

Financial distress in healthcare: elderly care in various countries

December 2023



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Executive summary (1/2)

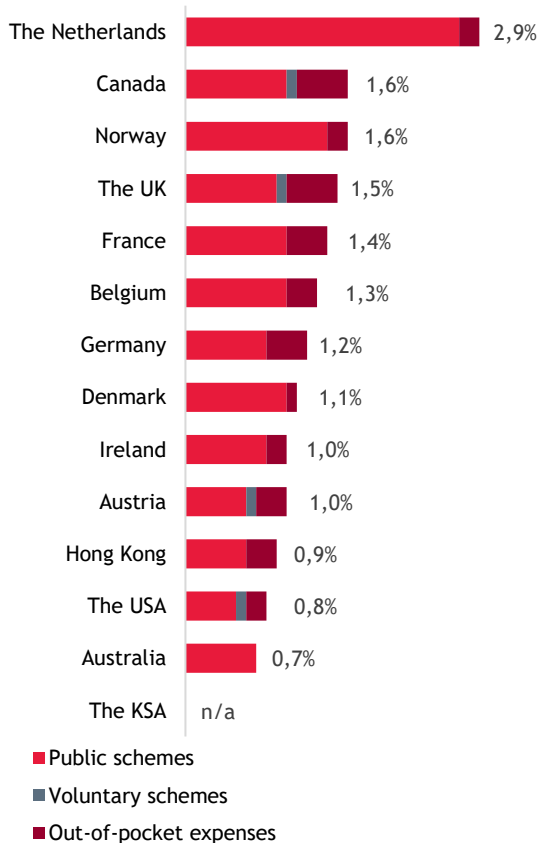
The conducted comparative analysis revealed notable similarities and distinctions in the provision of elderly care across the 14 selected countries

Key findings

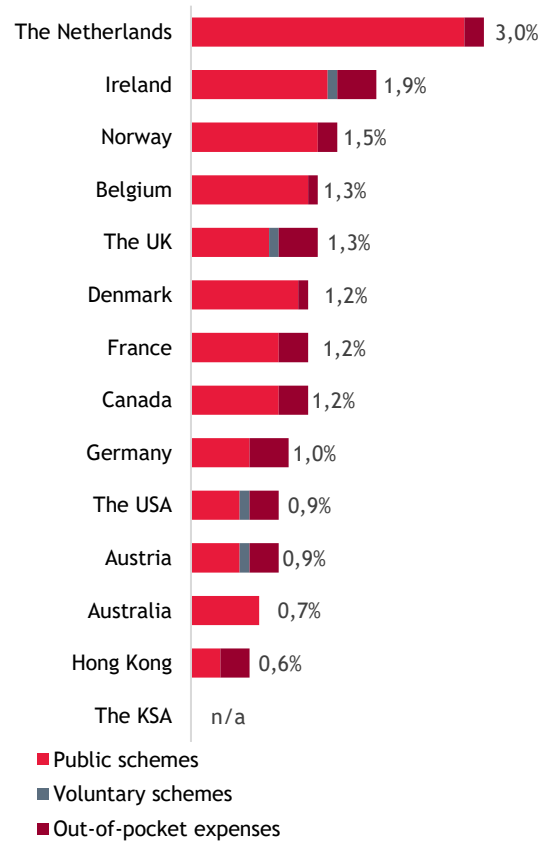
This analysis examines the long-term care (LTC) systems for the elderly in 14 selected countries. It particularly focuses on system-inherent **financial distress factors**, countermeasures, and **technological initiatives** aimed at improving quality, ensuring safer ageing, and achieving greater efficiency in LTC spending. As of 2022, the **Netherlands** is considered to have the most **comprehensive LTC system** among the chosen and OECD countries, partially deducible from the **level of government spending on LTC providers as a share of GDP – 2,7%¹** – the highest share among reviewed economies, against the **USA with the lowest share of 0,5%²**.

Spending on long-term care providers, % share of GDP

Last available year^{3,4}



10 years ago^{4,5}



Over the past decade, Canada has witnessed the most significant increase in spending on LTC providers, compared to other selected countries, with its expenditure, as a share of GDP, growing by 0,4 percentage points (hereinafter – p.p.). On the contrary, Ireland has experienced a noteworthy decline in LTC expenditure as a share of GDP, decreasing by 0,9 p.p. over the same period.

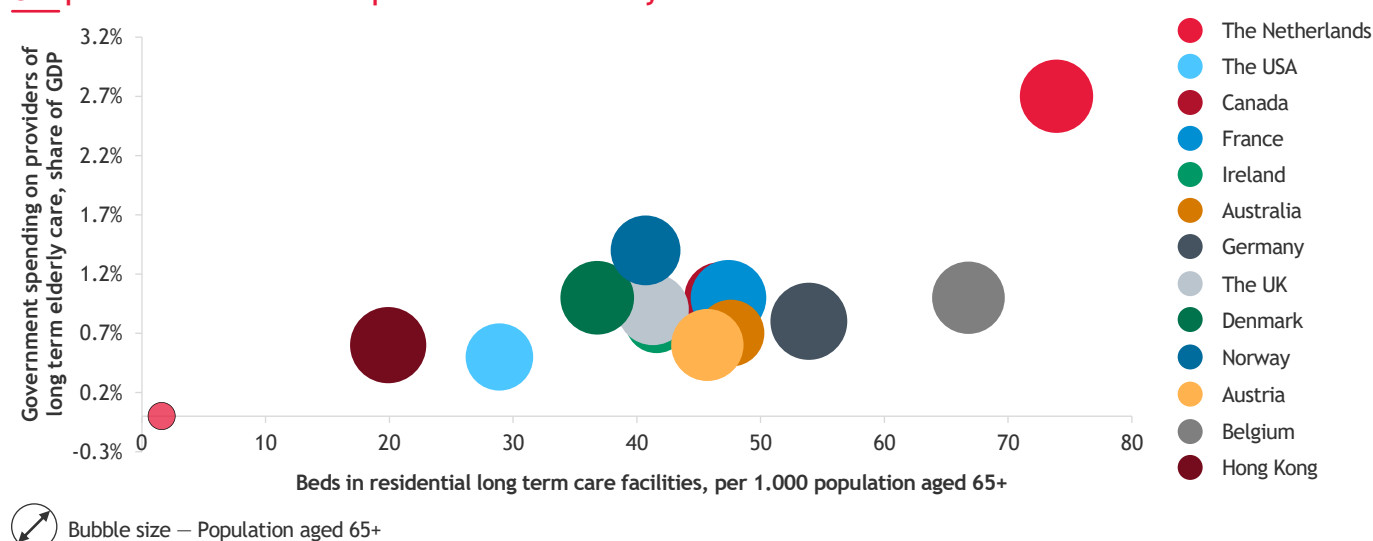
Sources: Kyiv Consulting analysis

Notes: (1) As of 2022; (2) As of 2021; (3) 2022 year's figures for the Netherlands, Canada, Denmark, Ireland, and Hong Kong; 2021 – for Norway, the UK, France, Germany, Belgium, Austria, the USA; 2020 – for Australia; (4) Data for the KSA is not available; (5) 2013 year's figures for all countries in focus except for Australia (2014)

Executive summary (2/2)

Among selected countries, the Netherlands allocates the highest percentage of GDP to LTC providers (2,7%), in contrast to the USA's lowest indicator of 0,5%

Comparison of the countries performance in elderly care^{1,2}



The research findings indicate that **Germany has the highest proportion of people aged 65 and older (22,4%)** among the selected economies, while the **KSA has the lowest (2,8%)**. On average, among the selected countries, there were **42,3 beds in residential LTC facilities per 1.000 population aged 65 and older¹**. The Netherlands had the highest number of beds per 1.000 people aged 65+ — **73,9³**, while the KSA represented the lowest indicator, with only **1,6 beds per 1.000 population aged 65 and older⁴**.

Financial distress in elderly care

The system-inherent **financial distress factors** are those that directly and indirectly **affect LTC service providers and recipients**. The main **common distress factors** in LTC institutions across countries include **intense competition, rising operating costs, staff shortages and increased demand**. Denmark appears to have the **least financial difficulties** in its LTC system for the elderly and is consistently ranked as a **remarkable place for seniors**, with excellent LTC options. Like the Netherlands, **Denmark's response to the shortage of care workers is to allow more foreign professionals to work in the country's social care sector**. On the other hand, the **USA appears to be facing significant financial distress** in its LTC system due to **strong competition and rising LTC costs**. In general, **best practices** in addressing the aforementioned problems involve **nationwide investment, government subsidies, and public-private cooperation**, alongside **reforms** focused on **enhancing training, working conditions, and strategic planning** to meet staffing needs.

