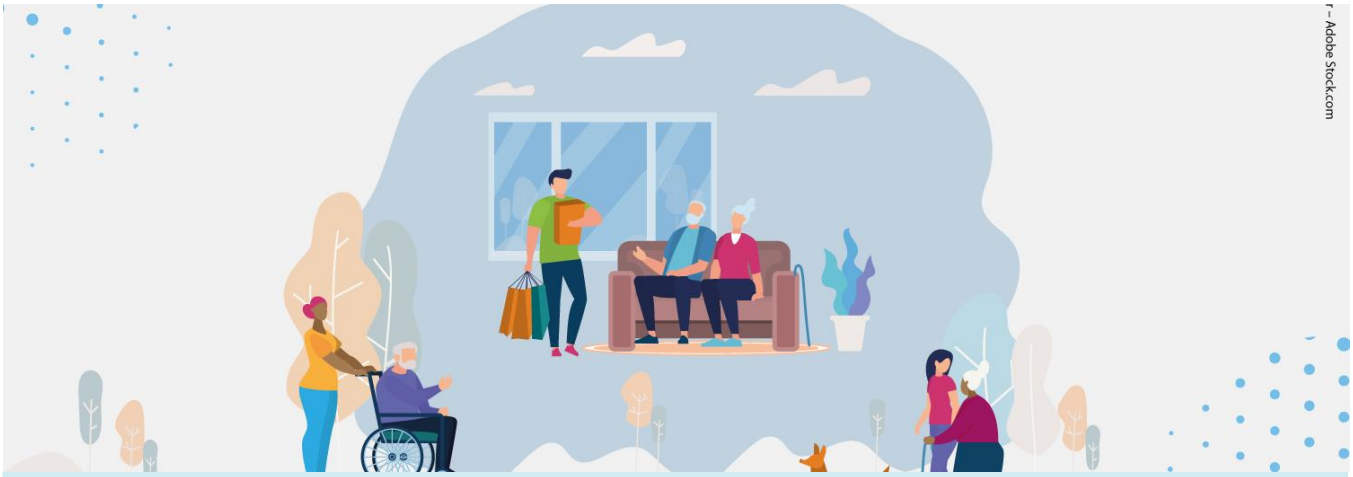
European Commission

SCIENCE FOR POLICY BRIEF

Demographic projections of long-term care needs in the EU up to 2070



HIGHLIGHTS

→ In the EU, the number of people with long-term care needs is projected to increase in the future. In 2070, this number is expected to be 21% higher than in 2020.

→ This increase is largely due to population ageing and in particular to the fact that more people are entering older age groups than in the past.

→ Within each age group, the share of people with long-term care needs is expected to decrease. Yet, the absolute number will increase in the future.

→ The alternative scenarios tested in the simulation show that the effects of population ageing on long-term care needs can be mitigated. In particular, research shows that higher level of education is associated with lower probability of developing long-term care needs.

→ Education is often linked to higher income; better information and more access to healthcare; as well as healthier lifestyle.

→ Policymakers working on the supply of long-term care services should take into consideration the expected increase in demand.

→ Active ageing policies, leveraging on the elements linked to education, have the potential to mitigate the rising demand in long-term care needs.

'Demographic change entails that Europeans are living longer lives, but this also leads to an increased demand for accessible, affordable quality long-term care. (...) It is time to care about care."

