Will ageing bankrupt the health system?
If not, why not?

Presentation by
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Overview

• Medicare is sustainable now and will be in the future
• That doesn’t mean that we should sit on our hands
• We have to stop doing the wrong things
• And start doing the right things
Medicare is sustainable

- Ageing historically not a big issue in escalation of health expenditure, either in Canada or internationally
- In a recent study of 22 OECD countries, after proximity to death is taken into account, there appears to be a (weak) **negative** relationship between ageing and health expenditure\(^1\).
- In a Canadian study:
  - ‘the share of population aged 65 and over has a +ve and significant effect on real per capita provincial government health expenditures only for PEI, while the effect is actually -ve and significant for NL, QC, MB, SK’\(^2\)

Medicare is (economically) sustainable

Our analysis reveals mortality rates are shifting over time meaning the period of high health care usage prior to death is changing as well. Planning based on past patterns of utilization or current age distributions of needs could therefore lead to over-provision of the capacity to meet the needs of what are no longer ‘close to death’ age groups.

Voodoo¹ (apocalyptic) demographics

- Demeaning to elderly
- Ignores past contributions
- Ignores current contributions
  - Assumes no ‘intergenerational interlinkages’²
- Neglects effect of increased life expectancy on Gross Domestic Product³
  - Over the period 1921 to 2001 a 1% increase in life expectancy in Canada led to a 6.7% increase in GDP per capita

Ageing not a big issue, despite rhetoric

• Even assuming it is, it is more a glacier than avalanche/tsunami* and we have time to do something
• And rhetoric important
• The population over 85 (the high utilizers) is expected to grow from 675,000 now to 1,700,000 in 2036

Alternative discourse

- Population over 85 more than doubles!!!!!
- But let us assume people over 85 have 25% less morbidity compared to today (compression of morbidity hypothesis*)
- Utilization projected to increase two thirds!!
- Utilization projected to increase 2% per annum!

Medicare is sustainable

• Ageing historically not a big issue in escalation of health expenditure
• Even so, it is more a glacier than avalanche/tsunami* and we have time to do something
• Extra health spending *per se* is not necessarily a bad thing
• Extra public health spending *per se* is not necessarily a bad thing
• So given the glacier, what should we do?
We have done those things which we ought not to have done...

- Stop doing the wrong things!
- The Everest syndrome
- The Edifice complex
The Everest syndrome

• ‘Because it’s there’

• Comparisons of spending: share of GDP or $ per capita?
  – *Is this a peculiar AB issue?*

• A higher GDP allows us to spend more, it doesn’t mean we have to

• Health spending is the result of choices and decisions by people, not because of size of GDP
The Everest syndrome

- If there is money in the bank, it is hard for politicians to deny ‘reasonable’ requests for spending
- What is reasonable?
- What is our* role in shaping what is reasonable?
  - 1:1 clinical rationality: net marginal benefit > 0
  - Economic (or population perspective) rationality: marginal benefit > marginal cost (or maybe incremental cost effectiveness ratio > threshold)
- *managers, health services researchers, other gad flies on the body politic
The Everest syndrome

• What is our role in shaping what is reasonable?
  – 1:1 clinical rationality: net marginal benefit > 0
  – Economic or population perspective rationality: marginal benefit > marginal cost (or maybe incremental cost effectiveness ratio > threshold
  – Political rationality: net marginal benefit* > 0
  – Editorial rationality: ????

• Do we implicitly (or even explicitly) reward extra spending or requests for extra spending

• * different measure of benefits
The Everest syndrome: the real challenge

• Can we enlist clinicians in the quest for more rational decision making?

• Can we enlist clinicians in the quest for more (economically*) rational decision making?

Q: why is my rationality better than yours?
The Everest syndrome: why is my rationality better than yours?

The Everest syndrome: the real challenge

• Can we enlist clinicians in the quest for more rational decision making?
• Can we enlist clinicians in the quest for more (economically) rational decision making?
  – AHS strategy: ‘clinical engagement’
  – aka harness collective/peer wisdom, to constrain cowboys
    • Clinical networks
    • Alberta Clinician Council
  – AHS strategy: ‘coalition of the willing’
The Everest syndrome:

the coalition of the willing

• Reduce diabetes admissions by one third
  – Provincial strategy
  – Zone strategies

• Every person admitted to General Internal Medicine (GIM) at the University of Alberta Hospital from the emergency department will be admitted to a GIM bed with an integrated plan of care within 90 minutes of the decision to admit

• Access to radiotherapy within two weeks
The Everest syndrome: why is my rationality better than yours?

