Health care system in Luxembourg: a short presentation

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Agenda

- Luxembourg – The country
- Healthcare system
- Population health status
- Expenditure and cost
- Conclusion
LUXEMBOURG – The Country
Luxembourg lies in the heart of Europe:

- **Area**: 2,586 km²
- **Population**: 560,000 inhabitants
- **Languages**: French, German, Luxembourgish, English

**8 facts about Luxembourg**

1. Constitutional Monarchy, Parliamentary Democracy
2. Founding member of the European Union, NATO, United Nations
3. Open, diversified and stable economic, political, and social
4. High quality of life
5. Unemployment: 6.9% population, with compensation: 5.9%
6. Easy access to responsive decision-makers
7. World’s highest GDP per capita
8. Lowest government debt ratio in the EU and top GDP performance
Demography and diversity

Steady increase (20 years)

High immigration rate

The proportion of non-Luxembourgish population rose from 29.4% to 46.7% in the last 25 years.

Source: Statec
THE LUXEMBOURG HEALTH CARE SYSTEM
### Hospital facilities

<table>
<thead>
<tr>
<th>Hospital facilities</th>
<th>Beds</th>
<th>Beds/1000 pop</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 acute hospitals</td>
<td>2290</td>
<td></td>
</tr>
<tr>
<td>2 acute specialty hospitals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac surgery and interventional cardiology</td>
<td>27</td>
<td>4.24</td>
</tr>
<tr>
<td>Radiotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Hospice</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Physical Rehabilitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 national center (RHZ: 72 beds)</td>
<td>177</td>
<td>0.32</td>
</tr>
<tr>
<td>In acute hospitals (105 beds)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mental health rehabilitation center</td>
<td>237</td>
<td>0.43</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2746</td>
<td>5.00</td>
</tr>
</tbody>
</table>

*Source: Carte sanitaire - 2015*
Medical doctors

- Physicians:
  - Certified and trained abroad (mostly in FR, BE, DE)
  - Automatic licence for practice in Lxb, no numerus clausus
  - Mandatory collective contract with the CNS
  - National fee schedule for medical services
  - Tripartite fee negotiations.

- 1656 practicing physicians (2.8/1000 population) in 2015, of which:
  - 69.9% specialists et 30.1% general practitionners
  - Most specialists (ca. 900) are affiliated to a hospital.
Increase of reserve from 10% to over 20% in 2018
Hospital financing

- Same rules for all hospitals
- In-patient nursing care: Financing based on PRN (Projet de recherche en Nursing) calculation tool
  - PRN: measures the required nursing and care time for in-patients.
- Out-patient nursing and professional care:
  - norms agreed between the health insurance fund and the hospital federation
  - negotiations
- Physicians: fee for service, separate billing system
- Flat rates for some types of activities (extra-renal epuration, ...)
- Annual quality bonus (up to 2% of hospital budget) for participation in national quality programme.
Extended **solidarity**, covering employment, health, and other benefits

Various **institutions** in charge of the social and health benefits coverage:
- l’assurance maladie-maternité,
- l’assurance accidents/maladies professionnelles
- l'assurance pension
- l’assurance dépendance
- les prestations familiales et les assistances sociales
- les prestations de chômage
- le revenu minimum garanti

**Mandatory affiliation** for all economically active persons (employed, self-employed or recipients of replacement benefits) and their dependents

**Population covered:**
- 518 168 residents in 2014 (94,3% resident population)
- 254 894 non-residents in 2014
Fundamental principles for the delivery of health care services:

- **Unlimited access** to quality health care – no discrimination – solidarity
- **Free choice** of health provider, direct access to specialized care and services, no gate-keeping
- **Strong health promotion** and **preventative care programmes** inbedded in the system.
National statutory health insurance: Caisse Nationale de Santé

Mission: Equitable access to quality healthcare for all

Health insurance law:
- Health services should maintain, restore, or improve the health of affiliated people, as well as their ability to work and face their personal needs
- Optimal coverage of the population should be reached
- A comprehensive basket of health services should be offered, within the limits of “what is needed and necessary”
- Free choice of the health care provider is guaranteed, unless for the provision of urgent and out-of-duty care

Minimal role of the private health insurance market
POPULATION HEALTH STATUS
Most frequent **mortality** causes:

<table>
<thead>
<tr>
<th>Mortality causes - 2014 (standardized rates / 100 000 inhabitants)</th>
<th>Luxembourg</th>
<th>France</th>
<th>Mean EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Cardiovascular diseases</td>
<td>296,9</td>
<td>202,9</td>
<td>373,6</td>
</tr>
<tr>
<td>#2 Cancer</td>
<td>260,7</td>
<td>245,4</td>
<td>261,5</td>
</tr>
<tr>
<td>... Transport accident</td>
<td>6,0</td>
<td>5,1</td>
<td>5,8</td>
</tr>
</tbody>
</table>

**Life expectancy**, healthy life years at birth, and ageing population:

<table>
<thead>
<tr>
<th></th>
<th>Luxembourg</th>
<th>France</th>
<th>Belgium</th>
<th>Germany</th>
<th>Mean EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth, both sexes, 2015 (years)</td>
<td>82,4</td>
<td>82,4</td>
<td>81,1</td>
<td>80,7</td>
<td>80,6</td>
</tr>
<tr>
<td>Healthy life years, 2015 (males)</td>
<td>63,7</td>
<td>62,6</td>
<td>64,4</td>
<td>65,3</td>
<td>62,6</td>
</tr>
<tr>
<td>Healthy life years, 2015 (females)</td>
<td>60,6</td>
<td>64,6</td>
<td>64,0</td>
<td>67,5</td>
<td>63,3</td>
</tr>
</tbody>
</table>