Dubravka Suica, Vice-President for Democracy and Demography

Joint Research Centre

LONG-TERM CARE DEMAND IN THE EU

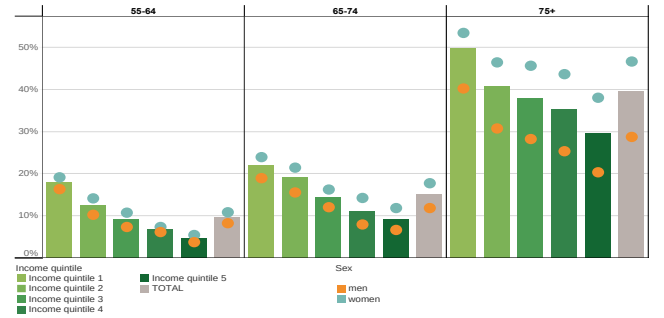
Policy relevance

Europeans are living longer and this trend is projected to continue in the future. This is an opportunity for individuals and the society alike. Living longer, however, means living more years associated with higher risks of experiencing difficulties with personal care or household activities. The share of people with severe levels of difficulties increases with age, and, in each age group, is higher for people with lower income levels. Independently from income and age, the share of people experiencing difficulties is higher for women than men (Figure 1).

To be able to make the most out of longer lives despite ill-health, people should have access to the appropriate services and assistance when, "for mental or physical frailty, disease and/or disability over an extended period of time they depend on support for daily living activities and/or are in need of some permanent nursing care".[1] Long-term care policies work towards this objective.

Quantifying the future demands of long-term care needs and understanding the factors that can reduce the likelihood of developing difficulties with daily activities in the first place is important to design appropriately such policies.

Figure 1 - Share of people with a severe level of difficulty with personal care or household activities by age, sex and income quintile (2019). Source: Eurostat, 2019 hlth_ehis_tai.



Scientific evidence

The number of people in the older age groups is projected to increase in the future. As a consequence, also the number of people in need of long-term care will increase. According to the estimates produced by the European Commission and the Economic Policy Committee in the Ageing Report 2021, the expected number of people with long-term care needs will increase by 24% in the period 2019-2050.

These estimates, part of a much broader exercise, are based on the projected evolution of the age structure of the population. They assume that the need for long-term care at a certain age will be the same across generations. However, the older age groups of today are not the same as the older groups of the past. The evolution of the medicine, better access to preventive health-care and changing lifestyles may all contribute to reducing the likelihood or postponing the insurgence of a need for long-term care.

Against this backdrop, in line with the actions under the European Care Strategy, the Joint Research Centre (JRC) conducted a study on the projections of long-term care needs in the population of 50 and above, up to 2070.[2] The study complements the projections in the Ageing Report in two ways. First, it does not assume that the share of people with long-term care needs by age group remains constant over time. It rather considers the individual probability of experiencing limitations with daily activities depending on the interaction of a series of characteristics, including the education level, obesity, smoking, and the presence of chronic disease (microsimulation)[3] (Figure 2).

Second, it develops alternative 'what-if' scenarios based on the *determinants* of long-term care needs:

- a healthier lifestyle scenario with a reduction of obesity and smoking levels;[4]
- a scenario where people live 2 years longer without any health gains in the additional years;
- a scenario where education does not influence the probability of developing long-term care needs.[5]

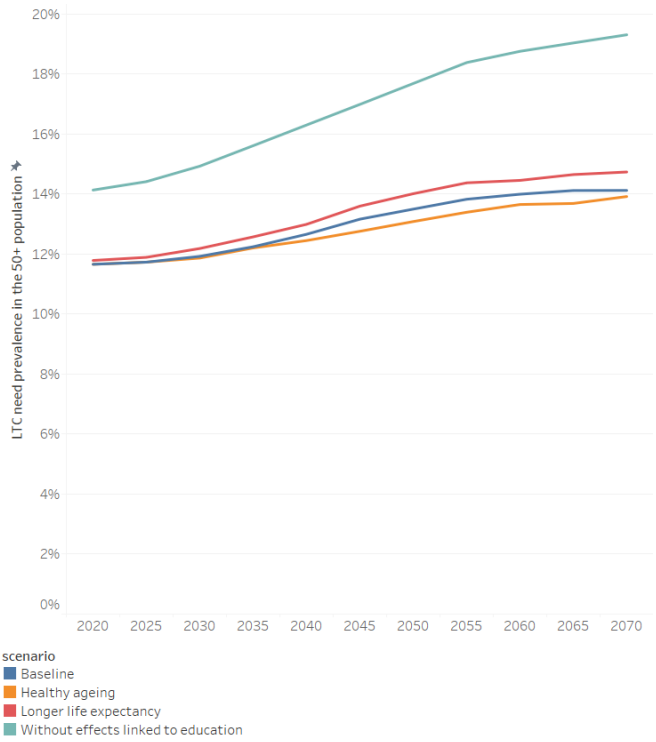
Opportunities for informed decision-making in long-term care

