an attempt to fill these gaps using national studies or international data sources (Chapter 5). It is hoped that this may provide an approach for these countries to complete their LTC estimates in future submissions.
- Chapter 6 summarises the key findings of the different analyses.

<sup>2</sup> In any future refinement of the definition, “diagnosis” could be better qualified as “medical assessment/monitoring” and “preventive activities” could be further qualified as “(tertiary) preventive” activities.

<sup>3</sup> Annex A gives a full overview of the functional classification within the SHA 2011 framework.



## 2. Current LTC spending estimates

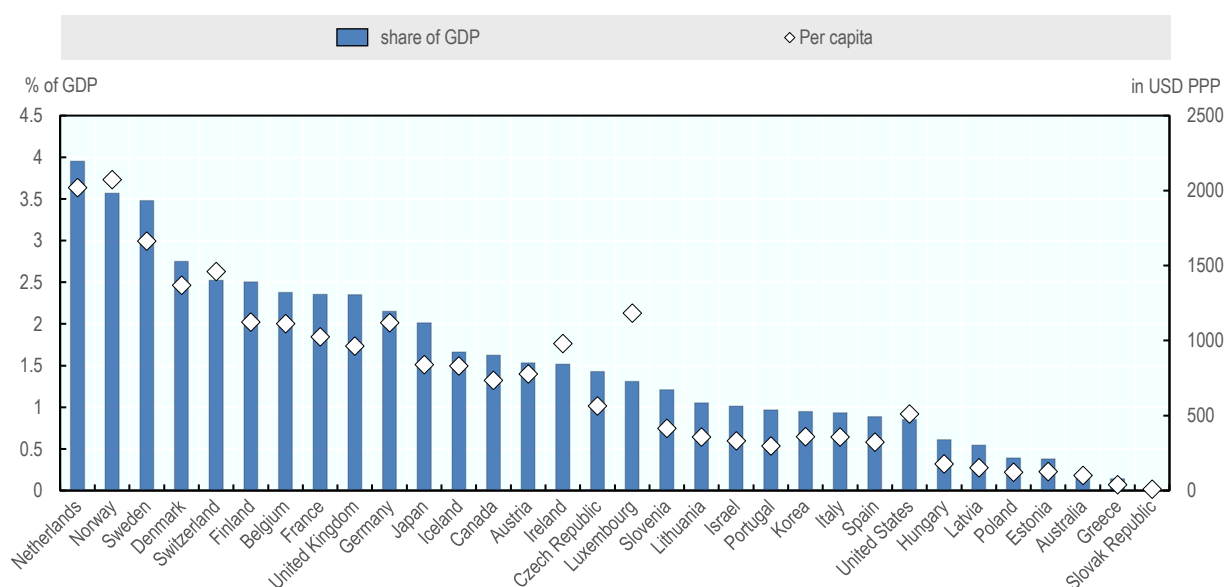
### 2.1. Expenditure and financing on LTC services

10. This chapter analyses current estimates of long-term care spending in OECD countries, based on submissions to the 2019 Joint Health Accounts Questionnaire (JHAQ). This helps to identify countries where important long-term care spending elements are excluded or under-reported. It also highlights outlier countries which could signal a potential over-/ or underestimation of some long-term care spending elements.

#### 2.1.1. How complete is current reporting of LTC spending?

11. Total spending on LTC in 2017 was estimated to account for 1.5% of GDP or 730 USD per capita (after adjusting for differences in price levels) on average across 32 OECD countries.<sup>4</sup> Reported LTC spending ranged from negligible shares (<0.2% of GDP) in Australia, Greece, and the Slovak Republic to a high of around 4% of GDP in the Netherlands (Figure 2.1).

Figure 2.1. Total LTC spending, OECD countries, 2017 (or latest year)



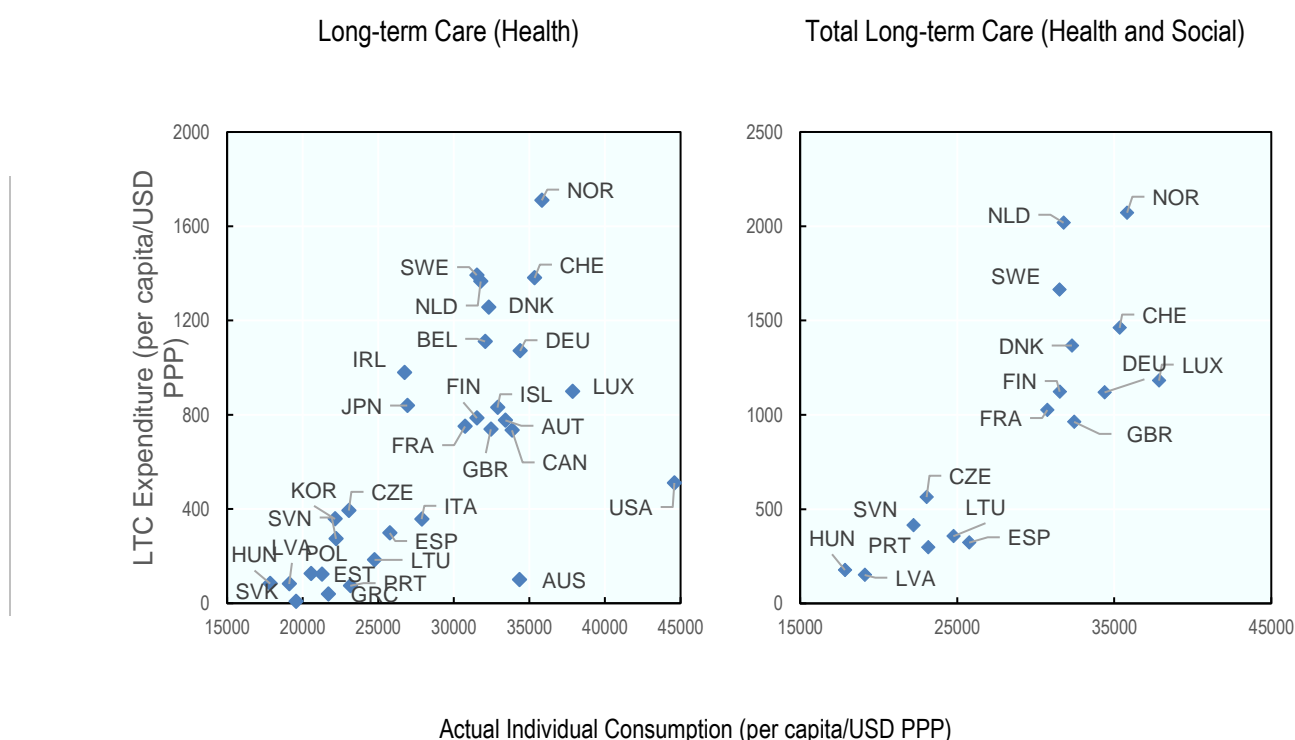
Note: No data available for Chile, Mexico, New Zealand and Turkey.

Source: OECD Health Statistics 2019.

<sup>4</sup> LTC spending data is currently not submitted to the JHAQ data collection by Chile, Mexico, New Zealand and Turkey.

12. A degree of variation in LTC spending is to be expected; LTC spending is highly correlated with income (Figure 2.2). However, the chart also shows that countries with similar levels of income can vary significantly in how much is allocated to LTC (see Canada and Sweden, for example). This can reflect substantial differences in the way LTC is organised, the existence of formal LTC arrangements, the extent of public coverage of LTC services as well as the demographic composition of the population. Yet, the observed differences may also suggest compilation issues in the estimation of LTC spending. Often, countries are either not able to identify and report key LTC care spending categories or are under-reporting some individual activities within the respective LTC categories. In other cases, there may be over-reporting by including spending on activities that should not be considered as LTC; these may relate to curative care or sit outside of the SHA universe altogether.<sup>5</sup>

**Figure 2.2. Spending on Long-term Care is linked to a country's overall level of income**



Source: OECD Health Statistics 2019 and OECD National Accounts 2019.

13. Table 2.1 provides an overview of available data for the various components in the 32 OECD countries currently submitting data on LTC.

<sup>5</sup> This will be analysed in further detail in Chapter 4.

Table 2.1. Reporting of LTC spending components, OECD countries, 2017 (or latest year)

Share of total LTC spending (and Long-term care (health) spending)

	Long-term care (health)	Of which:				Long-term care (social)
		<i>Inpatient long-term care (health)</i>	<i>Day long-term care (health)</i>	<i>Outpatient long-term care (health)</i>	<i>Home-based long-term care (health)</i>	
Australia (2016)	100%	99.8%	0.2%		0.0%	
Austria	100%	52.0%	0.8%		47.3%	
Belgium	100%	56.1%	0.8%	3.3%	39.8%	
Canada	100%	83.7%	6.5%		9.8%	
Czech Republic	69.8%	81.9%	3.9%		14.2%	30.2%
Denmark	91.9%	39.9%			60.1%	8.1%
Estonia	100%	89.9%	0.3%	0.3%	9.5%	
Finland	70.0%	19.6%			80.4%	30.0%
France	73.2%	82.5%			17.3%	26.8%
Germany	95.7%	49.4%	1.0%		49.5%	4.3%
Greece	100%	68.8%			31.2%	
Hungary	47.1%	96.4%	2.5%		1.1%	52.9%
Iceland	100%	90.9%	0.8%		8.3%	
Ireland	100%	57.3%	4.4%		38.3%	
Israel (2015)	55.1%	100.0%				44.9%
Italy	100%	59.8%	6.4%	18.5%	15.3%	
Japan (2016)	100%	66.9%	17.5%		15.6%	
Korea	100%	82.3%	3.8%		13.9%	
Latvia	54.3%	79.4%	3.7%	2.4%	14.4%	45.7%
Lithuania	51.7%	38.1%	1.4%	0.0%	60.5%	48.3%
Luxembourg	76.1%	62.2%	13.0%	1.3%	23.4%	23.9%
Netherlands	67.7%	76.5%	0.7%	1.6%	21.0%	32.3%
Norway	82.5%	54.4%			45.6%	17.5%
Poland	100%	21.4%	0.2%	0.0%	78.4%	
Portugal	24.9%	80.3%			19.7%	75.1%
Slovak Republic	100%	2.4%		0.1%	97.5%	
Slovenia	66.0%	72.9%	0.5%		26.5%	34.0%
Spain	92.5%	65.0%	10.1%		25.0%	7.5%
Sweden	83.7%	64.5%	4.9%		30.6%	16.3%
Switzerland	94.5%	83.9%			16.1%	5.5%
United Kingdom	76.7%	66.5%	0.1%	0.4%	33.0%	23.3%
United States	100%	100.0%				
<b>OECD18</b>	<b>70.7%</b>	<b>67.0%</b>	<b>2.6%</b>	<b>0.9%</b>	<b>29.5%</b>	<b>29.3%</b>

Note: An empty cell means no data submitted. Activities falling in these categories may, however, be reported in other LTC or health categories. The OECD average is calculated based on the 18 countries reporting the health and social component of LTC.

Source: OECD Health Statistics 2019.

14. On the first level of disaggregation, all 32 countries report LTC (health) but only 18 of them report estimates of LTC (social) spending. On a second level, inpatient LTC (HC.3.1) is reported by all 32 countries and home-based LTC (HC.3.4) by 30 countries,<sup>6</sup> while reporting for the other LTC (health) components is less complete: two-thirds report day LTC (HC.3.2) but less than a third of countries submit estimates of outpatient LTC (HC.3.3). Non-reporting of a component can mean

<sup>6</sup> Estimates for Israel and the United States are missing.

that the related spending is either included elsewhere (e.g. in another LTC category of another health category, such as curative care), or that it is excluded completely. Non-reporting might be seen as an indication that a category does not exist. However, given the universal way that LTC categories (HC.3.1 – HC.3.4 and HC.R.1) are defined in SHA 2011, it can be safely assumed that the services included therein exist in all advanced OECD economies.

15. Where expenditures on certain LTC categories are completely excluded, this can lead to a significant underestimation of total LTC spending. This is particularly relevant for home-based LTC (HC.3.4) and social LTC (HC.R.1): home-based LTC accounts for more than a quarter of LTC (health) spending, on average and spending on social LTC represents 29% of total LTC for the 18 countries reporting estimates. By comparison, the non-reporting of day LTC (HC.3.2) or outpatient LTC (HC.3.3) would likely have a lesser effect on the overall comparability of LTC spending figures.

16. Looking at the variation in the breakdown of LTC by sub-category can also flag comparability issues. Inpatient LTC represents only 2.4% of LTC (health) spending in the Slovak Republic, suggesting a significant problem in identifying the relevant spending, while in the United States and Israel only inpatient LTC is reported – meaning there are issues with identifying spending for the other components of LTC. Large differences are also observed for the other components. Day LTC accounts for more than 10% of LTC (health) spending in Japan, Luxembourg and Spain whereas it is negligible or not reported in many other countries. Italy is the only country where outpatient LTC represents a significant proportion of LTC (health). Home-based LTC accounts for a negligible value in Australia (clearly highlighting an underestimation) but 80% in Finland (which may indicate an underestimation of inpatient LTC or an overestimation of home-based LTC). Among the 18 countries able to report social LTC, the share represents between 4% (Germany) and 75% (Portugal) of total LTC – the variation in this share also points to potential comparability issues.

17. The analysis can be taken a step further by evaluating the *financing* of LTC<sup>7</sup> for the three key components – inpatient LTC (HC.3.1), home-based LTC (HC.3.4) and social LTC (HC.R.1); in this case looking into absolute spending figures instead of shares (Table 2.2).

18. This table shows that Greece and Iceland do not report any out-of-pocket spending for LTC, potentially resulting in a significant underestimation of total LTC spending. Out-of-pocket spending is also missing for one or more key LTC components in a number of other countries: e.g. home-based LTC in Australia, the Czech Republic, Denmark, Poland and the Slovak Republic. Looking at the absolute values of out-of-pocket spending for some LTC components can also help to identify possible reporting gaps. While there may be variation in the public coverage for LTC services across OECD countries, some degree of cost-sharing for room and board in inpatient LTC settings is often required. The low values reported in Australia, the Czech Republic, Poland and Slovenia might indicate limitations in fully identifying out-of-pocket payments for inpatient LTC services. For the Slovak Republic, government spending on inpatient LTC is missing, suggesting a substantial underestimation of what, on average, accounts for more than half of overall LTC health spending.

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<sup>7</sup> Only the key financing schemes relevant for long-term care spending –government/compulsory schemes (HF.1) and out-of-pocket payments (HF.3) – are considered here (together they finance on average 93% of all LTC services). Voluntary schemes (HF.2) and financing from the rest of the world (HF.4) generally play a negligible role in LTC financing in OECD countries.

Table 2.2. Financing of key LTC services, 2017 (or latest year)

Spending per capita in USD PPP

	Government/compulsory schemes (HF.1)			Out-of-pocket payments (HF.3)		
	Inpatient LTC	Home-based LTC	Social LTC	Inpatient LTC	Home-based LTC	Social LTC
Australia	94	0	..	3	..	..
Austria	225	326	..	178	26	..
Belgium	559	397	..	63	14	..
Canada	480	62	..	113	9	..
Czech Republic	322	56	170	1	..	..
Denmark	395	755	111	106	..	..
Estonia	71	9	..	42	3	..
Finland	126	527	326	28	105	11
France	449	121	241	171	9	..
Germany	313	436	8	199	47	38
Greece	25	8	..	..	..	..
Hungary	64	1	*	12	..	*
Iceland	755	69	..	..	..	..
Ireland	431	370	..	124	3	..
Israel	132	..	148	31	..	..
Italy	138	51	..	74	2	..
Japan	507	124	..	44	7	..
Korea	183	45	..	112	5	..
Latvia	56	10	51	9	1	18
Lithuania	62	111	142	7	0	22
Luxembourg	462	210	165	90	2	118
Netherlands	948	285	613	98	1	40
Norway	804	764	338	127	15	24
Poland	23	96	..	0	..	..
Portugal	41	14	112	17	0	112
Slovak Republic	..	8	..	0	..	..
Slovenia	191	69	42	5	3	99
Spain	157	65	19	34	10	6
Sweden	824	405	257	74	21	14
Switzerland	735	169	66	418	48	11
United Kingdom	265	215	108	201	27	26
United States	*	..	..	*	..	..

Note: \* The United States provides no financing breakdown for inpatient LTC. Hungary provides no financing breakdown for social LTC.

Source: OECD Health Statistics 2019.

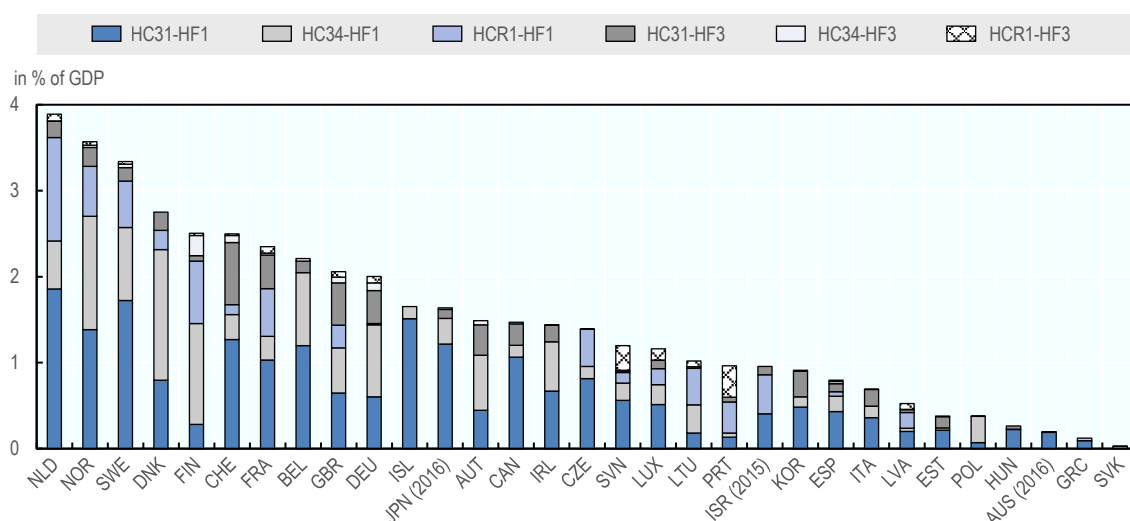
19. Combining the information from the above analyses suggests the following:

- The overall level of spending and non-reporting of some components indicate a significant underestimation of LTC spending in Australia and the Slovak Republic.
- LTC spending in the United States is likely to be underestimated since home-based LTC is not reported. The same might be true for Israel although, in this case, some home-based LTC spending may be included under social LTC.

- LTC spending in Denmark, the Czech Republic, Greece, Iceland and Poland is potentially underestimated as some key functions for certain payers are missing.
- In many countries, spending on home-based LTC, outpatient LTC services and day LTC cannot be clearly identified and may be reported in another category (to be analysed further in Chapter 4).

20. Figure 2.3 illustrates some of these reporting gaps by showing the share of the key LTC functions inpatient LTC (HC.3.1), home-based LTC (HC.3.4) and social LTC (HC.R.1) for the key payers: government schemes (HF.1) and out-of-pocket payments (HF.3).

**Figure 2.3. Spending for key LTC elements as share of GDP, 2017 (or latest year)**



Note: The comparison on this chart is limited to the key LTC components HC31, HC34 and HCR1 for the key payers HF1 and HF3. Hence, the displayed values differ from the total values shown in Figure 2.1. The US is missing from this chart because a financing split is not available.  
Source: OECD Health Statistics 2019.

