

## Introduction to the Belgian Health System

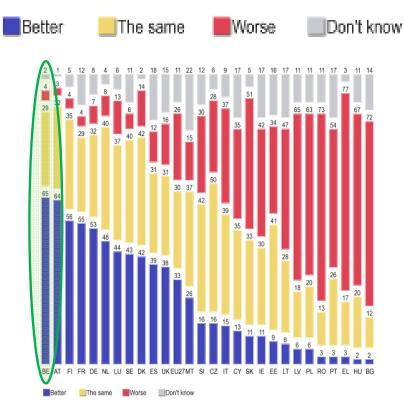
Lieven De Raedt FPS Health, Food Chain Safety & Environment



#### Intro



<u>Eurobarometer</u>: Based on what you know, do you think that the quality of healthcare in (OUR COUNTRY) compared to other Member States is...?

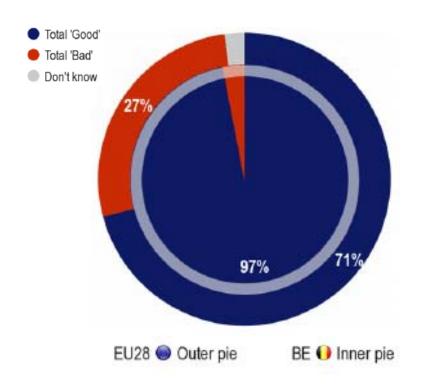


Source: Eurobarometer (April 2010) Patient safety and quality of healthcare

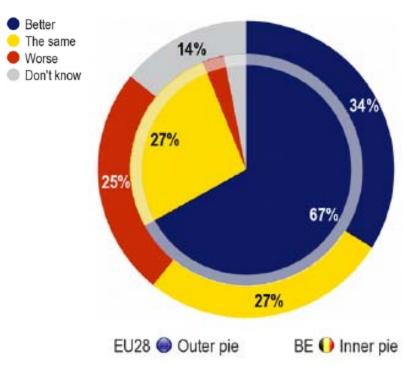
#### Intro



EUROBAROMETER: 'How would you evaluate the overall quality of healthcare in Belgium?'



EUROBAROMETER: 'Based on what you know, do you think that the quality of healthcare in Belgium compared to other Member States is...?'



[Eurobarometer BE (Fieldwork 23/11-01/12/2013)]

#### Intro



"From a citizen's perspective, the assessment is quite **positive**: a large part (78%) of the Belgian population reports to be in good health, which is a better result than the EU-15 average. The Belgian population also reports to be satisfied with their contacts with the health system, especially in ambulatory care. However, a more balanced image appears when examining the whole set of indicators."

(KCE Report 259C – Performance Report 2015)

#### **Content**



- 1. Belgium for Beginners
- 2. Characteristics of the Belgian Health system
- 3. Performance of the Belgian Health system
- 4. Conclusion



#### 1. Belgium for Beginners

- 2. Characteristics of the Belgian Health system
- 3. Performance of the Belgian Health system
- 4. Challenges for the future
- 5. Conclusion





### Geography, Socio-demography, Economy

- 11.250.585 inhabitants/ 30.528 km<sup>2</sup>
- 3 official languages: Dutch French German
- Open market and primarily service oriented economy
- GDP/capita > €36.000
- Considerable Pharmaceutical Industry





### Geography, Socio-demography, Economy

|  | Belgium | EU      |  |  |
|--|---------|---------|--|--|
| Demographic factors                    |         |         |  |  |
| Population size (thousands)            | 11 274  | 509 394 |  |  |
| Share of population over age 65 (%)    | 18.1    | 18.9    |  |  |
| Fertility rate <sup>1</sup>            | 1.7     | 1.6     |  |  |
| Socioeconomic factors                  |         |         |  |  |
| GDP per capita (EUR PPP)               | 34 200  | 28 900  |  |  |
| Relative poverty rate <sup>2</sup> (%) | 10.0    | 10.7    |  |  |
| Unemployment rate (%)                  | 8.5     | 9.4     |  |  |

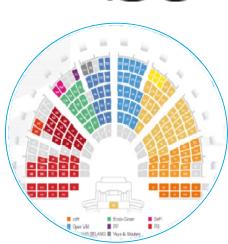
Number of children born per woman aged 15-49.

Percentage of persons living with less than 50% of median equalised disposable income. These data refer to 2013.Source: Eurostat Database; OECD (for relative poverty rate).

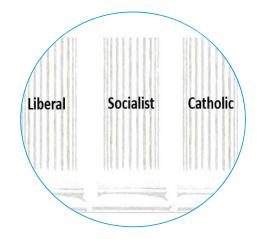
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### Political and historical context

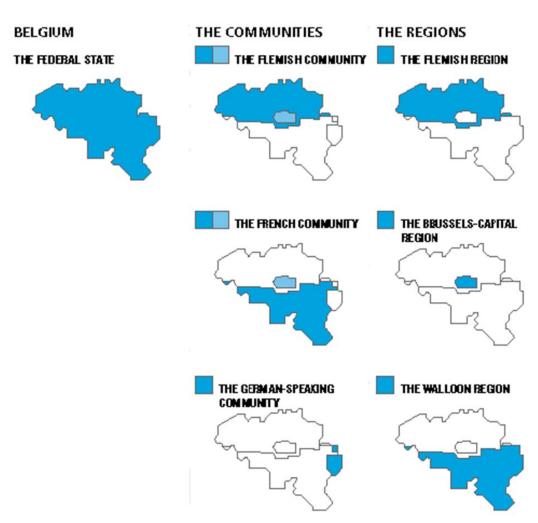
Constitutional monarchy with a parliamentary system of governance



- Federal state
- Legacy of strong "pillarization" (e.g. political parties, trade unions, news papers, and ... health insurance providers)







- **1 Federal level** Foreign affairs, Defense, Justice, Fiscal Policy, Domestic Affairs, Social Security and a share of Health policy (curative care)
- **3 Communities** Person-related matters (education, cultural affairs, language, health and welfare,...)
- 3 Regions Territorial matters ( economy, energy, agriculture, environment,...)
- 10 Provinces and 589 municipalities



### The European Union

Art. 168: new health article in the Treaty on the Functioning of the EU

- Principle of Subsidiarity
- High level of human protection in All community policies
- Complement national policy + encourage cooperation





#### Examples of EU Health Legislation outside article 168.

- Free movement of products
  - o Rules on market access of pharmaceutical products, medical devices
- Free movement of services
  - Professional qualifications of health professionals
- Free movement of persons
  - Coordination of social security systems
  - Directive on cross-border care (free movement of patients)





- Belgium for Beginners
- 2. Characteristics of the Belgian Health system
- 3. Performance of the Belgian Health system
- 4. Challenges for the future
- 5. Conclusion



- 1. Organisation and Governance
- 2. Principles
- 3. Service delivery
- 4. Financing
- 5. Medical products



- Competencies of the federal and regional authorities
- Competencies at federal Level
- Principles of health service delivery
- Principles of healthcare financing



