1.3. Public expenditure on health (S-20)

1.3.1. Documentation sheet

<table>
<thead>
<tr>
<th>Description</th>
<th>Principal indicator: Public expenditure on health (acute and long-term care) as % of Gross Domestic Product (GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secondary indicators: Public expenditure on acute care as % of Gross Domestic Product (GDP)</td>
</tr>
<tr>
<td></td>
<td>Public expenditure on long-term care as % of Gross Domestic Product (GDP)</td>
</tr>
</tbody>
</table>

**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. 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 6th 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.

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);
- demographic ageing, measured as the share of age groups 65-74, 75-84 and 85+ in the total population;
- the life expectancy of these population groups.

The long-term care expenditure model is specified as a linear model and estimated with data for the period 1980-2019.

**Limitation**

Results from the Study Committee on Ageing results must be interpreted as long-term projections. They do not intend to give the best possible estimate of the near future. Projections on a more distant horizon take into account trends observed in the past but are inevitably based on assumptions. In particular, the projections of the Study Committee on Ageing are anchored to the Planning Bureau medium-term projections by applying annual growth rates to the endpoint of these projections (2025). Given the degree of uncertainty of some hypotheses, analyses of sensitivity of the results to certain key parameters are needed. Rather than presenting exact figures for the future, projections constitute a decision-making aid tool and allow to frame the policy debate.

Although the 2020 projections of the Study Committee on Ageing integrate some effects of the COVID-19 crisis (such as a drop in GDP, an increase in unemployment as well the implementation of temporary measures), due to the many uncertainties regarding the evolution of the epidemic and its consequences, the potential impact of the COVID-19 pandemic is uncertain and can only partially be accounted for. In particular, the direct effect of COVID-19 on the amount publicly spent for healthcare is yet unknown.

Also, the distinction between acute and long-term care expenditure is not straightforward. Some expenditure on long-term care cannot be identified in the data as they are included in larger components of acute care (for instance, physiotherapist fees are always accounted for as acute care even if they concern long-term care).

**Rationale**

Population ageing and technological progress are expected to add pressures on public expenditure on health in the coming decades. At the same time, the relative size of the working-age population that contributes to finance such expenditure is expected to decrease, raising concerns about the fiscal sustainability of health and long-term care systems. These long-term projections can help policy makers to consider the possible evolution of public expenditure and the impact of the main underlying drivers of healthcare costs.

Measuring public expenditure on health as a proportion of GDP combines both economic and fiscal sustainability. The higher the indicator, the more pressure is put on the system, either because the health sector is taking a larger share in the overall economy, or because it is increasingly financed by the public sector, or both.

**Data source**

Study Committee on Ageing (High Council of Finance, Federal Planning Bureau)

The Committee is established within the High Council of Finance. The Federal Planning Bureau is responsible for the committee’s technical and administrative secretariat.

**Dimension**

Sustainability

**Related indicators**

- Current expenditure on health as % of Gross Domestic Product (GDP) (S-1)
- Current expenditure on health in € per capita (S-2)
- Current expenditure on health as % financed by government/compulsory schemes (S-3)

**International comparability**

Every three years, the Aging Working Group (AWG) of the Economic Policy Committee (EPC) of the Economic and Financial Affairs (ECOFIN) Council makes long-term projections of social expenditure for the 28 EU member states as well as Norway, published in the "Ageing Report". The 2018 Ageing Report integrates reforms decided up to May 2017. Nevertheless, these projections are not directly comparable to the projections from the Study Committee on Ageing because different projection models and data are used and because different assumptions are made (for more details see the Study Committee on Ageing 2018 annual report). In addition, the most recent data available do not include the potential impact of the 2020 COVID-19 crisis. Due to that, comparison of projections for Belgium and the EU are made using projections from AWG rather than projections from the Study Committee on Ageing. For completeness a comparison between both sources is made, using pre-COVID data from the Study Committee on Ageing.
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)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public expenditure on health (million € - constant prices 2019)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute care</td>
<td>28 641</td>
<td>28 865</td>
<td>29 316</td>
<td>30 301</td>
<td>31 344</td>
<td>32 797</td>
<td>33 626</td>
<td>34 509</td>
<td>35 350</td>
<td>39 040</td>
<td>46 755</td>
<td>54 737</td>
<td>65 181</td>
<td>77 947</td>
<td></td>
</tr>
<tr>
<td>Long-term care</td>
<td>6 499</td>
<td>6 686</td>
<td>6 851</td>
<td>6 845</td>
<td>7 374</td>
<td>7 141</td>
<td>7 254</td>
<td>7 396</td>
<td>7 572</td>
<td>7 758</td>
<td>9 082</td>
<td>13 688</td>
<td>17 595</td>
<td>19 286</td>
<td>22 050</td>
</tr>
<tr>
<td>Public expenditure on health (% of GDP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute care</td>
<td>7.8</td>
<td>7.7</td>
<td>7.8</td>
<td>7.9</td>
<td>9.1</td>
<td>8.5</td>
<td>8.4</td>
<td>8.5</td>
<td>8.6</td>
<td>8.8</td>
<td>9.1</td>
<td>10</td>
<td>10.3</td>
<td>10.3</td>
<td>10.4</td>
</tr>
<tr>
<td>Long-term care</td>
<td>1.4</td>
<td>1.4</td>
<td>1.5</td>
<td>1.4</td>
<td>1.7</td>
<td>1.6</td>
<td>1.5</td>
<td>1.6</td>
<td>1.6</td>
<td>1.7</td>
<td>2.3</td>
<td>2.5</td>
<td>2.4</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Public expenditure on health financed by the federal state (% of GDP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute care</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>6</td>
<td>6.9</td>
<td>6.5</td>
<td>6.5</td>
<td>6.6</td>
<td>6.7</td>
<td>7</td>
<td>7.4</td>
<td>7.5</td>
<td>7.6</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>Long-term care</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>0.6</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Public expenditure on health financed by federated entities and local authorities (% of GDP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute care</td>
<td>1.8</td>
<td>1.8</td>
<td>1.9</td>
<td>1.9</td>
<td>2.2</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.6</td>
<td>2.8</td>
<td>2.7</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Long-term care</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>(including Zorgkas in Flanders)</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.3</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.3</td>
<td>1.8</td>
<td>1.9</td>
<td>1.8</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source: Study Committee on Ageing (2020), reference scenario.
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)\(^1\), 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

<table>
<thead>
<tr>
<th>Variation 2019-2070 (GDP percentage points)</th>
<th>Reference scenario</th>
<th>Alternative scenario (S1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public expenditure on health</td>
<td>2.6</td>
<td>3.0</td>
</tr>
<tr>
<td>Acute care</td>
<td>1.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Long-term care</td>
<td>0.9</td>
<td>1.1</td>
</tr>
</tbody>
</table>

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)\(^1\)
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), reference scenario.
Figure 13 – Projections of public expenditure on health (% of GDP)

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

References