

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

Presentation by  
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to

BOOMERANGST: Myths and Realities about health care for an aging population  
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# Overview

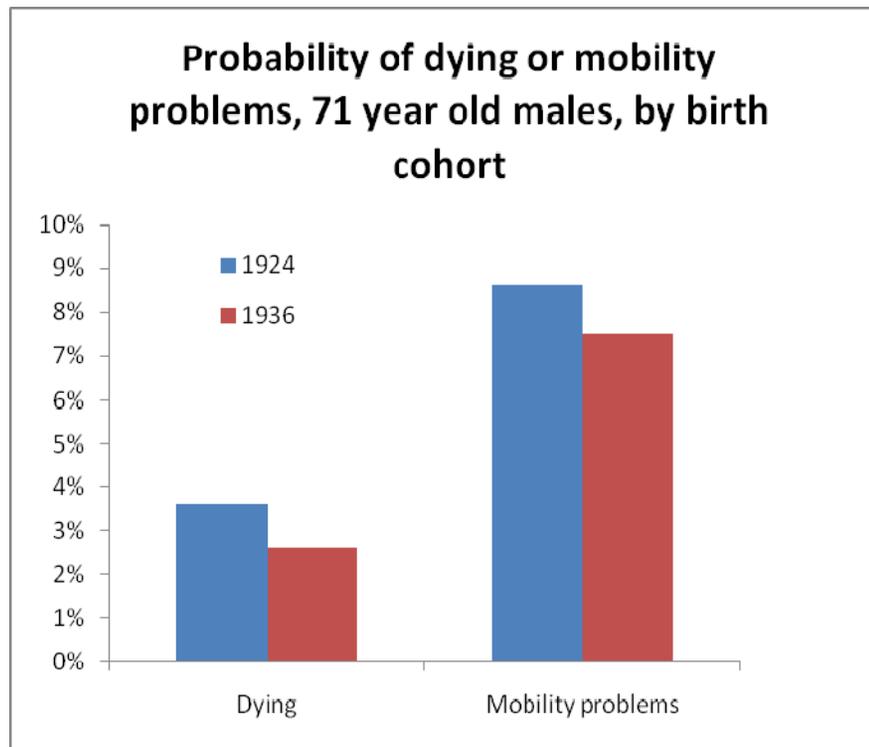
- Medicare is sustainable now and will be in the future
- That doesn't mean that we should sit on our hands
- We have to stop doing the wrong things
- And start doing the right things

# 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<sup>1</sup>.
- 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’<sup>2</sup>

1. Palangkaraya, A., & Yong, J. (2009). Population ageing and its implications on aggregate health care demand: empirical evidence from 22 OECD countries. *International Journal of Health Care Finance and Economics*, 9(4), 391-402.
2. Di Matteo, L. (2010). The sustainability of public health expenditures: evidence from the Canadian federation. *The European Journal of Health Economics*, 11(6), 569-584.

# 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

Amblin Murphy, G. et al. (2009). "Planning for what? Challenging the assumptions of health human resources planning" *Health policy* 92(2): 225-233.

# Voodoo<sup>1</sup> (apocalyptic) demographics

- Demeaning to elderly
- Ignores past contributions
- Ignores current contributions
  - Assumes no ‘intergenerational interlinkages’<sup>2</sup>
- Neglects effect of increased life expectancy on Gross Domestic Product<sup>3</sup>
  - Over the period 1921 to 2001 a 1% increase in life expectancy in Canada led to a 6.7% increase in GDP per capita

1. Schulz, J. A. (1998). The economics and financing of long-term care. *The Australasian Journal on Ageing*, 17(1(Supp)), 82-84. also Gee, E. M. (2000). Population and politics: Voodoo demography, population aging, and Canadian social policy. In E. M. Gee & G. M. Gutman (Eds.), *The overselling of population aging: Apocalyptic demography, intergenerational challenges, and social policy* (pp. 5-25). Ontario: Oxford University Press.

2. McDaniel, S. A. (2003). Intergenerational interlinkages: Public, family, and work. In D. Cheal (Ed.), *Aging and Demographic Change in Canadian Context*. Toronto: University of Toronto Press.

3. Swift, R. (2011). The relationship between health and GDP in OECD countries in the very long run. *Health Economics*, in press,

# 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

\* Barer, M. L., R. G. Evans, et al. (1995). "Avalanche or Glacier?: Health Care and the Demographic Rhetoric." *Canadian Journal on Aging/Revue canadienne du vieillissement* 14(02): 193-224.

# 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!
- 
- \* Fries, J. F. (2005). "The Compression of Morbidity." *Milbank Quarterly* **83(4): 801-823.**