Innovation and technologies zoom-in

All of the selected 14 countries **implement various technological initiatives** in elderly care, albeit to varying extents. Among the most common investments is creating a **digitised, automated connection** between clients, providers, and the government, as well as **digital monitoring systems** or devices, which help elderly people feel safer at home. Countries with a **substantial GDP share** for elderly care show a consistent trend of **increasing innovation and complexity of technological initiatives**. Notable examples are **the Dutch electronic notes-sharing system**, which allows earlier identification of end-of-life care patients, as well as **Hong Kong's first gerontechnology industry cluster**, set up to address the daily needs of elderly people.

Australia



The upcoming aged care state reform will replace existing programmes in the next few years, aiming to deliver equitable and sustainable care for recipients

Ageing population. Like most developed countries, Australia's population is ageing owing to sustained low fertility and increasing life expectancy. In 2013-2022, the total population of Australia grew by 14,2%, while the share of elderly people aged 65+ increased by 2,5 p.p., rising from 14,4% in 2013 to 16,9% in 2022.

Government spending on long-term care providers for the elderly. In 2020, the total government spending for LTC amounted to 9,4 Bn Euro, comprising 0,7% of the country's GDP. Although the relative percentage share of GDP remained stable over 2014-2020, the absolute amount spent by the government in 2020 was 9,4% higher than in 2019 and 37,6% higher than in 2014. At the same time, the distribution of total state spending on aged care by category has changed over recent years. Namely, the home care and support category grew its share in the total expenditure by 5,4 p.p. in 2021-2022 compared to 2017-2018, while the share of residential care decreased by 8,1 p.p., representing the tendency of preferring home support over residential facilities. In 2012-2022, the number of people using home care increased almost fourfold (from 55.000 to 216.000 people, an increase of 294%), while the number of people using permanent residential aged care grew only by 8,3%.

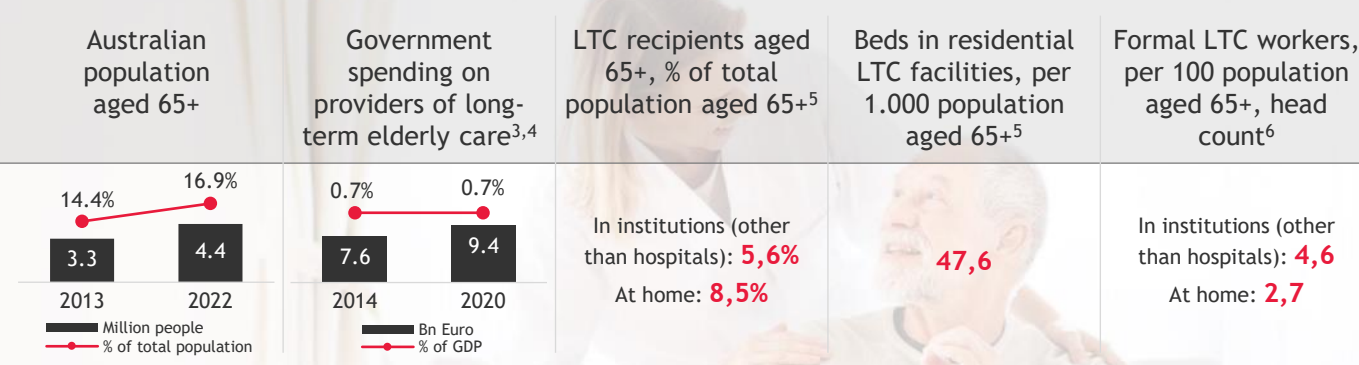
Financial distress in elderly care. As of September 2022, financial pressure persisted in the sector,

with 64,0% of residential aged care providers operating at a loss due to the competitive operating environment. Maintaining financial viability and increased regulatory burdens¹ remains a challenge for providers, initiating enhanced market consolidation. Since FY 2021, the number of home care providers and residential aged care providers has decreased by 2,4% and 4,3%, respectively. As for the aged care recipients, according to the Australian Seniors 2021 Mindset Shift survey, 80,0% of surveyed people over 50 years old said they were worried they had not saved enough for their retirement. One-quarter of respondents stated they struggled to pay their bills.

Measures to ease the financial distress. The government offers various programmes related to aged care to support older people, including the most common Home Care Packages Programme (HCP) and Commonwealth Home Support Programme (CHSP). The planned reform of aged care, initiated in 2022, will result in the new Support at Home programme, replacing the HCP in July 2025 and CHSP in July 2027.

Technological initiatives and investments. The proposed 17,8 Bn Euro² reform for aged care includes a digital transformation agenda to establish a connected ecosystem for clients and providers and ensure simplified, digitised, and automated connections between clients, providers, the software industry and government.

Key figures in the Australian elderly care



Sources: GEN AGED Care Data — Spending on aged care. Factsheet 2021-2022 — [2023]; Government of Australia — Securing Australia's Recovery. Budget 2021-2022 — [2021]; GEN AGED Care Data — People using aged care. Factsheet 2021-2022 — [2023]; KPMG — Aged care market analysis 2023 — [2023]; Australian Seniors — Mindset shift report — [2021]; Australian Institute of Health and Welfare website; Australian Bureau of Statistics website; The World Bank website

Notes: (1) Due to changes implemented under the Aged Care Amendment (Implementing Care Reform) Act 2022; (2) The numbers are converted from USD to Euro due to an average annual exchange rate by ECB in 2022; (3) Current prices; (4) Numbers are converted according to the average exchange rate for Australian dollar to Euro; (5) As of 2021; (6) As of 2020

Austria



Austria strategically undertakes measures to meet the forecasted staffing shortages in the LTC sector, in particular by adopting a respective reform in 2022

Ageing population. Over the past decade, the proportion of people aged 65 and above has increased from 18,1% in 2013 to 19,6% in 2023. The trend of a growing and ageing population in Austria is forecasted to persist in the coming years.

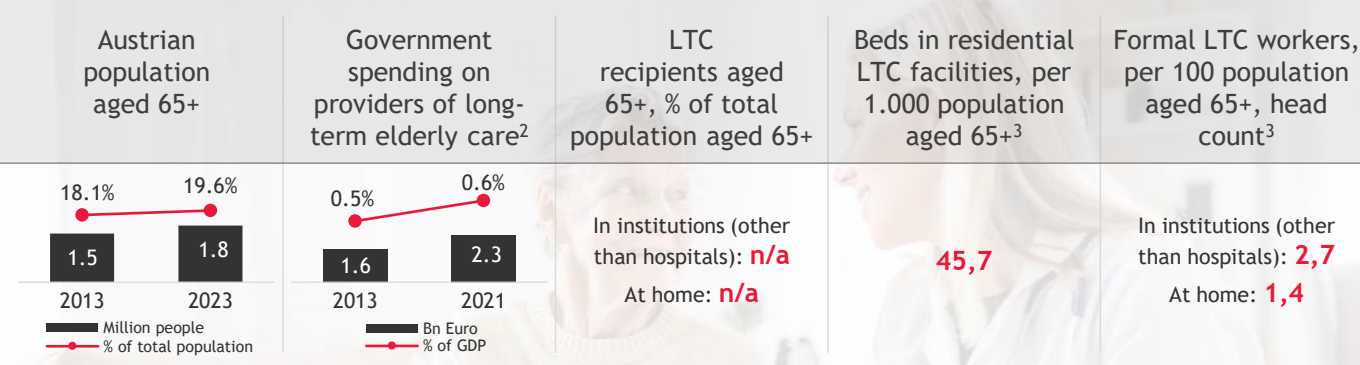
Government spending on long-term care providers for the elderly. With the introduction of the care allowance in 1993, the LTC system of Austria shifted towards more universalist LTC system principles yet maintained its firm reliance on family (informal) care. From 2013 to 2021, the absolute amount spent by the Austrian government on elderly LTC providers increased from 1,6 Bn Euro to 2,3 Bn Euro, which equals 59,9% of spending from all sources, and the major part of the remaining 40,1% account for the patients' families' out-of-pocket expenses. The Austrian care allowance scheme provides cash benefits that are non-means-tested¹ to people in need of care residing in Austria. As opposed to many other countries, recipients in Austria are free to choose how to spend the allowance.

Financial distress in elderly care. In Austria, the overall financial sustainability of LTC institutions is most affected by the growing demand for health professionals. The projected demand for social care workers is characterised by a significant increase of 22% in the demand for social care workers by 2030. This underlines the urgency of strategic planning to address this escalating demand.

Measures to ease the financial distress. On 14 July 2022 the Austrian parliament adopted an LTC reform. The primary objective of the reform was to improve the training attractiveness and overall working conditions of LTC sphere professionals. As a result, individuals in care education are entitled to financial support, starting at 600 Euro per month. Retraining for care and nursing comes with a 1,400 Euro per month scholarship from September 2023. Additionally, qualified staff from non-EU countries enjoys easier access to jobs in the care sector, and individuals with a foreign qualification certificate may work as care assistants even before completing the professional recognition process in the country. The qualified care personnel would also have the right to an additional week of paid vacation starting from the age of 43.

