# 1.3. Public expenditure on health (S-20)

### 1.3.1. Documentation sheet

#### Description

Principal indicator: Public expenditure on health (acute and long-term care) as % of Gross Domestic Product (GDP)

Secondary indicators: Public expenditure on acute care as % of Gross Domestic Product (GDP)

Public expenditure on long-term care as % of Gross Domestic Product (GDP)

#### Calculation

The Study Committee on Ageing (*Comité d'Étude sur le Vieillissement, CEV – Studiecommissie voor de Vergrijzing, SCvV*) makes long-term projections of social expenditure (retirement, healthcare, work incapacity, unemployment, child care allowances, and other social expenditure), up to 2070. In what follows we focus on projections for healthcare expenditure, i.e. public expenditure on health with a distinction between acute and long-term care. These long-term projections are based on four types of assumptions: demographic, socio-economic, macroeconomic and social policy assumptions that are summarised in table 2 of the Study Committee on Ageing 2020 annual report.<sup>1</sup> In particular, the average growth rate of labour productivity is assumed to be 0.3% per year during the period 2020-2025, then 1.2% per year until 2045 and 1.5% per year from 2045 onwards. An alternative scenario is also calculated, with a reduced growth rate of labour productivity in the long term: 0.9% per year during the period 2025-2030, and 1.0% per year from 2031 onwards.

The long-term projections published in 2020 integrate the 2019-2070 demographic outlook (updated in the context of the COVID-19 pandemic) established in June 2020, the 2020-2025 economic outlook published in June 2020 and all measures related to social expenditure already promulgated. Regarding healthcare expenditure, the measures taken by the government and RIZIV – INAMI to ensure that the evolution of the budget for compulsory health insurance does not exceed the real growth norm (1.5% in 2019) are included in the observed data. However, in the projections, the evolution of healthcare expenditure results from specific models and does not take into account the real growth norm.

Results are presented at the Belgian level as well as separately according to the level of power: on the one hand the federal state including social security organisations and on the other hand the federated entities (regions and communities) and local authorities (provinces and municipalities). Since 2015 and the 6<sup>th</sup> state reform, some competencies, notably those related to long-term care, have been transferred from the federal state to the federated entities.

Regarding projections for healthcare expenditure in particular, it is likely that acute and long-term care are not influenced by the same determinants and not influenced in the same way by common determinants. Therefore these two types of care are modelled separately.<sup>2</sup>

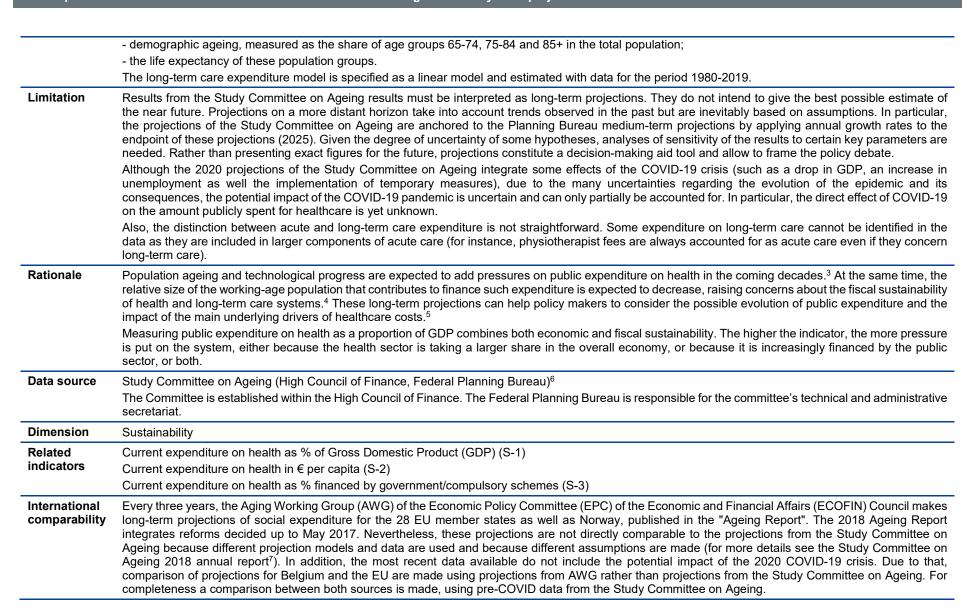
Acute care expenditure includes acute care services covered by the compulsory health insurance (fees for GPs and medical specialists, drugs, hospitalisations, implants, physiotherapy, etc.), hospital funding and other social benefits (such as some care to disabled persons) closely related to acute care. Expenditure is expressed in real terms per capita (deflated by the GDP deflator), as a function of the following explanatory variables:

