Better with Age: Health Systems Planning for the Aging Population
Demographics, aging and financial sustainability

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Outline

• The context of our discussions
• The sustainability of Medicare
• Will the elderly undermine Medicare’s sustainability?
  – Not if we change our health system
• What would a high performing health system for the elderly look like?
The context

- There are assertions that Medicare is not sustainable
- There are assertions that even if Medicare is sustainable now the aging of the population will make it unsustainable in the future
- Canada is just now slowly pulling out of a serious economic downturn
The sustainability of Medicare

• Canada’s health care costs are increasing
• Health has increased its share of GDP since 2000
• But recent increases in health care’s share of the GDP are almost totally due to the recession
• Health care has slightly increased its share of provincial budgets due mainly to cuts in other areas rather than increases in health spending
• Canada’s health costs are similar to other wealthy countries and substantially less than those in the US
* The dashed lines indicate the results if the economy had grown in 2009 at the same rate as in 2008.
Public Health Care Costs as % of GDP

The dashed lines indicate if the economy had grown in 2009 at the same rate as in 2008

Health expenditures as % of total government outlays -- Canada 1975 to 2009

Government Outlays as a share of GDP

Provincial program spending other than health as share of GDP
Will the elderly undermine Medicare’s sustainability?

- Canada is aging and health costs increase with age
- Aging is responsible for only moderate cost increases
- The elderly are healthier than ever
- The major reason for increases in health costs are due to increases in utilization
- There are unmet needs for the elderly but there is also considerable evidence of waste
  - Health Care has quality problems
- High performing health systems can hold costs while enhancing quality
% of Canada 65 and older

%  
26  24  22  20  18  16  14  12  10  

1991  2001  2011  2021  2031

From: Spencer 2010
Annual impact of Aging on health costs 2001-2010

From Mackenzie and Rachlis 2010
Annual impact of Aging on health costs 2010-2036

From Mackenzie and Rachlis 2010
The elderly are healthier than ever?!

• The elderly are living longer than ever
• We do not have accurate data on the prevalence of disability in the elderly
  – The PALS and CCHS exclude persons in “non-institutional collective dwellings”
• We do have fairly accurate US data and it mainly indicates less disability
• Should we extrapolate poor Canadian data or better American data?
The Compression of Morbidity

Prototypic Lingering Chronic Illness

Effects of the Postponement of Chronic Disease

“Our results, supporting the hypothesis of morbidity compression, indicate that younger cohorts of elderly persons are living longer in better health.”

### American prevalence of elderly disabled 1984 - 2004

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>No Disability</td>
<td>1984</td>
<td>73.8%</td>
<td>75.2%</td>
<td>76.8%</td>
<td>78.8%</td>
<td>81.0%</td>
</tr>
<tr>
<td>Light or Moderate</td>
<td>1984</td>
<td>15.9%</td>
<td>14.8%</td>
<td>13.9%</td>
<td>13.3%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Severe</td>
<td>1984</td>
<td>10.3%</td>
<td>10.0%</td>
<td>9.2%</td>
<td>7.9%</td>
<td>7.2%</td>
</tr>
</tbody>
</table>
### Forecasting dependency of the elderly population

<table>
<thead>
<tr>
<th></th>
<th>2005-2010</th>
<th>2025-2030</th>
<th>2045-2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Age Dependency Ratios</td>
<td>0.28</td>
<td>0.41</td>
<td>0.53</td>
</tr>
<tr>
<td>Prospective Old Age Dependency Ratios</td>
<td>0.19</td>
<td>0.23</td>
<td>0.27</td>
</tr>
<tr>
<td>Adult Disability Ratios</td>
<td>0.11</td>
<td>0.12</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Increased utilization by all ages is causing increased health costs

- The elderly are increasing their utilization at the same rates as younger Canadians but their absolute increase is greater
Change in per capita health costs by age (1998-2007)

Adapted from: Spencer 2010
Change in per capita health costs by age (1998-2007)

Adapted from: Spencer 2010
There are unmet needs but also considerable evidence of waste

- Chronic disease management
- Access
- Drug prescribing
Canada’s health care system has a quality problem
Hospitals have quality problems