Technological initiatives and investments. Austria is a partner in the DigiCare4E project, an international initiative aimed at digitalising the elderly care sector. Compared to Scandinavia, the UK or the Benelux, the situation in Austria concerning the implementation of technological initiatives in elderly care is different: the purchase of e-health applications and active and assistive living technology remains purely private. A semi- or fully publicly funded market, where insurance and health systems cover the costs of these applications, is comparatively weakly developed.

Key figures in the Austrian elderly care



Sources: Birgit Trukeschitz – Austria's Long-Term Care System: Challenges and Policy Responses – [2022]; BASYS – Health workforce demand and supply – [2022]; European observatory on Health System and Policies – Austria Health System Summary – [2022]; EPTA – Technologies in care for older people – [2019]; Statistik Austria website; Media overview

Notes: (1) Eligibility for cash benefits is not determined by the recipient's financial situation or income level; (2) Based on actual prices; (3) Most recent available figures are for 2021

Belgium



Belgium grapples with the economic implications of an ageing tendency, as the proportion of individuals aged 65 and above is projected to rise to 26% by 2050

Ageing population. Over the past decade, the proportion of people aged 65 and above has increased from 17,7% in 2013 to 19,8% in 2023. This proportion is forecasted to further increase to 21% in 2025 and will come close to 26% by 2050.

Government spending on long-term care providers for the elderly. From 2013 to 2021, the absolute amount spent by the Belgian government on elderly LTC providers increased from 4,8 Bn Euro to 5,2 Bn Euro, which in 2021 was equivalent to 82,3% of spending from all sources. The remaining 17,7% accounted for the patients' families' out-of-pocket expenses. In Belgium, LTC policy has been for a long time aimed at developing care services at home to postpone admission of elderly as much as possible. Funding for home care has increased significantly in recent years, while moratoriums have limited residential care capacity. There are two main types of residential facilities for elderly people in Belgium: **homes for elderly people**, servicing those with only mild limitations in their daily activities, and **nursing homes**. Nearly one in four Belgian residents enter a nursing home prematurely, which explains why the country is the fourth biggest spender in the nursing home sector in Europe. This poses massive pressure on Belgium's overall healthcare budget, and by 2030, spending on nursing care is expected to increase by a further 14% of the total healthcare budget.

Financial distress in elderly care. Belgium is one of the few EU Member States facing a significant projected increase in the cost of ageing, primarily due to high pension and LTC spending. It is estimated that half of the fiscal adjustments needed in 2023 to stabilise the debt levels in the long term are related to the expected increase in the cost of ageing. The anticipated rise in ageing-related costs is likely to place a significant financial burden on elderly care institutions. These institutions may face challenges in maintaining current service levels, hiring qualified staff, and investing in necessary infrastructure and technology.

Measures to ease the financial distress. The Belgian government's pension reform, announced in 2023 by Prime Minister Alexander De Croo and Pensions Minister Karine Lalieux, aims to reduce the cost of ageing by 0,5% of GDP by 2070, which is equivalent to 3,0 Bn Euro.

Technological initiatives and investments. One of the most popular technological solutions in LTC in Belgium is Nobi, an AI-enabled lamp designed to provide immediate assistance within 90 seconds of a fall. The lamp also features automatic circadian lighting to help maintain a natural daily rhythm and reduce disorientation. Soon, Nobi will also monitor the frequency of coughs, enabling early detection of health problems. Nobi was founded in 2019 and has secured 13 Mn Euro in funding.

Key figures in the Belgian elderly care

Belgian population aged 65+	Government spending on providers of long-term elderly care ¹	LTC recipients aged 65+, % of total population aged 65+ ²	Beds in residential LTC facilities, per 1.000 population aged 65+ ³	Formal LTC workers, per 100 population aged 65+, head count
<p>17.7% 19.8%</p> <p>2.0 2.3</p> <p>2013 2023</p> <p>■ Million people — % of total population</p>	<p>1.2% 1.0%</p> <p>4.8 5.2</p> <p>2013 2021</p> <p>■ Bn Euro — % of GDP</p>	<p>In institutions (other than hospitals): 5,5%</p> <p>At home: 7,5%</p>	<p>66,8</p>	<p>In institutions (other than hospitals): n/a</p> <p>At home: n/a</p>

Canada



Canadian elderly care sector's main problem is the projected lack of beds and the performance gap between public and for-profit organisations delivering LTC

Ageing population. In the last ten years, the population's share of people aged 65+ increased by 3,5 p.p., from 15,3% in 2013 to 18,8% in 2022. The number of centenarians (100+) in Canada almost doubled in the last decade, and every fourth Canadian is expected to be 65+ by 2043. The baby-boomer population being the most significant cohort, the increasing life expectancy, and the low fertility rate all contribute to the ageing population.

Government spending on long-term care providers for the elderly. From 2013 to 2022, government spending on LTC for the elderly in Canada fluctuated around 1% of GDP, hitting 20,5 Bn Euro¹ in 2022. The share of state spending on providers of long-term elderly care was 65,0% in 2022, while the remaining 35,0% represented voluntary payments, mainly out-of-pocket expenses incurred by patients and their caregivers.

Financial distress in elderly care. Public, non-profit, and for-profit entities own LTC homes in Canada. As of 2022, for-profits owned about a third of LTC facilities in Canada. They rely on government funding for construction and care and focus on extracting profits, servicing fewer customers than similar government-owned facilities, and providing inferior care to their clients. Depending on the province, seniors face varying out-of-pocket expenses, and levels of government funding, e.g., co-payments², for LTC can fluctuate from 0,8 K Euro

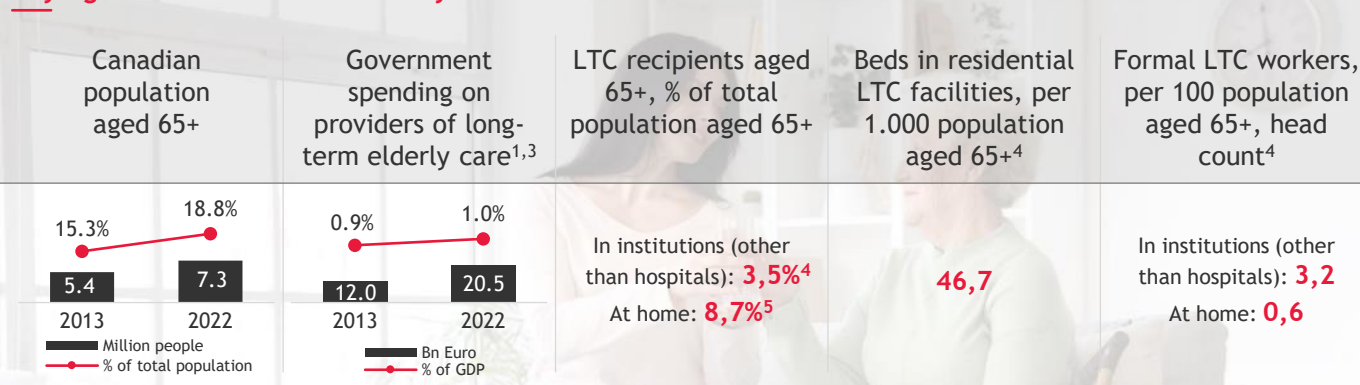
to 2,9 K Euro¹ per month depending on location, and even covering co-payments presents a challenge for some patients. Another issue is the lack of beds. Over 1,5 million Canadians were estimated to require LTC (25% of total) or home care (75%) in 2019. By 2031, this figure is expected to rise by 55% to over 2,3 million, implying the doubling of costs from 26,5 Bn Euro in 2019 to 54,1 Bn Euro in 2031¹, driven by increased demand and the growing cost of providing care.

Measures to ease the financial distress.

In February 2023, the government announced a nationwide investment of 1,6 Bn Euro¹ over five years to improve the situation in the elderly care sector. This initiative, in collaboration with provinces, includes a joint 5,6 Bn Euro¹ investment. The funds are to offset an increase in care workers' salaries and to support home and community care.

Technological initiatives and investments. Various innovations can improve the state of elderly care, e.g., improved communication between caregivers and care workers and improved conditions for the elderly. Canadian government invests in developing ageing-related innovation through organisations like the Centre for Ageing + Brain Health Innovation (CABHI) and AGE-WELL. CABHI aims to support Canadian care organisations offering funding and training. AGE-WELL is Canada's R&D network working on technologies and innovative solutions in services for healthy ageing.

Key figures in the Canadian elderly care



Sources: OECD.Stat – Long-Term Care Resources and Utilisation; OECD – Time for Better Care at the End of Life – [2023]; Statistics Canada database; Canadian Medical Association, Deloitte, Canada's elder care crisis: Addressing the doubling demand – [2021]; CABHI website; Media overview

Notes: (1) The numbers are converted from USD and CAD to Euro due to an average annual exchange rate by the ECB; (2) As of 2018; (3) Based on actual prices; (4) As of 2021; (5) As of 2016

Denmark



Denmark utilizes a balanced elderly care approach that combines increased government spending and a focus on home care over institutional care

Ageing population. Over the past decade, the proportion of people aged 65 and above has increased from 18,1% in 2013 to 20,5% in 2022, which marks a comparatively moderate ageing pace on average across the EU countries but is a relatively high indicator compared to other EU countries.