### 2.1.2. Public coverage for long-term care

21. Despite the gaps in reporting, current data is still extremely useful, particularly in comparing the public coverage for LTC services across countries. Figure 2.4 compares the share of public spending<sup>8</sup> for total LTC, inpatient LTC and home-based LTC.<sup>9</sup> On average, 79% of all LTC expenditure is financed from government and compulsory schemes. Countries with the highest LTC spending overall – Sweden, the Netherlands and Norway – are also those where the public share is highest (at 92-93%). However, Lithuania, a country with a relatively low overall LTC spending share, has a surprisingly high public share, perhaps suggesting gaps in reporting some private financing components. In Portugal, the public coverage of LTC spending accounts for less than 60%.

22. In all but two countries (Belgium and Slovenia), public coverage is higher for home-based LTC than for inpatient LTC. On average across the OECD, 76% of inpatient LTC is financed by public schemes compared to 91% for home-based care. The gap between the two is particularly

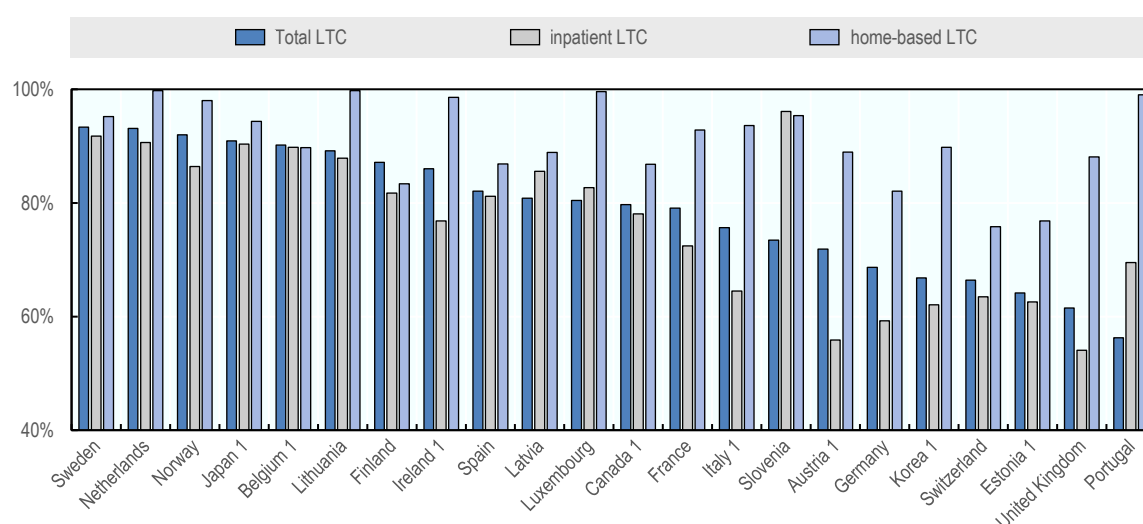
<sup>8</sup> "Public" refers here to spending from government and compulsory insurance schemes.

<sup>9</sup> For 22 OECD countries where the data reported does not suggest any substantial gaps in the key components (with the possible exception of social LTC).

pronounced in Austria, Korea and the United Kingdom, where there is a 30-percentage point difference or more. For home-based LTC, a number of countries including the Netherlands, Lithuania, Luxembourg, Ireland and Portugal report public coverage levels close to 100%. High public coverage rates for home-based LTC could hint at some reporting issues, for example, a country not being able to properly account for out-of-pocket spending for these services or a misallocation into social LTC of some ADL services that may require co-payment instead of home-based LTC (notably, public coverage for HC.R.1 is generally lower). In that case, the limited range of activities captured under home-based LTC can make the level of public coverage appear more generous than it is in reality.

**Figure 2.4. Share of public spending for different LTC services**

Share of spending by government/compulsory schemes in total spending for different LTC services, selected OECD countries, 2017



Note: The public share of total LTC spending can be below those of inpatient LTC and home-based LTC in case where social LTC plays a significant role and where public coverage for these services are low.

1. Countries that do not report social LTC.

Source: OECD Health Statistics 2019.

23. These results are generally in line with findings of an OECD study on the financial protection of typical LTC cases (Cravo Oliveira Hashiguchi and Llana-Nozal, 2019<sup>[6]</sup>). In that study, the actual costs of LTC provision are compared with public entitlement under a number of different patient scenarios, based on different needs as well as different levels of income and wealth. Generally, Nordic countries and the Netherlands are also found to have higher levels of financial protection. However, for some of the countries in Figure 2.4 where high coverage is indicated, the report documents relatively high out-of-pocket costs. This is the case for Lithuania and Latvia, where the report finds relatively low public coverage for home care regardless of the level of needs. More generally, the report finds that home care for people with severe needs is frequently unaffordable. While Figure 2.4 may suggest otherwise, in general this finding is not refuted. The aggregated data may reflect the fact that home care is typically provided to less severe cases (where the out-of-pocket share may be more limited) leaving the severe cases to inpatient facilities. Overall, combining micro information on costing for different case types with aggregate information from Health Accounts can provide valuable insights into the LTC financing system but also help validate the data submitted.

## 2.2. Provision of long-term care services

24. An analysis of the *providers* of LTC services can also indicate the comprehensiveness of LTC spending estimates. While the various LTC services can be financed by a mixture of government schemes and out-of-pocket spending in all OECD countries, there is greater variation in who might provide such services, reflecting among other things, differences in culture, government policy and regulation, as well as patient preferences. Table 2.3 summarises the allocation of LTC spending for the key LTC services across the most important providers – hospitals (HP.1), LTC residential facilities (HP.2), providers of home health care services (HP.3.5), households as providers of home health care (HP.8.1), and secondary providers of health care (HP.8.2).<sup>10</sup>

**Table 2.3. Spending of key LTC services by providers, OECD average**

Share of total spending for each LTC service by type of provider

	Hospitals HP.1	Residential facilities HP.2	Home healthcare providers HP.3.5	Households HP.8.1	Secondary providers HP.8.2	Other providers	All providers
<b>HC3</b>	16%	54%	16%	9%	2%	3%	100%
<b>HC31</b>	22%	74%	0%	0%	2%	1%	100%
<b>HC34</b>	2%	7%	59%	23%	2%	6%	100%
<b>HCR1</b>	1%	26%	30%	14%	27%	2%	100%
<b>Total LTC</b>	13%	50%	17%	10%	7%	4%	100%

Note: For each LTC service, the shares add up to 100%. For each country, this allocation matrix is displayed in Annex C.

Source: OECD Health Statistics 2019.

25. Table 2.3 shows that, on average, three-quarters of spending on inpatient LTC (HC.3.1) is related to provision by residential care facilities (HP.2). In six countries<sup>11</sup>, inpatient LTC spending is exclusively in residential care facilities. While national regulations might stipulate that inpatient LTC can only be provided in dedicated residential facilities, this means that these countries do not record any inpatient LTC services in hospitals (HP.1). This would potentially cover any patients with LTC needs who cannot be transferred to a dedicated LTC facility or discharged home (“bed-blockers”). Any exclusion of the associated expenditure will lead to an underestimation of LTC spending. By contrast, in Australia and the Slovak Republic, current reporting only covers expenditure on inpatient LTC services provided in hospitals. Given that, on average, hospitals only account for around a fifth of inpatient LTC spending, this would suggest a significant underreporting. In most countries, hospitals play a small but non-negligible role in the provision of inpatient LTC services. In some cases, a higher share of inpatient LTC in hospitals can indicate the absence of a developed LTC institutional sector.

26. For home-based LTC (HC.3.4), the range of service providers can vary from country to country, depending on the organisational structure of care provision. Ambulatory home health service providers (HP.3.5) typically account for around 60% of home-based LTC spending. However, in eleven countries, this share reaches 90% or more of spending on home-based LTC.

<sup>10</sup> Annex B gives a full overview of the provider classification within the SHA 2011 framework.

<sup>11</sup> Austria, Denmark, Germany, Greece, Norway and the United States.



Around a quarter of spending, on average, is linked to households (HP.8.1)<sup>12</sup> reflecting the case where family members provide informal care if care allowances are paid.<sup>13</sup> In Austria, Lithuania, Poland and Portugal, more than three-quarters of home-based LTC spending is based on households as the providers of care. This may be the result of policies to encourage household members to participate in the care of their relatives, a reflection of cultural norms, or a response to gaps in formal LTC provision. However, it may also highlight the underreporting of spending on other home-based care providers.

27. Regarding social LTC care provision (HC.R.1), in addition to various service arrangements, the range of providers highlights the likely difference in activities and cost items considered by countries, especially the mix of residential and home-based services. On average, for the 14 OECD countries<sup>14</sup> that currently report social LTC spending by provider, spending is split between home health care service providers (30%), secondary health care providers (27%) and residential care facilities (26%). In Spain and Switzerland, social LTC spending is exclusively through providers of home health services (HP.3.5), whereas in Portugal and Sweden it is restricted to other industries as secondary health care providers (HP.8.2). Four countries are not able to allocate social LTC spending to any provider (in this case, the aggregate spending information comes exclusively from the financing side). The allocation of social LTC spending is heavily influenced by the extent to which countries are able to separate the health and social components of LTC, especially in a home-based care setting.

28. Figure 2.5 shows the provider composition for LTC service delivery by overall spending for the same 22 OECD countries in section 2.1.2. Residential care facilities account for around 80% of all LTC spending in the Netherlands and Switzerland, the highest overall LTC spenders. This contrasts with only around 20% in Korea and Portugal, which spend much less overall on LTC. In Korea, almost two-thirds of LTC spending relates to hospital-based care, while three-quarters of LTC spending in Portugal is from secondary providers. Among the other high spenders, it is notable that in Norway a relatively low share of LTC spending is allocated to residential-type care with more on home care provider organisations.

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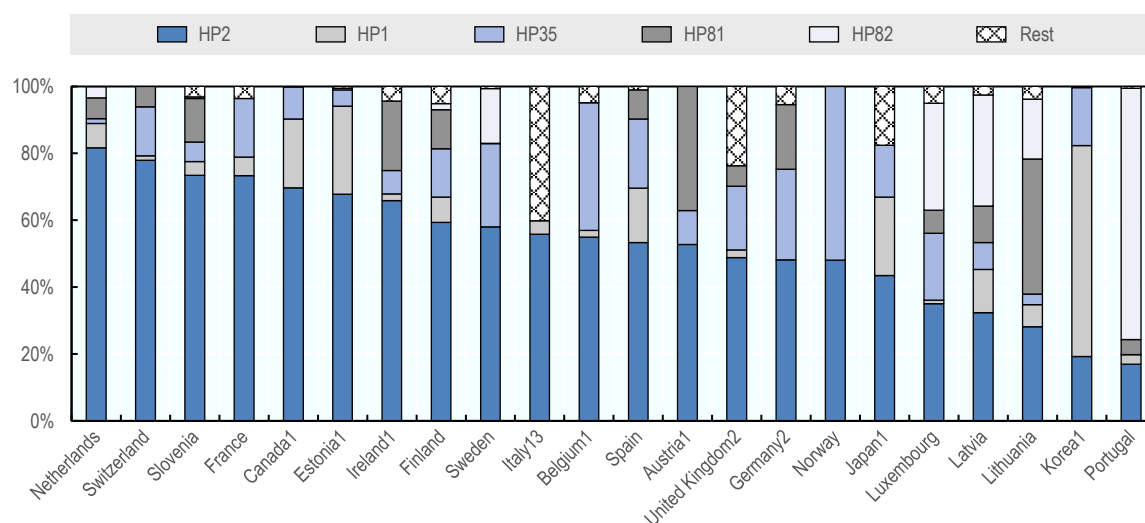
<sup>12</sup> Households can be considered as providers of LTC services (HP.8.1) in case a cash transfer (called “care allowance” or “carer’s allowance”) is paid with the understanding that friends or family members of the LTC dependent person provide LTC services. The cash transfer is a proxy for the valuation of the service provided. Unpaid household production should not be included in the measurement of HP.8.1.

<sup>13</sup> In some cases, eligible “care allowances” may not be reported.

<sup>14</sup> Out of the 18 that can report social LTC (HC.R.1).

**Figure 2.5. Total long-term care spending broken down by provider**

Total long-term care spending by key LTC service provider, 2017 (or latest year)



Note: 1. Countries not reporting social LTC. 2. Countries where social LTC cannot be allocated to providers (included in "Rest" here). 3. No breakdown of ambulatory service providers.  
Source: OECD Health Statistics 2019.

29. For each of the key LTC service providers, the share of spending related to LTC service delivery can shed further light on the extent of provision in a national context. Table 2.4 shows whether the focus of activity of these providers lies on the provision of LTC (health) and/or social LTC services (HC.R.1), or other health services, such as curative or rehabilitative care.

30. In Israel, Canada, Japan and Korea, a significant share (>10%) of overall hospital spending (HP.1) is on health LTC services (HC.3).<sup>15</sup> In most countries, this share is lower (4% on average). Finland and the Netherlands are the only countries reporting some social LTC (HC.R.1) provided by hospitals; in the Netherlands, this mainly refers to mental health hospitals.<sup>16</sup>

31. In nearly all countries, residential LTC facilities (HP.2) predominantly provide health LTC. In some, (e.g. Switzerland and Sweden), they exclusively provide health LTC. In Finland, France, the Netherlands and Slovenia, where some residents are institutionalised in these facilities for mainly social reasons, social LTC makes up between 20-40% of all spending in nursing homes. Lithuania is the only country with a majority of the spending in nursing homes allocated to social LTC (65%), raising a potential accounting issue, as to whether the providers should be classified as secondary health care providers (HP.8.2). In some countries, other health services such as inpatient curative care (e.g. Italy) or home-based curative care (e.g. Belgium) are reported for residential LTC facilities as secondary activities.

<sup>15</sup> In Japan and Korea, care for many LTC dependent people is organised in hospital-like facilities instead of nursing homes.

<sup>16</sup> Hospitals are multi-functional organisations and may provide health and social services both in an institutional and community setting.

**Table 2.4. Composition of health and LTC spending by LTC provider**

Share of HC3 and HCR1 in current health expenditure plus social LTC by provider

	HP.1		HP.2		HP.3.5		HP.8.1		HP.8.2	
	HC3	HCR1	HC3	HCR1	HC3	HCR1	HC3	HCR1	HC3	HCR1
Australia*	5%				100%					
Austria*			91%		96%		100%			
Belgium*	1%		94%		96%		100%			
Canada*	10%		98%		100%					
Czech Republic	9%		98%		83%		7%	93%	71%	29%
Denmark			76%	8%	93%	7%	100%			100%
Estonia*	3%		98%		100%				7%	
Finland	4%	1%	70%	21%	84%			100%	18%	4%
France	3%		75%	25%	57%	43%				
Germany**			100%		98%		100%			
Greece*			70%		100%					
Hungary**	4%		99%		18%				0%	
Iceland*	7%		100%		88%					
Ireland*	1%		79%		50%		100%			
Israel**	19%		100%							
Italy*	1%		96%							
Japan*	11%		94%		100%					
Korea*	17%		100%		100%		100%			
Latvia	4%		99%	1%	37%	62%	4%	94%	10%	85%
Lithuania	3%		35%	65%	17%	82%	73%	27%	6%	69%
Luxembourg	1%		99%		65%	32%	64%	36%	53%	43%
Netherlands	3%	5%	73%	22%	72%	8%		100%	7%	52%
Norway	0%		88%	6%	72%	28%			0%	
Poland*	1%		79%		74%		100%		33%	
Portugal	1%		89%		5%		80%		0%	92%
Slovak Republic*	0%				100%		100%			
Slovenia	1%		60%	39%	22%	75%	98%			46%
Spain	4%		100%		58%	33%	100%			
Sweden			100%		100%		100%			72%
Switzerland	1%		100%		62%	38%	100%			
United Kingdom**	1%		100%		89%		100%			
United States*			100%							

Note: The missing percentage to 100% is due to other health services (e.g. curative care) delivered by each provider. Countries marked with \* do not report HC.R.1. Countries marked with \*\* only report total HC.R.1 without a provider breakdown.

Source: OECD Health Statistics 2019.

32. Home health care providers (HP.3.5) typically provide a mix of curative, rehabilitative and long-term care services, although they often based on providing health LTC. When spending exclusively relates to health LTC, this might signal difficulties in splitting expenditures between the health and social LTC services, and between home-based LTC and home-based curative care. In these cases, all spending is allocated to home-based LTC based on the majority principle. On the other hand, in Latvia, Lithuania and Slovenia, social LTC spending accounts for more than half of spending on home care providers. In Portugal, the share of LTC in overall spending on home health care providers is minimal (5%) which may signal correctly that this type of provider predominantly provides curative care, or that it is difficult to identify the LTC services.

33. Households (HP.8.1) almost exclusively provide LTC. In a dozen countries, they provide health LTC (HC.3) only – perhaps reflecting the fact that the related cash transfers may be limited to covering help with ADL, or the difficulty to distinguish between ADL and IADL assistance. In the Czech Republic, Finland, Latvia and the Netherlands, most or all of the household provision focuses on social LTC. The split between health and social LTC will depend on the nature and conditions of cash transfers for care and carers, as well as the ability to differentiate between the two types of care. It cannot be due to difference in the qualification of caregivers – households should be equally qualified to provide health or social LTC.

34. Due to their broad scope, the focus of activity for secondary providers of health services (HP.8.2) across countries is much more varied. In addition, because of their secondary health nature, providers in this category tend to have a stronger role in providing social LTC rather than health LTC. In many cases, they include living facilities where the provision of medical/nursing care or personal services is less pronounced than in nursing homes.

## 2.3. Summary of analysis of LTC spending figures

35. An analysis of current long-term care spending estimates and a breakdown of type of care by financing and providers highlights the following issues:

- A number of countries appear to substantially underestimate their LTC (health) spending figures, e.g. Australia<sup>17</sup>, Greece, Poland, the Slovak Republic and the United States. Gaps in social LTC and OOP spending may also lead to an underestimation of total LTC spending in Denmark (compared to Sweden and Norway), and in Iceland (which is substantially below the average of Nordic countries).
- Estimates of social LTC spending are missing for a significant number of countries (including Austria, Belgium, Canada and the United States) impeding the comparability of total LTC spending. In some other cases, the spending on social LTC may be included under health LTC, affecting the comparability of health spending.
- Where social LTC spending is reported, the high variation as a share of total LTC suggests differences in accounting similar activities and/or boundaries may vary. The high share of social LTC in Hungary, Israel, Latvia, Lithuania, and Portugal (>40% of total LTC) might signal an overestimation of social LTC and an underestimation of health LTC spending. This would not affect the comparability of total LTC but would impact the comparability of health LTC and current health expenditure.<sup>18</sup>
- An analysis of LTC spending by providers highlights the following:
  - Countries exclusively reporting inpatient LTC in hospitals are missing a significant part of LTC spending; likewise, limiting the reporting of inpatient LTC to residential care facilities may miss some LTC spending in hospitals;
  - Countries reporting social LTC activities in hospital may be overestimating social LTC;
  - The high variation in the composition of activity recorded for home health care providers (HP.3.5) can point to some reporting issues. Countries may not be

<sup>17</sup> Australia is currently in the process of revising their LTC data. It can be expected that more comparable data will be submitted as part of the JHAQ 2021 data collection round.

<sup>18</sup> The aggregate Current Health Expenditure includes health LTC (HC.3) but not social LTC (HC.R.1).

able to properly distinguish between whether the purpose of service provision is curative, LTC (health) or social LTC.

- The variation in accounting of care provided by households (HP.8.1) – either as health LTC or social LTC- may reflect the conditions related to allowances and benefits for LTC but may also signal some comparability issues regarding ADL/IADL allocation.

36. Figure 2.6 summarises the reporting gaps for the main LTC elements across OECD countries (the shading in the first and last rows indicates the extent of reporting gaps). For example, with regards the financing breakdown, gaps are most apparent for OOP spending on social LTC.