# 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

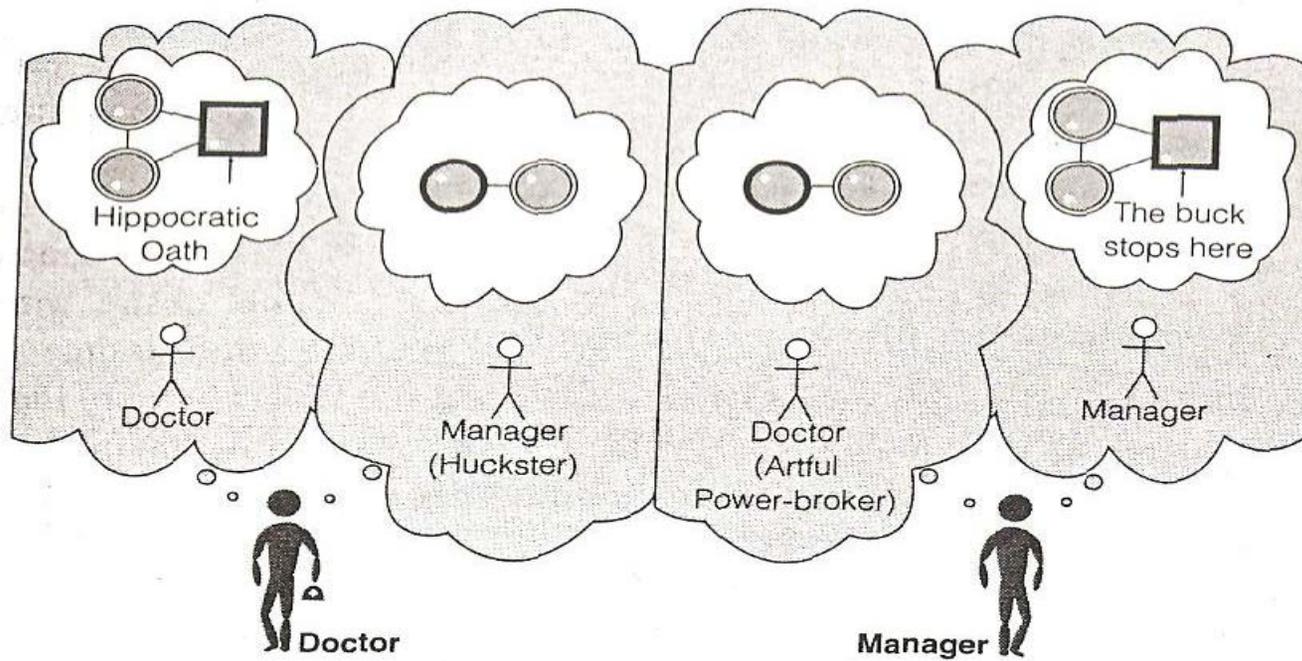
# The Everest syndrome

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  - 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?



Source: Mant, A. (1999). *Intelligent leadership*. St Leonards, NSW :Allen & Unwin

# 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

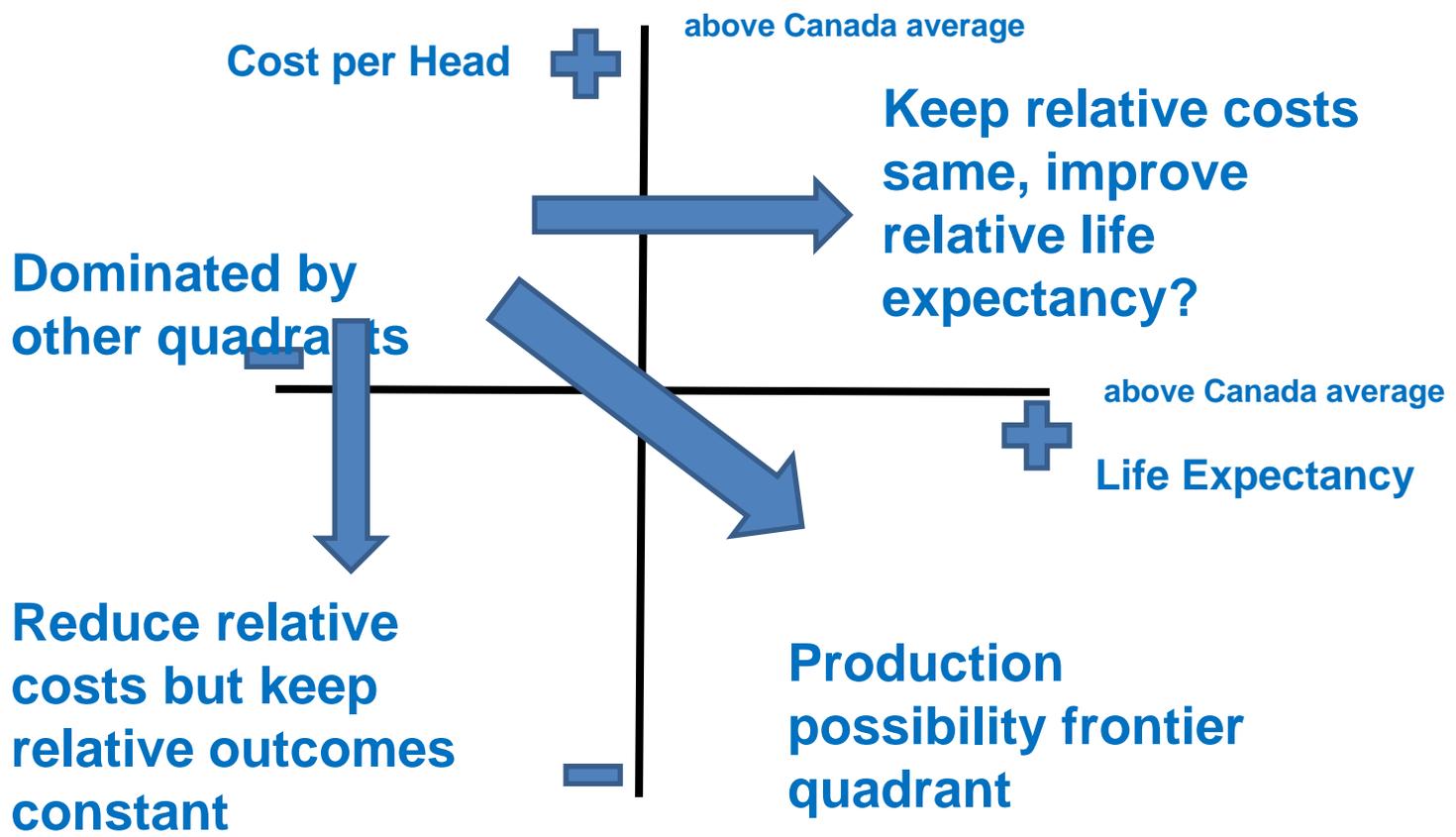
# The Everest syndrome:

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)