Government spending on long-term care providers for the elderly. From 2013 to 2022, the absolute amount spent by the Danish government on long-term elderly care providers increased from 2,7 Bn Euro to 3,8 Bn Euro, which is equivalent to around 40,7% growth. As a share of GDP, though, it remained almost at the same level, decreasing insignificantly by 0,1 p.p. from 2013 to 2022. In 2022, the government LTC spending was equivalent to 91,6% of spending from all sources. The remaining 8,4% is attributed to patients’ families’ out-of-pocket expenses, which is one of the lowest indicators among EU and OECD countries. In addition, informal carers may claim compensation from local councils for the lost care allowance¹. Compared to other countries, Denmark spends more on home care than institutional care. Remarkably, Denmark passed legislation against developing new institutional LTC spaces in 1984, reducing their number by around 30,0% to date.

Financial distress in elderly care. Denmark is continuously ranked as a remarkable country to grow old in, providing outstanding LTC options.

There is a comparatively low level of financial distress in the elderly LTC system in the given country. However, like the OECD-wide trend, the shortage of nursing professionals presents a challenge to the sustainability of LTC institutions.

Measures to ease the financial distress. To counter the nursing shortage problem, in 2024, the Danish government announced an agreement with a parliamentary majority allowing more foreign professionals to work in the country’s social care sector, particularly as care workers. The agreement sets a quota, permitting 1.000 foreign staff to fill these roles through work permits.

Technological initiatives and investments. To improve residential and home-based care, Denmark invests in health technologies that meet the needs of the elderly population. One example is DoseCan, which was introduced in 2015. It is a digitalised medicine management system that helps patients take their medication on time and dispenses packed and pre-measured medications. This system is estimated to save municipalities an average of 4.000 Euro annually. Despite the reduction in institutional LTC spaces, the Danish government is focused on enhancing the quality of institutional care. To this end, another solution was introduced for people suffering from incontinence – Abena Nova. Evaluations showed that it released 32 minutes of daily care per resident, improving the quality of elderly care by around 23%.

Key figures in the Danish elderly care

Danish population aged 65+	Government spending on providers of long-term elderly care ^{2,3}	LTC recipients aged 65+, % of total population aged 65+	Beds in residential LTC facilities, per 1.000 population aged 65+ ⁴	Formal LTC workers, per 100 population aged 65+, head count ⁶
<div><div>18.1%20.5%</div><div>1.01.2</div><div>20132022</div><div>Million people</div><div>% of total population</div></div>	<div><div>1.1%1.0%</div><div>2.73.8</div><div>20132022</div><div>Bn Euro</div><div>% of GDP</div></div>	<div>In institutions (other than hospitals): 3,2%⁴</div> <div>At home: 11,0%⁵</div>	<div>36,8</div>	<div>In institutions (other than hospitals): 4,2</div> <div>At home: 3,2</div>

Sources: SIT Graduate Institute – Identifying Critical Ageing Care Challenges and Opportunities in High-Income Countries – [August 2022]; Healthcare Denmark – Dignified Elderly Care in Denmark – [2023]; OECD website; The World Bank website; Media overview

Notes: (1) Refers to compensation that informal carers can claim to compensate for lost wages they have to forego to provide care; (2) Based on actual prices; (3) The numbers are converted from DKK to Euro due to an average annual exchange rate by the ECB; (4) Most recent available figures are for 2022; (5) Most recent available figures are for 2021; (6) Most recent available figures are for 2020

France



The key theme in elderly care in France is postponing the admission of patients, incentivising the use of informal home settings as much as possible

Ageing population. The French population is ageing at an increasing pace. In the past decade, in France, the share of the population aged 65+ increased from 17,7% in 2013 to 21,5% in 2023. France's baby boomers' generational cohort is massive and contributes significantly to the phenomenon.

Government spending on long-term care providers for the elderly. The French government's spending on the providers of long-term elderly care increased from 18,0 Bn Euro in 2013 to 24,6 Bn Euro in 2021. This indicator almost did not change as a share of GDP, being at 0,9% of GDP in 2013 and at 1,0% of GDP in 2021. In 2021, the government spending covered 69,7% of the total spending on the providers of long-term elderly care, while patients' out-of-pocket expenses covered the remaining 30,3%.

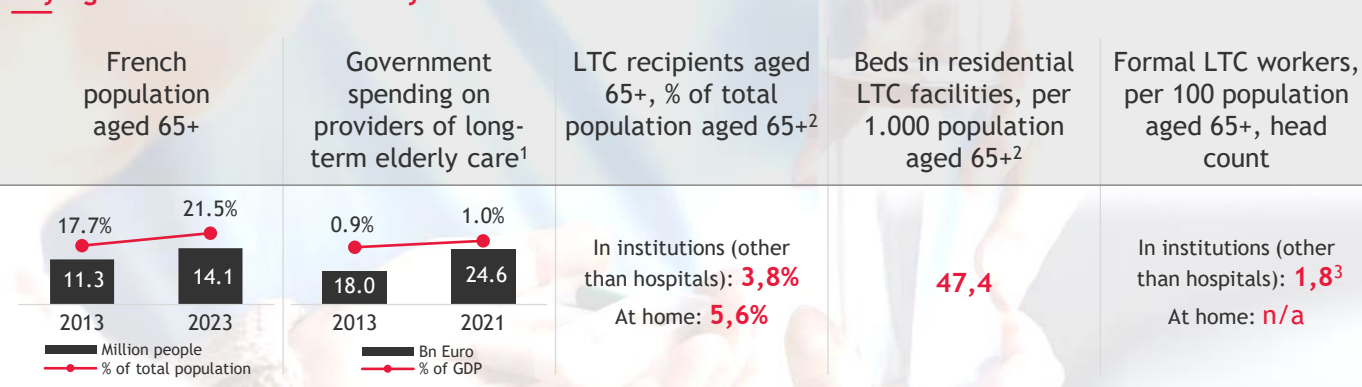
Financial distress in elderly care. By 2030, there estimated to be around 108.000 more dependent elderly individuals, reaching a total of 4 million by 2050, which poses a significant pressure on elderly LTC institutions. To address the rising costs of caring for those with a loss of autonomy, an annual commitment of 9 Bn Euro until 2030 is required. The highlighted financial challenges in elderly care require strategic financial management and ethical deliberation. Elderly LTC services can be costly for seniors and families. The financial stability of residential facilities and home LTC services hinges on national and local base prices. These prices vary

widely, often not reflecting actual care costs. In nursing homes, where the national reference price has remained unchanged since 2009, raising accommodation fees is the primary means of balancing the budget.

Measures to ease the financial distress. France incentivises patients to stay home without transferring to institutional care facilities for as long as possible. For this, it implemented the protocol of a hospital at home. To promote palliative care at home, France increased financing for out-of-hours palliative care. Besides, it created more mobile teams funded through national budgets, with pricing determined by the Regional Health Office based on personnel and travel costs. The payment includes contributing to the affiliated hospital's structural costs, and organisational cost assessments rely on hospital accounting data. Caregivers are entitled to a daily allowance of 56 Euro for up to 21 days per year. Those living in Paris can receive an additional allowance of up to 610 Euro per month for up to 3 months (12 months if the patient is a child).

Technological initiatives and investments. Multiple French companies are providing innovative agtech solutions like platforms for finding and booking home care in a specific locality (Colisee, Ouihelp), wearable and non-wearable sensors and emergency systems, e.g., allowing for tracking the movement of patients and helping them if they fall (SeniorAdom, Bluelinea, Telegrafik, Technis), etc.

Key figures in the French elderly care



Germany



Compulsory LTC insurance in Germany provides various benefits for elderly people, with 80,8% of them preferring home care over residential care

Ageing population. In 2012-2022, the German population grew by 4,8%, while a stagnating birth rate and the continuous rise in life expectancy drove the increased ageing. The share of the population aged 65+ grew by 1,8 p.p. since 2012, reaching 22,4% in 2022, which is 1,4 p.p. higher than the average for the EU countries.

Government spending on long-term care providers for the elderly. From 2013 to 2019, the state's spending on long-term elderly care rose in absolute terms, although the relative percentage share of GDP remained stable (0,6%). Notably, during the COVID-19 pandemic in 2020, this indicator increased to 0,7% of GDP, and in 2021, it further rose to 0,8% of GDP. In 2021, spending on LTC providers was divided between the government and patients' voluntary, along with out-of-pocket expenses, constituting 66,7% and 33,3%, respectively.