**Figure 2.6. Main gaps in reporting of LTC in OECD countries**

<b>HP1</b> (AUT, DNK, DEU, GRC, SWE, USA)	<b>HP2</b> (AUS, SVK)	<b>HP35</b> (ITA*)	<b>HP81</b> (AUS, BEL, CAN, EST, FRA, GRC, HUN, ISL, ITA, JPN, NLD, NOR)	<b>HP2</b> (CZE, LVA, LUX, PRT, ESP, SWE, CHE)	<b>HP35</b> (CZE, FIN, PRT, SWE)	<b>HP81</b> (DNK, FRA, NOR, PRT, SVN, ESP, SWE, CHE)	<b>HP82</b> (FRA, NOR, ESP, CHE)
<b>HC31</b>		<b>HC34</b> (ISR, USA)		<b>HCR1</b> (AUS, AUT, BEL, CAN, EST, GRC, ISL, IRL, ITA, JPN, KOR, POL, SVK, USA)			
<b>Total LTC</b> (CHL, MEX, NZL, TUR)							
<b>HC31</b>		<b>HC34</b> (ISR, USA)		<b>HCR1</b> (AUS, AUT, BEL, CAN, EST, GRC, ISL, IRL, ITA, JPN, KOR, POL, SVK, USA)			
<b>HF1</b> (SVK)	<b>HF3</b> (GRC, ISL)	<b>HF1</b>	<b>HF3</b> (AUS, CZE, DNK, GRC, HUN, ISL, POL, SVK)	<b>HF1</b>		<b>HF3</b> (CZE, DNK, FRA, ISR)	

Note: A country is mentioned for each key LTC component it is currently not reporting (e.g. CHL is not reporting any LTC element → Total LTC is missing; USA is not reporting HC34 and HCR1; DEU is not reporting HP1 for HC31). The chart should be read from the centre either up or down, the higher the number of countries with reporting gaps.

Source: Authors' assessment based on JHAQ 2019 data submission.

### 3. Linking LTC spending to other LTC indicators

37. Another way to assess the validity and comparability of current LTC spending figures is to compare with other data from the LTC sector. In addition to data on spending, the OECD collects data on beneficiaries, as well as physical and human resources in the area of LTC. This chapter analyses the relationship between the various indicators.

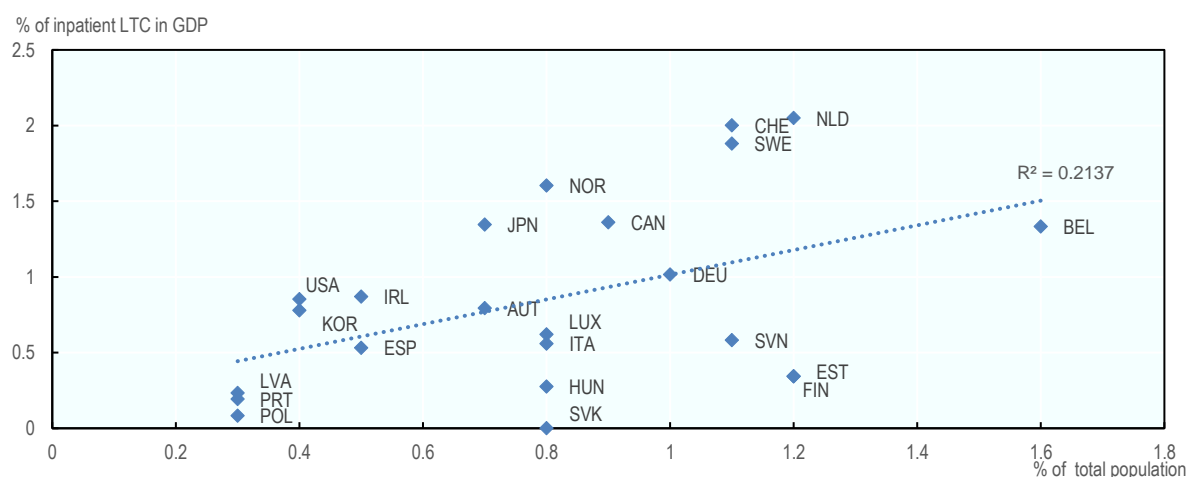
#### 3.1. LTC spending and LTC beneficiaries

38. It might be assumed that if a country has a large number of recipients of LTC services then the relative spending on LTC should also be high. OECD collects statistics on the number of LTC recipients in institutions (other than hospitals) and on the number of LTC recipients living at home.

39. Figure 3.1 shows a weak correlation between the share of LTC recipients living in institutions and spending on inpatient LTC (HC.3.1) as a share of GDP. Belgium stands out as reporting by far the highest number of beneficiaries while having only average inpatient LTC spending. Estonia, Finland and Slovenia have similar LTC recipient rates as the Netherlands or Sweden but much lower spending. On the other hand, low numbers of LTC recipients in Latvia, Poland and Portugal are reflected in low levels of inpatient LTC spending.

40. The chart also helps to validate some of the findings from Chapter 2. The Slovak Republic shows a sizeable population receiving care in institutions which is not included in the measure of inpatient LTC spending. In addition, Finland has a relatively high share of people receiving care in institutions but the inpatient LTC spending estimates were shown to be low (particularly in relation to home LTC).

**Figure 3.1. Mapping of LTC recipients in institution (other than hospitals) with spending on inpatient LTC**

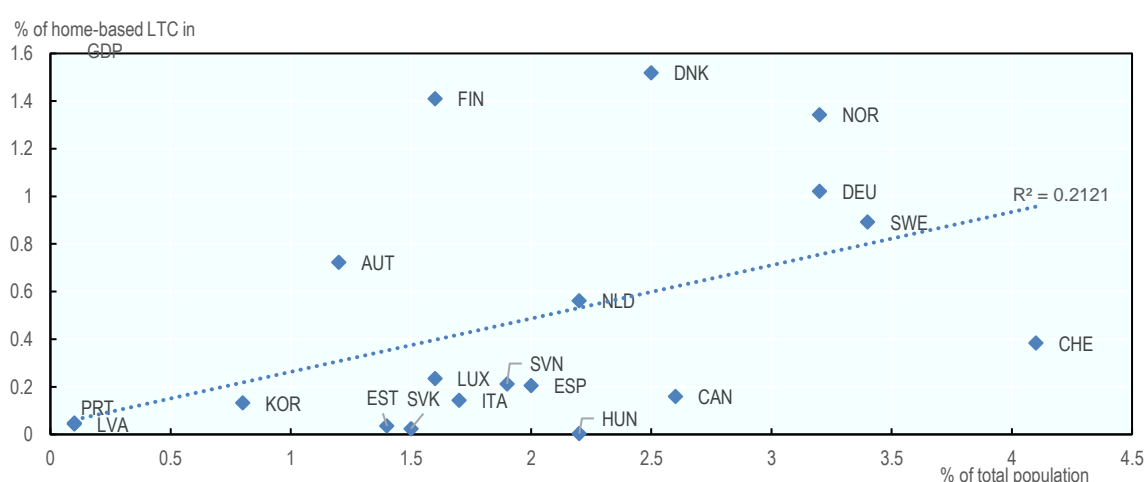


Source: OECD Health Statistics 2019.

41. In a similar way, Figure 3.2 compares the share of LTC recipients at home with spending on home-based LTC (HC.3.4) as a share of GDP. Again, the correlation is not very strong. Switzerland reports the highest share of LTC recipients but home-based LTC spending is only average; and while Sweden and Norway have fairly similar recipient rates, spending in Sweden is substantially below the figure seen in Norway.

42. The chart indicates that countries such as Estonia, the Slovak Republic, Hungary and Switzerland have an important number of recipients of home-based LTC but the spending reported is low – indicating perhaps some issues with non- or misreporting of some components of care. On the other hand, Finland and Denmark report high levels of spending, perhaps indicating the inclusion of additional costs or a misallocation between categories.

**Figure 3.2. Mapping of LTC recipients at home with spending for home-based LTC**



Source: OECD Health Statistics 2019.

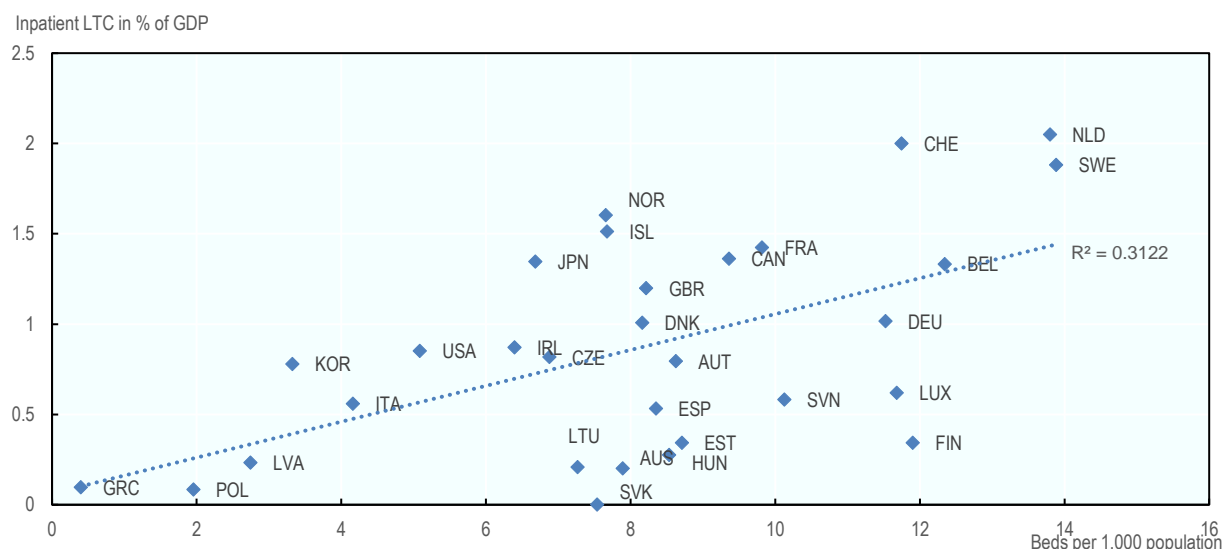
43. For both inpatient LTC and home-based LTC, the apparent disparities between the level of spending and number of recipients may be partially explained by the fact that some LTC spending is included under social LTC (HC.R.1). But other reasons for these large discrepancies are most likely due to under-reporting of spending data but also to issues concerning the data on LTC recipients. The analysis undertaken in Chapter 4 looking at the inclusion or exclusion of certain activities and beneficiary groups in the health spending figures may help to explain some of these observed anomalies.

### 3.2. LTC spending and LTC beds

44. OECD also regularly collects information on resources in the long-term care sector. Compared to the case of LTC recipients, the relationship between the data on LTC spending and the number of long-term care beds (in residential LTC facilities) would appear to be more consistent. The hypothesis is that the greater the infrastructure in the institutional sector for LTC patients (which can be interpreted as a proxy of needs), the more countries will be spending on inpatient LTC. This relationship holds for a few high-income countries such as Switzerland, Sweden and the Netherlands but is less evident in other cases (Figure 3.3). For example, Finland has a similar LTC bed density as Switzerland but the share of inpatient LTC spending in GDP is only one-sixth of the Swiss figure. Part of this may be explained due to some costs by Finland being recorded as HC.R.1 instead of HC.3.1 but this cannot be the only reason for such a

discrepancy. Data issues in the LTC bed data collection can of course also be the reason for the low correlation observed.

**Figure 3.3. Comparison of inpatient LTC spending with LTC beds**



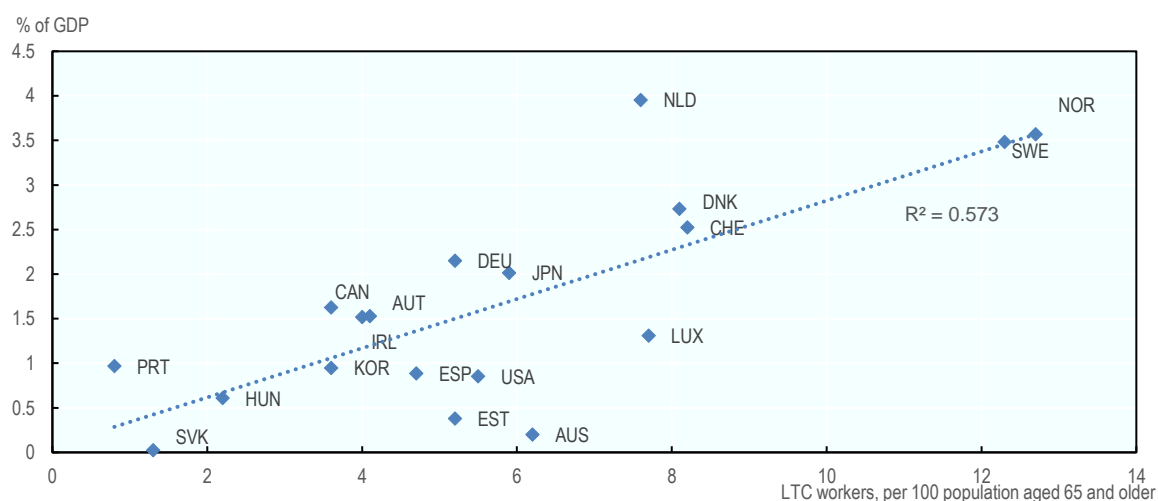
Source: OECD Health Statistics 2019.

### 3.3. Mapping of LTC spending with LTC workforce

45. Finally, the regular LTC data collections also allows for a comparison of LTC spending with figures on the LTC workforce and, overall, the relationship between the two seems to be more consistent. Figure 3.4 plots the share of total LTC in GDP with the number of formal LTC workers per 100 people aged over 65. While in general, the spending share increases with a rise in the number of workers, as would be expected, some countries are an exception to this. Australia (with its known gaps in spending coverage) and Estonia display a much lower spending level than other countries with similar numbers of LTC workers. The opposite is true in the Netherlands. This is consistent with responses in Chapter 4 that indicate that expenditure for these countries is potentially under- or over-estimated, and known data gaps outlined in Chapter 2 (particularly in the case of Australia).



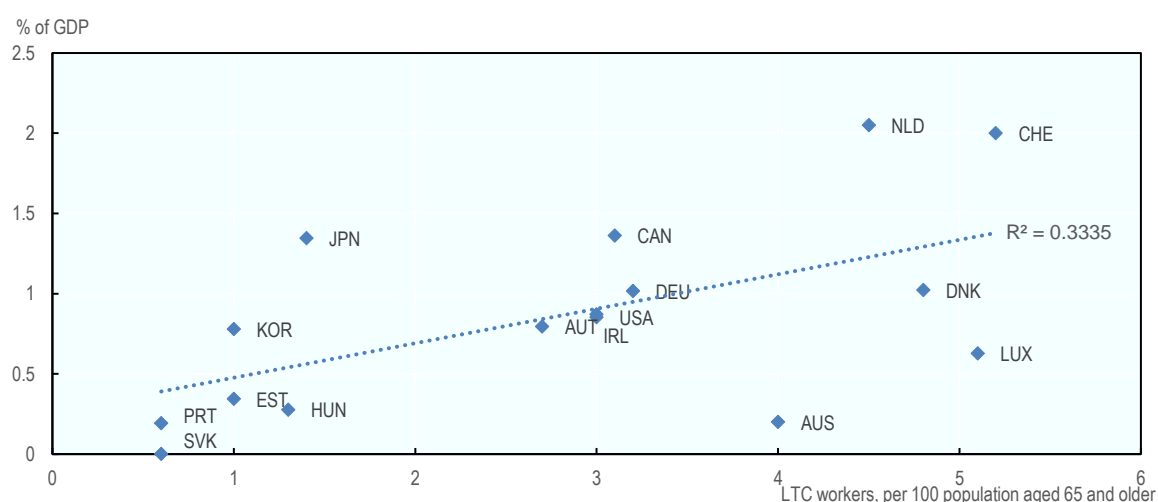
**Figure 3.4. Comparison of total LTC spending with formal LTC workers per 100 population aged 65 years and over, 2017 or nearest year**



Source: OECD Health Statistics 2019.

46. Looking only at inpatient expenditure and LTC workers in institutions, Australia, Denmark, and Luxembourg have lower expenditure than might be expected given the expenditure in countries with similar ratios of workers (Figure 3.5). This may indicate that not all expenditure from the inpatient LTC sector is being recorded as such; some spending in residential care facilities may be allocated to social LTC rather than inpatient LTC. The Netherlands and Switzerland, on the other hand, have much higher expenditure than what would be expected.

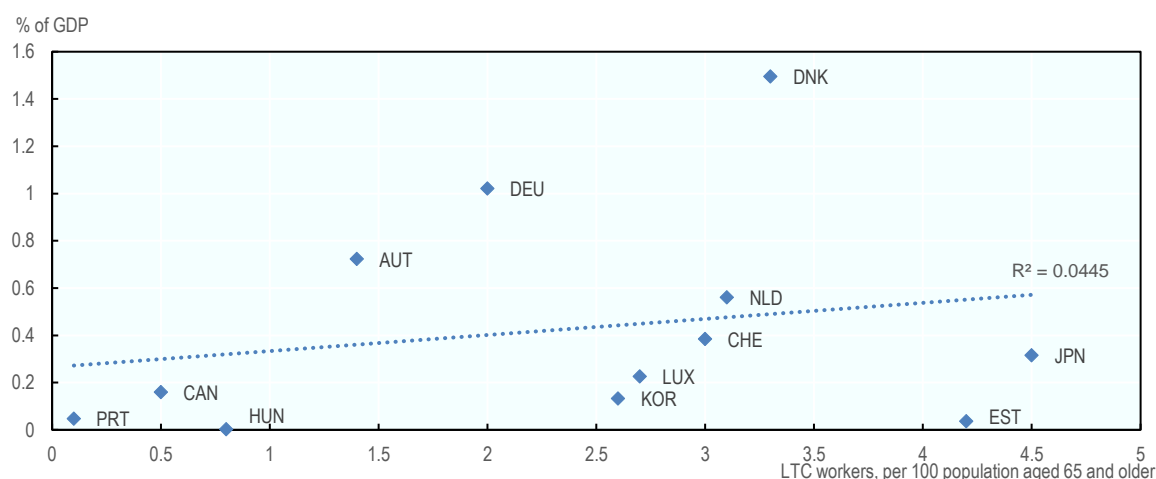
**Figure 3.5. Comparison of inpatient LTC spending with formal LTC workers in institutions per 100 population aged 65 years and over**



Source: OECD Health Statistics 2019.

47. Finally, a comparison of home-based LTC spending with formal LTC workers at home shows no correlation (Figure 3.6). The number of workers were highest in Estonia and Japan, but spending in these countries was low. Austria, Germany and Denmark, on the other hand, have around average numbers of workers, but very high expenditure. It is difficult to explain this just by misallocations of expenditure, and may point to more general issues of comparability of data.

**Figure 3.6. Comparison of home-based LTC spending with formal LTC workers at home per 100 population aged 65 years and over**



Source: OECD Health Statistics 2019.

### 3.4. Mapping spending to other data in LTC

48. In this chapter, LTC spending was mapped against a range of other data in the area of LTC in an attempt to assess the validity of LTC spending figures and the overall consistency of LTC data in OECD data collections. Mapping LTC spending data with information on LTC recipients, LTC beds and LTC workforce showed overall a relatively limited coherence. While there is some correlation between inpatient LTC spending and the number of LTC beds, as well as between overall LTC spending and total LTC workers there is no strong association with LTC beneficiary data or LTC workforce at home. Since the definition of LTC applied is identical, this discrepancy signals some inconsistency in the different data collections. As seen in Chapter 2, under-reporting of LTC spending in some countries may partially explain the low correlation. However, there also seem to be significant data issues in the data collection for LTC recipients and resources. Possibilities to make the different data collections more consistent should be explored in the future.