### Competencies of federal -regional authorities



#### Health competence - Federal level

Regulation and financing of the compulsory health insurance

Financing of Hospital budgets

Legislation on professionals qualifications

Registration and price control of Pharmaceuticals

Health Workforce Planning and forecasting

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### Competencies of federal -regional authorities







#### Health competence - Federated entities

Financing of health infrastructure and heavy medical equipment

Quality control in acute hospitals

Health promotion and disease prevention

The definition of recognition norms for hospitals

Maternity and child health care

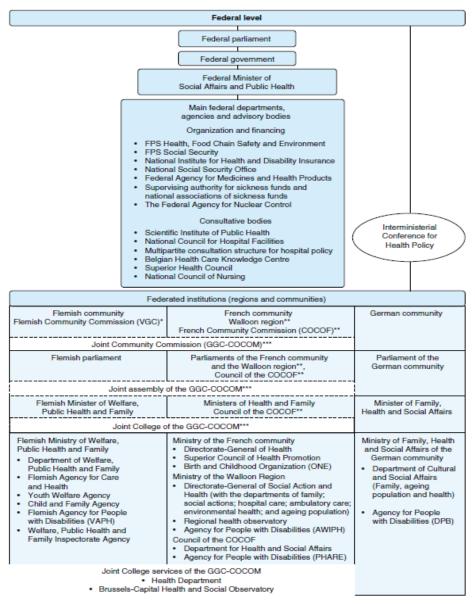
Coordination in primary care

Long-term care



Organisation







[http://www.euro.who.int/ data/assets/pdf file/0014/120425/E94245.PDF

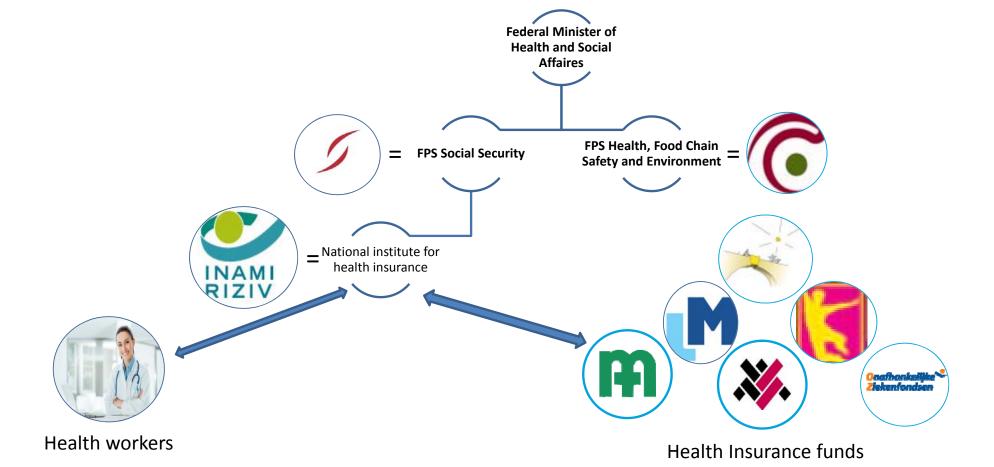
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Organisation

| Collabo                 | ration - Examples of policy areas     | Federal            | Federated             |
|-------------------------|---------------------------------------|--------------------|-----------------------|
| <b>Health workforce</b> | Health workforce planning             | Minister of Health | Minister of Education |
|                         | Defining professionals qualifications | Minister of Health |                       |
|                         | Handing out recognitions              |                    | Minister of Health    |

### Federal level





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### Principles of health service delivery

- Provision of care is done by private not-for profit organizations, while the framework is set by the state
- Freedom of choice for patients, no gatekeeper function
- The majority of doctors operate as self-employed, paid fee-for-service

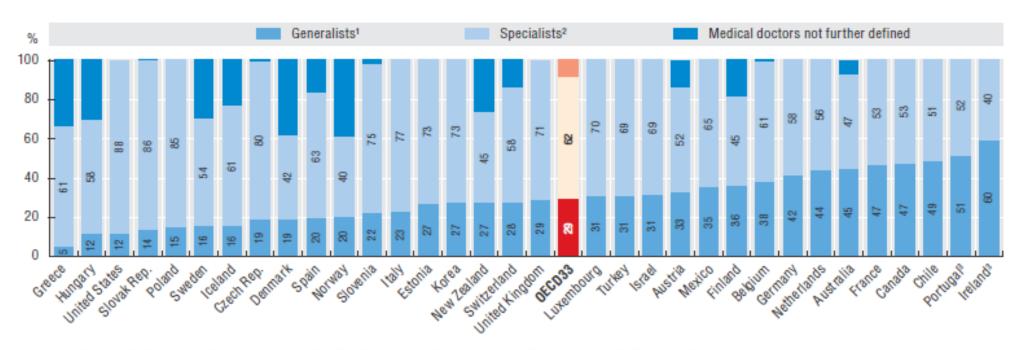


### Service Delivery

- Stable # of health care professionals since 2000
  - o Planning and limiting admission to the education curriculum
- Decrease in total number of acute beds, increase in average capacity of hospitals

## Generalists and specialists as a share of all doctors

(2013 or nearest year)

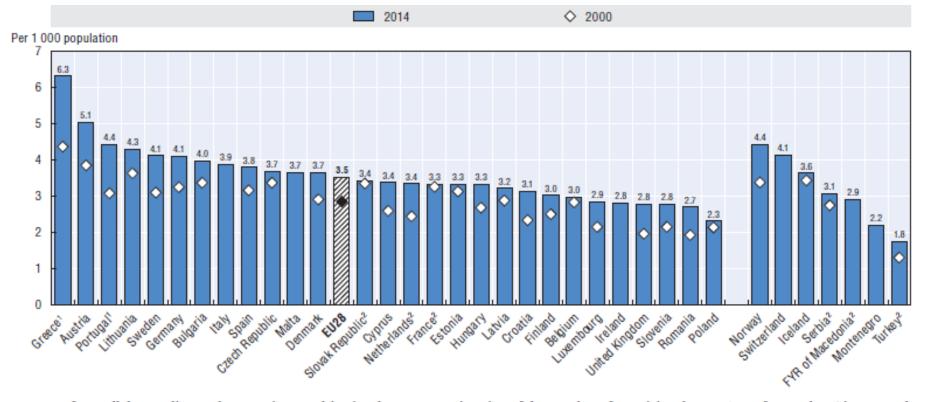


- 1. Generalists include general practitioners/family doctors and other generalist (non-specialist) medical practitioners.
- 2. Specialists include paediatricians, obstetricians/gynaecologists, psychiatrists, medical, surgical and other specialists.
- In Ireland and Portugal, most generalists are not GPs ("family doctors"), but rather non-specialist doctors working in hospitals or other settings. In Portugal, there is some double-counting of doctors with more than one specialty.