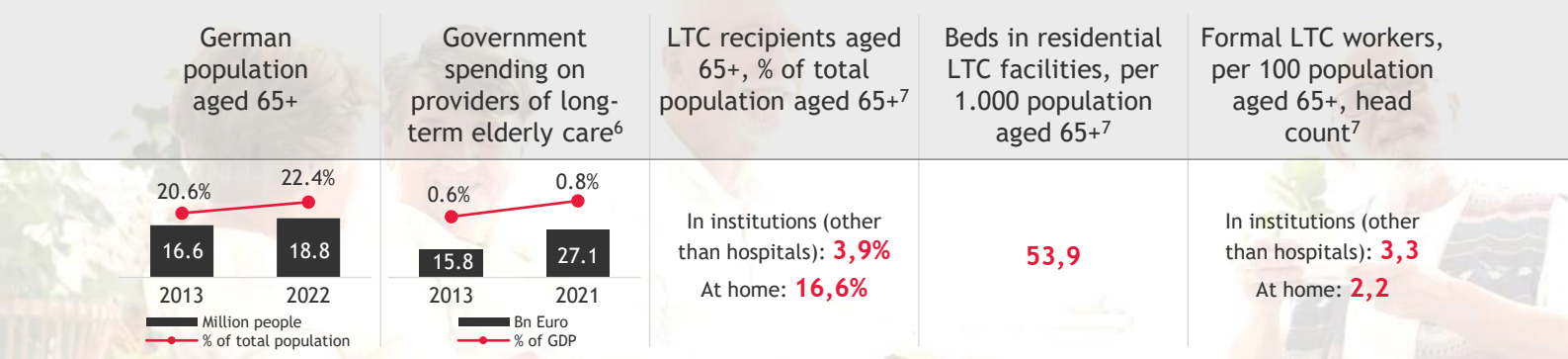
Financial distress in elderly care. The German nursing homes are facing financial strain due to rising material and personnel costs, and increased demand for nursing staff and capital. Prominent insolvencies highlight a concerning trend of financial challenges in the sector. Privatisation persists, with privately run homes operating more cost-effectively. As the aging population grows, projections indicate a need for an additional 322.000 inpatient care places by 2040, requiring substantial investments estimated between 81 Bn Euro and 125 Bn Euro. The entire population is covered with compulsory

long-term insurance (LTCI), with around 90% of people covered by the public LTCI and the remaining 10% – with the private LTCI. Elderly people eligible for benefits from the LTCI are classified into one of five care levels, depending on the independence in each area of life¹. But despite the wide range of LTCI benefits, 37% of the population is very worried about provision for old age, while 44% remain 'somewhat worried'².

Measures to ease the financial distress. Since its introduction in 1995, LTCI has offered home or inpatient care financial support. As of July 2023, LTCI contributions (3,4% of the employee's income) are shared equally between the employer and the employee. The Long-term Care Support and Relief Act, adopted in 2023, introduces changes to the LTCI, including measures to improve working conditions in inpatient facilities, such as coverage of personnel costs. In addition, 180 affordable LTC facilities are planned to be built in Germany within the EIB³ project with total costs of 924,0 Mn Euro⁴.

Technological initiatives and investments. DigiCare4E project, with the Deggendorf Institute of Technology, Germany, as the lead partner, is a three-year project with a 2,2 Mn Euro budget, where 80,0% of funds are provided by the ERDF⁵. The project aims to digitally transform LTC facilities in seven countries, starting with establishing communication channels between nursing homes and the care network as pilot actions in Germany.

Key figures in the German elderly care



Sources: National Bureau Of Economic Research – Long-term care in Germany – [2023]; The WorldBank website; EIB website; Media overview

Notes: (1) The assessment includes six modules that refer to different areas of life: mobility; mental and communication-related abilities; behaviour and psychological issues; self-care; independent handling of requirements and challenges associated with illness or therapy; everyday life and social contacts. Results are aggregated on a point scale from 0 ('no help needed') to 100 ('completely dependent on others'); (2) According to the 2022 Household Budget survey, conducted among 6.234 German respondents; (3) European Investment Bank; (4) Including EIB finance of 150,0 Mn Euro; (5) European Regional Development Fund; (6) Current prices; (7) As of 2021

Hong Kong



Having one of the longest life expectancies and the lowest fertility rates in the world, Hong Kong is expected to face significant LTC expenditures

Ageing population. Over the past decade, the proportion of people aged 65 and above has increased from 14,2% in 2013 to 21,8% in 2023. This proportion is forecasted to increase to 22,0% in 2024, close to 34% by 2049.

Government spending on long-term care providers for the elderly. From FY2012/13 to FY2021/22, the absolute amount spent by the government of Hong Kong on elderly LTC providers increased from 0,7 Bn Euro to 1,7 Bn Euro, equivalent to 65,6% of spending from all sources. The remaining 33,8% and 0,6% account for the patients' out-of-pocket and other¹ expenses, respectively. This supports the government's elderly care policy: 'ageing in place as the core, institutional care as back-up'.

Financial distress in elderly care. In Hong Kong, changing social demographics towards ageing and the declined availability of informal caregivers prompted a growing demand for formal LTC services. In Hong Kong, formal LTC services are broadly categorised as community care services (CCS) and residential care services (RCS). Elderly people applying for those services must undergo an assessment to match them with appropriate services. The elderly people with proven LTC needs are then put on a central waiting list with a usually rather long waiting time (in FY2017/18, it used to be 15 months on average compared to five months in FY2021/22).

Measures to ease the financial distress. Over the past decade, the Hong Kong government has

substantially increased its spending on LTC for the elderly in absolute terms. Since the 2010s, in light of the extended waiting list, the government expanded the supply of subsidised CCS and RCS by increasing the number of social workers in elderly centres, purchasing residential care places from private homes and self-financing homes, and engaging service operators through competitive bidding to provide subsidised RCS. With these enhancements, subsidised CCS places rose by 49,0% during FY2017/18-FY2021/22 to 17.200, while subsidised RCS places went up by 11,0% in the same period, reaching 30.400.

Technological initiatives and investments. Hong Kong has been actively integrating technology into elderly care to enhance the quality of life for its senior citizens. For instance, in 2021, the Hong Kong Productivity Council (HKPC) developed a Smart Elderly Health Care Monitoring System that monitors the physical conditions of elderly home residents, providing real-time health data to a centralised system and their relatives. The system connects devices such as a sphygmomanometer, blood glucose meter, and pulse oximeter, enabling timely follow-up. Also, in 2019, HKPC set up Hong Kong's first gerontechnology industry cluster, GLink, to leverage advanced technologies to address the daily needs of elderly people. This includes rollators with rhythmic cues for Parkinson's patients, patented AI fall detection, behavioural analysis devices, etc.

Key figures in the Hong Kong elderly care

Hong Kong population aged 65+ ²	Government spending on providers of long-term elderly care ^{2,3,4}	LTC recipients aged 60+, % of total population aged 60+ ⁵	Beds in residential LTC facilities, per 1.000 population aged 65+ ^{2,6}	Formal LTC workers, per 100 population aged 65+, head count
<p>14.2% 21.8%</p> <p>1.0 1.6</p> <p>2013 2023</p> <p>■ Million people — % of total population</p>	<p>0.3% 0.6%</p> <p>0.7 1.7</p> <p>FY2012/13 FY2021/22</p> <p>■ Bn Euro — % of GDP</p>	<p>In institutions (other than hospitals): n/a</p> <p>At home: 15,5%</p>	19,9	<p>In institutions (other than hospitals): n/a</p> <p>At home: n/a</p>

Sources: Hong Kong Governmental Census and Statistics Department website; Hong Kong Health Bureau website; Hong Kong Social Welfare Department website; GovHK website; Legislative Council of the Hong Kong Special Administrative Region website; Hong Kong Information Services Department website; Media overview

Notes: (1) Other includes employer-based insurance schemes, privately purchased insurance schemes, non-profit institutions serving households, and enterprise financing schemes; (2) Mid-year values; (3) Based on actual prices; (4) The numbers are converted from HKD to Euro due to an average annual exchange rate by the ECB; (5) Most recent available figures are for 2021; (6) Most recent available figures are for FY2021/2022

Ireland



To address the declining profitability of LTC facilities and assist with home care service expenses, Ireland provides various grants to family caregivers

Ageing population. Over the last ten years, the Irish population has grown by 15,2%, which is higher by 12,9 p.p. than the average for EU countries. At the same time, the share of the elderly aged 65+ increased from 12,6% in 2013 to 15,1% in 2021, suggesting the necessity to increase investment in the care of the elderly.