## 4. Activities and dependency groups in LTC spending estimates

49. Chapter 2 analysed current reporting on LTC spending from a quantitative perspective. This chapter complements this by analysing the results of a survey concerning specific activities and population groups included in the submitted spending estimates. This allows for a more comprehensive assessment of the submitted LTC spending figures.

### 4.1. LTC questionnaire 2019

50. A survey sent to OECD countries in July 2019 aimed to provide a better understanding of data currently reported as long-term care expenditure under JHAQ data submissions. The survey built on the 2015 LTC Questionnaire but added a number of important items to the list of LTC activities. It also included additional questions to examine which potential LTC dependent groups are included in LTC spending estimates. The results may help to explain observed differences in LTC spending levels across countries. The survey was structured around three questions, namely:

1. Current level of reporting of the subcategories of LTC expenditure and financing, including the reasons for non-reporting, or the inclusion with other care categories (Chapter 4.2);
2. The inclusion of specific activities/cost items within each key LTC category (inpatient LTC, home-based LTC and social LTC) and for which key financing scheme (government/compulsory schemes or out-of-pocket) (Chapter 4.3); and
3. The inclusion of groups of patients for specific types of care/services under health LTC or social LTC (Chapter 4.4).

51. By October 2019, responses from 26 OECD countries were considered sufficiently complete to be included in the analysis. Some responses were found to be inconsistent with the JHAQ expenditure estimates, and results may have been adjusted to take account of this.

### 4.2. Current reporting practice

52. Question 1 of the survey asked for qualitative information on current reporting practices for LTC expenditure in the JHAQ. Table 4.1 presents an overview of the country responses.

**Table 4.1. Current LTC expenditure reporting by function and financing scheme**

Number of countries reporting by disaggregation

	HF.1	HF.3	Total HF
HC.3.1	25	24	26
HC.3.2	18	8	18
HC.3.3	9	5	9
HC.3.4	24	20	24
HC.R.1	14	12	15

Note: Total of 26 countries analysed.

Source: OECD LTC questionnaire 2019.

53. The figures are consistent with the quantitative analysis carried out in Chapter 2: Reporting for LTC is more comprehensive for services funded by government schemes (HF.1). Almost all countries are able to report inpatient LTC (HC.3.1) and home-based LTC (HC.3.4) with two-thirds reporting day LTC (HC.3.2) and only around a third reporting outpatient LTC (HC.3.3). In the case of outpatient LTC, a number of countries cannot disaggregate the spending from other outpatient care or else consider the spending negligible or non-existent. Just over half of the countries report social LTC (HC.R.1).

54. Reporting for services funded out-of-pocket (HF.3) is lower for all LTC functions, particularly for day LTC and outpatient LTC, highlighting the general problem of under-reporting of household financing of LTC in many countries.

55. For countries not reporting a particular LTC item the following additional information was provided:

- In the case of **inpatient LTC**, the United States does not provide a breakdown by financing scheme and for Greece, the part financed out-of-pocket is missing;
- For **day LTC**, among the eight countries not reporting HF.1 spending, Finland, Greece, Israel, Norway and Switzerland include the services in other LTC categories, while Portugal includes it under curative care. For France and the United States, day LTC estimates are not available. For out-of-pocket spending, half of the countries not able to report this category record the expenditure in other LTC or health categories, while the other half do not report it at all;
- In the case of **outpatient LTC**, 10 of the 17 countries not reporting HF.1 spending include the expenditure under curative care, while five exclude it completely. Of the 21 countries not reporting OOP spending, 10 include it under curative care, while 11 do not report it at all.
- For **home-based LTC**, Israel includes HF.1 spending under social LTC, while the United States includes the spending together with curative home care. Of the six countries not reporting OOP spending on home LTC, Australia, the Czech Republic, Greece and Israel exclude the costs entirely.
- No estimates of **social LTC** are made for Australia, Austria, Belgium, Canada, Estonia, Greece, Ireland, Italy, Korea, Poland, and the United States. These countries do not report the expenditure under another LTC category resulting in a clear underestimation of total long-term care spending in those countries. Hungary reports social LTC but has no breakdown by financing scheme.

### 4.3. Qualitative assessment of reporting of LTC activities

#### 4.3.1. Key LTC activities

56. The SHA 2011 Manual as well as the 2018 LTC guidelines provide recommendations to differentiate LTC expenditure into a health component (HC.3) and a social component (HC.R.1), and also clarify which services should be considered in other functional categories (e.g. curative care, HC.1), or outside of the SHA universe completely. Based on these definitions, *nursing care* (e.g. administering medication, performing medical diagnosis, dressing wounds, health counselling) and *personal care* (help with activities of daily living [ADL] which refers to help with eating, washing, mobility and managing incontinence), when delivered to a LTC dependent person, should be included in the health part of LTC (HC.3). Help with instrumental activities of daily living (IADL), such as cooking, cleaning or managing finances as well as meals on wheels, and community activities in day centres should be included in the social part of LTC (HC.R.1) if provided in the home of a LTC dependent person or in social care institutions. Services without a primary health or social care objective, such as special schooling for disabled children, and sheltered workplaces for physically or mentally disabled adults are excluded from both health and LTC expenditure. Costs for pharmaceuticals for LTC dependent people treated in an inpatient setting

should be included in either HC.3 or HC.5, depending on whether the costs are included within a care package. For LTC dependent people at home they should be considered as HC.5 unless they, too, are included in a LTC service package.

57. Table 4.2 presents an overview of countries' reporting practice with regards to the recommendations above. The survey included 17 activities/cost items split across the categories of care, with countries indicating whether expenditure on the services are included under inpatient LTC (HC.3.1), home-based LTC (HC.3.4) and social LTC (HC.R.1).

**Table 4.2. Inclusion of activities/cost items in reported LTC expenditure by function**

Number of countries reporting that a particular activity is included in LTC spending figures by disaggregation

	Inpatient LTC (HC.3.1)			Home-based LTC (HC.3.4)			Social LTC (HCR.1)		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
<b>Nursing/medical care</b>									
Administering (i.e. giving) medication	24	1	-	22	1	1	3	11	1
Performing medical diagnosis	21	3	1	12	10	2	-	15	-
Dressing wounds	24	1	-	22	1	1	3	10	2
Health counselling	25	-	-	21	1	2	3	11	1
<b>Personal care (ADL)</b>									
Help with eating	24	1	-	18	5	1	9	5	1
Help with washing	24	1	-	18	5	1	8	6	1
Help with mobility	23	2	-	18	5	1	10	4	1
Help with managing incontinence	24	1	-	20	3	1	6	7	2
<b>Assistance care (IADL)</b>									
Help with shopping	2	23	-	6	17	1	14	-	1
Help with housework	3	22	-	5	18	1	14	-	1
Help with managing finances	3	21	1	4	19	1	10	4	1
Meals on wheels	2	22	1	4	20	-	9	3	3
<b>Social inclusion/ vocational activities</b>									
Community activities in day centres	5	19	1	1	22	1	8	6	1
Special schooling for disabled children	1	23	1	-	23	1	2	11	2
Sheltered workplaces for physically or mentally disabled adults	2	23	-	1	23	-	5	9	1
<b>Pharmaceuticals</b>									
Pharmaceuticals for LTC dependents in inpatient setting	19	5	1	2	21	1	1	14	-
Pharmaceuticals for LTC dependents living at home	2	23	-	11	13	-	2	13	-
<b>Total reporting function:</b>	<b>25</b>			<b>24</b>			<b>15</b>		

Notes: 'Don't know' also includes non-responses. The United States did not provide any details of inclusions or exclusions and is therefore not included in the analysis.

Source: OECD LTC questionnaire 2019.

58. Overall, for most activities/cost items, there appears to be general consistency, largely in accordance with the current recommendations and guidelines.

59. For **inpatient long-term care** (HC.3.1), almost all countries include the range of nursing care services and personal care services.<sup>19</sup> For some nursing (or medical) care services, particularly *diagnosis*, a few countries (e.g. Belgium and Luxembourg) cannot separate these expenditures from curative/rehabilitative services. Portugal indicates that help with ADL is not included under HC.3.1. Countries generally exclude spending on IADL-type services since they are mostly irrelevant in an inpatient setting. While most countries include pharmaceutical costs for LTC dependents in inpatient settings<sup>20</sup>, Luxembourg and the United Kingdom explicitly referred to the accounting of pharmaceutical costs as retail pharmaceuticals (HC.5), although this may refer to the prescribing to residents in specific long-term care facilities. Contrary to the general LTC guidance, a number of countries (including Ireland, Netherlands and Switzerland) include spending related to *community activities in day centres* under HC.3.1.

60. Activities are generally well reported for the two main financing types (HF.1 and HF.3), though coverage was better for services funded by governments. The lower coverage for OOP may indicate a degree of under-reporting but may also indicate that there is no cost-sharing for inpatient LTC services in some countries. Overall, across the range of activities, the Netherlands, Switzerland, Czech Republic, the United Kingdom, and Greece include the largest number of cost items under HC.3.1. On the other hand, reporting in Belgium, Canada and Portugal appears to be more restricted.

61. Slightly fewer countries include nursing care activities within **home-based long-term care** (HC.3.4). Some medical services provided by doctors and/or nurses are included under home-based curative care in some countries (e.g. Canada and Slovenia). This may also explain the lower number of countries including some personal care services, with spending included in curative home-based care (HC.1.4). A number of countries (including Finland, Germany and the United Kingdom) include expenditure related to IADL services under HC.3.4. This may relate to a package of services for which expenditure cannot be split between health and social LTC rather than any “incorrect” inclusion of these costs.

62. Pharmaceutical expenditure for LTC dependents living at home is included less often in the costs of home-based LTC than for LTC dependents in inpatient settings. However, it is still surprising that in eleven countries this appears to be the case. Again, coverage in reporting was better for all activities when funded by government compared to out-of-pocket.

63. Overall, for the whole range of activities, Germany, Greece, the Netherlands, Slovenia and the United Kingdom appear to have the greatest degree of inclusion. Korea, Portugal and Canada, on the other hand, are the most restrictive.

64. Reporting of spending on **social long-term care** (HC.R.1) is lower than for inpatient or home-based LTC. A significant number of those that do report include some expenditure items related to help with ADL (and in some cases also nursing care activities) which should normally be reported under health LTC (HC.3). This is likely due to their inclusion in a service package where help with IADL is the dominant character such that, in accordance with the guidelines, all spending is included under social LTC. This could have a considerable impact on the relative split between health and social care spending. In addition, out-of-pocket spending on social LTC services are less frequently reported compared to spending by government or compulsory schemes. Overall,

<sup>19</sup> The United States did not provide a breakdown of what is included under HC.3.1.

<sup>20</sup> As in the case for inpatient care in hospitals, pharmaceuticals used as part of an inpatient LTC stay should be reported under HC.3.1, if they are part of a service package.

Finland, the Czech Republic, and the United Kingdom tend to include the greatest range of activities under social LTC.

#### 4.3.2. Accounting of cash-transfers

65. The System of Health Accounts (SHA) framework adopts the concept of final consumption of health care goods and services to measure current health expenditure. Cash transfers (e.g. care or carer's allowance) with the condition (or intention) that they are used to purchase health or LTC services are included. However, cash transfers that do not reimburse any health or long-term care service transaction and considered as some sort of income replacement (e.g. disability or sickness benefits) should not be included.

66. Cash transfers can potentially be a costly component of LTC and different approaches in the inclusion or exclusion can contribute to comparability issues of overall spending between countries. Table 4.3 provides an overview of the extent to which conditional and unconditional cash-transfers are reported under the key LTC categories by countries.

67. Unconditional cash transfers to the mentally impaired, the blind or deaf, and physically disabled are included in home-based care expenditure (HC.3.4) for four countries (Belgium, France, Luxembourg and Slovenia). Some of these countries also include these transfers under HC.3.1 and HC.R.1. In France, this refers to the APA (*Allocation personnalisée d'autonomie*), a benefit paid out to those over 60 who have been assessed at a certain level of dependence requiring ADL-type services. The APA can be paid to persons in institutional care as well as those residing in their own homes.

**Table 4.3. Inclusion of care/service types in reported LTC expenditure by function**

Number of countries reporting by disaggregation

	HC31			HC34			HCR1		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
<b>Unconditional cash-transfers</b>									
Monetary transfers to the physically disabled	2	22	1	4	18	2	2	12	1
Monetary transfers to the blind or deaf	2	22	1	4	18	2	3	11	1
Monetary transfers to mentally impaired	2	21	2	4	18	2	2	12	1
Monetary transfers to the elderly	3	21	1	3	19	2	2	12	1
Other unconditional benefits to LTC dependent	0	24	1	1	21	2	0	14	1
<b>Conditional cash-transfers</b>									
Care allowance or carer's allowance	2	22	1	9	14	1	7	8	0
Other conditional cash-transfers to LTC dependent people	3	21	1	3	20	1	5	10	0
<b>Other</b>									
Other financial support to informal care givers	0	21	4	3	19	2	1	12	2
<b>Total reporting function:</b>	<b>25</b>			<b>24</b>			<b>15</b>		

Note: 'No' might mean that a certain cash transfer does not exist and therefore is not included, or that it does exist but is not included.

Source: OECD LTC questionnaire 2019.

68. Conditional cash transfers are included in LTC spending for nine countries. These primarily concern care or carer's allowances for home-based LTC, but seven countries also

provide some allowances to cover social LTC. The Netherlands provides conditional cash transfers for both institutional and home-based care, as well as for social LTC. Other types of financial support are included for home-based LTC in the case of Germany, Luxembourg and the United Kingdom. In Germany and Luxembourg, for example, this covers the pension contributions for caregivers under certain conditions.

69. In general, the responses to the survey raise some questions concerning the eligibility of the inclusion of certain allowances in the accounting of LTC.

### 4.3.3. Accounting for accommodation costs

70. Costs for room and board are an integral part of the costs for inpatient care in nursing homes and other facilities, and any differences in accounting practices across countries can have significant spending implications. Table 4.4 gives an overview as to what extent these costs are reflected under the key LTC categories.

**Table 4.4. Inclusion of care/service types in reported LTC expenditure by function**

Number of countries reporting by disaggregation

	HC31			HC34			HCR1		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Costs for accommodation in LTC facilities considered as HP2	23	2	0	2	19	3	5	9	1
Costs for food and drink in LTC facilities considered as HP2	23	2	0	2	19	3	5	9	1
Costs for accommodation in assisted living facilities considered as HP82	4	18	3	1	21	2	10	5	0
Costs for food and drink in assisted living facilities considered as HP82	2	20	3	1	21	2	9	6	0
Costs for accommodation in other facilities	3	19	3	1	22	1	3	10	2
Costs for food and drink in other facilities	3	19	3	1	22	1	3	10	2
<b>Total reporting function:</b>	<b>25</b>			<b>24</b>			<b>15</b>		

Note: These figures exclude countries that reported 'do not know' for each question.

Source: OECD LTC questionnaire 2019.

71. Most countries correctly report that the costs for board and lodging are included in inpatient LTC in long-term care facilities (HP.2). The Czech Republic, Finland, France, Israel and Slovenia also include some of these costs under social LTC – this can apply when dependents who are mainly receiving lower level (i.e. IADL-type services) care reside in nursing care type facilities such as HP.2. Importantly, Australia and Estonia report that they did not include long-term residential accommodation and board costs under in-patient care. While the current restricted measure of LTC in Australian reporting is known, the basis for exclusion in Estonia is unclear. It is also not clear why Finland and Greece include accommodation costs under home-based LTC.

72. For assisted-living arrangements (included under HP.8.2), according to the LTC guidelines, subsidies for the cost of accommodation are to be included under social LTC. Ten countries report that accommodation costs are included in social LTC with Finland, France, Latvia and the Netherlands including some of these costs under inpatient LTC, when applied to patients receiving predominantly nursing and personal care in such living facilities. A number of countries either do not know or do not report any LTC activity for these providers.



73. Finland, the Netherlands and Poland also record costs for accommodation and room and board under HC.3.1 for other facilities (outside of HP.2 and HP.8.2). This tends to refer to hospitals or ambulatory providers. In general, the accounting differences set out above have the potential to influence the comparability of LTC spending figures given how costly expenses for accommodation usually are.

#### 4.3.4. Accounting of other costs

74. Some other potentially important cost items may be reported in an inconsistent manner between countries. This includes the costs for LTC dependent people in hospitals who cannot access LTC facilities, costs for assessing whether applications qualify for LTC benefits or services, and the cost of case-management of LTC patients. Table 4.5 gives an overview of the extent to which countries report these items.

**Table 4.5. Inclusion of care/service types in reported LTC expenditure by function**

Number of countries reporting by disaggregation

	HC31			HC34			HCR1		
	Yes	No	Don't know	Yes	No	Don't know	Yes	No	Don't know
Care for LTC dependent people in hospitals who can temporarily not access LTC facilities due to lack of access ("bed blockers")	10	13	2	1	22	1	0	14	1
Costs for assessing if applicant qualifies for LTC benefits/services	8	14	3	9	13	2	3	10	2
Costs of case-management of LTC patients	9	11	5	8	14	2	4	10	1
<b>Total reporting function:</b>	<b>25</b>			<b>24</b>			<b>15</b>		

Source: OECD LTC questionnaire 2019.

75. The phenomenon of LTC patients remaining in hospitals rather than being transferred to other facilities or discharged back home can vary considerably. Ten countries currently include the related costs under inpatient LTC<sup>21</sup>, and another two countries (Czech Republic and Switzerland) are unsure as to how the costs are accounted. Some country estimates suggest this can account for between 1% and 4% of total hospital spending, although this may also include planned LTC. Around half of the remaining 14 countries that do not include these costs explicitly indicated that the costs are included under HC.1 or HC.2.

76. Costs for the assessment of applicants and case-management of LTC patients are included for around a third of countries for inpatient and/or home-based LTC. It is unclear if this is bundled with other services, or reported separately. Three or four countries also disaggregate these costs to include also under Social LTC. Other countries include these costs under general medical costs, administration costs or unknown.

#### 4.3.5. Assessment of comparability of estimates

77. The following three tables provide a summary of the groups of activities included in the estimates of inpatient, home-based and social LTC spending. This can give an overview of the degree of alignment between countries and possible areas of inconsistency that could affect

<sup>21</sup> Ireland also include some of the costs under home-based LTC.

comparability. One limitation of the analysis is that total spending is not only be impacted by whether one group of activities/services is included under the respective LTC categories, but also by the related prevalence and cost.

78. The majority of countries are consistent in their approach regarding the inclusion or exclusion of types of activities and transactions for estimating **inpatient LTC** (Table 4.6). Expenditures relating to nursing care, personal care and pharmaceuticals are included, together with room and boarding costs in long-term residential facilities (HP.2). However, some deviations might explain an over- or under-estimation of inpatient LTC spending compared with other countries.

- Belgium, Canada, Germany and Luxembourg are more restrictive on the inclusion of some of the medical/nursing services – with some or all the costs accounted under curative/rehabilitative care.
- Portugal does not include personal care services under inpatient LTC.
- Germany, Ireland, Israel, Luxembourg and the United Kingdom do not account for the cost of pharmaceuticals delivered to LTC residents under inpatient LTC.
- The Netherlands also includes accommodation costs in assisted living facilities which may help explain the high overall spending. Finland, France and Latvia also indicate that these costs are included.
- Only a few countries explicitly include assistance care services, although as explained previously, such services in an inpatient setting would be implicitly included or not relevant.