[OECD Health Statistics 2015, http://dx.doi.org/10.1787/health-data-en]

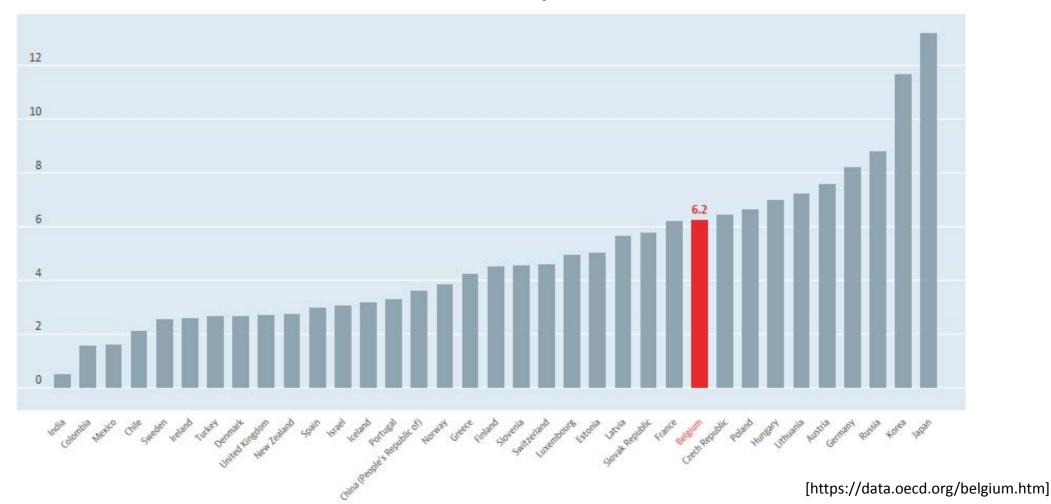






- 1. Data refer to all doctors licensed to practice, resulting in a large over-estimation of the number of practising doctors (e.g. of around 30% in Portugal).
- Data include not only doctors providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors).

## Hospital Beds (Total, Per 1000 inhabitants -2014)

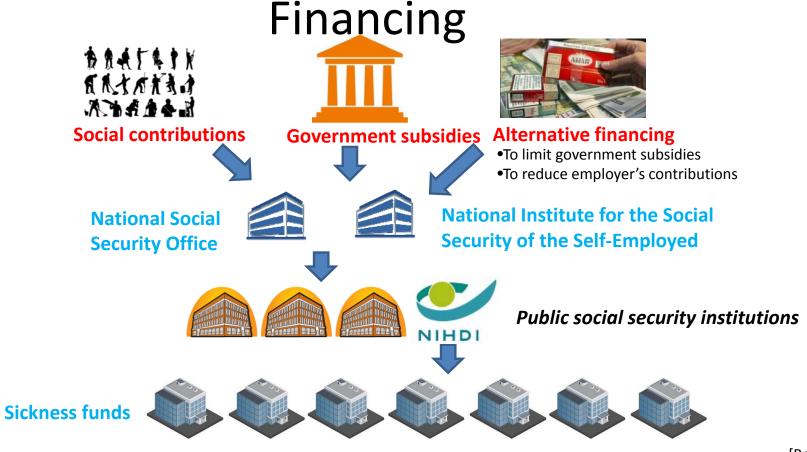




### Principles of healthcare financing

- Solidarity trough compulsory social insurance
- Healthcare insurance is part of a broader mandatory social security system based on income
- Reimbursement by the Non-profit sickness funds
- Fees are negotiated between sickness funds, physicians and government
- Social corrections (chronic illness low income)





[Presentation NIHDI]



### Financing

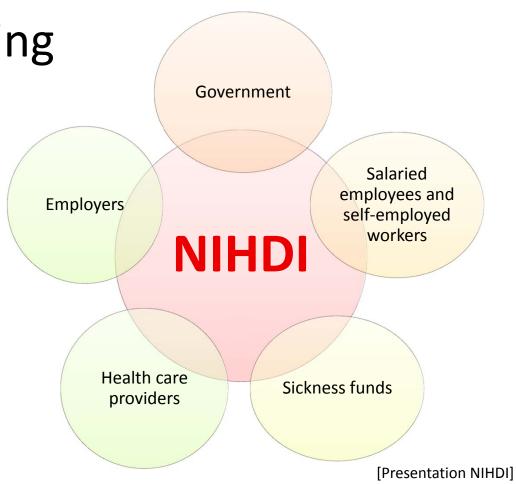
A Compulsory health care insurance

- Almost the whole population is covered: ± 99%
- A very broad benefits package
- Almost 75% of all health care expenses is covered by the compulsory health care insurance
- All working people have to pay **social security contributions**
- All entiteld persons must affiliate with a sickness fund



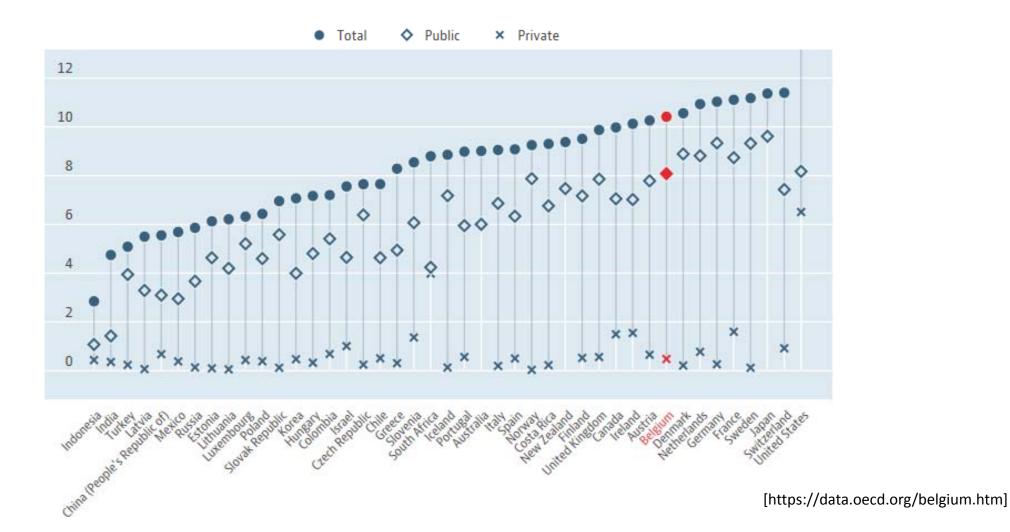
Financing

 The collective negotiation process in the health insurance



### Health Spending (% of GDP – 2014)

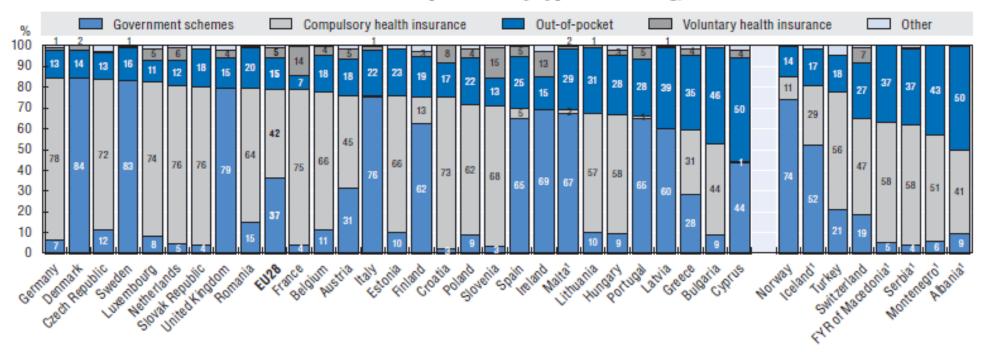




## Current Health Expenditure (By type of financing 2014)

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#### 5.11. Current health expenditure by type of financing, 2014



Note: Countries are ranked by government schemes and compulsory health insurance as a share of current health expenditure.

