Using international datasets for health system reviews and performance comparisons

Marina Karanikolos
European Public Health Conference, Ljubljana
28th November 2018
European Observatory

Who we are

Comparative analysis
of existing evidence

Bridge
Between policymakers and researchers

Developing practical lessons and options
in health policy-making

Country monitoring
- Health Systems in Transition (HTI) series
- Health systems Policy Monitor (HSPM)

Policy analysis
- Studies (OSS, OUP, CUP)
- Policy briefs
- Eurohealth
- Health Policy
- BMJ etc.

Performance assessment
- Methodology
- Health Systems Performance Assessment (HSPA)

Dissemination
- Publishing
- Web
- Twitter
- e-newsletter
- Policy dialogues
- Summer School

Core Mission: to support and promote evidence-based health policy-making

What we do
Health system reviews (HiTs)

- Systematic description of health systems, reforms and policy initiatives
- Cover WHO European region + selection of OECD countries
- Based on a common template
- Written by country experts and supported by OBS editorial team
- Evaluative components + performance assessment section
Information sources for HiTs

Descriptive and analytical content
• National legislation and regulation
• National audits
• Government and independent national reports
• International reports
• Academic literature
• etc

Data to support the narrative
• International databases
  – WHO (GHED, HFA, GHO, MDB, etc)
  – Eurostat
  – OECD Statistics
  – World Bank
  – IHME Global Burden of Disease

• National statistics and other data on health sector
When comparable data are needed

**Context** e.g.
- Population health profile
- Health care financing
- Health care resources
- Service utilization

**Assessment**
- Health system performance evaluation
Assessing health system efficiency

Understanding variations in health care efficiency
Cylus et al (2017)

Curative care beds, discharges and expenditure, European OECD countries, 2016 or latest available (OECD, 2018)
Assessing health system efficiency

Source: OECD and Eurostat, 2018
Portugal may initially appear to have more efficient acute care: beds, discharges and share of impatient care as THE are low.

Digging deeper:
- Fewer avoidable admissions → effective primary care?
- Low bed occupancy but high waiting times and length of stay
- Mixed picture on acute care quality
- Unmet need and amenable mortality just below EU average

Bottom line:
First impression from selected efficiency indicators may be misleading: perhaps a degree of inefficiency in hospital care, but still not clear where.

Following steps:
- Allocative efficiency (distribution of staff and resources)
- Clinical practices, incentives, discharge arrangements;
- Reasons for unmet need, inequalities in access to care
## Assessing population health

### Advantages:
- Easier to hold relative stakeholders to account
- Identifies areas which relative stakeholders have the capacity to make changes

### Advantages:
- Provides a more realistic view of all factors that influence health
- Identifies interactions between sectors, institutions, people that can influence health

### Disadvantages:
- Most factors influencing health are not included in the framework
- It may be difficult to disentangle the effect health care has on outcomes from other determinants

### Disadvantages:
- Many determinants identifies are difficult, if not impossible to change in the short run
- Does not provide clarity on managerial roles
- More difficult to assign responsibility and hold stakeholders to account

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Papanicolas & Smith, 2010

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www.healthobservatory.eu
Avoidable mortality

Amenable mortality
deaths which should not occur in presence of timely and effective health care)

Preventable mortality
deaths avoidable through wider health policies
  • where health care is less effective after the onset of condition (e.g. Nolte et al, 2004)
  • OR... in broadest sense (ONS, Eurostat)

Some thoughts
• Using the appropriate concept
• High levels indicate potential problems, but this is not a precise measure
• Further disaggregation is needed

The choice of the source will depend on
a) Health system boundaries
b) Purpose of the assessment
Amenable and preventable mortality (under 75s): example of Latvia


List by Eurostat
Limitations of avoidable mortality

- Relationship to health care inputs
- Interpreting trends over time
- Selection of avoidable causes and their attribution to health outcomes
- Changing concept of avoidability
- Treatment vs prevention
- Focus on morality, does not adjust for incidence or severity of disease
What is the best health system?
Can’t we just use rankings?

WHO 2000 Rankings

Exhibit 2. Health Care System Performance Rankings

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</table>

Source: Commonwealth Fund analysis.

Healthcare Access and Quality Index (GBD 2015) based on amenable mortality

Mirror, Mirror (2017) – Commonwealth Fund

Cylus et al., BMJ (2016) on EHCI 2015:
- Arbitrary scores are given to indicators
- The point system does not reflect what matters to citizens
- There is no apparent basis for selecting the indicators

We should just ignore the findings of the EuroHealth Consumer Index
In summary

• Variety of data sources are needed for comprehensive health system assessment

• Selection of sources depends on:
  – specific HSA-related factors (e.g. country and comparisons, time period)
  – data source factors (e.g. timeliness, interface, completeness)

• Data easier to use for describing population health or health system elements, but more complex for performance assessment and explaining variations

• Interpretation of international health system rankings needs a lot of caution (at best)