**Table 4.6. Summary of inclusion of activities in inpatient LTC spending by country**

	Nursing care services	Personal care services	Assistance care services	Pharma. to inpatients	Accom. costs HP2	Accom. costs HP82	Temp. hospital care	Assessment/ case mgmt.	Cash transfers
Australia									
Austria									
Belgium									
Canada									
Czech Republic									
Estonia									
Finland									
France									
Germany									
Greece									
Hungary									
Ireland									
Israel									
Italy									
Korea									
Latvia									
Lithuania									
Luxembourg									
Netherlands									
Norway									
Poland									
Portugal									
Slovenia									
Switzerland									
United Kingdom									

Note: Dark shaded cells include all the activities within the care category. Light shaded cells include only a selection of the activities. Blank cells indicate that no activities are included with the care category. Part shaded cells do not include OOP spending.

Source: Authors' assessment of OECD LTC questionnaire 2019.

79. For **home-based LTC**, nursing and personal care services are again broadly included apart from a few exceptions (Table 4.7). Assistance care is included in a number of countries, most likely due to the inseparability of costs within a service package. There is also a split between countries regarding the inclusion of pharmaceutical costs for patients living at home. The main points to note are:

- Canada, Estonia, Poland and Portugal (and Korea partially) exclude activities related to personal and assistance care services. Given that among these countries, only Portugal provides estimates of social LTC spending, this could mean an overall underestimation of LTC spending.
- Finland, Latvia and the Netherlands include accommodation costs for assisted living facilities, which could significantly inflate overall spending. Finland (along with Greece) indicates that costs of accommodation in residential facilities are also included under home-based LTC!

**Table 4.7. Summary of inclusion of activities in home-based LTC spending by country**

	Nursing care services	Personal care services	Assistance care services	Pharma. home-based	Accom. costs HP2	Accom. costs HP82	Temp. hospital care	Assessment/ case mgmt.	Cash transfers
Australia									
Austria									
Belgium									
Canada									
Czech Republic									
Estonia									
Finland									
France									
Germany									
Greece									
Hungary									
Ireland									
Italy									
Korea									
Latvia									
Lithuania									
Luxembourg									
Netherlands									
Norway									
Poland									
Portugal									
Slovenia									
Switzerland									
United Kingdom									

Note: Dark shaded cells include all the activities within the care category. Light shaded cells include only a selection of the activities. Blank cells indicate that no activities are included with the care category. Part shaded cells do not include OOP spending.

Source: Authors' assessment of OECD LTC questionnaire 2019.

80. Among the 15 countries reporting social LTC spending estimates, the possible inclusion across the board reflects the broader range of activities (to cover both home and residential settings). Most countries include assistance care services, often together with some personal care services (if delivered in a service package). The inclusion of accommodation costs in both residential LTC facilities and assisted living facilities is variable, perhaps mirroring the extent of public coverage as much as reporting gaps. The main points to note are:

- The Czech Republic, Finland, Portugal and Slovenia would appear to be the most inclusive, which is generally reflected in the large share of social LTC spending.

- The inclusion of accommodation costs in more than half of the countries would also be an important factor in the overall levels of social LTC spending, even if, in the case of Hungary, other activities are excluded.

**Table 4.8. Summary of inclusion of activities in social LTC spending by country**

	Nursing care services	Personal care services	Assistance care services	Pharma. home-based	Accom. costs HP2	Accom. costs HP82	Temp. hospital care	Assessment/ case mgmt.	Cash transfers
Czech Republic									
Finland									
France									
Germany	?	?	?						
Hungary									
Israel									
Latvia									
Lithuania									
Luxembourg									
Netherlands									
Norway									
Portugal									
Slovenia									
Switzerland									
United Kingdom									

Note: Dark shaded cells include all the activities within the care category. Light shaded cells include only a selection of the activities. Blank cells indicate that no activities are included with the care category. Part shaded cells do not include OOP spending.

Source: Authors' assessment of OECD LTC questionnaire 2019.

#### 4.4. Qualitative assessment of reporting of LTC dependency groups

81. The final part of the survey asked countries to indicate their reporting practice for a number of key activities/cost items for specific population groups that might be considered as LTC dependent. The extent to which specific groups are included in health LTC (HC.3) or social LTC (HC.R.1) could have substantial consequences for international comparability of LTC spending figures. Indeed, Table 4.9 suggests that there is relatively little consistency in reporting of 12 different population groups across countries.

Table 4.9. Inclusion of care/service types for LTC patient groups by function

Number of countries reporting by disaggregation

	HC3		HCR1		Both yes	Both no
	Yes	No	Yes	No		
<b>Children with mental disability</b>						
Costs for accommodation and board if housed in inpatient facilities	17	7	7	7	5	2
Costs for help with ADL if provided in inpatient facilities	17	7	4	10	3	3
Costs for supervision in inpatient facilities if they can perform ADL themselves	11	10	4	10	2	4
Costs for special schooling/shelter working	3	21	5	9	2	9
Costs for consultation with doctor	6	17	0	14	0	10
<b>Children with physical impairment</b>						
Costs for accommodation and board if housed in inpatient facilities	18	6	6	8	4	2
Costs for help with ADL if provided in inpatient facilities	18	6	3	11	2	3
Costs for supervision in inpatient facilities if they can perform ADL themselves	12	9	4	10	2	4
Costs for special schooling/shelter working	3	20	5	9	2	9
Costs for consultation with doctor	7	16	0	14	0	10
<b>Adults with mental disability</b>						
Costs for accommodation and board if housed in inpatient facilities	18	6	8	6	5	1
Costs for help with ADL if provided in inpatient facilities	18	5	5	8	3	1
Costs for supervision in inpatient facilities if they can perform ADL themselves	12	10	5	8	2	3
Costs for special schooling/shelter working	4	19	6	9	3	8
Costs for consultation with doctor	8	15	0	15	0	9
<b>Adults with chronic diseases</b>						
Costs for consultation	11	12	0	14	0	8
<b>Adults with mental health issues</b>						
Costs for consultation	10	13	1	14	1	9
Costs for accommodation and board if temporarily institutionalised	16	8	2	13	2	5
Costs for pharmaceuticals if patient is temporarily institutionalised	14	10	1	14	1	7
<b>Adults with addiction problems</b>						
Costs for consultation	9	15	0	15	0	10
Costs for accommodation and board if temporarily institutionalised	12	11	0	14	0	7
Costs for pharmaceuticals if patient is temporarily institutionalised	10	13	0	14	0	9
<b>Adults with cancer</b>						
Costs for consultation	8	16	0	15	0	10
Treatment costs in hospitals	8	16	0	15	0	10
Costs for pharmaceuticals	9	15	0	15	0	9
Palliative care at the end of life	20	5	0	15	0	4
<b>Adults with HIV/AIDS</b>						
Costs for consultation	8	16	0	15	0	11
Treatment costs in hospitals	7	17	0	15	0	12
Costs for pharmaceuticals	9	15	0	15	0	10
Palliative care at the end of life	19	5	0	15	0	4
<b>Adults with physical handicap that can live an independent life</b>						
Costs for consultation	5	20	1	14	0	11
<b>Elderly without clear ADL needs in assisted living facilities</b>						
Costs for accommodation	4	20	4	10	0	8

Costs for help with IADL	3	21	5	8	0	7
Costs for consultation	5	19	0	14	0	12
<b>Elderly with physical impairment (clear ADL needs) that live in LTC facility</b>						
Costs for accommodation	22	2	6	8	5	0
Costs for help with ADL	21	3	2	12	1	1
Costs for social activities	14	9	5	9	3	3
Costs for consultation with doctor or nurse if related to impairment	14	8	0	14	0	5
Costs for consultation with doctor or nurse if unrelated to impairment	13	9	0	14	0	6
Pharmaceuticals	16	7	1	13	1	4
<b>Elderly with dementia</b>						
Costs for supervision (if living at home with relatives or in day care setting)	16	8	7	8	4	1
Costs for social activities to fight isolation at home of patient or in day care setting	9	15	9	6	3	3
Costs for accommodation (if living in institution)	22	3	5	10	3	0
Costs for consultation with doctor or nurse if related to dementia	14	10	1	14	1	6
Costs for consultation with doctor or nurse if unrelated to dementia	11	13	1	13	1	9

*Note:* These figures exclude countries that reported 'do not know' for each question. In case a country report a specific care/service type under both HC3 and HCR1, this can signal that the same care/service type is treated differently depending on the setting where this service is provided or that depending on the payer expenses are classified differently.

*Source:* OECD LTC questionnaire 2019.

82. There is relative consistency in the reporting of costs related to **children with mental disability**, **children with physical impairment**, and **adults with mental disability**. Around three-quarters of countries include costs for accommodation and board, and help with ADL in inpatient facilities as part of inpatient LTC spending. A quarter of countries may also consider some of these costs under social LTC; Latvia and Portugal exclusively report accommodation costs for these groups under social LTC. Half exclude the costs for supervision in inpatient facilities if patients can perform ADL themselves – these costs should normally be included. Similarly, costs associated with doctors' consultations are not systematically included in inpatient LTC spending. The majority include the costs under curative care, though this may depend on the interpretation of whether care is delivered by on-site or visiting doctors. Around half a dozen countries still include costs of special schooling/sheltered work places for one or more of the population groups (either under HC.3 or HC.R.1), whereas the costs should be outside the SHA boundary. This can be due to difficulties in separately identifying these costs (e.g. France and the United Kingdom).

83. Costs for **adults with chronic diseases**, **mental health issues**, **addiction problems**, **cancer**, **HIV/AIDS**, and **physical handicap who live an independent life** are almost always excluded from social LTC regardless of the activity/cost item. Yet, countries appear undecided as to whether these some of these costs should be classified as health LTC or under other health functions, such as curative care (HC.1).

84. Between one-third and a half of the countries consider consultation costs with doctors as health LTC; the remainder appear to count these costs as curative care. The same proportion consider spending on pharmaceuticals for adults with mental health issues, addiction problems, cancer and HIV under health LTC with the remaining countries put these costs separately under medical goods (HC.5). A higher proportion (from half to two-thirds) allocate (temporary) accommodation costs for adults with mental health issues and addiction problems under LTC. One category where there is consensus concerns palliative care for cancer and HIV patients – the associated costs are overwhelmingly considered as health LTC.

85. Greater consensus exists for the two population groups that make up a large share of LTC recipients: **elderly with clear ADL needs who live in LTC facilities** and **elderly with dementia**.

Nearly all countries include accommodation costs and help with ADL for these groups under health LTC (or social LTC - depending on the nature of the facility where services are provided). For consultation costs, a half to two-thirds of countries count spending as health LTC – the remainder cover them under curative care (HC.1). For the elderly with clear ADL needs, social activities in LTC facilities are included under HC.3 for around two-thirds of countries, with the rest reporting them under HC.R.1. Costs related to social activities to fight isolation of dementia patients at home are included by more than a third of countries as health LTC and/or social LTC.

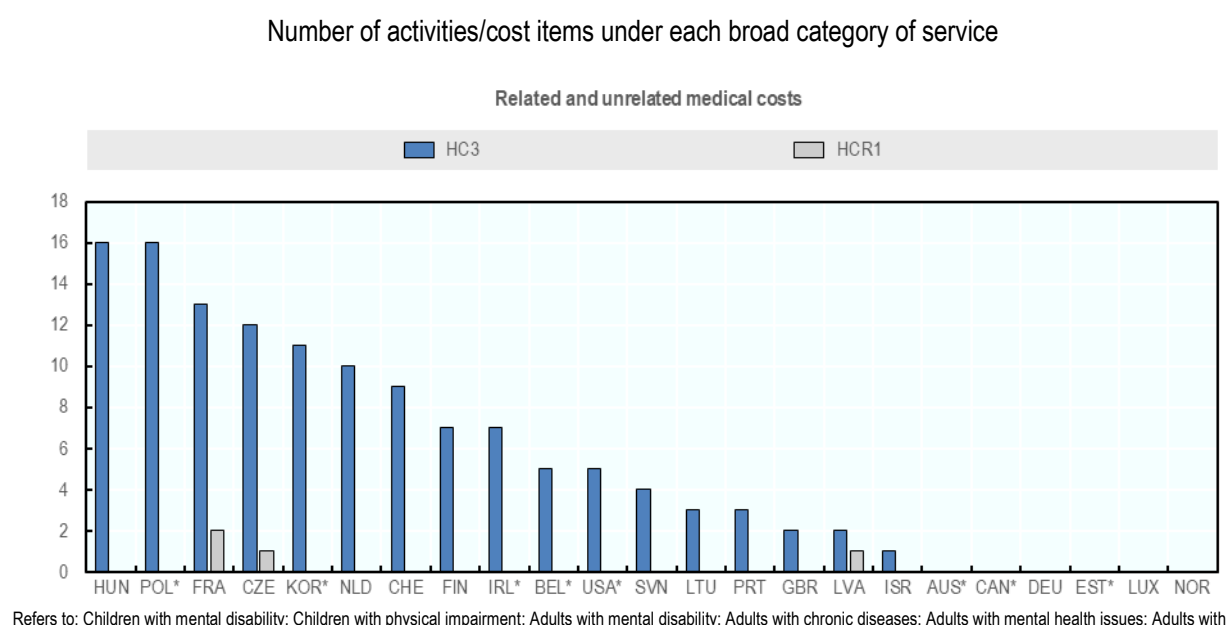
86. Spending on services for **elderly patients without clear ADL needs in assisted living facilities** are generally excluded. Only four countries report accommodation costs and help with IADL under health LTC with roughly the same number including them under social LTC.

87. In summary, there are some significant differences in accounting practices across countries, with implications for the comparability of spending figures. That said, the vast majority of countries report spending for care and accommodation for elderly people with physical impairment and dementia (two key LTC dependent groups covering most LTC recipients) as health LTC. Likewise, the overall inclusion of palliative care spending and the exclusion of costs incurred by people without clear ADL needs in assisted living facilities contributes to better comparability of LTC spending estimates.

88. For other patient groups, the rather heterogeneous accounting of costs poses some challenges. While in some cases these differences will not have important consequences due to the low prevalence or costs involved, these may be more substantial in other instances. For example, allocating consultation costs for chronic patients or the costs for hospital treatment and pharmaceuticals for cancer patients as LTC rather than curative or pharmaceutical costs can have enormous consequences. The 2018 LTC guidelines gives accounting recommendations for many of activities and population groups mentioned above. SHA data compilers are encouraged to consult them and adjust their reporting in future JHAQ data collection rounds if required.

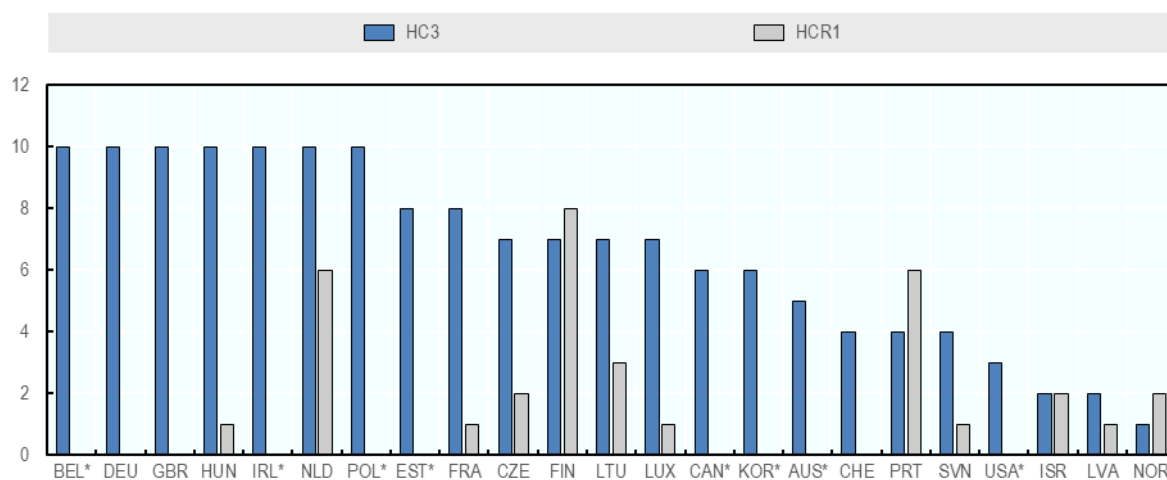
89. Figure 4.1 provides an overview on how countries account for different activities/cost items across the 12 specific patient groups.

**Figure 4.1. Summary of inclusions of activities/cost items for potential LTC patient groups by country and type of LTC**



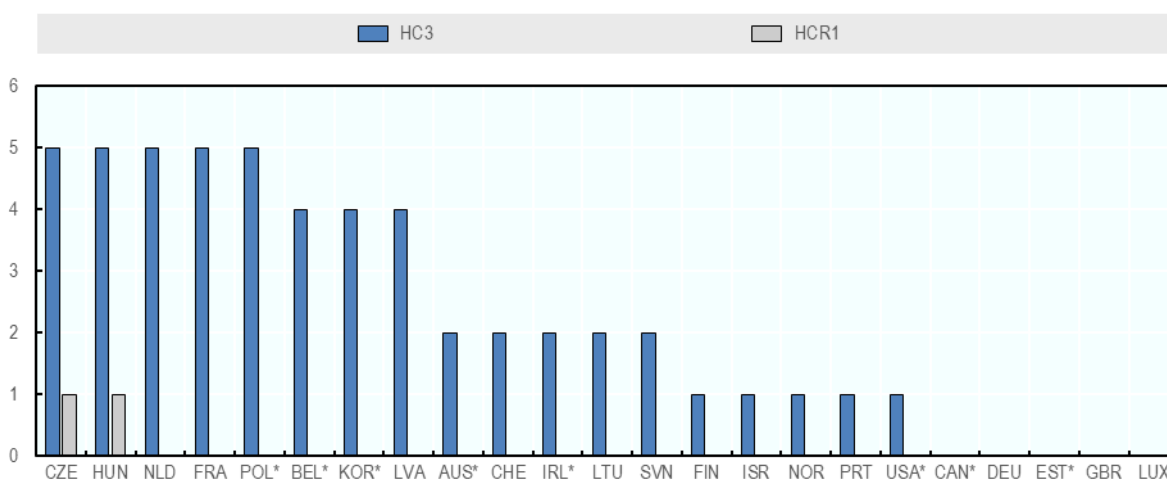
addiction problems; Adults with cancer; Adults with HIV/AIDS; Adults with physical handicap that can live an independent life; Elderly without clear ADL needs in ALF; Elderly with physical impairment (clear ADL needs) that live in LTC facility; Elderly with dementia

#### ADL and supervisory costs



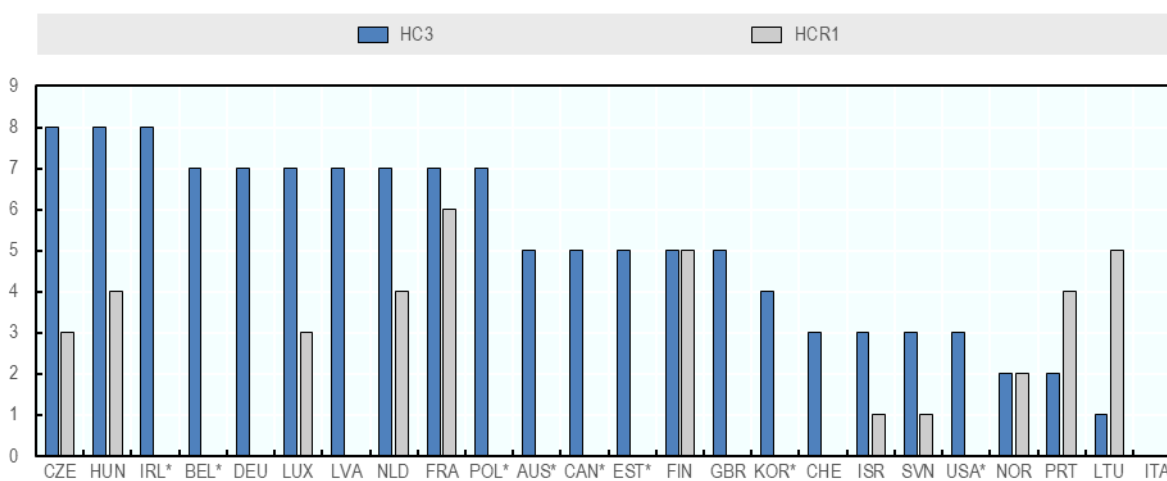
Refers to: Children with mental disability; Children with physical impairment; Adults with mental disability; Adults with cancer; Adults with HIV/AIDS; Elderly with physical impairment (clear ADL needs) that live in LTC facility; Elderly with dementia

