The Luxembourg health care system achieves good results relatively efficiently. Health status of the population is good (with life expectancy at birth at 82.3 years standing above the OECD average at 80.6 years) and health expenditure as a share of GDP is 1.8 percentage points lower than the OECD average. Luxembourg is, however, lagging behind other OECD countries with high volume of antibiotics prescribed and high rates of avoidable hospital admissions. Population ageing and increasing risk factors are other important challenges that demand further scrutiny.

Ensuring high performing primary care

- Hospital admissions for conditions that could be more safely and effectively treated at the primary care level are too important

Avoidable hospital admissions for diabetes, which is seen as an indicator of primary care performance, are significantly above the OECD average. In 2013, avoidable hospital admissions for diabetes are 12% higher than the OECD average.

Avoidable hospital admission for diabetes (rate per 100 000 population), 2013

- Doctors prescribe too many antibiotics in Luxembourg

Luxembourg reports the 6th highest volume of antibiotics prescription in OECD countries, 40% more than the OECD average.

Volume of antibiotics prescribed (defined daily dose), 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Volume of Antibiotics (DDD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>10.8</td>
</tr>
<tr>
<td>OECD</td>
<td>20.7</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>28.1</td>
</tr>
</tbody>
</table>

What can be done?

- Better exploit capacity at primary and community care levels; and improve care management for patient having complex needs
- Limit inappropriate antibiotic prescription and consumption through policies to encourage rational use
- Continue to raise public and doctors awareness of inappropriate prescribing through advertising campaigns

To read more about our work: Health at a Glance: Europe 2016; AMR Policy Insights

Strengthening long term care services

- As population ages, long-term care (LTC) services have to be developed and adapted to people's needs

The share of the population over 65 is projected to increase from 14% in 2010 to 22% in 2050.

About 2.5% of the population received long-term care in Luxembourg, close to the OECD average (2.3%). The share of LTC recipients who received LTC at home has increased by 13% over the past decade, reflecting people's preference for care at home.

Share of long-term care recipients aged 65+ receiving care at home (%), 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>59</th>
<th>65</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxembourg</td>
<td>59</td>
<td>65</td>
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<tr>
<td>OECD</td>
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</tr>
<tr>
<td>Switzerland</td>
<td>46</td>
<td>65</td>
<td>70</td>
</tr>
</tbody>
</table>

However, Luxembourg reports the third lowest proportion of LTC recipients living at home. In 2013, 59% of LTC recipients aged 65 years and over received LTC at home, compared to 65% on average across OECD countries.

What can be done?

- Build long-term care alternatives away from inpatient settings and innovate service delivery to provide more co-ordinated and integrated care
- Improve co-ordination across social and health care sectors, and across levels of government
- Assess more systematically local needs, especially focusing on frail elderly and people at risk of hospitalisation, and aim to provide appropriate care at home or at the community level

To read more about our work: Health at a Glance 2015; A good life in old age?
Tackling obesity and improve diet and physical activity level

Although close to the OECD average, Luxembourg has a relative high level of obesity with 23% of obese adults

The rise in adult obesity in Luxembourg in the past decade – from 16% in 2000 to 23% in 2014 – should be treated as a public health priority. Obesity is associated with preventable conditions such as type 2 diabetes and other chronic diseases.

Rate of obese adults aged 15 and over (%), 2014

- Japan 3.9%
- OECD 23%
- Luxembourg 23%
- USA 38%

One in two adults has a daily consumption of fruits and vegetables in Luxembourg, which is below the average of EU countries

Nutrition is an important determinant of health. Inadequate consumption of fruit and vegetables is one factor that can play a role in increased morbidity.

Reduce harmful use of alcohol

Alcohol consumption in Luxembourg is above the OECD average

Although average rates have diminished over past years, harmful drinking patterns are on the rise among young and women in particular.

Harmful alcohol consumption is associated with numerous diseases, injuries and accidents, and has social and economic consequences.

Annual per capita alcohol consumption (litre of pure alcohol), 2014

- Turkey: 1.5
- Italy: 7.6
- OECD: 9.0
- Luxembourg: 11
- Austria: 12.3

Heavy episodic drinking, or binge drinking, is high in Luxembourg compared to the average of EU countries

In 2014, 35% of adults in Luxembourg regularly consumed large quantities of alcohol in a single session, also called “binge drinking”, compared to 22% on average in 24 European countries. Heavy drinking and alcohol dependence account for an important share of the burden of diseases associated with alcohol.

What can be done?

- Implement a comprehensive prevention strategy, targeting different age groups and determinants of obesity as well as a multi-stakeholders approach
- Implement awareness campaigns to improve nutrition habits of children and their physical activity
- Strengthen regulation of food advertising
- Make progress in nutrition labelling (using front-of-package guideline daily amount labelling) to improve consumer literacy around nutritional information
- Implement fiscal and pricing policies to reduce the consumption of unhealthy foods and beverages

To read more about our work: Health at a Glance: Europe 2016; Obesity and the Economics of Prevention: Fit not Fat

In 2014, 50% of adults in Luxembourg consumed fruits and vegetables daily compared to 62% and 57%, respectively for fruits and vegetables, on average in 28 EU countries.

What can be done?

- Combine alcohol policies (fiscal, regulatory measures and health care interventions) in a coherent prevention strategy
- Strengthen pricing and fiscal policies to deter over consumption of alcohol
- Enforce the regulations to prevent driving under the influence of alcohol
- Implement legally binding policies like product placement, display of health warnings on alcohol containers and time/place restrictions for sales
- Develop an open dialogue with other stakeholders to fight the harms associated with alcohol consumption

To read more about our work: Health at a Glance: Europe 2016; Tackling Harmful Alcohol Use: Economics and Public Health Policy