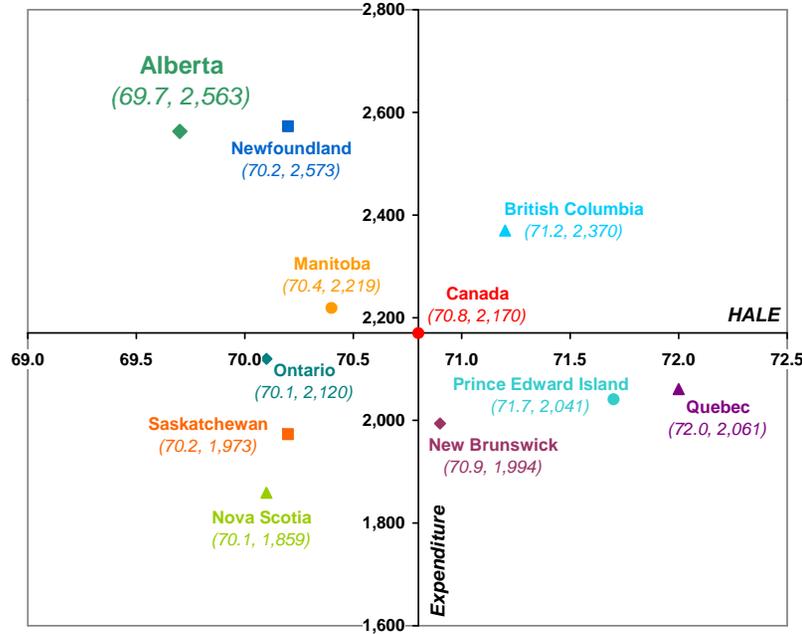
# The Edifice complex

- 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?