- real GDP per capita (also deflated by the GDP deflator);
- demographic ageing, measured as the share of age groups 65-74, 75-84 and 85+ in the total population;
- the unemployment rate;
- a dummy variable which captures the impact of the extension of health insurance for self-employed workers from 2008 onward;
- two indicators on the evolution of medical technology.

The acute care expenditure model is specified as a log-linear model and estimated on the basis of data for the period 1980-2019.

Long-term care expenditure includes nursing care at home, stays of persons in residential care facilities for older people and in mental healthcare facilities, some other expenditure for assistance with the daily living of dependent elderly persons as well as additional insurance for non-medical care (*Vlaamse Zorgkas*) in Flanders. Expenditure is expressed in real terms per capita (deflated by the GDP deflator) as a function of the following explanatory variables:

- real GDP per capita (also deflated by the GDP deflator);





## 1.3.2. Results

# **Belgium**

In 2019, public expenditure on health amounted to 37.2 billion € in Belgium. This represents 7.9% of the Belgian Gross Domestic Product (GDP). The major part of this expenditure (30.3 billion €, 6.4% of the GDP) is related to acute care, compared to 6.8 billion € (1.4% of the GDP) to long-term care (Table 7, Figure 11).

Public expenditure for acute care is mainly the responsibility of the federal state (5.7% of GDP compared to 0.7% for federated entities and local authorities) while the opposite is true for long-term care (0.3% of GDP for the federal state compared to 1.1% for federated entities and local authorities) (Table 7, Figure 12).

In the future, public expenditure (as a share of GDP) is foreseen to increase, up to 10.0% in 2040, mainly due to an increase in long-term care expenditure (from 1.4% of GDP in 2019 to 2.3% of GDP in 2040, i.e. an increase of 64%). Public expenditure for acute care (in percent of GDP) is foreseen to increase by 22% between 2019 and 2040 (from 6.4% to 7.8% of the GDP) (Table 7, Figure 11).

According to the current division of competencies, the increase in public expenditure for acute care will be mainly supported by the federal state while the increase in public expenditure for long-term care will be supported by federated entities and local authorities (Table 7, Figure 12).

Under an alternative scenario with reduced productivity growth, public expenditure on health is expected to increase more, from 7.9% of the GDP in 2019 to 10.9% in 2070 (compared to 10.4% in the reference scenario), partly due to a higher increase in public expenditure on acute care (from 6.4% of the GDP in 2019 to 8.3% in 2070 compared to 8.1% in the reference scenario) (Table 8).

# International comparison

The international comparison is based on projections from the Aging Working Group (AWG) of the Economic Policy Committee (EPC) of the Economic and Financial Affairs (ECOFIN) Council that are not directly comparable to the projections of the Study Committee on Ageing, although they show a similar pattern (Figure 13). They were made before the COVID-19 crisis and therefore do not account for the impact of the pandemic.

In 2016, public expenditure on health in Belgium, as a percentage of the GDP, is very close to the EU-28 average. They are projected to follow a similar trend in the short and long term (Figure 14). Nevertheless, public expenditure on long-term care (as a share of GDP) in Belgium is above the EU-28 average, compensated by lower public expenditure on acute care than the EU-28 average. These differences are expected to be slightly exacerbated in the future (Figure 15).