1. Includes investments.



### **Medical Products**

- Provision through Community & Hospital pharmacies
- Selective reimbursement
  - o Prescription by physicians, dentist and midwives
  - 7 reimbursement categories (Medical-therapeutical importance)



### **Medical Products**

| Regulation                            |  |  |  |
|---------------------------------------|--|--|--|
| Market authorization                  | Federal Ministry of Public Health                              |  |  |
|                                       | Federal Agency for Medicines and Health Products               |  |  |
|                                       |  |  |  |
| <b>Determination of maximum price</b> | Federal Ministry of Economic Affairs                           |  |  |
|                                       |  |  |  |
| Level of Reimbursement                | Commission for the compensation for Medicinal Products - NIDHI |  |  |



# 3. Performance of the Belgian health system

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## 3. Performance of the Belgian health system



- Health System Performance Assessment (HSPA): a process that allows the health system to be assessed holistically based on measurable indicators.
- Belgium:
  - o Regular evaluations of the performance of the health system.
  - o one of the first country's to perform such an assessment systematically









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#### PERFORMANCE OF THE BELGIAN HEALTH SYSTEM -REPORT 2015





| Part 1 - Context and methods |  |  |
|------------------------------|--|--|
| Part 2 – Results             | Preventive care  |  |
|                              | Curative care  |  |
|                              | Mental Healthcare  |  |
|                              | Long-term care for the elderly                                       |  |
|                              | Care at the end of life  |  |
|                              | Efficiency of the healthcare system                                  |  |
|                              | Efficiency of the healthcare system                                  |  |
|                              | Sustainability   |  |
|                              | Health Status  |  |
|                              | Health Promotion and Lifestyles                                      |  |
|                              | Equity an inequalities   |  |
|                              | Conclusions on strengths and weaknesses of the Belgian Health System |  |
| Part 3 – Discussion          |  |  |

[https://kce.fgov.be/]



• The performance of the health system is evaluated according to five dimensions:

1. Quality



2. Accessibility



3. Efficiency



4. Sustainability



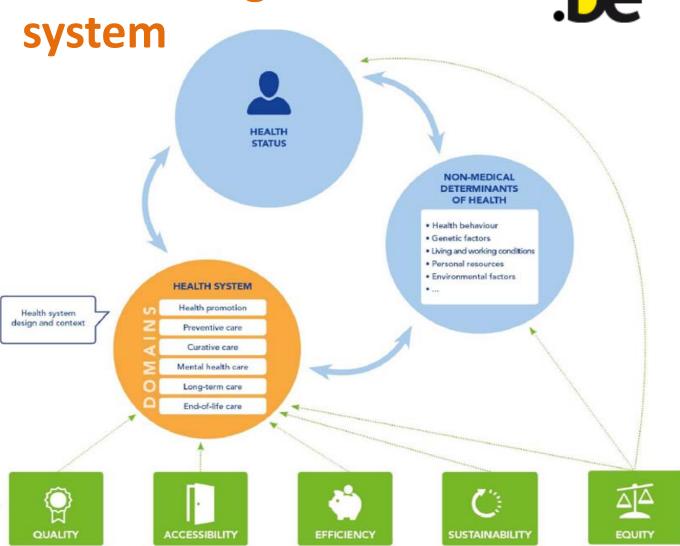
5. Equity.





Federaal Kenniscentrum voor de Gezondheidszorg Centre Fédéral d'Expertise des Soins de Santé Belgian Health Care Knowledge Centre

5 dimensions of performance





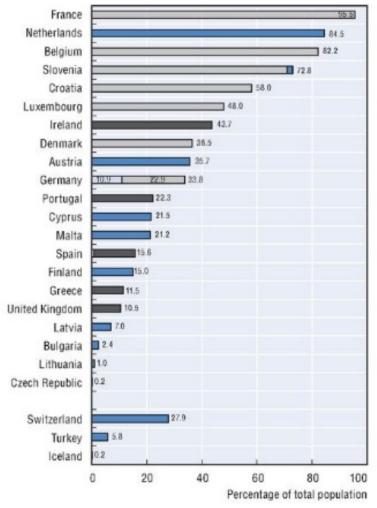


| KCE Performance Indicator |   |      | re         |
|---------------------------|---|------|------------|
| Financial accessibility   | Health insurance of the population (% of population)  | 98.9 |            |
|                           | Out-of-pocket payments (% of total health expenditures)   | 17.9 |            |
|                           | Self-reported delayed contacts with health services for financial reasons (% of households)                         | 8.0  |            |
| Health Workforce          | Practicing physicians (/1000 population)  | 2.95 |            |
|                           | Practicing nurses (/1000 population)  | 9.51 |            |
| Waiting time              | Waiting time of more than two weeks to get an appointment with a specialist (% of population asking an appointment) | 38.4 | [https://k |

[https://kce.fgov.be/]

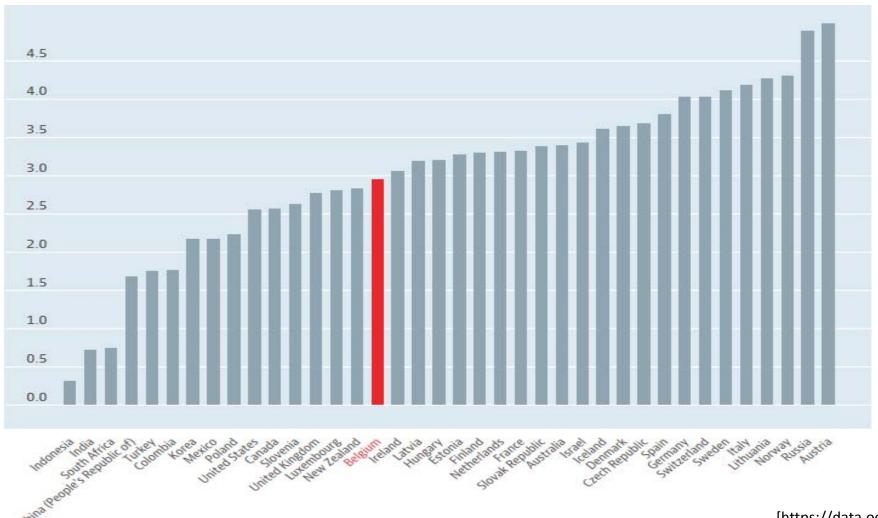
### Health insurance coverage, by type, 2014

(or nearest year)