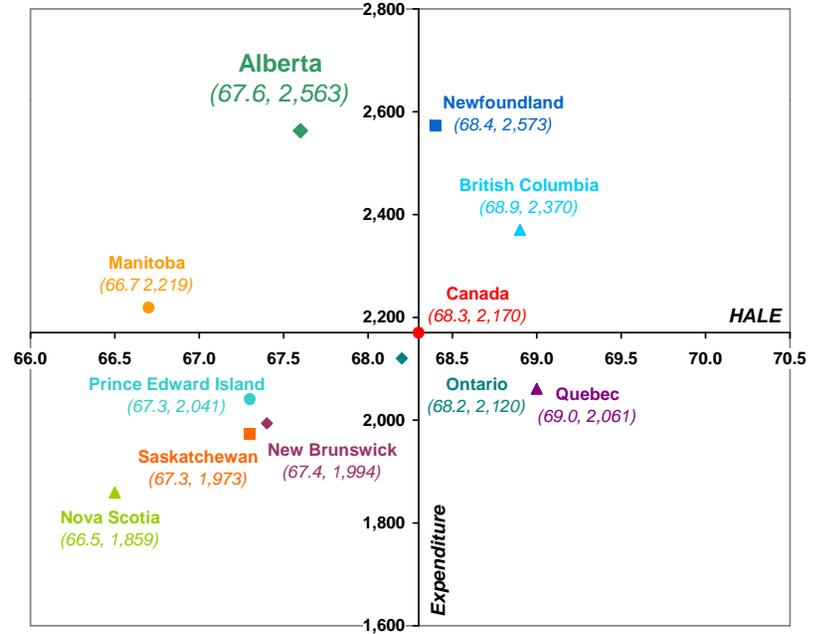


# Can we do better?

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

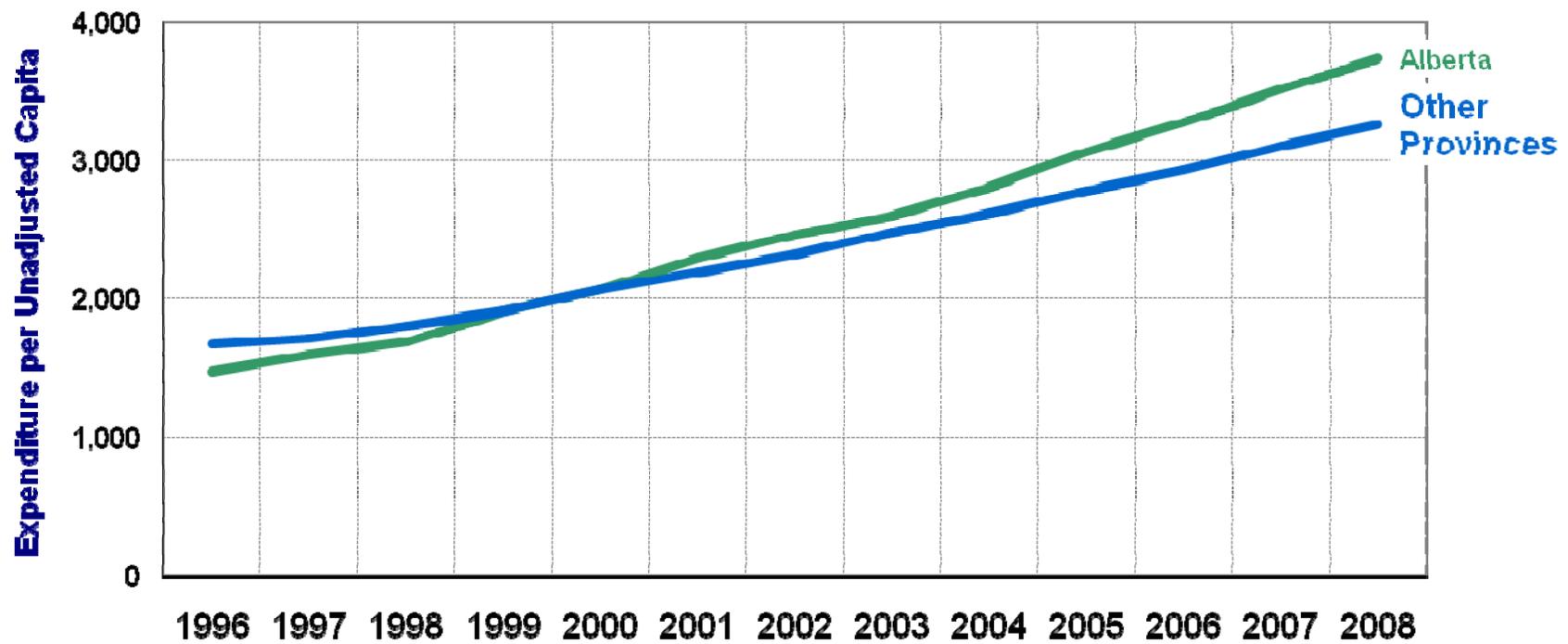


Health-Adjusted Life Expectancy (HALE)<sup>1</sup> vs. Constant (2002)<sup>2</sup>  
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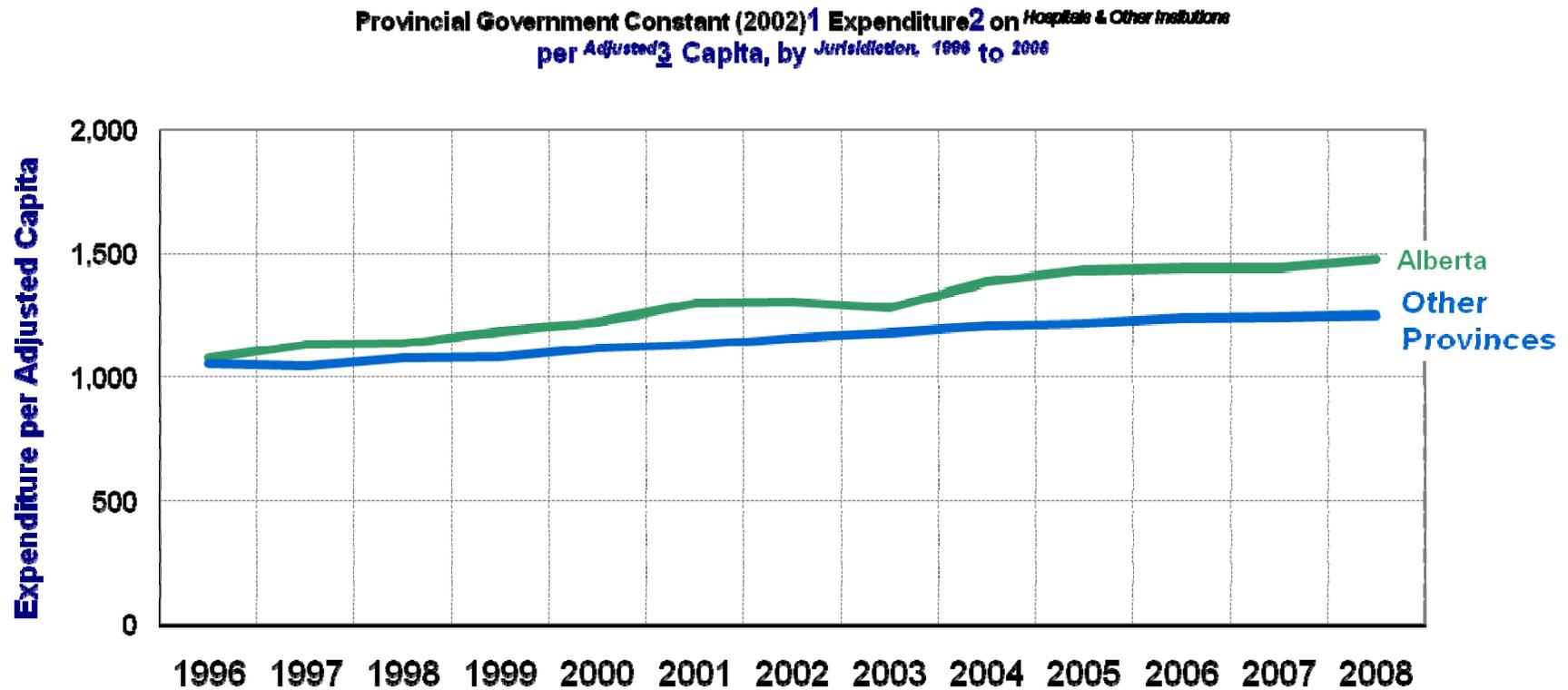
In 1996, Alberta spent less than the average of Other Provinces, with spending (in current dollars) diverging over the last decade

**Provincial Government Current Health Care Expenditure<sup>1</sup>**  
*per Unadjusted Capita, by Jurisdiction, 1996 to 2008*