Government spending on long-term care providers for the elderly. The decrease in government spending on LTC from 1,4% of GDP in 2013 to 0,8% of GDP in 2022 stems from the sharp reduction in government healthcare spending that occurred after the global financial crisis of 2008. However, the absolute expenditure by the government during this period showed an overall increasing tendency, which supported the relatively low death rate in LTC (23%) compared to other countries. In 2022, the state's spending on LTC providers amounted to 4,0 Bn Euro, comprising 80,0% of the total spending from all sources. The remaining 20,0% were secured via voluntary schemes and household out-of-pocket expenses, constituting 0,2% of the country's GDP and one of the highest indicators among EU and OECD countries. At the same time, the 'Financing Long-term Care in an Ageing Society' document, which followed a 2019 National debate initiated by Sage Advocacy¹, recommends Ireland adopt a model like Denmark's, where the emphasis is on publicly funded LTC provided in community-based settings.

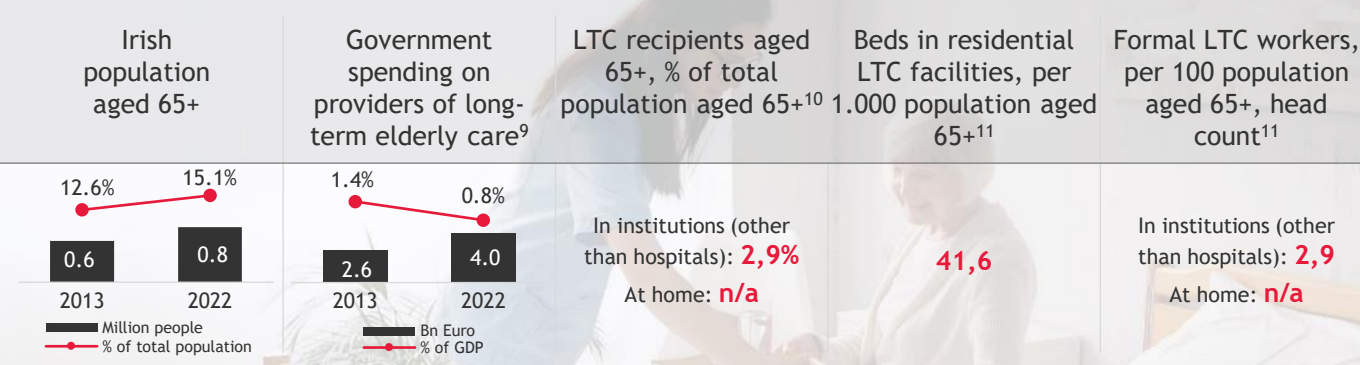
Financial distress in elderly care. Inflationary

trends, sector-wide staffing shortages, and the necessity of renovations to meet HIQA² regulations has contributed to a 36,0% increase in operational costs per resident and a 47,0% rise in development costs per bed since 2017. As a result, in 2022, 33,0% of the surveyed nursing homes experienced an operating loss, marking a substantial increase from the 4,0% reported in 2018, with none of the nursing homes reporting an operating loss in 2017³. At the same time, around 68% of family carers, as of 2022, are experiencing financial distress, while almost a quarter of those facing financial challenges are reducing spending on food and heating.

Measures to ease the financial distress. To help cover the expenses of home care services, the Irish Government provides grants, such as the Tax Relief⁴, Carer's Support Grant⁵, The HSE Home Support Service⁶ and the most common — the Fair Deal scheme⁷. However, due to a clear financial need faced by most family caregivers, public support for the Fair Deal amendment has been consistently demonstrated in recent years.

Technological initiatives and investments. The state Sláintecare Integration Fund⁸ provided 28,0 Mn Euro to fund 123 sector projects over 2019-2022 to deliver social care service that meets the population's needs. Projects like 'Agewell Programme' and 'ALONE Bconnect' implied linking healthcare, community and social care using mobile technology and services.

Key figures in the Irish elderly care



Sources: PWC — Challenges for nursing homes in the provision of older person care — [2023]; Central Statistics Office Ireland; OECD website; Media overview Notes: (1) Irish National advocacy service for older people; (2) Health Regulations and Quality Authority; (3) According to the 2023 PWC report; (4) Offers tax relief for certain healthcare costs; (5) Offers annual payment to carers; (6) Supports older people to remain in their own homes for as long as possible; (7) A scheme under which the cost of nursing home care are partially covered by the Health Services Executive, the publicly funded healthcare system in Ireland; (8) Based on actual prices; (9) In current prices; (10) As of 2021; (11) As of 2022

Norway



The Norwegian LTC system is highly developed compared to other OECD countries, yet it faces the challenges of nurse stuffing and inequality issues

Ageing population. Over the past decade, the proportion of people aged 65 and above has increased from 15,7% in 2013 to 18,4% in 2023. Norway’s population projections indicate slower growth and increased ageing. Outward migration is one of the critical drivers of the mentioned tendencies.

Government spending on long-term care providers for the elderly. In 2021, Norway was the second-largest country after the Netherlands to spend on LTC, allocating 3,5% of GDP to LTC (including the health and social component). This factor underscores the government’s commitment to supporting family caregivers’ continued participation in the labour market.

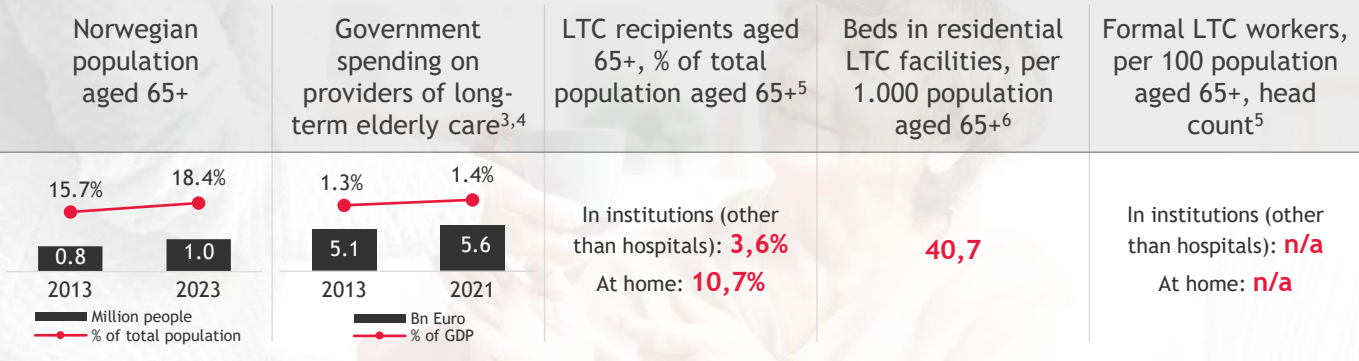
From 2013 to 2021, the absolute amount spent by the Norwegian government on elderly LTC providers increased from 5,1 Bn Euro to 5,6 Bn Euro, which is equivalent to 86,8% of all financing schemes, and the remaining 13,2% account for the patients’ families’ out-of-pocket expenses, dominated by pharmaceuticals and dental care expenses. In 2021, Norway had 5,2 practicing doctors per 1.000 population, which is nearly 27,0% above the EU average. The density of nurses in Norway was twice as high as the EU average in 2021, attributable to Norway’s substantial allocation of government expenses to LTC¹. Nevertheless, LTC providers face a growing challenge of nurse retention, with their annual turnover exceeding 20,0%.

Financial distress in elderly care. In Norway, municipalities are funded by government grants, regulated local taxes, and user fees. User fees are only charged for health and care services. For nursing homes, municipalities are allowed to charge an income-dependent user fee, capped at 80% of the residents’ after-tax income and the actual cost of the service. User fees cover almost 12% of total nursing home expenditure. Municipalities thus have an indirect incentive to target high-income users.

Measures to ease the financial distress. One of the possible options for low-income citizens to sustain potential nursing home care expenses is the **National Insurance Scheme**. Subject to this scheme, the Norwegian government is responsible for providing health care in accordance with the goal of equal access to care regardless of social or economic status or location.

Technological initiatives and investments. An important reason why elderly people are willing to move to nursing homes is that they feel unsafe at home, afraid of falling or having a heart attack without anyone noticing and being able to help. In 2017, Oslo districts sought a solution to address these concerns, resulting in Sensio AS² introducing an infrared monitoring system, ‘RoomMate’. This device detects movements, including falls, providing seniors with a sense of security and enabling the city to save on nursing home costs.

Key figures in the Norwegian elderly care



Sources: European Observatory on Health Systems and Policies – State of Health in the EU: Norway – [2023]; Øystein Hernæs – Economic incentives and health equity in the public provision of nursing homes in Norway – [September 2023]; Statistics Norway website; OECD website; Media overview
 Notes: (1) In 2016, the Norwegian government adopted the Competence Lift 2020, a five-year action plan aiming to improve the competencies, pay and retention rates of nurses; the plan was extended to 2025; (2) A Norwegian software development company; (3) Based on actual prices; (4) The numbers are converted from NOK to Euro due to an average annual exchange rate by the ECB; (5) Most recent available figures are for 2022; (6) Most recent available figures are for 2021

The Kingdom of Saudi Arabia



To boost insufficient elderly care, KSA plans to expand its network of long-term facilities and outsource LTC services to private and non-profit sectors

Ageing population. Over 2013-2022, the population of Saudi Arabia grew notably by 15,6%, while the share of elderly people increased by 0,6 p.p. The ageing of the population can be attributed to a gradual and consistent reduction in both birth and fertility rates, along with a relatively stable death rate.