In the future (baseline scenario[6]), the share of people with long-term care needs is expected to increase from 11.6% in 2020 to 14.1% in 2070. This represents +21% people in need of long-term care needs in 2070 with respect to the level in 2020 (Figure 2).[7]

Policies addressing long-term care should therefore adapt the supply of services to an ever-increasing demand. This could include improving the efficiency in the provision of long-term care; extending homecare and community-based care; increasing financial resources for the health- and social-care sectors; and expanding the long-term care workforce with measures aimed at improving working conditions and pay levels, upskilling and re-skilling the workforce, accompanied by pro-active labour market and immigration policies.[8]

[1] Definition of long-term care as per Council Recommendation (2022), on access to affordable high-quality long term care, 13948/22.
[2] The projections are based on the Survey of Health, Ageing and Retirement in Europe (SHARE) and in particular cover the following countries: AT, BE, CZ, DE, DA, ET, ES, FR, EL, HR, HU, IE, IT, LU, NL, PL, PT, SE, SI.
[3] The relevant characteristics are: age, sex, education, migration, country of residence, migration status, obesity, smoking history, chronic disease.
[4] 5% decrease in the overall obesity prevalence in Europe in 2040 compared to 2011, and 80% decrease in the probability of having ever smoked for those reaching age 50 in 2040 (with linear decrease over the years until 2040).
[5] This is a methodological scenario that removes the effect of education: all individuals are assumed to have the same risk of activity limitation as those with the lowest level of education. It serves the purpose of showing, by contract, the effect of education.
[6] Projection parameters constant throughout the projection exercise (up to 2070).
[7] These results are in line with the Ageing Report.
[8] The Council Recommendation on access to affordable high-quality long-term care proposed by the European Commission in the context of the Care Strategy works in this direction.

Figure 2 - Long-term care needs prevalence in the population of more than 50 years of age, as a percentage increase (2020-2070).



This increase in long-term care needs is largely due to the population ageing. In the future, with the increase in life expectancy, there will be more people in older age groups than today in *absolute numbers*.

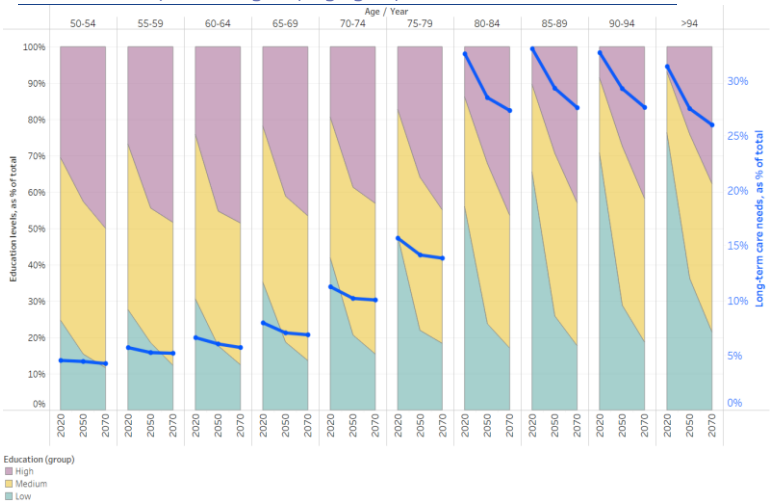
Yet, **looking at the needs *within each age group*, there is a decline over time in *percentage*, especially among older age groups.** This can be referred to as a cohort effect - the impact of being born and growing up during a particular time period, which can result in individuals within the same cohort sharing similar experiences and characteristics that may influence their behaviors, attitudes, and outcomes. The data indicate that younger generations entering the age group 50+ are less likely to develop long-term care needs.