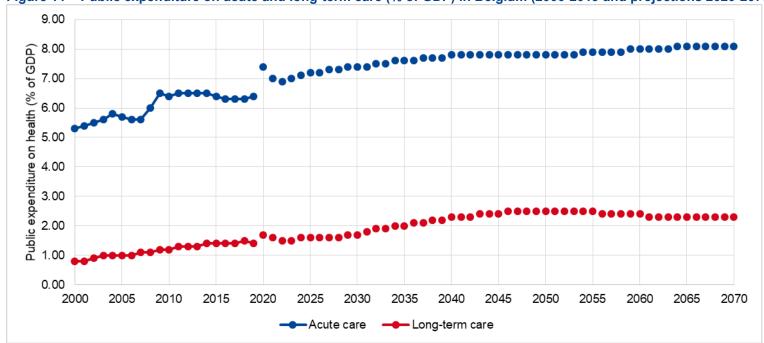
Table 7 – Public expenditure on health in Belgium (2016-2019 and projections 2020-2070)

						2020		2024	2025	2030	2040	2050	2060	2070
2010	2017	2010	2019	2020	2021	2022	2023	2024	2025	2030	2040	2050	2000	207
35 140	35 559	36 178	37 157	38 726	39 193	40 060	41 030	42 088	43 117	48 121	60 440	72 328	84 460	99 988
28 641	28 865	29 316	30 301	31 344	32 044	32 797	33 626	34 509	35 350	39 040	46 755	54 737	65 181	77 947
6 499	6 686	6 851	6 845	7 374	7 141	7 254	7 396	7 572	7 758	9 082	13 688	17 595	19 286	22 050
7.8	7.7	7.8	7.9	9.1	8.5	8.4	8.5	8.6	8.8	9.1	10	10.3	10.3	10.4
6.3	6.3	6.3	6.4	7.4	7	6.9	7	7.1	7.2	7.4	7.8	7.8	8	8.1
1.4	1.4	1.5	1.4	1.7	1.6	1.5	1.5	1.6	1.6	1.7	2.3	2.5	2.4	2.3
5.9	5.9	5.9	6	6.9	6.5	6.5	6.6	6.7	6.7	7	7.4	7.5	7.6	7.7
5.5	5.5	5.5	5.7	6.5	6.2	6.1	6.2	6.3	6.4	6.6	6.9	7	7.1	7.2
0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.5	0.5
1.8	1.8	1.9	1.9	2.2	2.0	2.0	2.0	2.0	2.0	2.2	2.6	2.8	2.7	2.7
0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
1.1	1.1	1.1	1.1	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.8	1.9	1.8	1.8
	28 641 6 499 7.8 6.3 1.4 5.9 5.5 0.4	35 140 35 559 28 641 28 865 6 499 6 686  7.8 7.7 6.3 6.3 1.4 1.4  5.9 5.9 5.5 5.5 0.4 0.4  1.8 1.8 0.8 0.8	35 140       35 559       36 178         28 641       28 865       29 316         6 499       6 686       6 851         7.8       7.7       7.8         6.3       6.3       6.3         1.4       1.4       1.5         5.9       5.9       5.9         5.5       5.5       5.5         0.4       0.4       0.4         1.8       1.8       1.9         0.8       0.8       0.8	35 140       35 559       36 178       37 157         28 641       28 865       29 316       30 301         6 499       6 686       6 851       6 845         7.8       7.7       7.8       7.9         6.3       6.3       6.3       6.4         1.4       1.4       1.5       1.4         5.9       5.9       5.9       6         5.5       5.5       5.7       0.4       0.4       0.3         1.8       1.8       1.9       1.9         0.8       0.8       0.8       0.7	35 140       35 559       36 178       37 157       38 726         28 641       28 865       29 316       30 301       31 344         6 499       6 686       6 851       6 845       7 374         7.8       7.7       7.8       7.9       9.1         6.3       6.3       6.3       6.4       7.4         1.4       1.4       1.5       1.4       1.7         5.9       5.9       5.9       6       6.9         5.5       5.5       5.7       6.5         0.4       0.4       0.4       0.3       0.4         1.8       1.8       1.9       1.9       2.2         0.8       0.8       0.8       0.7       0.8	35 140       35 559       36 178       37 157       38 726       39 193         28 641       28 865       29 316       30 301       31 344       32 044         6 499       6 686       6 851       6 845       7 374       7 141         7.8       7.7       7.8       7.9       9.1       8.5         6.3       6.3       6.3       6.4       7.4       7         1.4       1.4       1.5       1.4       1.7       1.6         5.9       5.9       5.9       6       6.9       6.5         5.5       5.5       5.5       5.7       6.5       6.2         0.4       0.4       0.4       0.3       0.4       0.4         1.8       1.8       1.9       1.9       2.2       2.0         0.8       0.8       0.8       0.7       0.8       0.8	35 140       35 559       36 178       37 157       38 726       39 193       40 060         28 641       28 865       29 316       30 301       31 344       32 044       32 797         6 499       6 686       6 851       6 845       7 374       7 141       7 254         7.8       7.7       7.8       7.9       9.1       8.5       8.4         6.3       6.3       6.3       6.4       7.4       7       6.9         1.4       1.4       1.5       1.4       1.7       1.6       1.5         5.9       5.9       5.9       6       6.9       6.5       6.5         5.5       5.5       5.5       5.7       6.5       6.2       6.1         0.4       0.4       0.4       0.3       0.4       0.4       0.3         1.8       1.8       1.9       1.9       2.2       2.0       2.0         0.8       0.8       0.8       0.7       0.8       0.8       0.8	35 140       35 559       36 178       37 157       38 726       39 193       40 060       41 030         28 641       28 865       29 316       30 301       31 344       32 044       32 797       33 626         6 499       6 686       6 851       6 845       7 374       7 141       7 254       7 396         7.8       7.7       7.8       7.9       9.1       8.5       8.4       8.5         6.3       6.3       6.3       6.4       7.4       7       6.9       7         1.4       1.4       1.5       1.4       1.7       1.6       1.5       1.5         5.9       5.9       5.9       6       6.9       6.5       6.5       6.6         5.5       5.5       5.5       5.7       6.5       6.2       6.1       6.2         0.4       0.4       0.4       0.3       0.4       0.4       0.3       0.3         1.8       1.8       1.9       1.9       2.2       2.0       2.0       2.0         0.8       0.8       0.8       0.8       0.8       0.8       0.8	35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6           6.3         6.3         6.3         6.4         7.4         7         6.9         7         7.1           1.4         1.4         1.5         1.4         1.7         1.6         1.5         1.5         1.6           5.9         5.9         5.7         6.5         6.2         6.1         6.2         6.3           0.4         0.4         0.4         0.3         0.4         0.4         0.3         0.3           1.8         1.8         1.9         1.9         2.2         2.0         2.0         2.0         2.0           0.8         0.8         0.8         0.7         0.8         0.8 <td< td=""><td>35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8           6.3         6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2           1.4         1.4         1.5         1.4         1.7         1.6         1.5         1.5         1.6         1.6           5.9         5.9         5.9         6         6.9         6.5         6.5         6.6         6.7         6.7           5.5         5.5         5.5         5.7         6.5         6.2         6.1         6.2         6.3         6.4           0.4         0.4         0.4         0.3         0.3         0.3</td><td>35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117         48 121           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350         39 040           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758         9 082           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8         9.1           6.3         6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2         7.4           1.4         1.4         1.5         1.4         