• Studies in more 7 countries indicate that 5-10% of all deaths in developed countries are due to preventable deaths in hospitals
  – In Canada that means 9000 – 24,000 deaths per year
• The 2004 Canadian Adverse Events Study cites that 7.5% of hospital patients have an adverse event (AE)
  – 185,000 are associated with an Adverse Event and 70,000 of these are potentially preventable
Practices with Advanced Electronic Health Information Capacity

Source: 2009 Commonwealth Fund International Health Policy Survey of Primary Care Physicians.
## Family Drs’ Perception of Access Barriers

<table>
<thead>
<tr>
<th>Percent reporting patients <strong>OFTEN:</strong></th>
<th>AUS</th>
<th>CAN</th>
<th>FR</th>
<th>GER</th>
<th>ITA</th>
<th>NET</th>
<th>NZ</th>
<th>NOR</th>
<th>SWE</th>
<th>UK</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have difficulty getting specialized diagnostic tests</td>
<td>21</td>
<td>47</td>
<td>42</td>
<td>26</td>
<td>52</td>
<td>15</td>
<td>60</td>
<td>11</td>
<td>22</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>Experience long waiting times to see a specialist</td>
<td>34</td>
<td>75</td>
<td>53</td>
<td>66</td>
<td>75</td>
<td>36</td>
<td>45</td>
<td>55</td>
<td>63</td>
<td>22</td>
<td>28</td>
</tr>
</tbody>
</table>

Source: 2009 Commonwealth Fund International Health Policy Survey of Primary Care Physicians.
High performing health systems can hold costs and enhance quality

“Many attribute the quality problems to a lack of money. Evidence and analysis have convincingly refuted this claim. In health care, good quality often costs considerably less than poor quality.”

Fyke Report 2001 (Saskatchewan)
Quality provides sustainability

• An Alberta aftercare program for congestive heart failure patients leaving hospital reduced future hospital use by 60% with $2500 in overall net cost savings per participant.

• New Westminster's Royal Columbian Hospital reduced post heart surgery pain complications by 80% and length of stay by 33%.

• BC’s Reference Drug Program kept Vioxx as a second line drug and saved $23 million per year and dozens of lives.
EXHIBIT 1

Total (Private And Public) Spending On COX-2 Inhibitors And Other Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) Purchased Per Capita Per Quarter, In British Columbia And The Rest Of Canada, 1998–2002

Dollars per capita

<table>
<thead>
<tr>
<th>1998 Q1</th>
<th>1999 Q1</th>
<th>2000 Q1</th>
<th>2001 Q1</th>
<th>2002 Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>COX-2, rest of Canada</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other NSAIDs, rest of Canada</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other NSAIDs, B.C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COX-2, B.C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** Authors’ calculations based on data from IMS Health, Canada.

**NOTES:** COX-2 is cyclooxygenase-2. Older NSAIDs include Diclofenac, Etodolac, Fenoprofen, Flurbiprofen, Ibuprofen, Indomethacin, Ketoprofen, Nabumetone, Naproxen, Oxaprozin, Phenylbutazone, Piroxicam, Sulindac, Tenoxicam, Tiaprofenic acid, and Tolmetin. Dollars are Canadian dollars.
“It is not the aging of our population that threatens to precipitate a financial crisis in health Care, but a failure to examine and make appropriate changes to our health care system, especially patterns of utilization.”

Dr. William Dalziel. CMAJ. 1996;115:1584-6
What would a high performing health system for the elderly look like?

• Need for Intersectoral Action for Health
• Follow frameworks for quality, e.g. Ontario Health Quality Council, Saskatchewan Health Quality Council, etc.
• Examples of high performing care
• Example of Denmark internationally
Intersectoral Action for Health

• The frail elderly, like those with severe persistent mental illness often need housing as part of their health program
• Transportation is major problem particularly outside of downtown areas of major cities
• Food accessibility is a problem and combined with inaccessibility to transportation leads to under nutrition
1. Acceptability
2. Appropriateness
3. Accessibility
4. Safety
5. Effectiveness
6. Equity
7. Efficiency
Health Quality Council of Alberta
Dimensions of Quality
(http://www.hqca.ca/assets/pdf/Matrix%20.pdf)