The variable that substantially impacts the prevalence of long-term care needs in younger generations reaching a specific age is **education** (Figure 3). The increase in educational levels over time in the future is a demographic assumption of the simulation. The fact that education has an important impact on the long-term care needs explains why long-term care needs rates decrease over time within age groups.

Policies aimed at increasing the level of education are important from a long-term perspective. The benefits of education can be seen throughout the entire life course of an individual, even when it comes to reducing the likelihood of developing long-term care needs at an older age.[9]

Education alone does not explain in itself lower long-term care needs. **Education is associated with income**, **and its effect in the simulation may in fact incorporate other impacts**, such as better information on and more access to healthcare, a healthier lifestyle (defined in different ways as the ones captured in the healthy ageing scenario, or to include other aspects, like healthier nutrition, more physical activity), residency (e.g. rural-urban).[10] Further research is required on those factors and the results should contribute towards shaping policy interventions to reduce the likelihood of developing long-term care needs.

Figure 3 – Projected educational levels (area, left axis) and prevalence of long-term needs (line, right axis) in the population of more than 50 years of age, by age groups (2011-2070).



A reduction in smoking and obesity levels is expected to produce lower rates of long-term needs. Conversely, **living longer without improving our health conditions is expected to lead to the opposite results**. However, our simulations indicate that the effects on long-term care needs in these scenarios is limited at around 1 percentage point (Figure 2).

Interventions aimed at reducing smoking and obesity rates in the population should be sustained and enhanced as these have a wide range of well-documented health benefits. Long-term care is also affected by obesity and smoking, although it is **currently not possible to confidently estimate the impact of reducing smoking and obesity on long-term care needs**.

Conclusion and future outlook

There is evidence of the positive future perspectives of healthy ageing at *the individual level*. However, at the *aggregate level*

[9] EU actions on improving the access to education and in building a European Education Area work in this direction. The Council Resolution on a strategic framework for European cooperation in education and training towards the and beyond for instance sets a minimum target of 45% in the share of 25-34 year-olds with tertiary educational attainment, by 2030.

[10] These are all factors that were outside our demographic microsimulation model, but that can be analysed with future research. At the moment, we also do not know whether the effect of education is linear and how it interacts with other behavioural changes.

our simulations indicate that society as a whole will be more in need of long-term care.

This is due to the fact that, in the future, more people will be in older age groups, compared to today. As such, demographic change remains a dominant factor driving the need for long-term care in the future.

The society as a whole has some tools to mitigate the effects of such demographic change. As people move from one age group to the next, they are less likely to be in need of long-term care than the people preceding them. In our simulations, this is mostly associated with increased levels of education, which in turn is connected to a variety of characteristics linked to healthy ageing.

Against this backdrop, policies should adapt the supply of long-term care services to an increasing demand in the future, by securing the adequacy of social protection for long-term care needs, improving the availability and accessibility of long-term care services, enhancing their quality and improving the working conditions and overall attractiveness of the sector. Moreover, they should aim at delaying the occurrence of long-term care needs by by increased educational levels and actively promoting healthy ageing.

QUICK GUIDE – This JRC research supports the European Care Strategy (Commission Communication COM(2022) 440 final). It provides support to the section on improving the evidence base, in particular on the action on developing detailed projections on the demand for health and long-term care services in the EU.

This Policy Brief summarises the results of the research described in the JRC Report: Belmonte, M., Grubanov-Boskovic, S., Natale, F., Conte, A., Belanger, A. and Sabourin, P., Demographic microsimulation of long-term care needs in the European Union, Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/941182, JRC135303.

It is supported by the JRC Atlas of Migration Story on Long-term care, available at https://migration-demography-tools.jrc.ec.europa.eu/atlas-demography/stories/AoD/2/S3.8

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