• We need to build acceptance that we do live in a fiscally constrained environment
  – pace AB
• We need to build the case that doing better with our existing resources is:
  a) Possible
  b) Legitimate (vs just asking for more money)
  c) Will be supported (politically, skills, hump-funding)
The Edifice complex

• Hospitals are good things

• The best way to improve health is to have more of them, with more people in them, or at least, more people having access to them

• And this costs money but, that’s life, it’s worth it

• But what do we really get for all that spending and is it worth it?
Keep relative costs same, improve relative life expectancy?

Reduce relative costs but keep relative outcomes constant

Dominated by other quadrants

Production possibility frontier quadrant

Cost per Head
Can we do better?

Health-Adjusted Life Expectancy (HALE)\(^1\) vs. Constant (2002)\(^2\)
Provincial Government Health Expenditure\(^3\) per Adjusted Capita\(^4\)
for Females, by Province, for 2001

Health-Adjusted Life Expectancy (HALE)\(^1\) vs. Constant (2002)\(^2\)
Provincial Government Health Expenditure\(^3\) per Adjusted Capita\(^4\)
for Males, by Province, for 2001

- **Alberta** (69.7, 2,563)
- **Newfoundland** (69.0, 2,573)
- **British Columbia** (71.2, 2,370)
- **Manitoba** (70.4, 2,219)
- **Canada** (69.0, 2,170)
- **Prince Edward Island** (71.7, 2,041)
- **Quebec** (72.0, 2,061)
- **New Brunswick** (70.9, 2,051)
- **Saskatchewan** (70.2, 1,973)
- **Nova Scotia** (70.1, 1,859)
In 1996, Alberta spent less than the average of Other Provinces, with spending (in current dollars) diverging over the last decade.

1 Source: Canadian Institute for Health Information, National Health Expenditure Trends, 1975 – 2008 (Ottawa, Ont.: CIHI, 2008).
Alberta spent about 12% faster over the last decade than other provinces on Hospitals and Other Institutions.
Alberta spent 25% faster on Hospitals over the last decade than Other Provinces

2 Source: Canadian Institute for Health Information, National Health Expenditure Trends, 1975 – 2008 (Ottawa, Ont.: CIHI, 2008).
3 Adjusted Population is Weighted by All-Sector Expenditure by Age and Gender (2007/2008 Population-Based Funding Weights for Alberta). Alberta’s weights were applied across all provinces.
Alberta disinvested in Seniors Accommodation and Other Institutions

\[\text{Provincial Government Constant (2002)}^{1}\text{ Expenditure on}\text{ Other Institutions per Adjusted Capita, by Jurisdiction, 1996 to 2008}\]

1 Source: Statistics Canada, CANSIM, table 326-0021 and Catalogue nos. 62-001-X and 62-010-X.
2 Source: Canadian Institute for Health Information, National Health Expenditure Trends, 1975 – 2008 (Ottawa, Ont.: CIHI, 2008).
3 Adjusted Population is Weighted by All-Sector Expenditure by Age and Gender (2007/2008 Population-Based Funding Weights for Alberta). Alberta’s weights were applied across all provinces.
The Edifice complex

- Hospitals are good things
- The best way to improve health is to have more of them, with more people in them, or at least, more people having access to them
- It’s clear in retrospect that Alberta made poor investment decisions, but the other provinces probably did too (the seniors accommodation spending should have gone up faster)
The Edifice complex

- March 12 1946 *Hospital Insurance Act* introduced into Saskatchewan Legislature
- January 27 1956 conclusion of Paul Martin Sr seminar and offer to provinces for national hospital insurance support
The Edifice complex
Why do hospitals (and doctors) dominate our thinking?

• Partly historic
• When all the health problems were acute, it may have been appropriate
• Partly because health system leadership/ spokespeople is often institutionally based
• We reward that focus
• Media likes high tech stuff (‘machines that go ping’)
• Visible and obvious
• Easier to demonstrate progress
• Ribbons to cut
We have left undone those things which we ought to have done...