<sup>1</sup> 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



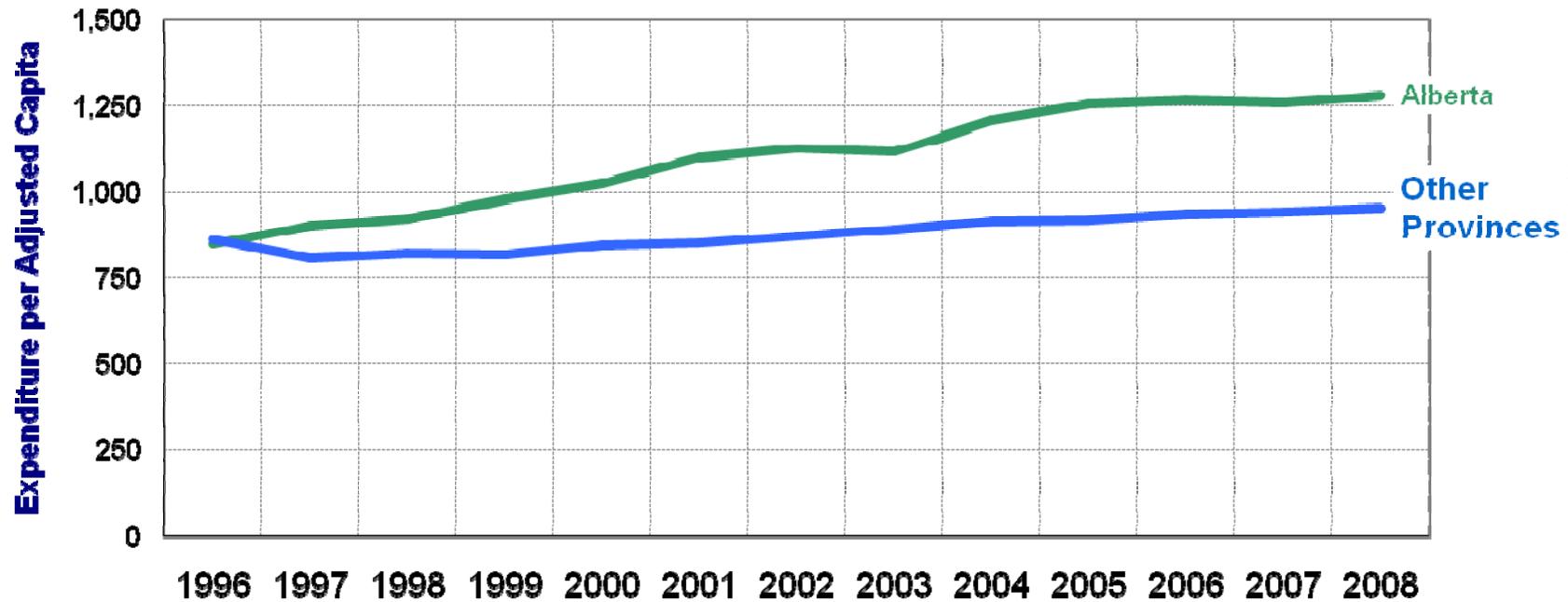
<sup>1</sup> Source: Statistics Canada, CANSIM, table 326-0021 and Catalogue nos. 62-001-X and 62-010-X.

<sup>2</sup> Source: Canadian Institute for Health Information, National Health Expenditure Trends, 1975 – 2008 (Ottawa, Ont.: CIHI, 2008).

<sup>3</sup> 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 spent 25% faster on Hospitals over the last decade than Other Provinces

Provincial Government Constant (2002)<sup>1</sup> Expenditure<sup>2</sup> on Hospitals  
per Adjusted<sup>3</sup> Capita, by Jurisdiction, 1996 to 2008



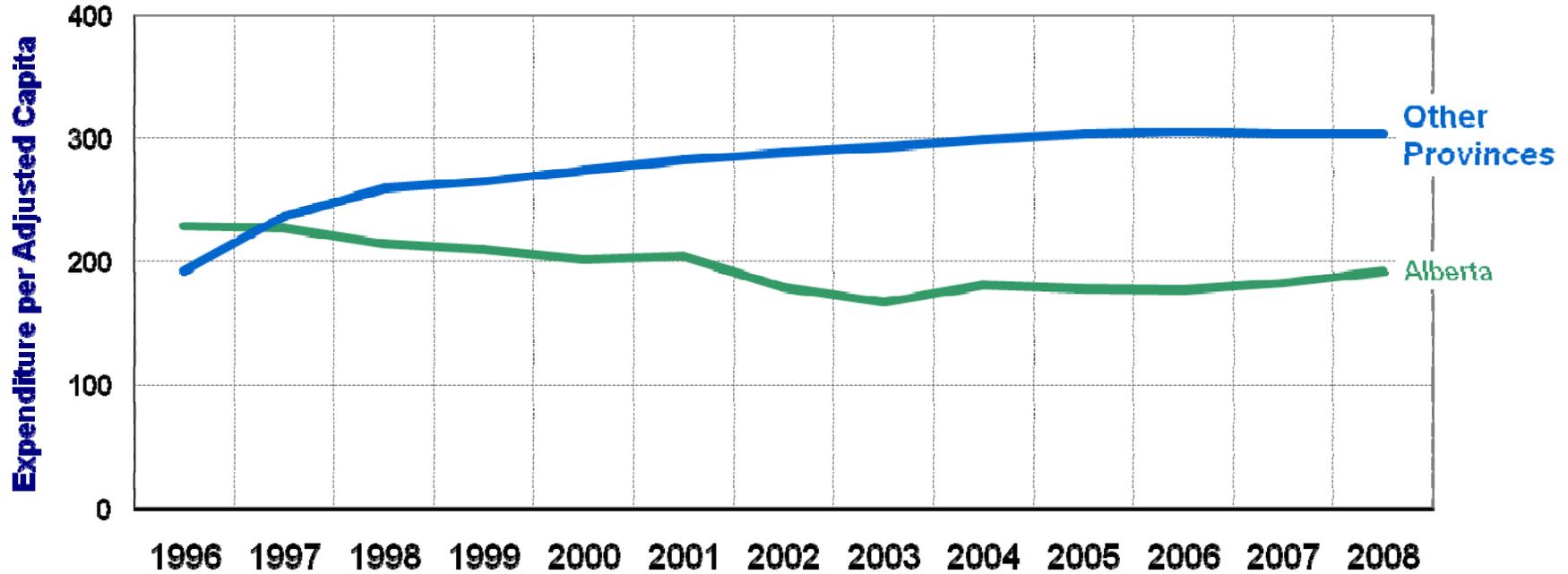
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# Alberta disinvested in Seniors Accommodation and Other Institutions

Provincial Government Constant (2002)<sup>1</sup> Expenditure<sup>2</sup> on Other Institutions per Adjusted<sup>3</sup> Capita, by Jurisdiction, 1996 to 2008



<sup>1</sup> Source: Statistics Canada, CANSIM, table 326-0021 and Catalogue nos. 62-001-X and 62-010-X.