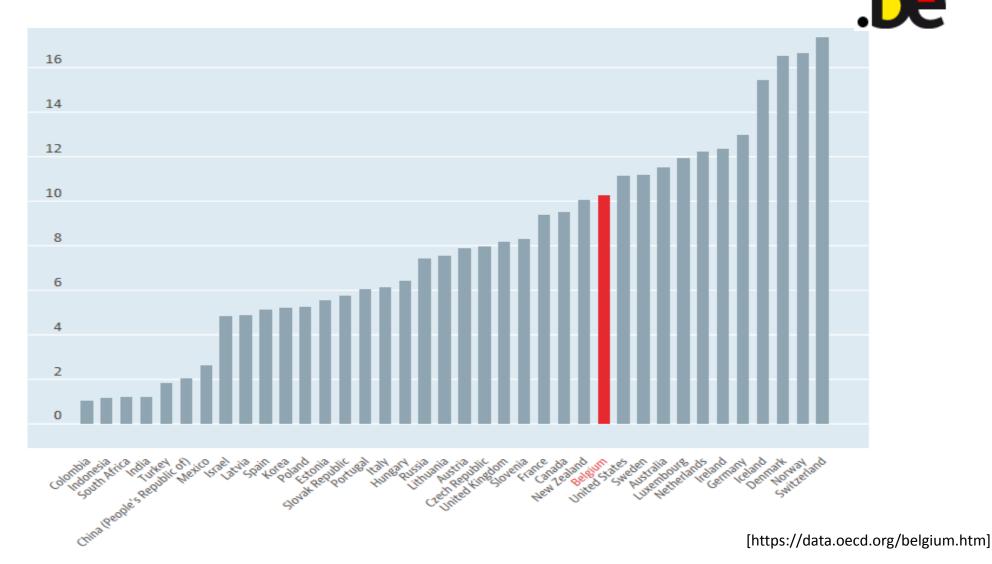




#### Doctors (Total, Per 1000 inhabitants - 2013)

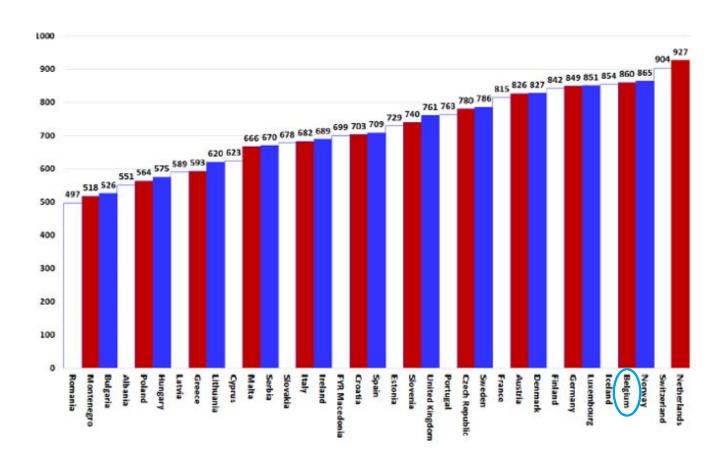


#### Nurses (Total, Per 1000 inhabitants - 2014)

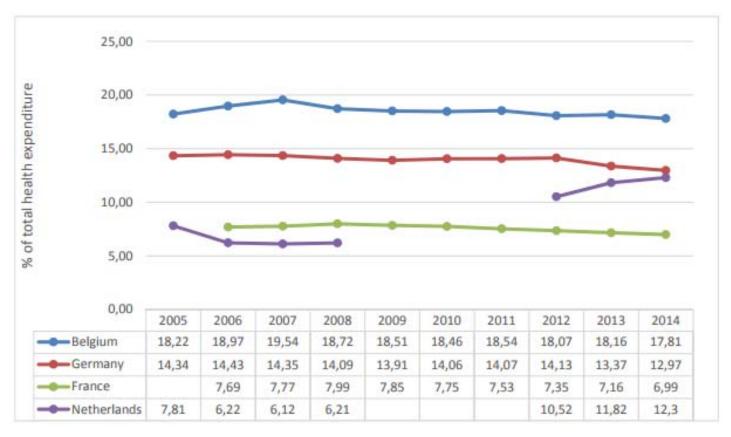


#### EHCI 2016 Total scores





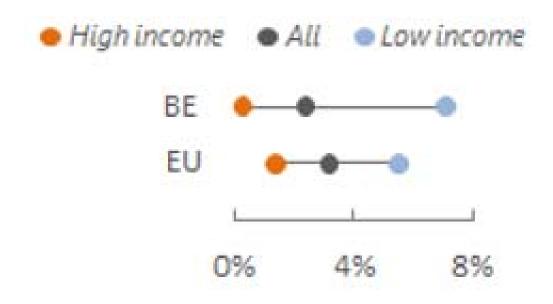
# Out-of-pocket expenditures as share in total health expenditure (Belgium an neighbouring countries, 2005-2014)



[https://socialsecurity.belgium.be/sites/default/files/analysis-social-situation-and-protection-belgium-2017-en.pdf]

# % reporting unmet medical needs (2015)









| KCE Performance Indicator |  | Score   |
|---------------------------|--|---|
| Safety                    | Prevalence of hospital-acquired infections (% of patients hospitalized)                                  | 7.1   |
|                           | Incidence of post-operative sepsis after abdominal surgery (/100 000 abdominal surgery discharges)       | 2114  |
| Continuity                | Coverage of global medical record (% of pop with at least one contact with their GP within three years)  | 62  |
|                           | GP encounter within 7 days after hospital discharge (% patients 65+)                                     | 54.6  |
| Patient centeredness      | Doctor spending enough time with patients during the consultation (% of respondents, contact with GP/SP) | GP: 97.7<br>SP: 96.3<br>[https://kce.fgov.be/ |

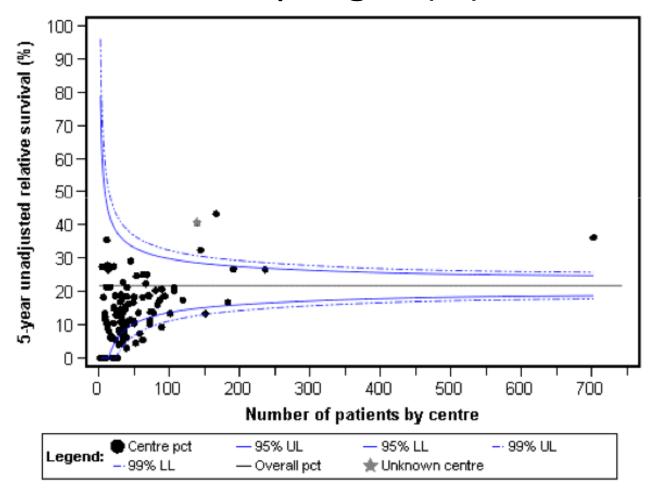




|                 | KCE Performance Indicator   | Score |
|-----------------|---|-------|
| Effectiveness   | Asthma hospital admissions in adults (/100 000 pop)                               | 38    |
|                 | Breast cancer 5-year relative survival rate (%)                                   | 88.3  |
| Appropriateness | Use of antibiotics (total DDD/1000 pop/day)                                       | 28.7  |
|                 | Medical radiation exposure due to inappropriate medical imaging (mSv/capita/year) | 0.90  |

