Canadian Institute for Health Information (CIHI)
Health System Performance Research Network

*International Comparisons of Health System Performance: a focus on research on older people with complex care needs*

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Why Make International Comparisons?

• Global Symposium on Health Systems Research (Montreux, November 2010) calling for expanding agenda on health system research

• International comparisons provide opportunities to explore outcomes of different health systems on a macro, meso or micro levels

• Various objectives for international comparisons: strategy development, policy learning, performance management

• Comparisons between Canada and Europe or Australia seem more meaningful than comparisons with US (universal coverage main distinguishing factor)
There are still hurdles to international performance comparisons

• Technical hurdles:
  – specifying indicators using internationally standardized definitions
  – controlling for differences in population structures across countries
  – adjusting for differences in information systems’ ability to track individual patients
  – controlling variability of data sources
  – identifying nationally representative data
  – determining the retrospective completeness of the time series

• Determining who to compare, when and for what purpose is still a challenge
Existing International Collaborations
CIHI is associated with

> WHO and OECD
> EuroREACH
> EuroHOPE and CanHope
What are the opportunities for international comparisons and collaboration on measuring how health systems are meeting the needs of the complex elderly?
Seniors and the Health Care System: What Is the Impact of Multiple Chronic Conditions? (January 2011)

Senior Use of Emergency Departments in Ontario (February 2010)

Diabetes Care Gaps and Disparities in Canada (December 2009)

Seniors 2011 Report (Fall 2011)
What is the Impact of Multiple Chronic Conditions?

- Senior’s use of health care services driven by number of chronic conditions - **not age**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Morbidity Group</th>
<th>Number of Reported Chronic Conditions</th>
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<tbody>
<tr>
<td></td>
<td>None</td>
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<tr>
<td>65–74</td>
<td>4,211*</td>
<td>6,814</td>
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<tr>
<td>75–84</td>
<td>3,815*</td>
<td>5,547</td>
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<tr>
<td>85+</td>
<td>4,917*</td>
<td>6,268</td>
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Senior Use of Emergency Departments in Ontario

• Seniors’ ED visits for ACSCs triaged at higher urgency levels
  – Result in greater hospitalization rates when compared to overall visits for seniors
Senior Use of Emergency Departments in Ontario

- Hypertension
- Asthma
- Diabetes
- Epilepsy
- COPD
- Heart Failure and Pulmonary Edema
- Angina
- Seniors With ACSCs
- All Seniors

Percent of Patients Admitted to Hospital

- 2004–2005
- 2008–2009
Senior Use of Emergency Departments in Ontario

- Average cost for ED visit (2007-2008) - $260 (overall) vs. $386 (seniors)
Senior Use of Emergency Departments in Ontario

• Costs vary among ACSCs
Diabetes Care Gaps and Disparities in Canada

- 17% of seniors (65 and older) reported a diagnosis of diabetes in 2007
  - 5.1% of youth (12 and older) reported a diagnosis of diabetes
Diabetes Care Gaps and Disparities in Canada
Health Care in Canada 2011

• How does the Canadian health care system meet the current and future health care needs of older Canadians?

• How does performance vary across Canadian jurisdictions and what lessons can be learned for performance improvement?
Ten characteristics of the high-performing chronic care system*

1) Ensure universal coverage
2) Provision of care that is free at the point of use
3) Delivery system should focus on the prevention of ill health
4) Priority is given to patients to self manage their conditions, with support from carers and families
5) Priority is given to primary health care
6) Population management is emphasized
7) Care should be integrated to enable primary health care teams to access specialist advice and support when needed
8) Exploit potential benefits of information technology in improving chronic care
9) Ensure that care is effectively coordinated
10) Link these nine characteristics into a coherent whole as part of a strategic approach to change

Strategies for implementing these characteristics*

1) **Physician leadership** appears to play a critical role in re-orientating health services from the acute care to the chronic care paradigm

2) **Measuring patient outcomes**, and using the results of measurement to drive **continuous quality improvement** is critically important

3) Organizations focusing on chronic care have thought carefully about the best way of **aligning incentives** in support of their strategies

4) **Community engagement** appears to be an important implementation strategy in some systems, although more research is needed to understand how community engagement contributes to high performance

*C.Ham, *Health Economics, Policy and Law* (2010), 5, 71–90*
## Elements of CDM Frameworks

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<th>Element</th>
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<th>UK</th>
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Dimensions of Quality Health and Social Care for Complex Chronic Patients

- Effective
- Safe
- Cost-Effective
- Patient Centered

- Evidence-based
- Integrated
- Timely
- Care continuity
- Coordinated
- Responsive

- Accessible
- Equitable
Priority Areas for Performance Measurement in this Population

• Social and economic burden of not being able to provide patient-centered care to this population is evident

• Great ideas and interventions, but inconclusive evidence of effectiveness for most of these models

• There is a need for further research:
  – Better understand this population and define cohorts with similar profiles
  – Emphasize the economic argument: no more tolerance for waste in the system
  – Measure system performance when addressing needs of this population (both health care and social care services) addressing multiple performance domains
  – Measure outcomes from the perspective of the patient
  – Evaluate impact of prevention strategies in delaying onset of multiple chronic conditions and chronic disease management models
Thank You