<sup>2</sup> Source: Canadian Institute for Health Information, National Health Expenditure Trends, 1975 – 2008 (Ottawa, Ont.: CIHI, 2008).

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# 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



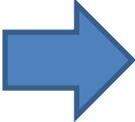
- March 12 1946 *Hospital Insurance Act* introduced into Saskatchewan Legislature
- January 27 1956 conclusion of Paul Martin Sr seminar and offer to provinces for national hospital insurance support

# The Edifice complex

Why do hospitals (and doctors) dominate our thinking?

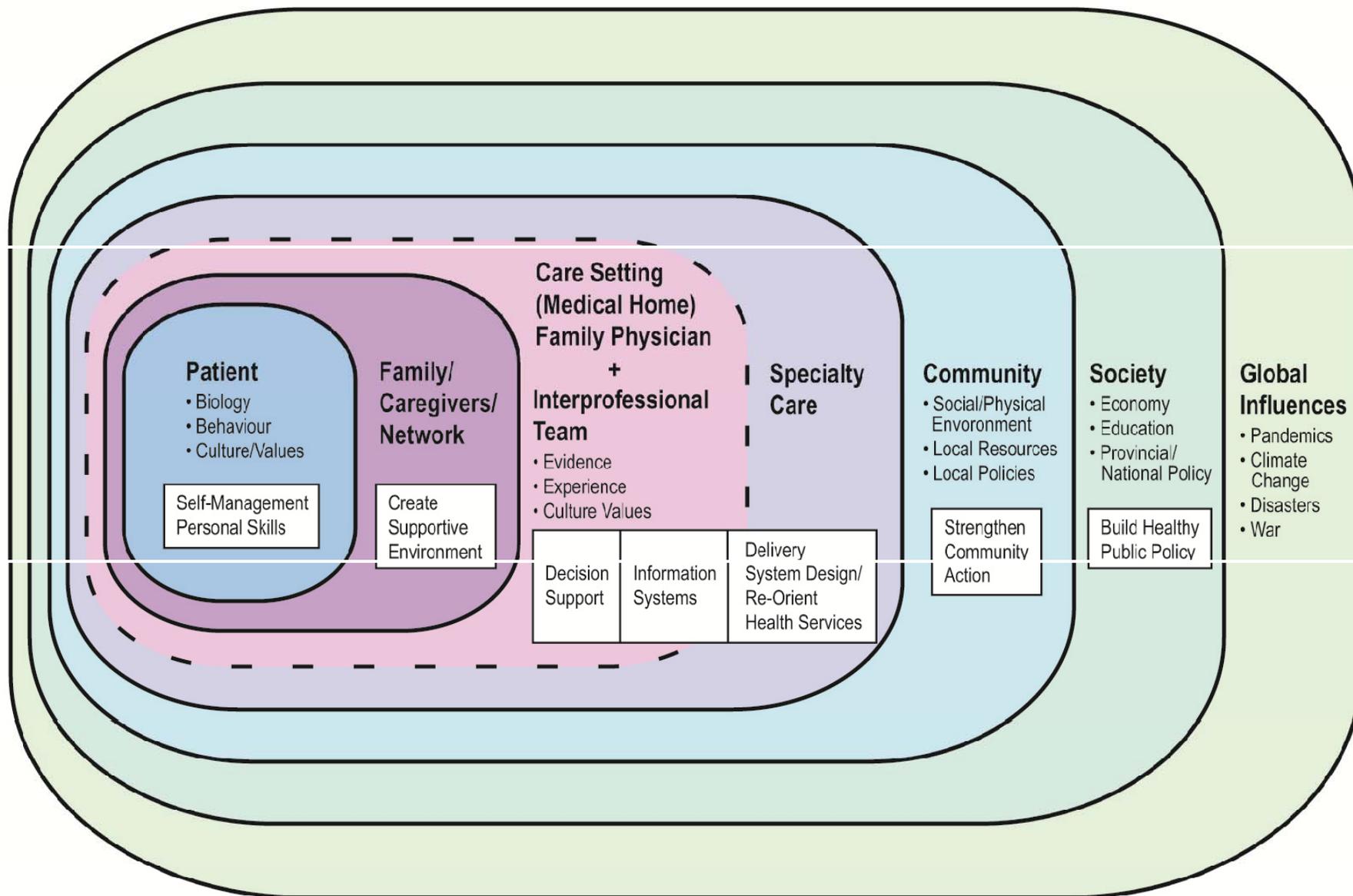
- Partly historic
- When all the health problems were acute, it may have been appropriate
- Partly because health system leadership/ spokespeople is often institutionally based
- We reward that focus
- Media likes high tech stuff ('machines that go ping')
- Visible and obvious
- Easier to demonstrate 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