### 5-year unadjusted relative survival Oesophagus (%)

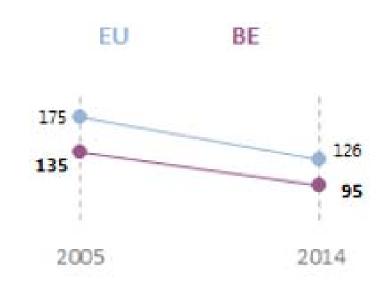




[https://kce.fgov.be/sites/default/files/page documents/KCE 200 Quality indicators for the management of upper gastrointestinal cancer second rint 0.pdf]

### Amenable mortality per 100,000 pop .be





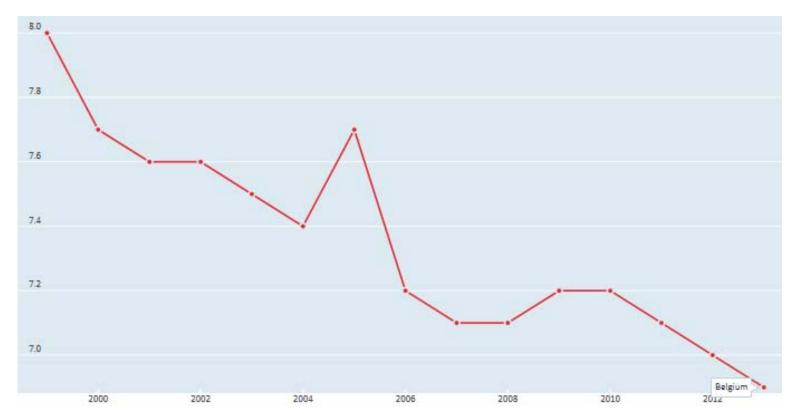




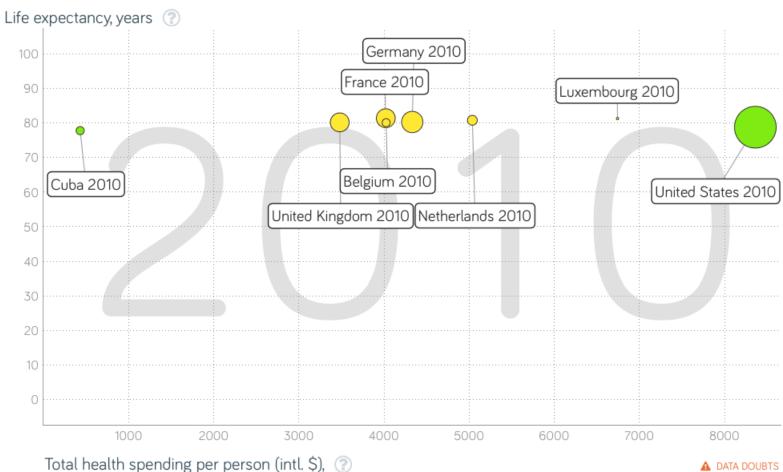
| KCE Performance Indicator  | Score |
|--|-------|
| One-day surgical admissions (% of surgical admissions)                 | 48.5  |
| Length of stay normal delivery (mean, days)                            | 4.0   |
| Use of low-cost medication (% of total ambulatory Daily Defined Doses) | 54.8  |

#### Length of hospital stay (Acute care, Days, 1999-2013)









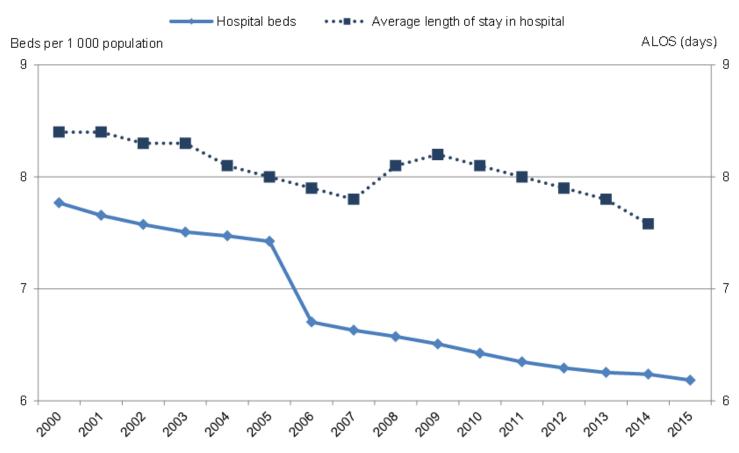




|  | KCE Performance Indicator  | Score |
|--|--|-------|
| Health Workforce in the future (inflow, outflow) | Mean age of practicing GPs (in FTE, years)                             | 52.8  |
|  | Medical graduates becoming GP (% of those with medical specialization) | 28    |
| Hospital-centrism                                | Curative care bed-days (number/capita)                                 | 1.1   |

#### Beds per 1000 population





Note: There is a break in the series of hospital beds in 2006 (when beds in psychiatric care institutions were excluded), explaining the large reduction in that year.

Source: Eurostat Database





| KCE Performance Indicator   | Score |
|---|-------|
| Income distribution in population (GINI coefficient)  | 0.259 |
| Degree of progressivity of financing healthcare (Ratio progressive receipts / total receipts, expressed as a %) | 7.5   |
| Degree of regressivity of financing healthcare (Ratio regressive receipts / progressive receipts)               | 3.5 🔾 |

# Life expectancy (2001) and healthy life expectancy (2004) at age 25, by sex and level of education

|                                  | Life exp | ectancy | Healthy life | expectancy |
|----------------------------------|----------|---------|--------------|------------|
|                                  | male     | female  | male         | female     |
| Higher education                 | 55       | 59.9    | 46.33        | 47.1       |
| Higher<br>secondary<br>education | 52.5     | 58.8    | 41.54        | 41.27      |
| Lower secondary education        | 51.3     | 58.0    | 39.71        | 42.01      |
| Primary education                | 49.3     | 56.2    | 36.65        | 36.27      |
| No diploma                       | 47.6     | 54.0    | 27.75        | 28.92      |

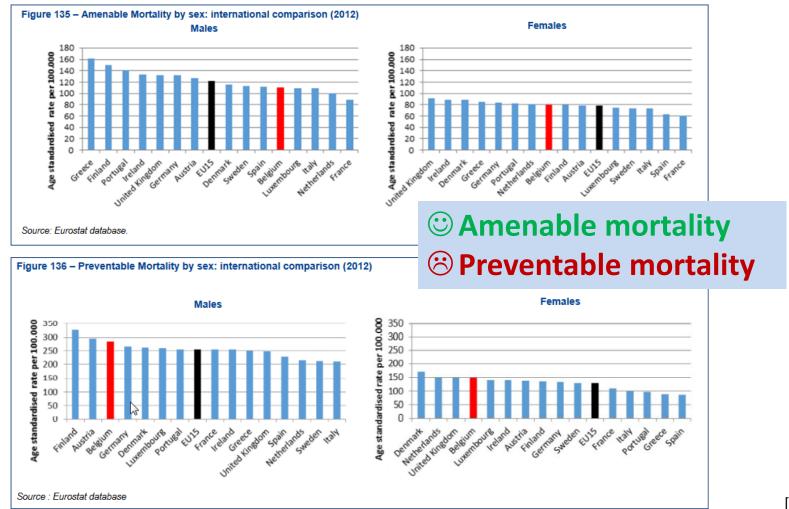


#### **Preventive Care**

| KCE P  | Score  |                      |
|--|--|----------------------|
| Vaccination coverage                                     | Polio, diphtheria, tetanus and pertussis vaccination in children (%, 3th/4 <sup>th</sup> dose) | 3d: 99.0<br>4d: 92.0 |
|  | Measles vaccination in children (%, 1th/2th dose)  | 1d: 95.5<br>2d: 85.0 |
| Incidence infectious diseases preventable by vaccination | Incidence of measles (new cases/million pop)   | 6.1                  |
| Cancer screening   | Breast cancer screening (% women aged 50-69)   | 62.7                 |
|  | Cervix cancer screening (% women aged 25-64)   | 53.6                 |
| Oral health  | No regular contacts with dentist (% pop aged 3+)   | 50.8                 |