• Reorienting the system
  – Recognizing the acute chronic disease transition
  – Seniors investments

• Getting the incentives right
  – Activity based funding
  – Leading to action on eliminating waste (including improving quality)

• Getting the workforce right
Reorienting the system

• Have we got the right conception of the health care process?

• The right person
• enables
• the right care
• in the right setting
• on time
• every time
Getting the incentives right

• What behaviour is rewarded?
  • Edifice complex again
  • Oliver Twist and Noah’s Ark again

• What is (implicit) maximand for managers?
  – Is increasing size of budget easier than addressing efficiency/change issues?
  – What skills should managers have?
    • Managing (aka manipulating) media
    • Managing (aka manipulating) politicians
    • Do we reward knights or knaves*?

### An Economist's View of Targets for Healthcare Cost Control

<table>
<thead>
<tr>
<th>Price</th>
<th>Demand Side</th>
<th>Supply Side</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Consumer co-payments</strong></td>
<td>• Design/structure of payment schedule</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Activity Based Funding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Private Sector provision to improve efficiency</td>
</tr>
<tr>
<td>Quantity</td>
<td><strong>Eligibility limitations</strong></td>
<td>• Utilization review to improve efficiency</td>
</tr>
<tr>
<td>Volume</td>
<td></td>
<td>• Capacity Controls</td>
</tr>
</tbody>
</table>

*NB: Private sector financing is not a cost control strategy*
Distribution of weighted cost per day, Alberta long term care facilities, 2009
Policy choices:
different benchmarks have different effects

Expenditure effect (per day) if benchmark price at that decile

Decile
Variation in cost per acute inpatient treated (2008-09) within Alberta (we think)
Getting the incentives right

• Give managers a framework within which to manage
  • How much should political rationality constrain management rationality?
  • The reason we have politicians is to make political decisions and to allow for political accountability
Getting the incentives right

- Give managers a framework within which to manage
  - How much should political rationality constrain management rationality?
  - The reason we have politicians is to make political decisions and to allow for political accountability

- Give managers a budget to manage

- Ensure managers have incentive to manage responsibly
  - Are we rewarding right behaviours?
  - Management/reward reform
### Performance Agreement – President and CEO

#### 2009/10 Performance Agreement Targets for President and CEO

<table>
<thead>
<tr>
<th>Goal</th>
<th>Focus</th>
<th>Performance Measure</th>
<th>Baseline</th>
<th>2009/2010 Target</th>
<th>3 year Target</th>
<th>Weighting</th>
<th>% of Bonus</th>
<th>100%</th>
<th>66%</th>
<th>33%</th>
<th>0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>Improving access</td>
<td>Number of alternate level of care patients in acute care</td>
<td>700</td>
<td>550</td>
<td>350</td>
<td>10%</td>
<td>≤ 550</td>
<td>≤ 550</td>
<td>≤ 700</td>
<td>&gt; 700</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wait time in Emergency</td>
<td>Time in Emergency Department for uncomplicated cases (90% percentile)</td>
<td>3.0 hours</td>
<td>5 hours</td>
<td>4 hours</td>
<td>10%</td>
<td>≤ 5 hours</td>
<td>≤ 5 hours</td>
<td>≤ 5.3 hours</td>
<td>&gt; 5.3 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department for complex cases</td>
<td>Wait time in Emergency Department for complex cases (90% percentile)</td>
<td>16.1 hours</td>
<td>14 hours</td>
<td>9 hours</td>
<td>10%</td>
<td>≤ 14 hours</td>
<td>≤ 15 hours</td>
<td>≤ 15 hours</td>
<td>&gt; 15 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wait time for hip replacement surgery (90% percentile)</td>
<td>Wait time for hip replacement surgery (90% percentile)</td>
<td>33 weeks</td>
<td>30 weeks</td>
<td>25 weeks</td>
<td>10%</td>
<td>≤ 30 weeks</td>
<td>≤ 31 weeks</td>
<td>≤ 32 weeks</td>
<td>&gt; 32 weeks</td>
<td></td>
</tr>
<tr>
<td>Learning and improving</td>
<td></td>
<td>Develop incident reporting system including common definitions, approaches, etc.</td>
<td>n/a</td>
<td>Completed by December 31, 2009</td>
<td>n/a</td>
<td>10%</td>
<td>By Dec. 31, 2009</td>
<td>By Jan. 31, 2010</td>
<td>By March 31, 2010</td>
<td>Later than Mar. 31, 2010</td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>Improving population health</td>
<td>Seniors influenza immunization rates</td>
<td>40%</td>
<td>60%</td>
<td>72%</td>
<td>10%</td>
<td>&lt; 40%</td>
<td>&lt; 60%</td>
<td>&lt; 72%</td>
<td>&gt; 72%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Responsive to consumers and communities</td>
<td>Establish Health Advisory Councils</td>
<td>n/a</td>
<td>12 IACs by March 31, 2010</td>
<td>n/a</td>
<td>10%</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Sustainability</td>
<td>Fit for the future</td>
<td>Implement organizational structure and associated HR and financial delegations, and budget assignment.</td>
<td>n/a</td>
<td>By September 30, 2009</td>
<td>n/a</td>
<td>10%</td>
<td>By Sept. 30, 2009</td>
<td>By October 31, 2009</td>
<td>By Dec. 31, 2009</td>
<td>Later than Dec. 31, 2009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Board-endorsed Strategic Plan</td>
<td>Board-endorsed Strategic Plan</td>
<td>n/a</td>
<td>By June 30, 2009</td>
<td>n/a</td>
<td>10%</td>
<td>By June 30, 2009</td>
<td>By Sept. 31, 2009</td>
<td>By Oct. 31, 2009</td>
<td>Later than Oct. 31, 2009</td>
<td></td>
</tr>
</tbody>
</table>