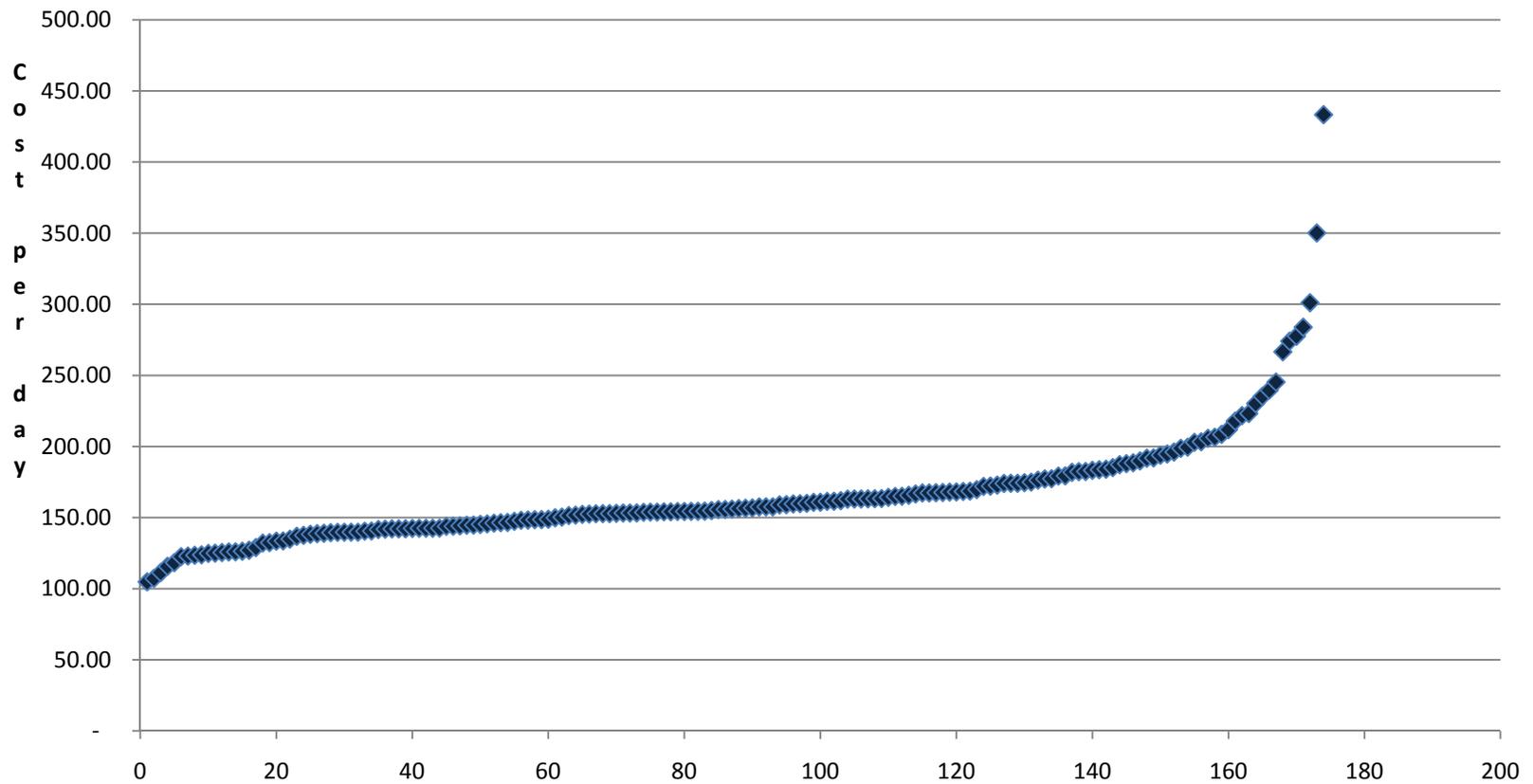
- What behaviour is rewarded?
  - Edifice complex again
  - Oliver Twist and Noah's Ark again
- What is (implicit) maximand for managers?
  - Is increasing size of budget easier than addressing efficiency/change issues?
  - What skills should managers have?
    - Managing (aka manipulating) media
    - Managing (aka manipulating) politicians
    - Do we reward knights or knaves\*?

• \* Le Grand, J. (2003). *Motivation, Agency and Public Policy: Of Knights and Knaves, Pawns and Queens*. Oxford, Oxford University Press.

	Demand Side	Supply Side
Price	Consumer co-payments	<ul style="list-style-type: none"> <li>• Design/structure of payment schedule</li> <li>• Activity Based Funding</li> <li>• Private Sector provision to improve efficiency</li> </ul>
Quantity Volume	Eligibility limitations	<ul style="list-style-type: none"> <li>• Utilization review to improve efficiency</li> <li>• Capacity Controls</li> </ul>