### Amenable vs preventable mortality

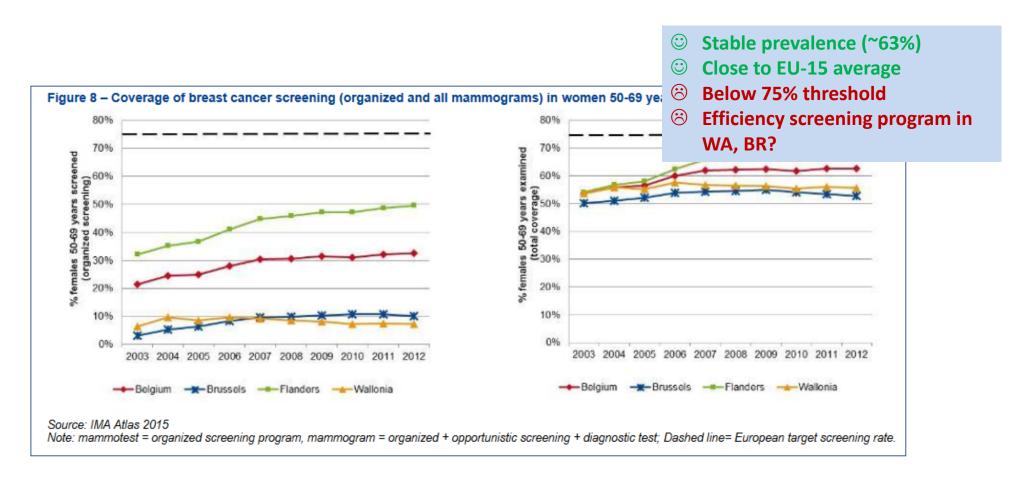




[Presentation SIPH]

#### Breast cancer screening







#### Mental Health Care

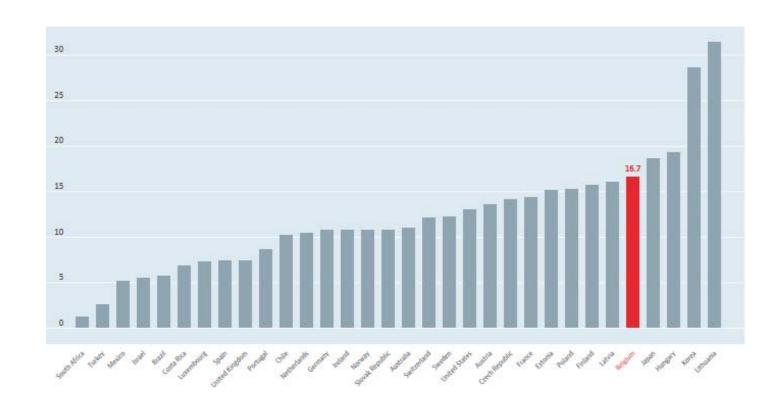
|   | Indicator  | Score |
|---|--|-------|
| Health Status   | Deaths due to suicide (/100 000 pop)   | 18.3  |
| Accessibility of care   | Practicing psychiatrists (/1000 pop)   | 0.17  |
| Appropriateness of care                                       | ER visits for social, mental or psychic reason (% of admission in ER in general hospitals) | 1.5   |
| Appropriateness of prescribing pattern in ambulatory patients | Use of antidepressants (% of adult population, at least once in the year)                  | 13.4  |
| Safety of prescribing pattern in ambulatory patients          | Patients (65+ years old) prescribed antidepressants with anticholinergic effect (%)        | 15.4  |

[https://kce.fgov.be/]





(Total, per 100 000 persons, 2013)





#### Long Term Care

|                                | Indicator  | Score |
|--------------------------------|--|-------|
| Use of long-term care services | Long-term care in residential facility (% pop aged 65+)                              | 8.4   |
|                                | Long-term home nursing care (% pop aged 65+)   | 4.9   |
|                                | Informal carers<br>(% of pop aged 15+)   | 9     |
| Safety for elderly             | Fall incident during the last 12 months (% pop aged 65+)                             | 20    |
| Safety in residential care     | Prevalence of pressure ulcers (grade II-IV) in home for the elderly (% of residents) | /     |
|                                | Prevalence of MRSA carriage in residential facility (% of residents)                 | 12.2  |



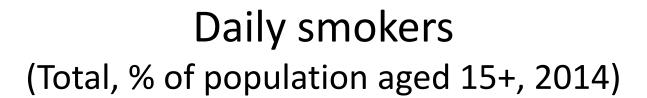
#### **End of Life-Care**

|   | Indicator  | Score |
|---|--|-------|
|   | Patients who received palliative care (% of terminal cancer patients who died in the year)   | 51.0  |
| Lack of timely palliative care            | Patients who died within one week after start of palliative care (% of terminal cancer patients who received palliative care and died in the year) | 19.6  |
| Aggressiveness of care at the end of life | Patients who received chemotherapy in the last 14 days of life (% of terminal cancer patients who died in the year)                                | 11.2  |
| Patient centeredness                      | Death at usual place of residence (home or in residential care) (% of terminal cancer patients who died in the year)                               | 29.6  |

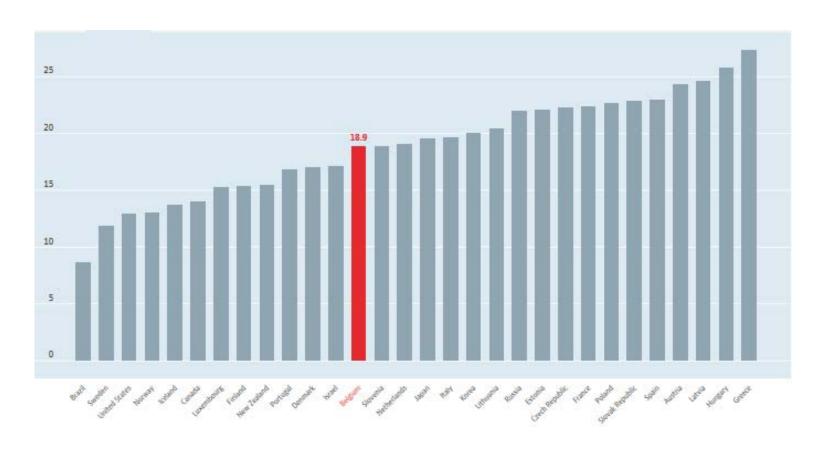


### Non-medical determinants of health and health promotion

|                               | Indicator   | Score  |
|-------------------------------|---|--------|
| Health outcomes               | Obesity in adults (BMI ≥ 30) (% pop aged 18+)                   | 13.7   |
| Lifestyles                    | Daily smokers (% pop aged 15+)                                  | 18.9   |
| Effective health services     | Global Medical Record + (% pop aged 45-75 with GMR)             | 22     |
| Health literacy (Empowerment) | Health literacy (at least sufficient level) (% of pop aged 18+) | 58.7   |
| Policy                        | Tobacco Control Scaled  | 47/100 |