1.7         1.6         1.5         1.5         1.6         1.6         1.7           5.9         5.9         5.9         6         6.9         6.5         6.5         6.6         6.7         6.7         7           5.5         5.5         5.7         6.5         6.2         6.1         6.2         6.3         6.4         6.6&lt;</td><td>35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117         48 121         60 440           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350         39 040         46 755           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758         9 082         13 688           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8         9.1         10           6.3         6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2         7.4         7.8           1.4         1.4         1.5         1.4         1.7         1.6         1.5         1.5         1.6         1.6         1.7         2.3           5.9         5.9         5.5         5.5         5.7         6.5         6.2         6.1         6.2         6.3         6.4         6.6         6.9           0.4</td><td>35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117         48 121         60 440         72 328           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350         39 040         46 755         54 737           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758         9 082         13 688         17 595           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8         9.1         10         10.3           6.3         6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2         7.4         7.8         7.8           1.4         1.4         1.5         1.4         1.7         1.6         1.5         1.5         1.6         1.6         1.7         7.4         7.4         7.5           5.9         5.9         5.9         6.5         6.5         6.5         6.6         6</td><td>35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117         48 121         60 440         72 328         84 460           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350         39 040         46 755         54 737         65 181           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758         9 082         13 688         17 595         19 286           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8         9.1         10         10.3         10.3           6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2         7.4         7.8         7.8         7.8         2.4           5.9         5.9         5.9         6         6.9         6.5         6.5         6.5         6.6         6.7         6.7         7         7.4         7.5         7.6           5.5</td></td<>	35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8           6.3         6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2           1.4         1.4         1.5         1.4         1.7         1.6         1.5         1.5         1.6         1.6           5.9         5.9         5.9         6         6.9         6.5         6.5         6.6         6.7         6.7           5.5         5.5         5.5         5.7         6.5         6.2         6.1         6.2         6.3         6.4           0.4         0.4         0.4         0.3         0.3         0.3	35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117         48 121           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350         39 040           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758         9 082           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8         9.1           6.3         6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2         7.4           1.4         1.4         1.5         1.4         1.7         1.6         1.5         1.5         1.6         1.6         1.7           5.9         5.9         5.9         6         6.9         6.5         6.5         6.6         6.7         6.7         7           5.5         5.5         5.7         6.5         6.2         6.1         6.2         6.3         6.4         6.6<	35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117         48 121         60 440           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350         39 040         46 755           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758         9 082         13 688           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8         9.1         10           6.3         6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2         7.4         7.8           1.4         1.4         1.5         1.4         1.7         1.6         1.5         1.5         1.6         1.6         1.7         2.3           5.9         5.9         5.5         5.5         5.7         6.5         6.2         6.1         6.2         6.3         6.4         6.6         6.9           0.4	35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117         48 121         60 440         72 328           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350         39 040         46 755         54 737           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758         9 082         13 688         17 595           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8         9.1         10         10.3           6.3         6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2         7.4         7.8         7.8           1.4         1.4         1.5         1.4         1.7         1.6         1.5         1.5         1.6         1.6         1.7         7.4         7.4         7.5           5.9         5.9         5.9         6.5         6.5         6.5         6.6         6	35 140         35 559         36 178         37 157         38 726         39 193         40 060         41 030         42 088         43 117         48 121         60 440         72 328         84 460           28 641         28 865         29 316         30 301         31 344         32 044         32 797         33 626         34 509         35 350         39 040         46 755         54 737         65 181           6 499         6 686         6 851         6 845         7 374         7 141         7 254         7 396         7 572         7 758         9 082         13 688         17 595         19 286           7.8         7.7         7.8         7.9         9.1         8.5         8.4         8.5         8.6         8.8         9.1         10         10.3         10.3           6.3         6.3         6.4         7.4         7         6.9         7         7.1         7.2         7.4         7.8         7.8         7.8         2.4           5.9         5.9         5.9         6         6.9         6.5         6.5         6.5         6.6         6.7         6.7         7         7.4         7.5         7.6           5.5