**Population Structure 2016**

<table>
<thead>
<tr>
<th></th>
<th>Luxembourg</th>
<th>France</th>
<th>Belgium</th>
<th>Germany</th>
<th>Mean EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population aged 65 and over (%)</td>
<td>14,2</td>
<td>18,8</td>
<td>18,2</td>
<td>21,1</td>
<td>19,2</td>
</tr>
<tr>
<td>Population aged 80 and over (%)</td>
<td>4,0</td>
<td>5,9</td>
<td>5,5</td>
<td>5,8</td>
<td>5,4</td>
</tr>
</tbody>
</table>
Hepatitis impact on hospitalisation

Evolution of viral hepatitis related hospitalisation

Luxembourg average hospitalisation cases (2014)

Hospitalisation exit diagnostic ICD 10 (B15-B19)

Source: Carte sanitaire - 2015
Death caused by acute hepatitis

Distribution of deaths related to Hepatitis 2005-2015

B16: acute hepatitis B
B17: Other acute viral hepatitis
B18: Chronic viral hepatitis
B19: Unspecified viral hepatitis
LUXEMBOURG HEALTH CARE SYSTEM: EXPENDITURE AND COST
Expenditures and sources of financing

- Annual total health expenditures per capita: 4’808 USD PPP
- 83% of total health expenditures are covered by public money (48% in the US)

Source: OECD Health Data 2015
Luxembourg budget 2018

Total foreseen expenses 2018

- 15,009,801,608 €

Distribution of health expenses 2018

- Ministry of social security: 21.88%
- Ministry of health: 1.13%
THANK YOU FOR YOUR ATTENTION

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Thank you for the preparation of slides to
Dr. F. Berthet and Dr. T. Dentzer
Luxembourg’s healthcare system in a nutshell

Luxembourg has a performant health sector

- 4 general hospitals and 5 specialised hospitals (2 for acute care and 3 for re-education)
- Single payer: Compulsory public health system that offers universal coverage to 98% of the population
- Freedom to choose a hospital or doctor for treatment
- Private health sector but is predominantly supplemental (high standard of state-funded healthcare)
- About 60% of the people living in Luxembourg opt for additional complementary mutual insurance that simply covers the gap between medical fees and reimbursed fees
- Public system strives to guarantee equal treatment to all patients regardless of their financial or social status
- One of the most comprehensive, generous (3rd) and best systems in the world

Sources: OECD, Statec, Luxinnovation, Deloitte
### Evolution of Hospitalisation

<table>
<thead>
<tr>
<th>Hospitals</th>
<th>Hospitalisation (days)</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHdN</td>
<td></td>
<td>&lt;5</td>
<td>10</td>
<td>11</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>% of total stays</td>
<td>6,7%</td>
<td>17,5%</td>
<td>15,9%</td>
<td>8,5%</td>
<td>11,6%</td>
</tr>
<tr>
<td>CHL</td>
<td>Hospitalisation (days)</td>
<td>22</td>
<td>12</td>
<td>20</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>% of total stays</td>
<td>36,7%</td>
<td>21,1%</td>
<td>29%</td>
<td>42,4%</td>
<td>32,6%</td>
</tr>
<tr>
<td>CHK</td>
<td>Hospitalisation (days)</td>
<td>12</td>
<td>11</td>
<td>16</td>
<td>&lt;5</td>
<td>&lt;5</td>
</tr>
<tr>
<td></td>
<td>% of total stays</td>
<td>20%</td>
<td>19,3%</td>
<td>23,2%</td>
<td>5,1%</td>
<td>7%</td>
</tr>
<tr>
<td>ZITHA</td>
<td>Hospitalisation (days)</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>% of total stays</td>
<td>15%</td>
<td>21,1%</td>
<td>10,1%</td>
<td>16,9%</td>
<td>16,3%</td>
</tr>
<tr>
<td>CHEM</td>
<td>Hospitalisation (days)</td>
<td>11</td>
<td>8</td>
<td>13</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>% of total stays</td>
<td>18,3%</td>
<td>14%</td>
<td>18,8%</td>
<td>23,7%</td>
<td>30,2%</td>
</tr>
<tr>
<td>CSM</td>
<td>Hospitalisation (days)</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>&lt;5</td>
</tr>
<tr>
<td></td>
<td>% of total stays</td>
<td>3,3%</td>
<td>7%</td>
<td>2,9%</td>
<td>3,4%</td>
<td>2,3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>60</td>
<td>57</td>
<td>69</td>
<td>59</td>
<td>43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ICD-10</th>
<th>Cause prim. lib. 3d</th>
<th>2005-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>B16</td>
<td>Hépatie aiguë B</td>
<td>0</td>
</tr>
<tr>
<td>B17</td>
<td>Autres hépatites virales aiguë</td>
<td>0</td>
</tr>
<tr>
<td>B18</td>
<td>Hépatite virale chronique</td>
<td>32</td>
</tr>
<tr>
<td>B19</td>
<td>Hépatite virale, sans précision</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>