#### Pharmaceutical costs



Refers to: Adults with mental health issues; Adults with addiction problems; Adults with cancer; Adults with HIV/AIDS; Elderly with physical impairment (clear ADL needs) that live in LTC facility

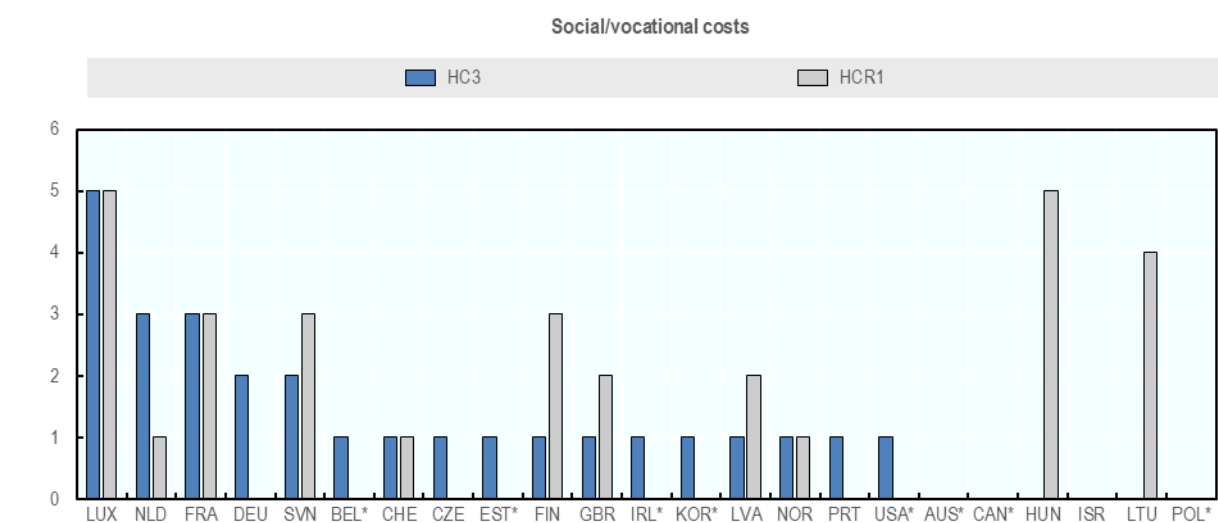
#### Accommodation costs



Refers to: Children with mental disability; Children with physical impairment; Adults with mental disability; Adults with mental health issues; Adults with addiction problems; Elderly



without clear ADL needs in ALF; Elderly with physical impairment (clear ADL needs) that live in LTC facility; Elderly with dementia



Refers to: Children with mental disability; Children with physical impairment; Adults with mental disability; Elderly without clear ADL needs in ALF; Elderly with physical impairment (clear ADL needs) that live in LTC facility; Elderly with dementia

Note: \* Countries not currently reporting spending estimates for HCR.1

Source: OECD LTC questionnaire 2019.

90. Table 4.10 summarises the reporting practice by countries and clusters them into groups for each of the 12 patient groups. The categorisation is based on whether – for each group – countries include or exclude the majority of activities mentioned in Table 4.10 under HC.3 and HC.R.1. Due to limitations of the survey, it is not clear whether countries report activities in other function categories if they are not reported under HC.3. In many cases, it can be assumed that this is the case.

**Table 4.10. Preliminary overview of country responses by patient group for HC.3 for HCR.1**

Mostly included means half or more of activities mentioned in Table 4.10 are included by a country, mostly excluded means countries include less than half.

	HC.3		HCR.1
	Mostly included	Mostly excluded	Mostly included
<b>Adults with addiction problems</b>	AUS, BEL, CZE, FRA, GRC, HUN, IRL, LVA, NLD, POL	DEU, EST, FIN, GBR, ISR, KOR, LTU, LUX, NOR, PRT, SVN, USA	
<b>Adults with cancer</b>	CHE, CZE, FRA, GRC, HUN, KOR, LVA, NLD, POL	AUS, BEL, DEU, EST, FIN, GBR, IRL, ISR, LTU, LUX, NOR, PRT, SVN, USA	
<b>Adults with chronic diseases</b>	BEL, CHE, FRA, GBR, GRC, HUN, IRL, ISR, KOR, NLD, POL	AUS, DEU, EST, FIN, LTU, LUX, LVA, NOR, PRT, SVN, USA	
<b>Adults with HIV/AIDS</b>	BEL, CZE, GRC, HUN, KOR, LVA, NLD, POL	AUS, CHE, DEU, EST, FIN, GBR, IRL, ISR, LTU, LUX, NOR, PRT, SVN, USA	
<b>Adults with mental disability</b>	BEL, CHE, DEU, FIN, FRA, GBR, GRC, HUN, IRL, KOR, LUX, NLD, POL	AUS, CAN, CZE, EST, LTU, NOR, PRT, SVN, USA	FIN, NLD, NOR, PRT
<b>Adults with mental health issues</b>	BEL, CHE, CZE, FRA, GRC, HUN, KOR, LTU, NLD, POL	AUS, DEU, EST, FIN, GBR, ISR, LUX, NOR, PRT, USA	CZE

<b>Adults with physical handicap that can live an independent life</b>	CHE, CZE, GRC, HUN, POL	AUS, BEL, CAN, DEU, EST, FIN, FRA, GBR, IRL, ISR, KOR, LTU, LUX, LVA, NLD, NOR, PRT, SVN, USA	LVA
<b>Children with mental disability</b>	BEL, DEU, EST, FIN, FRA, GBR, GRC, HUN, IRL, LUX, NLD, POL	AUS, CAN, CZE, KOR, LTU, LVA, NOR, PRT, SVN, USA	FIN, LTU, NLD, PRT
<b>Children with physical impairment</b>	BEL, DEU, EST, FIN, FRA, GBR, GRC, HUN, IRL, LUX, NLD, USA, POL	CAN, CZE, KOR, LTU, LVA, NOR, PRT, SVN	FIN, LTU, NLD, SVN
<b>Elderly with dementia</b>	BEL, CHE, CZE, DEU, FIN, FRA, GBR, GRC, HUN, IRL, KOR, LUX, NLD, PRT, SVN, USA, POL	AUS, EST, ISR, LTU, LVA, NOR	FIN, FRA, LUX
<b>Elderly with physical impairment (clear ADL needs) that live in LTC facility</b>	CZE, FIN, FRA, GRC, HUN, IRL, KOR, LTU, NLD, NOR, PRT, SVN, USA, POL	AUS, BEL, DEU, EST, GBR, LUX, LVA	
<b>Elderly without clear ADL needs in ALF</b>	CZE, GRC, HUN, IRL	AUS, BEL, CAN, DEU, EST, FIN, GBR, ISR, KOR, LTU, LUX, LVA, NLD, NOR, PRT, SVN, USA	NLD, NOR, PRT

*Note:* For each patient group countries were clustered into one group based on whether a country includes or exclude the majority of activities mention responses to the Questions in Table 3.8 – this is of course a simplification. In some countries, activities are included under HC.3 and HC.R.1. This may reflect the fact, for the same patient group, the same activities are considered as either HC.3 or HC.R.1 depending on the setting where they are provided or that depending the payer groups are treated differently. Austria not included,  
*Source:* Author's assessment of OECD LTC questionnaire 2019.

## 4.5. Summary of analysis of LTC survey results

91. The analysis of the survey results highlights a number of important aspects that facilitate a better assessment of the validity and comparability of LTC spending figures across countries.

92. Looking at the accounting of services/activities:

- Variation in the activities/cost items included under **inpatient LTC** (HC.3.1) would appear to be minimal. In line with the guidance, nearly all countries include nursing care and personal care services as well as cost for accommodation and food. Around three-quarter of countries also include the costs of pharmaceuticals under HC.3.1, which can have an impact on the comparability for some countries (although may reflect the reality of care packages).
- There is more variation in the reporting of **home-based LTC** (HC.3.4) and **social LTC** (HC.R.1), in particular regarding the allocation of help with ADL and IADL. Around one-third of countries include help with ADL under social LTC leading to a possible underestimation of home-based LTC; a handful of countries include help with IADL under HC.3.4 overestimating home-based LTC.
- Issues also remain regarding consistent accounting of accommodation costs for institutions of lower care intensity than residential care facilities (i.e. HP.8.2).

93. The accounting of activities/cost items for different dependent groups provides the following points:

- There is a consensus that accommodation and personal care costs for **frail elderly and elderly with dementia** living in institutions should be accounted for under HC.3.1. The vast majority of countries also include palliative care and exclude costs incurred by people without clear ADL needs living in assisted living facilities.

- On the other hand, accounting practice for patient groups such as **children and adults with mental disability, adults with mental health issues or addiction problems, patients with chronic conditions or cancer and HIV** varies. Around two-thirds of countries consider accommodation costs for disabled people under LTC health (with the remaining countries allocating these costs to HC.R.1 or excluding them altogether), around half of the countries include medical consultation costs for these groups as HC.3 (with the other countries considering those costs as curative care).
- Moreover, for **cancer and HIV patients**, around a third of countries consider the treatment costs in hospitals and costs of pharmaceuticals under LTC (health). Given the high treatment costs and prevalence, this can have implications for overall LTC spending figures.

## 5. Alternative approaches to filling data gaps for LTC spending

94. Chapter 2 highlighted some substantial reporting gaps for a number of countries. Apart from four countries (Chile, Mexico, New Zealand and Turkey) not reporting any LTC spending data, data is substantially underestimated in Australia, the Slovak Republic and the United States.<sup>22</sup> This chapter attempts to fill these gaps using alternative data sources. These potential sources are analysed to see whether they can provide adequate estimates for long-term care spending. The preferred choice of complementary data sources are national studies, ideally using a health accounting framework. Alternative data sources assessed are other economic statistics such as the production or use side of National Accounts (SNA) and other Social Expenditure (SOCX) data. The chapter concludes by integrating these new sources to provide updated long-term care spending estimates for all 36 OECD countries.

### 5.1. National Sources

95. Potentially suitable national sources were found for Australia, Chile, New Zealand, Turkey and the United States.

#### 5.1.1. Australia

96. In the 2019 and previous JHAQ data submissions, Australia *de facto* only reported spending on LTC services in hospitals resulting in a substantial underestimation of LTC and, therefore, health spending. The “Aged care data snapshot” published by the Australian Department of Health in 2017 appears to be a suitable source to complement the existing data (Australian Ministry of Health, 2017<sup>[7]</sup>). For the financial year 2016/2017, the report provides an overview of all LTC-related spending by federal and state governments. The report includes spending for inpatient and home-based care as well as some capital spending. It includes programmes that provide help with ADL and IADL – some of which may also cater for patients that exclusively need help with IADL. In addition, the annual reports of the funding and financing of the aged sector can be used for an estimation of the out-of-pocket share payable by households – in particular for residential care (Australian Government, 2017<sup>[8]</sup>).

97. According to these sources, total government expenditure by the Commonwealth government and the States and Territories stood at AUD 17,557 mn in 2016-17. After adjusting for services/costs that appear to be - at first sight - outside of the LTC boundary in SHA, that would leave AUD 16,803 mn for nursing care, personal care and help with IADL.<sup>23</sup> Of this, AUD 12,219 mn would be for residential care and AUD 4,584 mn for home care (but also including other settings). For the latter, a significant share of social LTC services can be assumed and no attempt to distinguish between the two is made here. Out-of-pocket payments for households were

<sup>22</sup> As discussed in chapter 2, there are many additional reporting gaps in other countries, which are, however, not addressed here.

<sup>23</sup> Excluded from HC.3 would be, for example, capital spending, spending for the aged care quality, access and information, transition care, and continence aid care.

estimated to stand at AUD 5,062 mn in 2016-17, AUD 4,888 mn for residential care and AUD 176 mn for home care. Adding this information to the existing data (assuming that there is no overlap between the two sets of data) would give an estimate of total LTC spending of AUD 25.6 bn or 1.45% of GDP.<sup>24</sup>

### 5.1.2. Chile

98. So far, no estimates on LTC spending have been submitted as part of the JHAQ data collection for Chile. Nevertheless, some data on public and private spending exists. *The Servicio Nacional del Adulto Mayor* of the Ministry of Social Development (Mideso) organises a number of public programmes for the elderly with LTC needs. It includes home care and inpatient care in public LTC facilities. In addition, a carer's allowance is paid to informal caregivers under the *Programa Pago de Cuidadores de Personas con Discapacidad*. Yet, the majority of costs for long-term care has to be borne out-of-pocket.

99. Using data from available public budgets and estimations for private costs, separately for informal care and inpatient LTC, suggests that total LTC spending in 2018 was around CLP 259 bn (Chilean Ministry of Health, 2020<sup>[9]</sup>) or around 0.14% of GDP. Most likely, this represents an underestimation as some home care costs are not included. Moreover, some nursing care costs financed by social health insurance (Fonasa) are also not included. On the other hand, some elements of programmes financed by Mideso with a clear social focus may be outside of LTC. Given the comparatively young population and the lack of formal LTC infrastructure it can be expected that the estimates of LTC spending for Chile would be similar to some southern European countries and Mexico.

### 5.1.3. New Zealand

100. Spending for long-term care was estimated for the years 1999/2000 to 2009/10 in the report "Health Expenditure Trends in New Zealand" (New Zealand Ministry of Health, 2012<sup>[10]</sup>). This document used the SHA 1.0 definitions to report Current Health Expenditure including long-term care spending. Data for inpatient LTC, LTC day care and home LTC were included for all financing schemes in health LTC (HC.3).

101. For the latest available year (from financial year 2009/2010), HC.3 represented 14.6% of current health expenditure, of which 92% were financed by government schemes and compulsory insurers. Looking at the composition of HC.3, 49% was allocated to inpatient LTC, 4% to day LTC and 47% to home-based LTC. Compared to other OECD countries, these figures would not suggest a significant over- or underestimation of LTC components. In the absence of more recent alternative data sources, applying the same LTC shares to the 2017 data on current health expenditure could be an approach to generate a preliminary estimate. Using this methodology, the share of total LTC in GDP would be 1.53%.<sup>25</sup> This would likely define a lower limit; as in most OECD countries, the share of HC.3 in current health expenditure has increased over the last decade.

<sup>24</sup> This value includes IADL services but does not include "other spending" which according to the ACFA can be more than AUD 1 bn for residential care.

<sup>25</sup> It is unclear to what extent IADL and other social services are included in HC.3.4 - most likely, they are missing.

#### 5.1.4. Turkey

102. There is relatively little information on LTC spending in Turkey in international databases, including the JHAQ. Nevertheless, two documents published by the Ministry of Family and Social Policies - which is responsible for the organisation of care for the elderly and disabled - could be identified (Turkish Ministry of Family and Social Policy, 2019<sup>[11]</sup>); (Ayhan, 2014<sup>[12]</sup>). In Turkey, LTC is mainly financed via general taxation with a strong focus on care provision at home. The different programmes in the context of the analysis presented here appear to be the care allowance for disabled people and in need for LTC at home (“Evde Bakım Yardımı”), day care in rehabilitative centres (“Kuruluşlarda Bakım Hizmeti”), LTC in special centres (“Özel Bakım Merkezleri”) and residential care services for the elderly in nursing home, palliative care and other institutional care (“Yaşlı Bakım Hizmetleri”).

103. In 2018, public spending on home care (including informal care) and institutional care in public and private centres for the elderly and people with disabilities was estimated to represent around 0.22% of GDP. This figure appears plausible given the overall economic development of the country and is similar to other countries in southern Europe where informal LTC is often provided. While the lack of estimates for private spending leads to an underestimation, the care allowance for the disabled in Turkey may include some groups of people for which costs are not included in LTC in other countries.

#### 5.1.5. United States

104. JHAQ submissions of the United States are based on a re-coding of the National Health Expenditure (NHE) Accounts produced by the Centers for Medicare and Medicaid Services (Centers for Medicare and Medicaid Services, 2019<sup>[13]</sup>). In the most recent submission, only spending in the category “Nursing Care Facilities and Continuing Care Retirement Communities Expenditures” was allocated to LTC (the entire category was allocated to inpatient LTC). However, two other categories included in the NHE Accounts also include LTC services (as defined in SHA). These are “Home Health Care Services Expenditures” and “Other Health, Residential, and Personal Care Services Expenditures”. The description of “Home Health Care Services” suggests a significant proportion of the expenditure refers to nursing and personal care services and can be considered as home-based LTC. The category of “Other Health, Residential, and Personal Care Services Expenditures” includes a wide a range of providers including Residential Intellectual and Developmental Disability Facilities (NAICS 623210) Residential Mental Health and Substance Abuse Facilities Ambulance Services (NAICS 623220) and Ambulance Services (NAICS 621910). While the former two facilities provide health and especially social LTC, the latter provides mainly ancillary services. With a conservative assumption of including around one-third of the costs in this category under LTC (and all of the costs of the category “Home Health Care Services”), total LTC spending in the US would increase to around 1.72% of GDP of which around 74% is financed by government and compulsory schemes (HF.1).

## 5.2. National Accounts Data

105. The System of National Accounts (SNA) is the accounting framework measuring all economic activity in a country, thus determining key economic figures such as GDP. As such, it also includes activities of health and LTC service providers. In many countries, there is a close correspondence between Health Accounts and National Accounts but this link is typically stronger for health services (HC.1-2, HC.4-7) than for LTC (HC.3). Nevertheless, for those countries where some LTC spending categories are missing in SHA or estimates are less robust, an analysis of

the available information in SNA may still be useful. Suitable data could come potentially from the consumption or the production side of SNA.

### 5.2.1. Consumption of long-term care services

106. Since current health expenditure in SHA measures the final consumption of health care goods and services, the natural starting point to find suitable proxies in SNA would be to analyse public and private *consumption* of long-term care services. Conceptually, there is a close alignment between SHA and SNA regarding the concept of “consumption”; however, the mapping of consumption categories between the two accounting frameworks is less straightforward. For public consumption in SNA, government spending is allocated according to the classification of function of government (COFOG). For private consumption, the equivalent classification to the SHA functions is the classification of individual consumption by purpose (COICOP). Unfortunately, long-term care services are not well defined in either of these classifications.

107. As described in Table A.1.5 in the SHA 2011 Manual, long-term care services consumed by the government are part of **COFOG** division 07 (Health), in particular groups 07.2 (hospital services) and 07.3 (outpatient services) – in both cases indistinguishable from curative care services in SHA (HC1) – and of COFOG division 10 (Social Protection), in particular groups 10.1 (sickness and disability) and 10.2 (old age), which includes services outside the boundary of LTC. Given the lack of a clear mapping, comparing long-term care estimates from SHA with COFOG 10.1 and 10.2 is relatively inconclusive (Table 5.1). In general, spending for COFOG 10.1 and 10.2 is below LTC spending but the variation is substantive. In addition, for those countries where public LTC spending is missing in SHA, COFOG data is frequently also not available. Using COFOG data to fill SHA LTC reporting gaps would not appear to be a promising approach. On the other hand, the information on the underlying data used to calculate COFOG could still be very instructive.