Source: Study Committee on Ageing (2020)<sup>1</sup>, reference scenario.

'n

Figure 11 – Public expenditure on acute and long-term care (% of GDP) in Belgium (2000-2019 and projections 2020-2070)



Source: Study Committee on Ageing (2020)<sup>1</sup>, reference scenario. The peak expected in 2020 is a consequence of the COVID-19 crisis that reduced expected GDP growth.

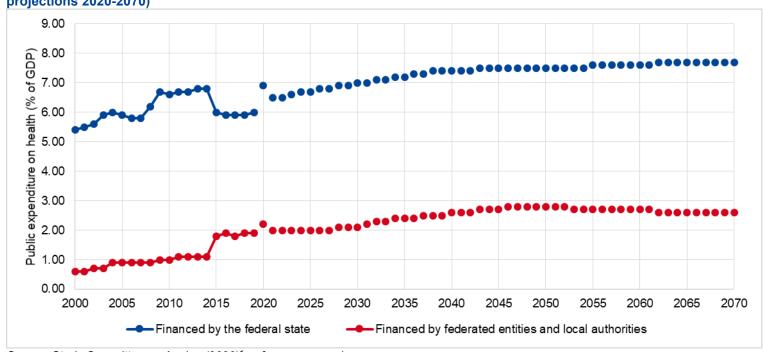
Table 8 – Projections of public expenditure on health in Belgium: reference and alternative scenario

Variation 2019-2070 (GDP percentage points)	Reference scenario	Alternative scenario (S1)
Public expenditure on health	2.6	3.0
Acute care	1.7	1.9
Long-term care	0.9	1.1

Under the alternative scenario, long-term growth of labour productivity is set to 1% from 2031 onwards (compared to 1.5% from 2045 onwards in the reference scenario). Source: Study Committee on Ageing (2020)<sup>1</sup>