Government spending on long-term care providers for the elderly. In 2021, the total KSA healthcare expenditure comprised 5,6% of the GDP, amounting to 35,4 Bn Euro. Estimated at 57,7 Bn Euro in 2022, healthcare expenditure is expected to slightly decrease to 5,5% of the GDP. Although the data on the state spending on LTC is not available, it may be speculated that institutional LTC is weakly developed, considering there are only 15 LTC facilities, with only 1.567 beds for LTC recipients available, as of 2020. The KSA aims to stimulate the private sector as per Saudi Vision 2030.

Financial distress in elderly care. The Kingdom of Saudi Arabia faces a critical challenge in LTC for the elderly due to a **general shortage of healthcare workforce**, including formal LTC workers. Along with the low number of LTC facilities, this results in patients with LTC needs occupying from 20,0% to 30,0% of public hospital beds, which is more financially burdensome for both LTC recipients and the state. To cover healthcare expenses, **50,0% of households rely on current income**, while only **9,0% depend on health insurance**. Apart from that, the

National Strategy on Ageing does not recognise the right of older people to work while receiving a pension. 33% of older adults receive a pension, while 41% of men in their 60s keep working¹.

Measures to ease the financial distress. The KSA supports the elderly through the **Programme of Home Care for the Elderly** and the **Social Welfare System**, which ensures financial and in-kind assistance and provides devices to the elderly and informal carers. In 2020, the Ministry of Human Resources and Social Development introduced a **comprehensive elderly care model**, which involves outsourcing services to private and non-profit sectors to enhance quality and efficiency. Simultaneously, the KSA is promoting **Public Private Partnerships**² as one of the main catalysts to fund the required LTC beds. In 2023, **Olayan Financial**³ forged a partnership with the Australian company **Vamed Group**⁴ to establish a new hospital specialising in rehabilitation and LTC in Saudi Arabia, accommodating 150 beds. In addition, the KSA plans to invest 12,5 Bn Euro in constructing medical facilities by 2030.

Technological initiatives and investments. The KSA plans to invest 43,5 Bn Euro into general healthcare and social development, focusing on **digital health initiatives** to bolster the healthcare infrastructure while reducing the load on healthcare professionals.

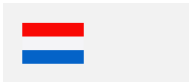
Key figures in the Saudi elderly care

Saudi population aged 65+	Government spending on providers of long-term elderly care	LTC recipients aged 65+, % of total population aged 65+ ⁵	Beds in residential LTC facilities, per 1.000 population aged 65+ ⁵	Formal LTC workers, per 100 population aged 65+, head count
<p>2.2% 2.8%</p> <p>0.7 1.0</p> <p>2013 2022</p> <p>■ Million people — % of total population</p>	n/a	<p>In institutions (other than hospitals): 0,4%</p> <p>At home: n/a</p>	1,6	<p>In institutions (other than hospitals): n/a</p> <p>At home: n/a</p>

Sources: National Health Economics and Policies General Directorate – The current situation of Long Term Care in SA 2020 – [2020]; UNFPA – The rights and wellbeing of older persons in Saudi Arabia – [2021]; The KSA Ministry of Human Resources and Social Development website; KSA National Unified Portal website; Arab News website; SaudiGazette website

Notes: (1) No official information on poverty and financial distress in terms of paying for healthcare services; (2) Projects where all parties are affected by the shared projects between the public sector and the private sector; (3) A privately-owned enterprise which invests across listed equities, private equity, debt, and real estate, based in the KSA; (4) A global provider for hospitals and other facilities in the healthcare sector, headquartered in Australia; (5) As of 2020

The Netherlands



One of the largest spenders on LTC, the Netherlands incentivises home-based care with the help of personal health budget and various training programmes

Ageing population. Like in most developed economies, the population’s age composition in the Netherlands skews towards more elders. The share of the population aged 65+ increased from 16,8% in 2013 to 20,2% in 2023, implying the need for growing spending on elderly care.

Government spending on long-term care providers¹ for the elderly. In 2013-2022, while the absolute amount spent by the government on long-term elderly care increased, the relative percentage share of GDP fluctuated at 2,5-2,8% of GDP. The respective financing figures went up in 2020 and 2021 to 3,0% and 2,9% of GDP, respectively, and now are moving back to the pre-COVID-19 level. In 2022, state spending constituted about 2,7% of GDP, equal to 93,1% of spending from all sources. The remaining 6,9% was mostly patient families’ out-of-pocket expenses which can include day care programs, meals, community-based services that help people remain in their homes. High public spending on LTC impacts the share of deaths occurring in hospitals which is one of the lowest in the world at 20%. The role of Dutch LTC facilities and private homes is the key reason for that².

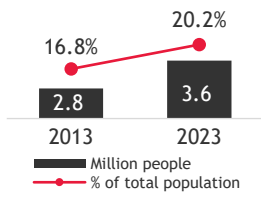
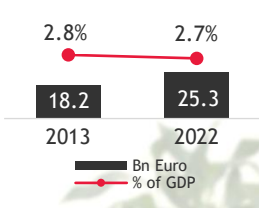
Financial distress in elderly care. Regarding the patients and their families, 36% of them in the Netherlands had difficulty covering care costs at the end of life³. Due to the gaps in both public funding and service delivery, informal carers bear much of

the responsibility for providing such care. In the Netherlands, a high proportion of people dying at age 65+ in 2008-2020, namely 59,1%, received some form of informal care from their relatives. Providers of elderly care face declining profitability; for example, in 2022, the share of providers operating at a loss was 32% compared to 16% in 2021 and 13% in 2020. It is likely contributed by the senior housing shortage in the country, which is tackled by the gradual increase in senior housing.

Measures to ease the financial distress. To incentivise home-based palliative care among informal carers, the Netherlands, like many other countries, implemented a personal health budget for individuals requiring assistance at home due to illness, disability, or palliative care needs. Training programmes are available for informal carers and volunteers alike to ease the load on the formal care system. Besides, the Dutch government sponsors major programmes on palliative care awareness and research (e.g., ZonMw, IKNL) to improve the end-of-life care guidelines to maximise patients’ quality of life and remove unnecessary procedures.

Technological initiatives and investments. An electronic note-sharing system is being developed nationwide to enable the early identification of patients requiring end-of-life care and the integration into primary care, effectively involving several specialists if needed.

Key figures in the Dutch elderly care

Dutch population aged 65+	Government spending on providers of long-term elderly care ⁴	LTC recipients aged 65+, % of total population aged 65+ ⁵	Beds in residential LTC facilities, per 1.000 population aged 65+ ⁶	Formal LTC workers, per 100 population aged 65+, head count ⁶
 <div>16.8% 20.2%</div> <div>2.8 3.6</div> <div>2013 2023</div> <div>Million people % of total population</div>	 <div>2.8% 2.7%</div> <div>18.2 25.3</div> <div>2013 2022</div> <div>Bn Euro % of GDP</div>	<div>In institutions (other than hospitals): 4,0%</div> <div>At home: 7,7%</div>	<div>73,9</div>	<div>In institutions (other than hospitals): 5,3</div> <div>At home: 2,9</div>

Sources: OECD.Stat – Long-Term Care Resources and Utilisation; OECD – Time for Better Care at the End of Life – [2023]; Government of the Netherlands website; CBS database (Statistics Netherlands); World Health Organisation website; Media overview
Notes: (1) Long-term care is mostly funded by following three public schemes: social long-term care insurance (covers care in nursing homes), social health insurance (covers nursing and personal care at home), and the Social Support Act (community support for older people); (2) The figures are for 2017; (3) Figures are from the 2014 international study; (4) Based on actual prices; (5) Most recent available figures are for 2020; (6) Most recent available figures are for 2021

The UK



Limited state assistance for long-term elderly care, coupled with the financial impact of rising living and energy costs, poses challenges for elderly people

Ageing population. The UK population demonstrated continuous ageing. In 2012-2022, the total population increased by 6,4%, while the proportion of people aged 65 and above increased from 17,3% in 2012 to 19,2% in 2022, implying the need to strengthen support in caring for elderly people.

Government spending on long-term care providers for the elderly. The state expenditure of the United Kingdom government on aged care amounted to 24,2 Bn Euro in 2021, comprising 0,9% of the country's GDP. Although the relative percentage share of GDP fluctuated within the range of 0,7-0,9% over 2012-2021, the absolute amount spent by the state was growing steadily throughout the period. In 2021, state expenditure on LTC increased by 4,4% compared to 2020 and by 50,4% compared to 2013. Apart from the government expenditure, the voluntary and out-of-pocket expenses comprised 40,0% of the total spending in 2021.