**Table 5.1. Public LTC spending in SHA compared to COFOG data**

Country	Unit	SHA – HF1	COFOG - final consumption expenditure general government		% of 10.1 in LTC	% of 10.2 in LTC
		Total LTC expenditure	10.1 sickness and disability	10.2 old age		
Australia	Australian Dollar, Millions	3,364	n/a	n/a		
Austria	Euro, Millions	4,069	1,568	538	39%	13%
Belgium	Euro, Millions	9,414	n/a	n/a		
Canada	Canadian Dollar, Millions	27,758	n/a	n/a		
Chile	Chilean Peso, Millions	..	n/a	n/a		
Czech Republic	Czech Koruna, Millions	72,083	8,806	8,958	12%	12%
Denmark	Danish Krone, Millions	55,268	25,363	17,932	46%	32%
Estonia	Euro, Millions	58	37	45	64%	78%
Finland	Euro, Millions	4,887	2,864	2,917	59%	60%
France	Euro, Millions	42,705	8,805	19,658	21%	46%
Germany	Euro, Millions	48,440	41,850	24,150	86%	50%
Greece	Euro, Millions	221	34	95	15%	43%
Hungary	Forint, Millions	88,343	42,959	84,531	49%	96%
Iceland	Iceland Krona, Millions	43,549	20,454	8,787	47%	20%
Ireland	Euro, Millions	3,844	1,431	157	37%	4%
Israel	New Israeli Sheqel, Millions	10,046	5,623	7,072	56%	70%
Italy	Euro, Millions	12,211	1,635	4,151	13%	34%

Japan	Yen, Millions	9,808,437	412,200	10,819,300	4%	110%
Korea	Won, Millions	10,951,405	n/a	n/a		
Latvia	Euro, Millions	119	72	71	61%	60%
Lithuania	Euro, Millions	396	114	166	29%	42%
Luxembourg	Euro, Millions	583	755	152	130%	26%
Mexico	Mexican Peso, Millions	..	n/a	n/a		
Netherlands	Euro, Millions	27,146	11,837	9,440	44%	35%
New Zealand	New Zealand Dollar, Millions	..	n/a	n/a		
Norway	Norwegian Krone, Millions	108,495	55,446	4,920	51%	5%
Poland	Zloty, Millions	7,533	4,154	5,732	55%	76%
Portugal	Euro, Millions	1,060	15	120	1%	11%
Slovak Republic	Euro, Millions	20	129	150	636%	737%
Slovenia	Euro, Millions	382	92	7	24%	2%
Spain	Euro, Millions	8,495	3,632	5,230	43%	62%
Sweden	Swedish Krona, Millions	148,756	60,425	114,193	41%	77%
Switzerland	Swiss Franc, Millions	11,202	2,807	696	25%	6%
Turkey	Turkish Lira, Millions	..	n/a	n/a		
United Kingdom	Pound Sterling, Millions	29,655	9,053	15,584	31%	53%
United States	US Dollar, Millions	113,090	n/a	n/a		

Note: Data refers to 2017 or latest year.

Source: OECD Health Statistics 2019; OECD National Accounts Database 2019.

108. In **COICOP**, private consumption of long-term care services can be found under group 06.3 (hospital services) – indistinguishable from curative care (HC1) - and under the very broadly-defined group 12.4 (social protection). As in the case of COFOG, comparing private LTC spending based on SHA with COICOP group 12.4 does not lead to conclusive results (Table 5.2). Generally, the value recorded under COICOP 12.4 exceeds the estimated private LTC in SHA by a factor of 2-3 – and considerably more in countries where private LTC in SHA is known to be underestimated, e.g. the Czech Republic, Greece or the Slovak Republic. Again, using COICOP data for countries where SHA data on LTC is missing does not seem to be a viable option.

**Table 5.2. Private LTC spending in SHA compared to COICOP data**

Country	Unit	SHA – HF2/HF3	COICOP - final consumption expenditure of households	% of 12.4 in LTC
		Total LTC expenditure	12.4 social protection	
Australia	Australian Dollar, Millions	185	n/a	
Austria	Euro, Millions	1,594	2,454	154%
Belgium	Euro, Millions	1,024	2,535	248%
Canada	Canadian Dollar, Millions	7,073	15,680	222%
Chile	Chilean Peso, Millions	..	n/a	
Czech Republic	Czech Koruna, Millions	98	14,003	14251%
Denmark	Danish Krone, Millions	4,651	15,012	323%
Estonia	Euro, Millions	32	66	204%
Finland	Euro, Millions	720	2,153	299%
France	Euro, Millions	11,294	24,754	219%
Germany	Euro, Millions	22,085	35,386	160%
Greece	Euro, Millions	10	487	4699%
Hungary	Forint, Millions	21,716	105,415	485%
Iceland	Iceland Krona, Millions	..	79	
Ireland	Euro, Millions	624	900	144%



Israel	New Israeli Sheqel, Millions	1,791	7,741	432%
Italy	Euro, Millions	3,932	7,047	179%
Japan	Yen, Millions	979,393	n/a	
Korea	Won, Millions	5,443,375	n/a	
Latvia	Euro, Millions	28	38	134%
Lithuania	Euro, Millions	42	85	201%
Luxembourg	Euro, Millions	137	461	337%
Mexico	Mexican Peso, Millions	..	15,010	
Netherlands	Euro, Millions	2,003	4,070	203%
New Zealand	New Zealand Dollar, Millions	..	n/a	
Norway	Norwegian Krone, Millions	9,440	22,467	238%
Poland	Zloty, Millions	248	2,599	1046%
Portugal	Euro, Millions	823	1,945	236%
Slovak Republic	Euro, Millions	1	107	20599%
Slovenia	Euro, Millions	138	190	137%
Spain	Euro, Millions	1,853	6,940	375%
Sweden	Swedish Krona, Millions	10,660	48,491	455%
Switzerland	Swiss Franc, Millions	5,672	n/a	
Turkey	Turkish Lira, Millions	..	n/a	
United Kingdom	Pound Sterling, Millions	18,545	23,392	126%
United States	US Dollar, Millions	53,211	192,806	362%

Note: Data refers to 2017 or latest year.

Source: OECD Health Statistics 2019; OECD National Accounts Database 2019.

109. In conclusion, without in-depth country knowledge about the methodology applied and data sources used for the calculation of COFOG nor COICOP, this data would not seem to be a suitable approach to address gaps in reporting for LTC in SHA.

### 5.2.2. Production side

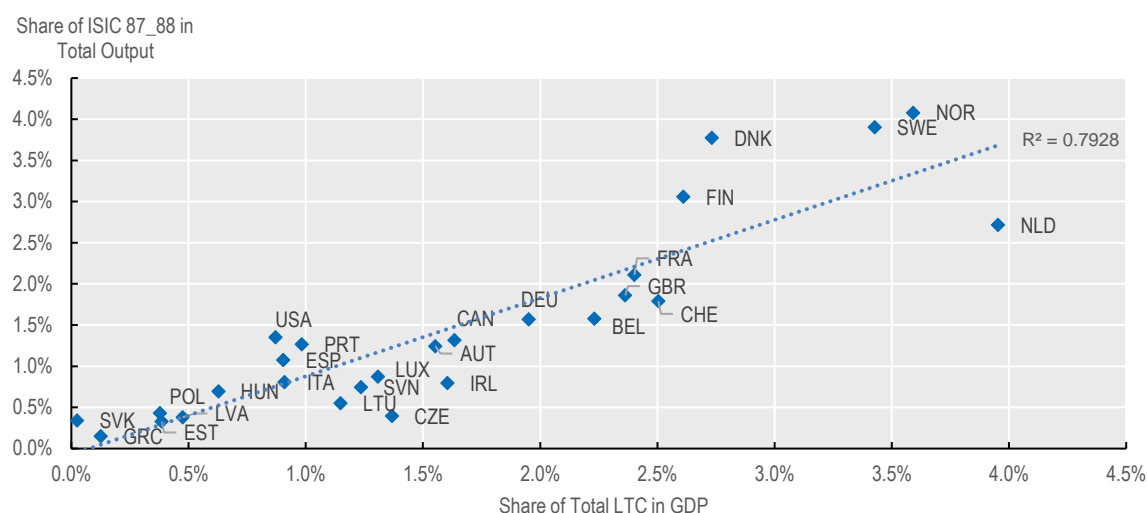
110. The production side of National Accounts records the value of domestic output across all industries, including the long-term care sector. This information can be used to map against “Total long-term care expenditure” measured in SHA. Admittedly, there are some conceptual issues with such a comparison. In SNA, the long-term care sector is part of categories 87 and 88 in the ISIC<sup>26</sup> classification – “Residential care and Social work activities”. In addition to activities provided by residential nursing care facilities and ambulatory LTC providers, other social activities such as day care activity for children and the homeless are also included under those categories. On the other hand, LTC services provided in hospitals or by households are not included. Moreover, while in SNA the total output produced (and the value added) is measured for all industries, SHA only measures the final consumption. However, it can be safely assumed that in the case of LTC providers the output created is generally for final consumption with little of it used for intermediate consumption, capital formation or exports. Hence, while the conceptual differences and boundary issues are acknowledged, it can still be useful to compare levels of LTC in the output created in SNA with the LTC expenditure estimated in SHA.

111. Figure 5.1 compares the output of “Residential care and Social work activities” as a share of total output (from SNA) with the share of LTC spending in GDP (based on SHA). The correlation between the two indicators is high. A country with a high share of industries 87-88 in total output generally also has a high share of LTC expenditure in GDP. To some extent, this validates the

<sup>26</sup> International Standard Industrial Classification of all economic activities in the 4<sup>th</sup> revision.

LTC spending figures gathered in the JHAQ but in countries where the same data sources are to estimate LTC a close relationship is to be expected.

**Figure 5.1. Comparison of Total LTC with output of the LTC sector in National Accounts**



Note: ISIC 87-88 refers to Residential care and Social work activities. Total LTC is the sum of LTC (health and LTC (social) as measured in the JHAQ.

Source: OECD National Accounts 2019; OECD Health Statistics 2019.

112. This high correlation can be used to estimate some missing LTC data with output information but also to verify other LTC estimates from SHA. Table 5.3 shows that the total LTC spending (excluding care allowance) represents roughly 55% of the value of the output of “Residential care and social work activities” as measured in the SNA. This relationship could be used to estimate total LTC spending in Mexico, for example. A simple calculation would give LTC spending of around 18,200 mn NCU or roughly 0.1% of GDP. The assumption that Mexico will be at the lower end among OECD countries seems reasonable. The output data of SNA also allows to validate the LTC data submitted via the JHAQ. For example, it can help to adjust the data available for the Slovak Republic (reported at 0.1% of GDP in the JHAQ). Assuming that 55% of the output generated by the residential care and social work industry is dedicated to LTC, this would equate to EUR 440 mn or 0.5% of GDP. This value seems more in line with neighbouring countries such as Poland (0.4%) or Hungary (0.6%). At the same time, the results of Table 5.3 raises some questions about the data of the Czech Republic in SHA – the only country where total LTC spending exceeds the output of ISIC 87 and 88. Data compilers should closely analyse the difference between LTC spending in SHA and output of the mentioned industries in SNA.

**Table 5.3. LTC expenditure compared with output of residential care and social work activities**

Country	Unit	SHA expenditure	SNA Output	Share of LTC in output
		Total LTC without household providers	Output of Residential care and social work activities	
Australia	Australian Dollar, Millions	3,548	n/a	
Austria	Euro, Millions	3,564	8,453	42%
Belgium	Euro, Millions	10,438	13,551	77%
Canada	Canadian Dollar, Millions	32,534	46,312	70%

Chile	Chilean Peso, Millions	..	n/a	
Czech Republic	Czech Koruna, Millions	53,326	47,012	113%
Denmark	Danish Krone, Millions	59,710	138,601	43%
Estonia	Euro, Millions	90	154	59%
Finland	Euro, Millions	4,949	12,165	41%
France	Euro, Millions	53,999	83,459	65%
Germany	Euro, Millions	56,866	100,493	57%
Greece	Euro, Millions	257	399	64%
Hungary	Forint, Millions	233,782	538,593	43%
Iceland	Iceland Krona, Millions	43,549	n/a	
Ireland	Euro, Millions	3,540	6,356	56%
Israel	New Israeli Sheqel, Millions	6,099	n/a	
Italy	Euro, Millions	16,143	25,771	63%
Japan	Yen, Millions	10,787,830	n/a	
Korea	Won, Millions	16,338,557	n/a	
Latvia	Euro, Millions	131	184	71%
Lithuania	Euro, Millions	264	410	64%
Luxembourg	Euro, Millions	675	1,844	37%
Mexico	Mexican Peso, Millions	..	32,764	
Netherlands	Euro, Millions	27,324	37,900	72%
New Zealand	New Zealand Dollar, Millions	..	n/a	
Norway	Norwegian Krone, Millions	117,935	220,047	54%
Poland	Zloty, Millions	2,712	17,403	16%
Portugal	Euro, Millions	1,799	4,543	40%
Slovak Republic	Euro, Millions	17	790	2%
Slovenia	Euro, Millions	453	576	79%
Spain	Euro, Millions	9,453	22,291	42%
Sweden	Swedish Krona, Millions	159,193	297,524	54%
Switzerland	Swiss Franc, Millions	15,555	23,262	67%
Turkey	Turkish Lira, Millions	..	n/a	
United Kingdom	Pound Sterling, Millions	43,757	61,998	71%
United States	US Dollar, Millions	166,301	456,865	36%

Note: Data refers to 2017 or latest available year

Source: OECD National Accounts 2019; OECD Health Statistics 2019.

### 5.3. The OECD Social Expenditure Database (SOCX)

113. The Social Expenditure Database of OECD (SOCX) measures all benefits with a social purpose provided by public or private institutions to households. This includes benefits in-cash and in-kind. SOCX distinguishes between nine social purposes and collects data on a country-specific programme level. Among the nine social purposes are “Health”, “Old Age” and “Incapacity-related benefits”. Public LTC expenditure (as defined in SHA) should generally be reported under those purposes. As such, SOCX could provide potentially useful information to complement and validate LTC data based on SHA but this is not straightforward. The main reason is that SOCX uses health spending information from SHA (including LTC) as an input for many countries, so it cannot be considered as an independent database. As a result, the figures between SHA and SOCX are relatively close for many countries, in particular when comparing current health expenditure with social expenditure for the purpose Health (the first two columns of Table 5.4). Differences are more pronounced for social LTC (column 4 and column 5). Generally, the values of SOCX are higher

but it is unclear to what extent the programmes recorded under the respective categories correspond to the definitions of HCR.1 under SHA.

**Table 5.4. Comparison of spending aggregates, per capita in current prices between SHA and SOCX, in USD PPP 2015**

Government and compulsory spending on health and social LTC (SHA) compared with public and mandatory private spending on health and other selected benefits for the purpose “old age” and “incapacity-related” (SOCX)

	SHA	SOCX		SHA	SOCX		SHA	SOCX	
	CHE	Health	Difference	HCR1	other social	Difference	CHE+HCR1	Health + other soc	Dif (%)
Australia	2,988	2,974	14	..	688	-688	2,988	3,662	23%
Austria	3,662	3,255	407	..	975	-975	3,662	4,230	16%
Belgium	3,513	3,610	-97	..	520	-520	3,513	4,129	18%
Canada	3,223	3,254	-30	..	0	0	3,223	3,254	1%
Chile	1,080	1,094	-14	..	13	-13	1,080	1,107	3%
Czech Republic	2,097	1,997	99	142	340	-197	2,239	2,337	4%
Denmark	3,935	3,248	687	103	1,752	-1,649	4,038	5,001	24%
Estonia	1,413	1,390	23	..	263	-263	1,413	1,653	17%
Finland	3,037	2,413	624	284	1,229	-945	3,321	3,642	10%
France	3,586	3,566	19	225	310	-85	3,811	3,876	2%
Germany	4,449	4,251	198	9	767	-759	4,457	5,018	13%
Greece	1,217	1,275	-57	3	249	-246	1,220	1,524	25%
Hungary	1,290	1,245	45	..	395	-395	1,290	1,640	27%
Iceland	3,019	2,380	639	..	664	-664	3,019	3,044	1%
Ireland	3,098	3,682	-584	..	276	-276	3,098	3,958	28%
Israel	1,466	1,660	-194	148	1,244	-1,095	1,614	2,904	80%
Italy	2,334	2,456	-122	..	897	-897	2,334	3,353	44%
Japan	3,798	3,171	627	61	971	-910	3,859	4,142	7%
Korea	1,465	1,462	3	..	485	-485	1,465	1,947	33%
Latvia	801	798	3	43	287	-244	844	1,085	29%
Lithuania	1,287	1,252	36	119	356	-237	1,407	1,608	14%
Luxembourg	4,046	5,228	-1,181	167	1,165	-998	4,214	6,393	52%
Mexico	561	539	22	..	1	-1	561	539	-4%
Netherlands	4,011	4,174	-163	580	893	-313	4,591	5,067	10%
New Zealand	2,775	2,767	8	..	649	-649	2,775	3,416	23%
Norway	4,899	3,963	935	325	1,818	-1,492	5,224	5,781	11%
Poland	1,262	7	1,255	..	0	0	1,262	7	-99%
Portugal	1,681	1,753	-72	105	70	35	1,786	1,823	2%
Slovak Republic	1,642	1,617	25	..	278	-278	1,642	1,894	15%
Slovenia	1,847	1,914	-67	34	374	-340	1,881	2,288	22%
Spain	2,154	2,265	-111	15	355	-341	2,169	2,620	21%
Sweden	4,190	3,011	1,179	243	2,086	-1,844	4,432	5,097	15%
Switzerland	4,283	4,796	-513	63	1,340	-1,277	4,346	6,136	41%
Turkey	813	812	1	..	107	-107	813	919	13%
United Kingdom	2,940	3,230	-290	100	726	-626	3,039	3,956	30%
United States	8,041	7,865	176	..	185	-185	8,041	8,050	0%

Note: CHE refers to Current Health Expenditure and HCR.1 to social LTC in the definition of SHA; Health refers to expenditure for the purpose “Health” in SOCX; “Other social” refers to “other benefits in cash” as well as “residential care/home help services” and “other benefits in kind” for the purpose “old age” and “incapacity-related” and “Rehabilitation services” for the purpose “incapacity-related” in SOCX.

Source: OECD Health Statistics 2019; OECS Social Expenditure Database 2019.

114. For Canada, for example, current health expenditure (from SHA) and health expenditure (from SOCX) are nearly identical; and there is neither spending reported for HC.R.1 (in SHA) nor for other benefits (in SOCX). As a result, the SOCX aggregate value is only around 1% higher than the SHA value when summing up current health expenditure and social LTC (HC.R.1).

115. For other countries that do not report social LTC in SHA, SOCX could be helpful in filling some reporting gaps. For example, Belgium reports a number of benefits under SOCX that could potentially fill the gap in reporting for HC.R.1. However, country expertise would be required to evaluate whether the programmes reported under the respective benefit categories in SOCX fit in the SHA definition of social LTC. For some other countries where LTC spending is substantially underestimated, such as the United States, SOCX does not appear to provide much complementary information that could be of use for SHA.