1. Acceptability
2. Accessibility
3. Appropriateness
4. Effectiveness
5. Efficiency
6. Safety
Attributes of High Performing Health Systems Ontario Health Quality Council.
(www.ohqc.ca)

1. Safe
2. Effective
3. Patient-Centred
4. Accessible
5. Efficient
6. Equitable
7. Integrated
8. Appropriately resourced
9. Focused on Population Health
IHI’s Triple Aim

1. Enhance the Care experience for patients
2. Improve the health of the population
3. Control overall health care costs
A high performing health system for the elderly

- Chronic disease management and primary health care
  - Health assessment
  - Health promotion
- Home care
- Long term care
- Palliative care
- Acute Care
Self-care Support
Coaching and support to promote self-care and maintain healthy behaviours

Care Management
Coaching and support for Managing care needs

Intensive Care Management
Frequent contact and coaching, coordinating of care

Individuals with no chronic conditions & no self-care challenges

Individuals with 1 chronic Condition & few self-care challenges

Multiple chronic conditions & self-care challenges

Services tailored to reflect varying levels of client capacity
Per Person Average overall costs of health care in areas with cuts and without cuts to social and preventive home care (Hollander 2001)

<table>
<thead>
<tr>
<th>Areas</th>
<th>Year Prior to Cuts</th>
<th>First Year After Cuts</th>
<th>Second Year After Cuts</th>
<th>Third Year After Cuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas with cuts</td>
<td>$5,051.84</td>
<td>$6,682.77</td>
<td>$9,654.22</td>
<td>$11,903.38</td>
</tr>
<tr>
<td>Areas without cuts</td>
<td>$4,535.02</td>
<td>$5,963.10</td>
<td>$6,771.45</td>
<td>$7,807.96</td>
</tr>
</tbody>
</table>

## Health Promotion for continuing care applicants

<table>
<thead>
<tr>
<th>Group</th>
<th>Alive living in the community</th>
<th>Dead</th>
<th>Resident of a LTC facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Promotion Group</td>
<td>65.4%</td>
<td>17.3%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Control Group</td>
<td>50.2%</td>
<td>23.3%</td>
<td>26.3%</td>
</tr>
</tbody>
</table>

Good News! We could improve access to care

- We could access primary health care within 24 hrs
- We could have elective specialty consultations within one week
Comprehensive community care

- US Program for All-inclusive Care of the Elderly (PACE)
- Edmonton Comprehensive Home Option of Integrated Care for the Elderly (CHOICE)
- Calgary Comprehensive Community Care (C3)
The Eden Alternative for long term care

- Fights the “plagues of old age”
  - Loneliness
  - Boredom
  - Helplessness
Acute Care for the Elderly (ACE units)

- Gentle care
- Reduces delerium
- Reduces skin ulcers
- Improves nutrition
Denmark: A country of best practices

• 1987 moratorium on building new nursing home beds
  – Accompanied by giving all benefits of long term care to home care clients
  – Longstanding Scandinavian public responsibility for housing
  – Increased construction of supportive housing

• 1998 country-wide policy of home visits/assessments for people > 75
Denmark: A country of best practices

• In 2007, Denmark spent 9.7% of GDP on health while Canada spent 10.1%

• Denmark has 16.1% population > 65 while Canada has 15.2% > 65
Final thoughts

• A decentralized federation makes national progress impossible

• Intersectoral action, and particularly healthy public policy is the foundation of an effective, efficient health system
  – But most Canadian governments do not have tight coordination of social policy

• The challenges of changing health systems
  – It seems even harder here than elsewhere

• The opportunities offered by the quality agenda
Summary:

• Health care costs are rising but not nearly as fast as most people think
  – In 2010 health will decrease it’s share of GDP
• The elderly by themselves will not undermine Medicare’s sustainability
  – They need a lot of help from health providers
• Canada’s health system has a quality problem
• A high performing health system for the elderly can control costs and improve quality and outcomes
Canada’s health policy is in evolution from a 19th century passive insurance program for an 18th century-style professional practice to a 21st century population health service based upon high performing, patient/family/community-centred, team-based programs.