Financial distress in elderly care. Increased wages for long-term facilities to retain staff, escalating operational costs, and the cessation of short-term government COVID-19 support, such as the Infection Control Fund in March 2022, have strained care homes' financial resources. The Association of Directors of Adult Social Services reported that market instability was a primary concern for directors, with 67% reporting that providers in their area had closed, ceased trading, or handed back

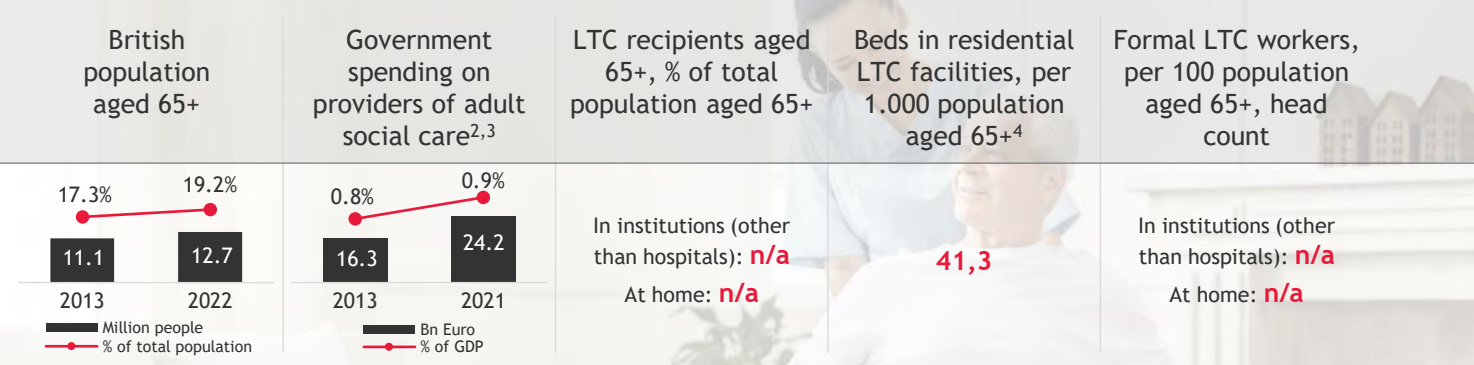
local authority contracts. Overall, the persisting financial and staffing pressures led to the closure of more than 14.000 elderly care beds throughout 2022. The prevailing majority of these beds were publicly funded, leaving some care recipients in the situation, where they are unable to afford the LTC services. The care recipients' situation is deteriorated by increased cost of living and elevated energy costs. As of 2023, 45% of 50+ people in the UK found it difficult to afford their energy bills, while 68% of people aged 70+ experienced a rise in their cost of living, forcing one in three people to cut on food expenses.

Measures to ease the financial distress.

In January 2024, the British Department of Health and Social Care allocated around 7 Bn Euro³ over the current and following years to support elderly social care system. The government additionally granted nearly 600 Mn Euro³ to improve LTC care workers' skills, support their career progression, and foster technological development and digitization. Support for elderly people for their LTC in the UK can be received from the local council or, in some circumstances, from the National Health Service.

Technological initiatives and investments. Starting in 2013, the ageing demographic prompted the establishment of companies improving the quality of life for the elderly. The surge in start-ups prompted their categorisation into a novel HealthTech subsector named AgeTech¹.

Key figures in the British elderly care



Sources: NHS – Adult Social Care Activity and Finance Report, England – [2022, 2023]; ADASS – Spring Budget Survey 2022 – [2022]; Age UK – Tackling the cost of living crisis for older people: What the Government must do – [2023]; Care Quality Commission – The state of health care and adult social care in England 2021/2022 – [2022]; OECD website; Age UK website; IMF website; World Bank Website; Media overview

Notes: (1) Sometimes referred to as 'Ageing 2.0'; (2) Current prices; (3) The numbers are converted from GBP to Euro due to an average annual exchange rate by the ECB; (4) As of 2021

The USA



The US government is the largest single-payer for nursing home care costs through the state-sponsored insurance programmes Medicaid and Medicare

Ageing population. During the last decade, improvements in vaccines and antibiotics developments, as well as surgeries and other medical care, paired with lower birth rates, resulted in the gradual increase in the share of the American population aged 65+, specifically, from 13,9% in 2013 to 17,1% in 2022. It is estimated that among all aged 65+, about 20% have difficulty with such basic tasks as dressing, bathing, walking, etc.

Government spending on long-term care providers for the elderly. From 2013 to 2021, government spending on LTC for the elderly fluctuated from 0,5% to 0,7% of GDP, reaching its peak value of 0,7% in 2020. In 2021, spending on LTC providers was divided between the government and voluntary patients' spending along with out-of-pocket expenses, constituting 68,5% and 31,5%, respectively. State-sponsored insurance, Medicare, covers about 80% of medical care expenses for the population aged 65+ and people with disability. Another state programme, Medicaid, exists for people of lower income groups, not excluding the elderly. Medicaid is the largest single-payer for nursing homes in the USA.

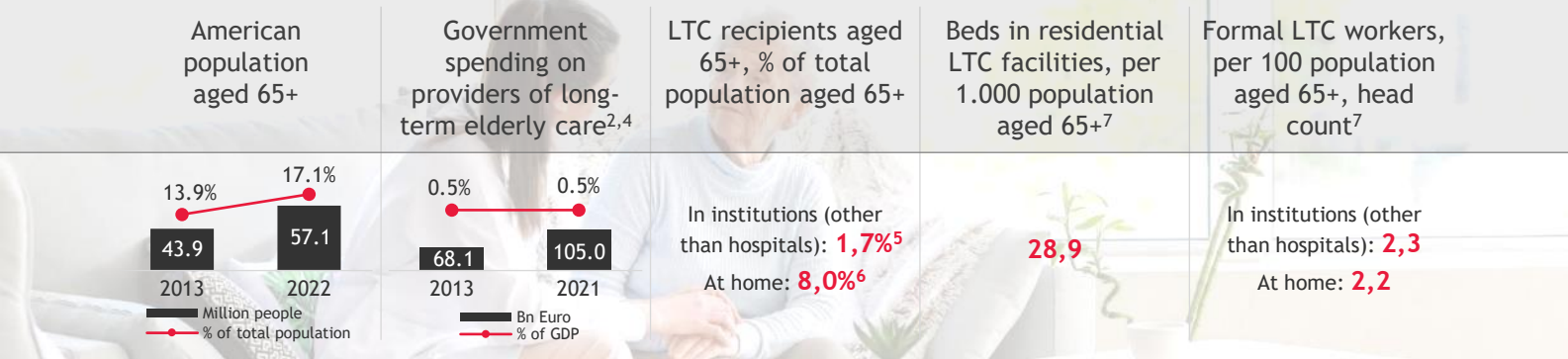
Financial distress in elderly care. The LTC institutional sustainability is shaped by such factors as free market policies, strong competition, increased demand from the ageing baby boomer generation, the spread of preventable diseases, and other reasons. As of 2020, 89% of nursing homes and

73% of assisted living facilities generated 3% or less profit margin (while 55% and 50%, respectively, operated at a loss). In 2023, only three new nursing homes have opened, which is a stark contrast to the 579 closures that have occurred in the industry during 2020-2023. From the patient's point of view, for every fourth American household, the total out-of-pocket expenses during the last five years of life are more than the entire household assets¹. Wealth is not a universal solution, as people aged 65+ had from 129,0 K Euro² to 1,4 Mn Euro² in savings; almost 24% became bankrupt by the moment of death due to nursing home expenses. The overall LTC costs increased faster than inflation in the last 15 years. For instance, an assisted living facility cost 33,2 K Euro² per year in 2004 and 45,7 K Euro² in 2021.

Measures to ease the financial distress. Increased public financing, involving more private health insurance, incentivising early use of palliative care and home care, and supporting informal caregivers with training, counselling, and opportunities to balance work and caring responsibilities are all to drive the cost-effectiveness of the elderly care system.

Technological initiatives and investments³. Multiple use cases in elderly care present opportunities for using technologies, e.g., scheduling applications and process management, AI to improve communication between patients and doctors, help with basic tasks, and provide patients with companionship.

Key figures in the American elderly care



Sources: OECD.Stat – Long-Term Care Resources and Utilisation; OECD – Time for Better Care at the End of Life – [2023]; AHCA – Access to care report – [2023]; WorldBank database; Media overview

Notes: (1) Based on the 2010 study using USA data; (2) The numbers are converted from USD to Euro due to an average annual exchange rate by the ECB; (3) Long-term care facilities were mainly omitted from the digital transformation by the Health Information Technology for Economic and Clinical Health Act, and there is a lag in technology adoption; (4) Based on actual prices; (5) As of 2020; (6) As of 2017; (7) As of 2021



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