Rankings: What do they matter, what do they measure?

Anne McFarlane

August 18, 2010
Outline

• Healthcare statistics in Canada
• My organization and what we do
• Why we are interested in rankings
• Our “Making Sense of Health Rankings” report
CIHI and the Canadian Context
CIHI’s Mandate

• Serve as the national coordinating mechanism for a common approach to Canada’s health information system

• Produce timely information for:
  – Establishment of sound health policy
  – Effective management of health system(s)
  – Generating public awareness about health determinants
Health Care Spending in Canada to Exceed $180 Billion this Year

B.C. spends the least on drugs:
Per capita prescriptions lowest in the country

Growth in Drug Spending Reaches Lowest Rate in a Decade

Rise in use of common osteoporosis drugs among Canadian seniors

Number of Regulated Nurses Working in Canada up by 8% between 2004 and 2008

Canadian Hospitals Aim to Reduce Mortality Rates, but Severe Infections Remain a Challenge

B.C. Leads Country in Meeting Wait Time Benchmarks
Health Indicators 2010

B.C. HAS LOWEST HEART ATTACK RATE IN CANADA

Dateline Michigan City, IN: A popular columnist who writes for a very popular weekly newspaper in Michigan City has been fighting the effects of calluses from an overabundance of surfing. "It's just one of the hazards of the job," the writer explained, adding that she has to surf dozens of websites before she can find five or six decent ones to write about in her column. The writer said that she planned to create a "surprise" column that would add more visual flash and dash for her strong and increasing readership. She wants to give her readers more than just words on a page in the column, with the added benefit of healing her callus problem. "The neat thing is that readers just don't know what to expect in this column from week to week. But then I don't usually know what to expect, either." The newspaper snippet generator will serve to help her callus problem, she explained.

The following impress is

Taking health information further À l'avant-garde de l'information sur la santé
Have Canada’s public health policies and health care systems succeeded in promoting the health of its citizens?

Does my province provide high quality services with good outcomes?
Our interest in rankings….

“Canada manages to hang on to its “B,” ranking 10th among the 16 peer countries”

Conference Board of Canada
September 2009
Our interest in rankings....

- Canada ranked 11th among 24 countries belonging to the Organisation for Economic Co-operation and Development (OECD) in terms of overall health performance.

- The ranking considered life expectancy, rates of death and disease, immunization rates, self-reported health and certain risk factors (such as rates of obesity).

OECD, 2007
“Canada ranked 23rd among 30 countries”

This incorporated measures of patient rights and information, waiting times for treatment, clinical outcomes, generosity of public health care systems and provision of pharmaceuticals.

Euro Canada Health Consumer Index,

January 2009
## Provincial Rankings

### Provincial Comparison

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<tr>
<th>Overall Ranking</th>
<th>Gold</th>
<th>Silver</th>
<th>Bronze</th>
<th>n.a.*</th>
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*n.a. = Data not available.

Source: The Conference Board of Canada.
Making Sense of Health Rankings

• Methodology paper designed to help:
  – Interpret information that ranks health care performance
  – Identify strengths and weaknesses in ranking methodologies
  – Assist in better understanding and evaluating ranking reports
Rankings

Strengths:
• Simple
• Easy to understand
• Easy to communicate

Challenges:
• Over-simplified
• Highly affected by methodology, measures and motive
• Comparability is often questionable
Making Sense of Health Rankings

Checklist for Reviewing Health Ranking Reports

① Assess the soundness of the conceptual framework

② Assess the indicators chosen to measure selected aspects of health and health care

③ Assess the data quality

④ Examine soundness of methods
Step 1: Assess the soundness of the conceptual framework

☑ Does the ranking scheme’s conceptual framework cover the areas of health and health care that are relevant to the purpose of the ranking?
Step 2: Assess the indicators chosen to measure selected aspects of health and health care

- Are the indicators of health or healthcare used in the ranking consistent with the conceptual framework?

- Are the measures used for the selected indicators meaningful and valid?
Step 3: Assess the data quality

- Are data accurate, reliable, complete, comparable and free from bias?

- Are data elements defined and collected so that “apples to apples” comparisons are being made?
Step 4: Examine the soundness of methods

- Are meaningful differences in performance distinguishable?
- Are absolute and relative comparisons available for review?
- Have appropriate adjustments been made for underlying differences in the populations being compared?
Step 4: Examine the soundness of methods (cont.)

- Is the way specific measures are combined in the ranking scheme clear?
- Is the specific formula, along with any weights used to combine individual measures or indicators, based on clear and reasonable principles?
- Are differences in performance statistically significant?
Step 4: Examine the soundness of methods (cont.)

☑ Have other statistical issues been appropriately handled (e.g., adjustments for correlated measures, handling outlier values and ties)?

☑ Have the authors of the report reduced the potential for bias through full disclosure of ranking methods and peer review?
Data, Indicators, Rankings . . .

RAW DATA

INDICATORS

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<th>X</th>
<th>Y</th>
<th>Z</th>
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<td>120</td>
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RANKINGS

1. X
2. Y
3. Z

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Questions?  www.cihi.ca