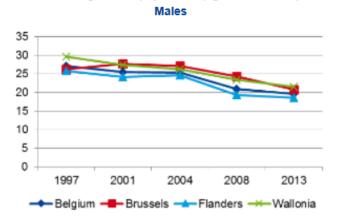


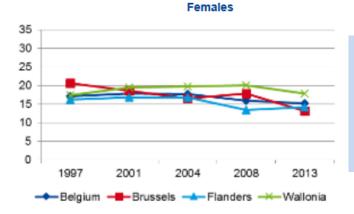


#### Daily smokers



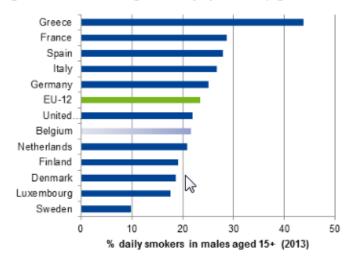
Figure 152 - Percentage of the population (aged 15 or older) that smokes daily, by region and by sex (1997-2013)

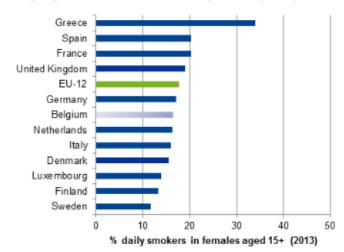




- Opening prevalence
- **☺** Below EU-15 average
- **Prevalence remains high**
- Disparities between sex, region, SES

Figure 153 -Percentage of the population (aged 15 and older) that smokes daily, by sex: international comparison (2013)

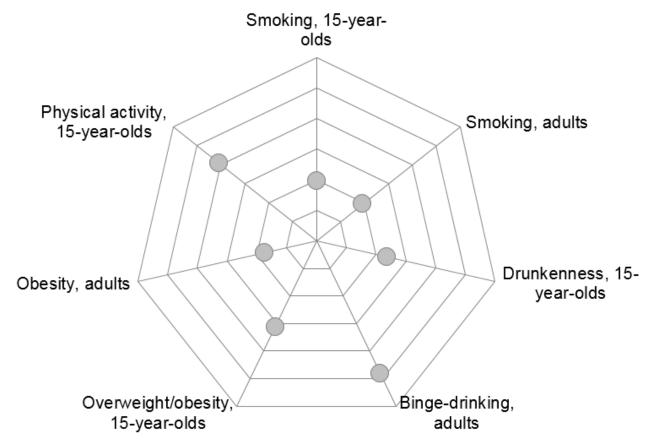




[Presentation SIPH]

#### Important Public Health Issues





Note: The closer the dot is to the center "target", the better the country performs compared to other EU countries. The further it is from the center, the worse the country performs. No country is in the center "target" as there is room for progress in all countries in all areas. Data on physical activity among adults are not available for Belgium.

Source: OECD calculations based on Eurostat Database (EHIS in or around 2014), OECD Health Statistics and HBSC survey in 2013-14. (Chart design: <u>Laboratorio MeS</u>).

[DRAFT country profile Belgium – OECD; Observatorium;EC]



#### **Health Status**

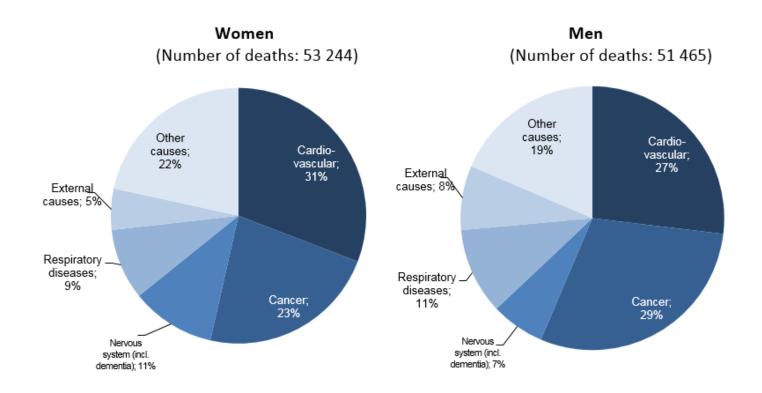
- Positive evolution of life expectancy and premature mortality
   high contribution of preventable mortality
- Relatively good self-rated health
- Mediocre to poor results for health promotion and lifestyle indicators
- All health indicators show socioeconomic and regional gradient (FL > BR > WA)
- Women live longer but report lower health-related quality of life



#### **Health Status**

- 76.8% of the Belgian inhabitants report to be in good or very good health
- Life expectancy at birth:
  - o 77.8 years for men (EU15= 78.6)
  - o 83.2 years for women (EU15= 83.7)
- Most important causes of death:
  - o cardiovascular diseases (28,6%)
  - o cancer (26,3%)

### Leading causes of death in Belgium (2014)



Note: The data are presented by broad ICD chapter. Dementia was added to the nervous system diseases' chapter to include it with Alzheimer's disease (the main form of dementia).

Source: Eurostat database

[DRAFT country profile Belgium – OECD; Observatorium;EC]



#### **Overall Trends**

- Civilians are overall positive (78% satisfaction rate)
- Good Accessibility (Mandatory insurance and social corrections for low income families)
- Improving efficiency (but progress still needed)
- Average Quality ( close to the EU-average)
- Improvement needed in Prevention
- Alarming indicators concerning Mental Health
- #Doctors and #nurses needs ongoing attention



### 4. Challenges for the future

- 1. Belgium for Beginners
- 2. Characteristics of the Belgian Health system
- 3. Performance of the Belgian Health system
- 4. Challenges for the future
- 5. Conclusion



### 4. Challenges for the future

- Current Health Policy(federal government): Central Objectives
  - o Rationalizing healthcare services
  - o Improving health equity
  - o Safeguarding equitable access to healthcare

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#### 4. Challenges for the future

- Current Health Policy (federal government): Reform areas
  - Health targets
  - Healthcare budget
  - Distribution of competences among health professionals
  - Case-based hospital financing system
  - o Integrated care
  - o Reform of the hospital-landscape



### 5. Conclusion

- 1. Belgium for Beginners
- 2. Characteristics of the Belgian Health system
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#### 5. Conclusion



- Health system governance is shaped by two forces: federalization and pillarization
- General satisfaction can be explained by high overall access and (perceived) quality
- But attention should be given to:
  - Accessibility for most vulnerable
  - Adequacy and variations in quality
  - o Hospitalocentrism

Thank you for your attention!

Questions?