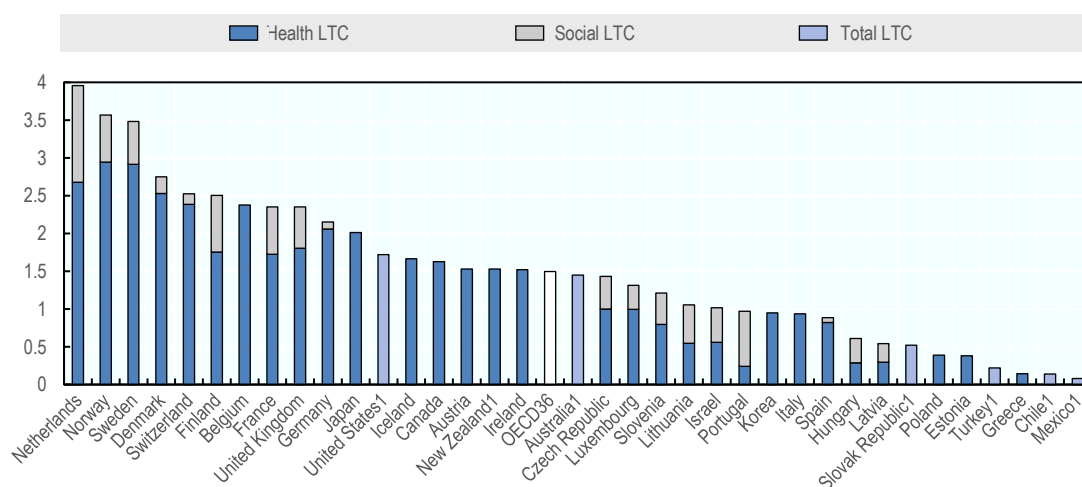
116. That said, a country-specific mapping between SOCX and SHA to get more robust and comparable LTC estimates would appear to be a useful exercise, in particular for those countries with missing data on LTC. However, this goes beyond the scope of this paper.

#### 5.4. New estimation of LTC spending

117. Applying data sources and considerations set out above, this section provides a new measure of LTC spending – based on submitted data from the JHAQ and complemented with new data sources where estimates are not available or reporting gaps in health LTC have been identified. Figure 5.2 presents estimates of LTC spending for all 36 OECD countries for the first time. Estimates for Chile, New Zealand and Turkey are based on national data sources; for Mexico OECD data from National Accounts were used as a proxy. The data for Australia, the Slovak Republic and the United States were revised to compensate for substantial reporting gaps in health LTC.

118. The next step to improve LTC comparability could be to use information included in SOCX to fill the gaps in reporting in social LTC for those countries not currently reporting. However, a “one size fits all” estimation without in-depth knowledge of country’s accounting practice does not appear to improve comparability. SHA data compilers would need to clarify whether the national sources identified in SOCX for the separate programmes related to social LTC compare indeed finance social LTC as defined in SHA.

**Figure 5.2. Estimated spending on LTC for OECD countries, 2017 or latest year**



Note: 1. Data was estimated by OECD Secretariat based on alternative national or international data sources.

Source: OECD Health Statistics 2019 and complementary sources.

## 6. Conclusion

119. Within the framework of the System of Health Accounts (SHA), comparable accounting of long-term care expenditure has long been considered as one of the more challenging tasks. Difficulties relate to boundary issues: between long-term care and other health care functions, such as curative care; between long-term care and other social care outside the health accounts universe; and between the health and social components within long-term care itself. Nevertheless, progress has been made and an increasing number of countries report the key long-term care spending components with an improving degree of comparability.

120. On average, based on the JHAQ data collection, it is estimated that total long-term care spending in 2017 accounted for 1.5% of GDP across OECD countries, from a high of 4% in the Netherlands down to negligible values in Greece and the Slovak Republic. Some of the variation observed between countries of a similar level of income can be explained by differences in the organisation of long-term care, the existence of formal long-term care structures as well as the demographic structure of the population. However, there remain issues with underreporting of spending of important long-term care components and differences in the accounting practice *vis-à-vis* long-term care activities and dependent population groups.

121. Analysis of long-term care spending data from a service, financing and provider perspective identifies countries that under-report particular long-term care spending elements. For example, Australia, Denmark, Greece, Iceland, Poland, the Slovak Republic and the United States all miss important health components of long-term care, while many countries such as Austria and Belgium still do not report social long-term care. This naturally affects the comparability of their overall long-term care spending figures.

122. In an attempt to assess the validity of spending figures and gauge the overall consistency of data on long-term care, spending is mapped against a range of other long-term care statistics. There seems to be some relationship between long-term care spending data on the one hand and LTC beds and LTC workforce but less so to other LTC indicators. Since the definition of long-term care is identical across the respective data collections, the apparent lack of coherence between the data should be analysed further.

123. An in-depth survey of accounting practices reveals whether specific activities/cost items and potential long-term care dependent groups are included in national estimates. On an activity level, there appears to be close alignment in the activities/cost items included by countries for inpatient long-term care, generally following the existing accounting guidelines. One issue, however, refers to the treatment of pharmaceuticals consumed in residential facilities: around three-quarter of countries include the costs under long-term care spending while the rest account them as pharmaceutical spending. There is more variation in the reporting of home-based LTC and social LTC in particular related to the allocation of help with activities of daily living (ADL) and instrumental activities of daily living (IADL).

124. Looking in more detail at how particular activities/cost items for certain population groups are treated provides further insights. There is consensus that most costs for the frail elderly and elderly with dementia living in institutions are included under long-term (health) care. On the other hand, accounting practice varies for other groups, such as children and adults with mental disability, adults with mental health issues or addiction problems and patients with chronic conditions, cancer or HIV. Around half of the countries include medical consultation costs for these groups as long-term (health) care (with the rest regarding these activities as curative care), and

two-thirds of countries include accommodation costs for disabled people under the health component of long-term care (with the remaining countries allocating these costs to either social long-term care or excluding them altogether). Moreover, for cancer and HIV patients, around a third of countries appear to allocate treatment costs in hospitals and costs of pharmaceuticals to the health component of long-term care. Given the high costs of treatment and prevalence, such variations in reporting can have a significant impact on overall long-term care spending figures. Further analysis of LTC spending differences ultimately requires information on the prevalence of LTC dependency groups and the volume and costs of the different activities included under LTC.

125. Finally, in an attempt to fill some of the reporting gaps and make the picture of spending on LTC in OECD countries more complete, some national data sources have been identified. Other internationally available data sources have also be used to complement or adjust LTC spending data for some countries. As a result, estimates of LTC spending for *all* 36 OECD countries have been produced for the first time. These updated figures suggest LTC spending accounts for 3.5% of GDP or more in the Netherlands, Norway and Sweden and down to around 0.2% of GDP in Turkey, Greece, Chile and Mexico.



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## Annex A. Classification of health consumption by function in SHA 2011

Health Functions SHA 2011	
<b>HC.1 Curative care</b>	
HC.1.1 Inpatient curative care	
HC.1.2 Day curative care	
HC.1.3 Outpatient curative care	
HC.1.3.1 General outpatient curative care	
HC.1.3.2 Dental outpatient curative care	
HC.1.3.3 Specialised outpatient curative care	
HC.1.4 Home-based curative care	
<b>HC.2 Rehabilitative care</b>	
HC.2.1 Inpatient rehabilitative care	
HC.2.2 Day rehabilitative care	
HC.2.3 Outpatient rehabilitative care	
HC.2.4 Home-based rehabilitative care	
<b>HC.3 Long-term care (Health)</b>	
HC.3.1 Inpatient Long-term care (health)	
HC.3.2 Day long-term care (health)	
HC.3.3 Outpatient long-term care (health)	
HC.3.4 Home-based long-term care (health)	
<b>HC.4 Ancillary services (non-specified by function)</b>	
HC.4.1 Laboratory services	
HC.4.2 Imaging services	
HC.4.3 Patient transportation	
<b>HC.5 Medical goods (non-specified by function)</b>	
HC.5.1 Pharmaceuticals and other medical non-durable goods	
HC 5.1.1 Prescribed medicines	
HC 5.1.2 Over-the-counter medicines	
HC 5.1.3 Other medical non-durable goods	
HC.5.2 Therapeutic appliances and other medical durable goods	
<b>HC.6 Preventive care</b>	
HC.6.1 Information, education and counseling programmes	
HC.6.2 Immunisation programmes	
HC.6.3 Early disease detection programmes	
HC.6.4 Healthy condition monitoring programmes	
HC.6.5 Surveillance of communicable and non-communicable diseases, injuries and exposure to environmental health risks programmes	
HC.6.6 Preparing for disaster and emergency response programmes	
<b>HC.7 Governance, and Health system and financing administration</b>	
HC.7.1 Governance and Health system administration	
HC.7.2 Administration of health financing	
<b>HC.9 Other health care services not elsewhere classified (n.e.c.)</b>	
HC Memorandum Items SHA 2011	
<b>Health Care-Related</b>	
HCR 1 Long-term care (Social)	
HCR.1.1 In-kind Long-term social care	
HCR.1.2 Long-term social care cash-benefits	
HCR.2 Health promotion with multi-sectoral approach	

## Annex B. Classification of health care providers in SHA 2011

### Providers SHA 2011

<b>HP.1</b>	<b>Hospitals</b>
HP.1.1	General hospitals
HP.1.2	Mental health hospitals
HP.1.3	Specialised hospitals (other than mental health hospitals)
<b>HP.2</b>	<b>Residential long-term care facilities</b>
HP.2.1	Long-term nursing care facilities
HP.2.2	Mental health and substance abuse facilities
HP.2.9	Other residential long-term care facilities
<b>HP.3</b>	<b>Providers of ambulatory health care</b>
HP.3.1	Medical practices
HP.3.2	Dental practice
HP.3.3	Other health care practitioners
HP.3.4	Ambulatory health care centres
HP.3.5	Providers of home health care services
<b>HP.4</b>	<b>Providers of ancillary services</b>
HP.4.1	Providers of patient transportation and emergency rescue
HP.4.2	Medical and diagnostic laboratories
HP.4.9	Other providers of ancillary services
<b>HP.5</b>	<b>Retailers and other providers of medical goods</b>
HP.5.1	Pharmacies
HP.5.2	Retail sellers and other suppliers of durable medical goods and medical appliances
HP.5.9	All other miscellaneous sellers and other suppliers of pharmaceuticals and medical goods
<b>HP.6</b>	<b>Providers of preventive care</b>
<b>HP.7</b>	<b>Providers of health care system administration and financing</b>
HP.7.1	Government health administration agencies
HP.7.2	Social health insurance agencies
HP.7.3	Private health insurance administration agencies
HP.7.9	Other administration agencies
<b>HP.8</b>	<b>Rest of economy</b>
HP.8.1	Households as providers of home health care
HP.8.2	All other industries as secondary providers of health care
HP.8.9	Other industries n.e.c.
<b>HP.9</b>	<b>Rest of the world</b>

## Annex C. LTC service provision by key providers

<b>AUS (2016)</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	100%	0%	0%	0%	0%	0%	0%
HC31	100%	0%	0%	0%	0%	0%	0%
HC34	0%	0%	100%	0%	0%	0%	0%
HCR1							
LTC	100%	0%	0%	0%	0%	0%	0%

<b>AUT</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	0%	53%	10%	37%	0%	0%	0%
HC31	0%	100%	0%	0%	0%	0%	0%
HC34	0%	0%	22%	78%	0%	0%	0%
HCR1							
LTC	0%	53%	10%	37%	0%	0%	0%

<b>BEL</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	2%	55%	38%	0%	0%	5%	0%
HC31	3%	96%	0%	0%	0%	1%	0%
HC34	0%	1%	96%	0%	0%	3%	0%
HCR1							
LTC	2%	55%	38%	0%	0%	5%	0%

<b>CAN</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	21%	70%	10%	0%	0%	0%	0%
HC31	17%	83%	0%	0%	0%	0%	0%
HC34	2%	0%	98%	0%	0%	0%	0%
HCR1							
LTC	21%	70%	10%	0%	0%	0%	0%

<b>CZE</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	26%	56%	3%	3%	11%	0%	0%
HC31	32%	68%	0%	0%	0%	0%	0%
HC34	1%	2%	22%	20%	53%	2%	0%
HCR1	0%	0%	0%	80%	11%	9%	0%
LTC	18%	39%	2%	26%	11%	3%	0%

<b>DNK</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	0%	40%	60%	0%	0%	0%	0%
HC31	0%	100%	0%	0%	0%	0%	0%
HC34	0%	0%	99%	1%	0%	0%	0%
HCR1	0%	49%	51%	0%	0%	0%	0%
LTC	0%	41%	59%	0%	0%	0%	0%

<b>EST</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	26%	68%	5%	0%	0%	1%	0%
HC31	26%	74%	0%	0%	0%	0%	0%
HC34	35%	10%	49%	0%	0%	5%	0%
HCR1							
LTC	26%	68%	5%	0%	0%	1%	0%

<b>FIN</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	8%	65%	21%	0%	2%	4%	0%
HC31	13%	60%	0%	0%	6%	21%	0%
HC34	7%	66%	26%	0%	1%	0%	0%
HCR1	7%	46%	0%	39%	1%	7%	0%
LTC	8%	59%	14%	12%	2%	5%	0%

<b>FRA</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	8%	75%	14%	0%	0%	4%	0%
HC31	9%	91%	0%	0%	0%	0%	0%
HC34	0%	0%	78%	0%	0%	22%	0%
HCR1	0%	69%	28%	0%	0%	3%	0%
LTC	6%	73%	17%	0%	0%	4%	0%

<b>DEU</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	0%	50%	28%	20%	0%	1%	0%
HC31	0%	100%	0%	0%	0%	0%	0%
HC34	0%	0%	57%	41%	0%	2%	0%
HCR1							100%
LTC							

<b>GRC</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	0%	69%	31%	0%	0%	0%	0%
HC31	0%	100%	0%	0%	0%	0%	0%
HC34	0%	0%	100%	0%	0%	0%	0%
HCR1							
LTC	0%	69%	31%	0%	0%	0%	0%

<b>HUN</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	38%	61%	1%	0%	0%	0%	0%
HC31	37%	63%	0%	0%	0%	0%	0%
HC34	0%	0%	100%	0%	0%	0%	0%
HCR1							100%
LTC							
<b>ISL</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated

HC3	14%	78%	8%	0%	0%	0%	0%
HC31	15%	85%	0%	0%	0%	0%	0%
HC34	0%	0%	100%	0%	0%	0%	0%
HCR1							
LTC	14%	78%	8%	0%	0%	0%	0%

<b>IRL</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	2%	66%	7%	21%	0%	4%	0%
HC31	4%	96%	0%	0%	0%	0%	0%
HC34	0%	28%	18%	54%	0%	0%	0%
HCR1							
LTC	2%	66%	7%	21%	0%	4%	0%

<b>ISR (2015)</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	88%	12%	0%	0%	0%	0%	0%
HC31	88%	12%	0%	0%	0%	0%	0%
HC34							
HCR1							100%
LTC							

<b>ITA</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	4%	56%	0%	0%	0%	40%	0%
HC31	7%	93%	0%	0%	0%	0%	0%
HC34	0%	0%	0%	0%	0%	100%	0%
HCR1							
LTC	4%	56%	0%	0%	0%	40%	0%

<b>JPN (2016)</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	23%	43%	16%	0%	0%	18%	0%
HC31	35%	65%	0%	0%	0%	0%	0%
HC34	0%	0%	99%	0%	0%	0%	0%
HCR1							
LTC	23%	43%	16%	0%	0%	18%	0%

<b>KOR</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	63%	19%	17%	0%	0%	0%	0%
HC31	76%	23%	0%	0%	0%	0%	0%
HC34	0%	0%	97%	2%	0%	0%	0%
HCR1							
LTC	63%	19%	17%	0%	0%	0%	0%

<b>LVA</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	24%	59%	5%	1%	7%	4%	0%
HC31	24%	70%	0%	0%	6%	0%	0%
HC34	20%	4%	38%	6%	9%	24%	0%
HCR1	0%	0%	11%	23%	65%	1%	0%
LTC	13%	32%	8%	11%	33%	2%	0%
<b>LTU</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	13%	19%	1%	57%	3%	7%	0%

HC31	33%	50%	0%	0%	4%	13%	0%
HC34	0%	0%	2%	94%	0%	4%	0%
HCR1	0%	38%	5%	23%	34%	0%	0%
LTC	7%	28%	3%	40%	18%	4%	0%

<b>LUX</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	1%	46%	18%	6%	23%	6%	0%
HC31	0%	62%	3%	0%	38%	-3%	0%
HC34	6%	0%	75%	25%	0%	-6%	0%
HCR1	0%	0%	28%	10%	59%	3%	0%
LTC	1%	35%	20%	7%	32%	5%	0%

<b>NLD</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	4%	93%	2%	0%	1%	0%	0%
HC31	5%	94%	0%	0%	0%	0%	0%
HC34	1%	89%	9%	0%	2%	0%	0%
HCR1	13%	58%	0%	19%	9%	0%	0%
LTC	7%	82%	1%	6%	3%	0%	0%

<b>NOR</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	0%	54%	46%	0%	0%	0%	0%
HC31	0%	100%	0%	0%	0%	0%	0%
HC34	0%	0%	100%	0%	0%	0%	0%
HCR1	0%	18%	82%	0%	0%	0%	0%
LTC	0%	48%	52%	0%	0%	0%	0%

<b>POL</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	8%	14%	7%	65%	1%	4%	0%
HC31	36%	53%	4%	0%	0%	8%	0%
HC34	1%	4%	7%	83%	2%	3%	0%
HCR1							
LTC	8%	14%	7%	65%	1%	4%	0%

<b>PRT</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	11%	68%	0%	18%	0%	2%	0%
HC31	14%	85%	0%	0%	0%	1%	0%
HC34	0%	2%	1%	92%	0%	6%	0%
HCR1	0%	0%	0%	0%	100%	0%	0%
LTC	3%	17%	0%	4%	75%	1%	0%

<b>SVK</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	2%	0%	81%	16%	0%	0%	0%
HC31	100%	0%	0%	0%	0%	0%	0%
HC34	0%	0%	83%	17%	0%	0%	0%
HCR1							
LTC	2%	0%	81%	16%	0%	0%	0%

<b>SVN</b>	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	6%	67%	2%	20%	0%	5%	0%
HC31	9%	91%	0%	0%	0%	0%	0%

HC34	0%	1%	8%	74%	0%	17%	0%
HCR1	0%	85%	13%	0%	2%	0%	0%
LTC	4%	73%	6%	13%	1%	3%	0%

ESP	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	18%	58%	14%	9%	0%	1%	0%
HC31	24%	76%	0%	0%	0%	0%	0%
HC34	1%	0%	57%	37%	0%	4%	0%
HCR1	0%	0%	100%	0%	0%	0%	0%
LTC	16%	53%	21%	9%	0%	1%	0%

SWE	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	0%	69%	30%	0%	0%	1%	0%
HC31	0%	100%	0%	0%	0%	0%	0%
HC34	0%	0%	97%	1%	0%	2%	0%
HCR1	0%	0%	0%	0%	100%	0%	0%
LTC	0%	58%	25%	0%	16%	1%	0%

CHE	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	1%	82%	10%	6%	0%	0%	0%
HC31	2%	98%	0%	0%	0%	0%	0%
HC34	0%	0%	60%	40%	0%	0%	0%
HCR1	0%	0%	100%	0%	0%	0%	0%
LTC	1%	78%	15%	6%	0%	0%	0%

GBR	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	3%	64%	25%	8%	0%	1%	0%
HC31	4%	96%	0%	0%	0%	0%	0%
HC34	0%	0%	75%	24%	0%	1%	0%
HCR1							100%
LTC							

USA	HP1	HP2	HP35	HP81	HP82	Rest	unallocated
HC3	0%	100%	0%	0%	0%	0%	0%
HC31	0%	100%	0%	0%	0%	0%	0%
HC34							
HCR1							
LTC	0%	100%	0%	0%	0%	0%	0%

Note: For each LTC category, the shares add up to 100%. In some countries HCR1 cannot be allocated by provider.

Source: OECD Health Statistics 2019.