#### Notes
- Any bonus within the sustainability component is contingent on achieving Board-endorsed budget targets.

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*Alberta Health Services*
Annual increase in health spending* in Alberta

* excluding EMS, AADAC

Pre AHS average annual increase 9.63%
Conceptual model to analyze waste

Waste in the Health Care System

Administrative
- Transactions - Related

Operational
- Other Waste
  - Duplication of Services
  - Inefficient Processes
  - Expensive Inputs

Clinical
- Cost - Ineffective
  - Errors

Detrimental to Health

Unnecessary paperwork

Noah's Ark

• Lean
• Productivity

• Wages
• Roles
• Procurement

• Rework
• Adverse Events

Improving quality is one strategy to reduce costs.

Savings from 25% reduction in 7 day re-admissions

- Foothills Medical Centre
- Alberta Children’s
- Stollery Children’s
- RAH
- Misericordia
- Grey Nuns Hospital
- Rockyview General...
- Peter Lougheed Centre
- Medicine Hat Regional...
- Chinook Regional Hospital
- Red Deer Regional Hospital
- QEII Hospital
- Northern Lights
Getting the incentives right

- Give managers a framework within which to manage
  - How much should political rationality constrain management rationality?
  - The reason we have politicians is to make political decisions and to allow for political accountability
- Give managers a budget to manage
- Ensure managers have incentive to manage responsibly
  - Are we rewarding right behaviours?
  - Management/reward reform
- Ensure managers have right skill (and value) set
The place of workforce reform

• Traditional workforce planning concentrated on how many of profession x are needed
• Considerable overlap in skills
• Need to move from profession-based to skill/task/role needs
• Need to allow/facilitate all workers to work at ‘full scope of practice’
  – Need to allow/facilitate all workers to work together at ‘full scope of practice’
  – MD: Nurse practitioner/RN
  – RN:LPN:HCA
  – Use of assistants
The place of workforce reform

• Right person doing the right thing
  (back to:
The right person enables the right care
  in the right setting on time every time)

  AND

• (Right person) doing the thing right,
  (or, with better grammar) doing things right
  (the waste issue, improving quality variant)

NB: same issue covered very elegantly in:
Take home messages

• Extra health spending is worth it if you get good value in return
• Extra health spending is worth it if, *and only if*, you get good value in return
• We are not automatons, doomed to continue the practices of the past
• Although Medicare is sustainable now and will be in future, we need to take action now and in the future to ensure it remains so
  – Right investments (start right ones, stop doing wrong ones)
  – Right system design
  – Incentives (waste etc)
  – Right workforce

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