31

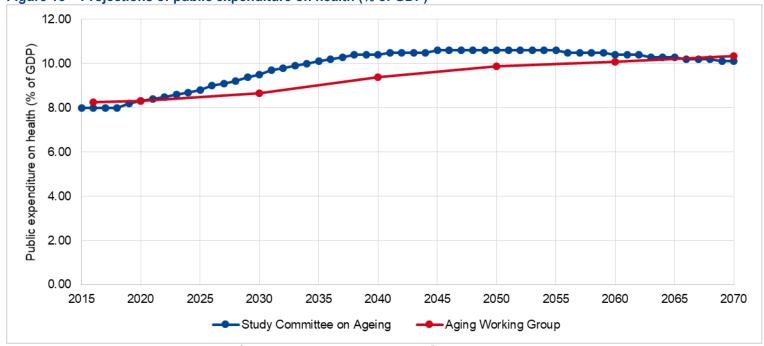
Figure 12 – Public expenditure on health (% of GDP) financed by the federal state or by federated entities and local authorities (2000-2019 and projections 2020-2070)



Source: Study Committee on Ageing (2020)<sup>1</sup>, reference scenario.



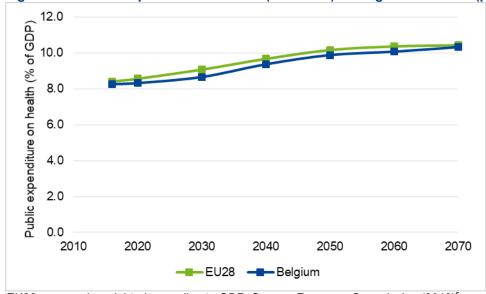
Figure 13 – Projections of public expenditure on health (% of GDP)



Source: Study Committee on Ageing (2019)8 and European Commission (2018)5



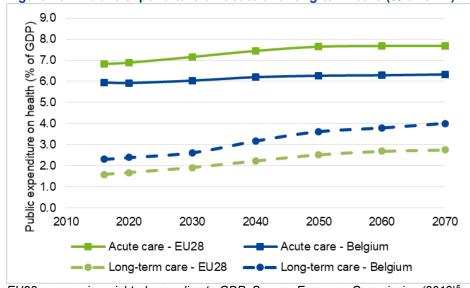
Figure 14 – Public expenditure on health (% of GDP) in Belgium and EU28 (projections 2016-2070)



EU28 average is weighted according to GDP. Source: European Commission (2018)<sup>5</sup>

54

Figure 15 – Public expenditure on acute and long-term care (% of GDP) in Belgium and EU28 (projections 2016-2070)



EU28 average is weighted according to GDP. Source: European Commission (2018)5

#### References

- [1] Conseil Supérieur des Finances. Comité d'Étude sur le Vieillissement. Rapport annuel. Bruxelles: Conseil Supérieur des Finances; 2020.
- [2] Conseil Supérieur des Finances. Comité d'Étude sur le Vieillissement. Rapport annuel. Bruxelles: Conseil Supérieur des Finances; 2014.
- [3] OECD, European Observatory on Health Systems and Policies. Belgium: Country Health Profile 2019, State of Health in the EU. Paris, Brussels: Organisation for Economic Co-operation and Development. European Observatory on Health Systems and Policies; 2019.
- [4] OECD. Fiscal Sustainability of Health Systems. Bridging Health and Finance Perspectives. Paris: Organisation for Economic Co-operation and Development; 2015.
- [5] European Commission. The 2018 Ageing Report: Economic and Budgetary Projections for the EU Member States (2016-2070). Brussels: European Commission; 2018.
- [6] Federal Planning Bureau. 2020 Annual Report of the Study Committee on Ageing [Web page].Brussels: Federal Planning Bureau;2020 [cited 21 December 2020]. Available from: <a href="https://www.plan.be/databases/data-33-en-2020">https://www.plan.be/databases/data-33-en-2020</a> annual report of the study committee on ageing
- [7] Conseil Supérieur des Finances. Comité d'Étude sur le Vieillissement. Rapport annuel. Bruxelles: Conseil Supérieur des Finances; 2018.
- [8] Conseil Supérieur des Finances. Comité d'Étude sur le Vieillissement. Rapport annuel. Bruxelles: Conseil Supérieur des Finances; 2019.