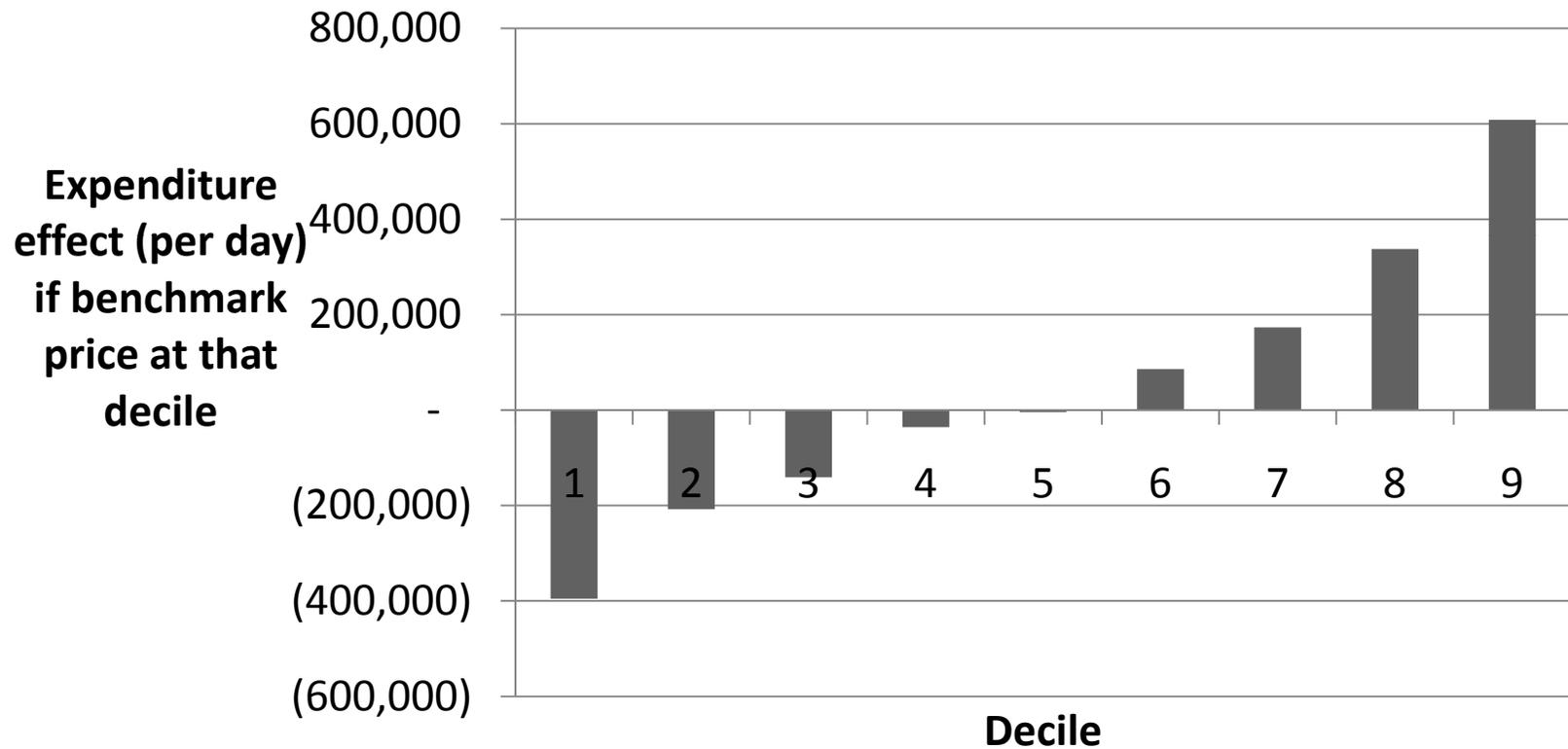
*NB: Private sector financing is not a cost control strategy*

# Distribution of weighted cost per day, Alberta long term care facilities, 2009

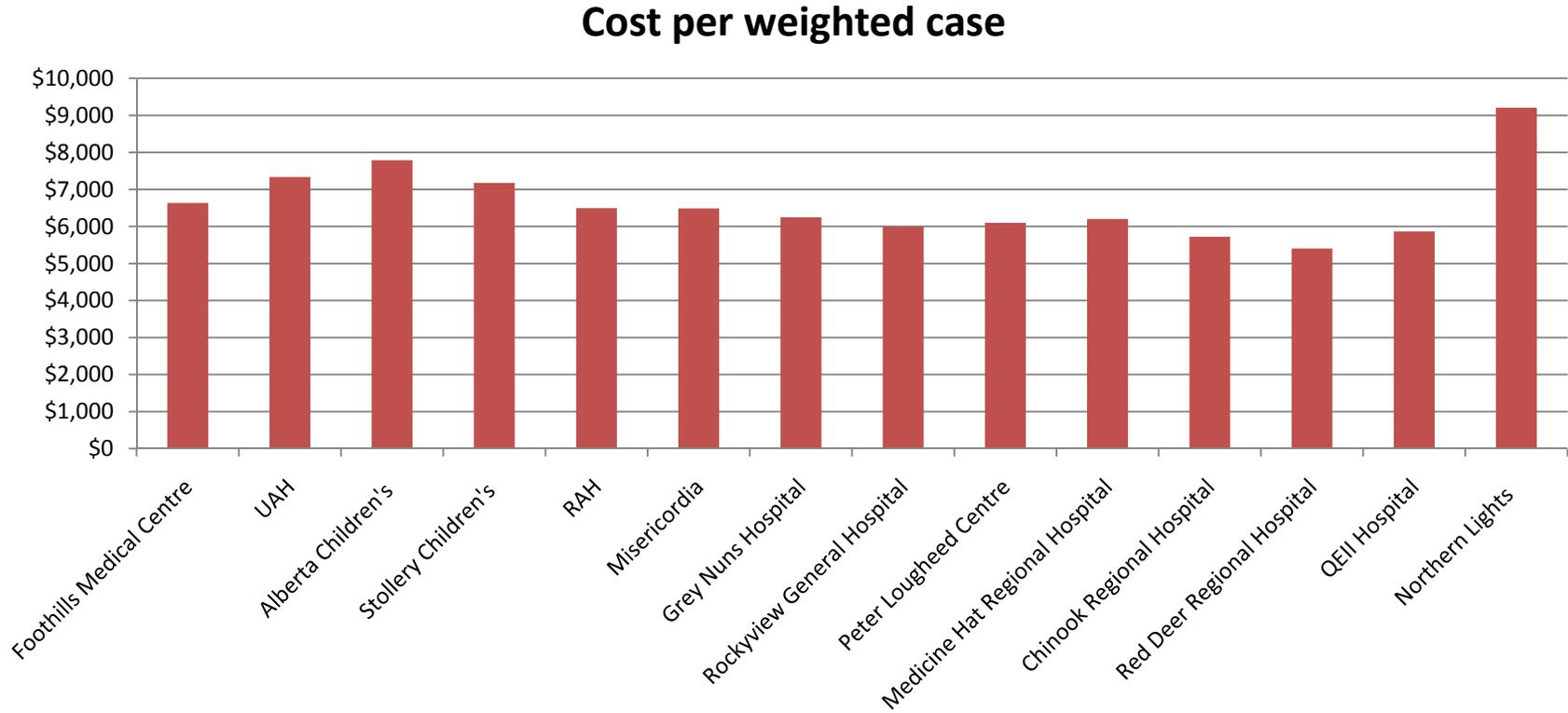


# Policy choices:

different benchmarks have different effects



# 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

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- 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

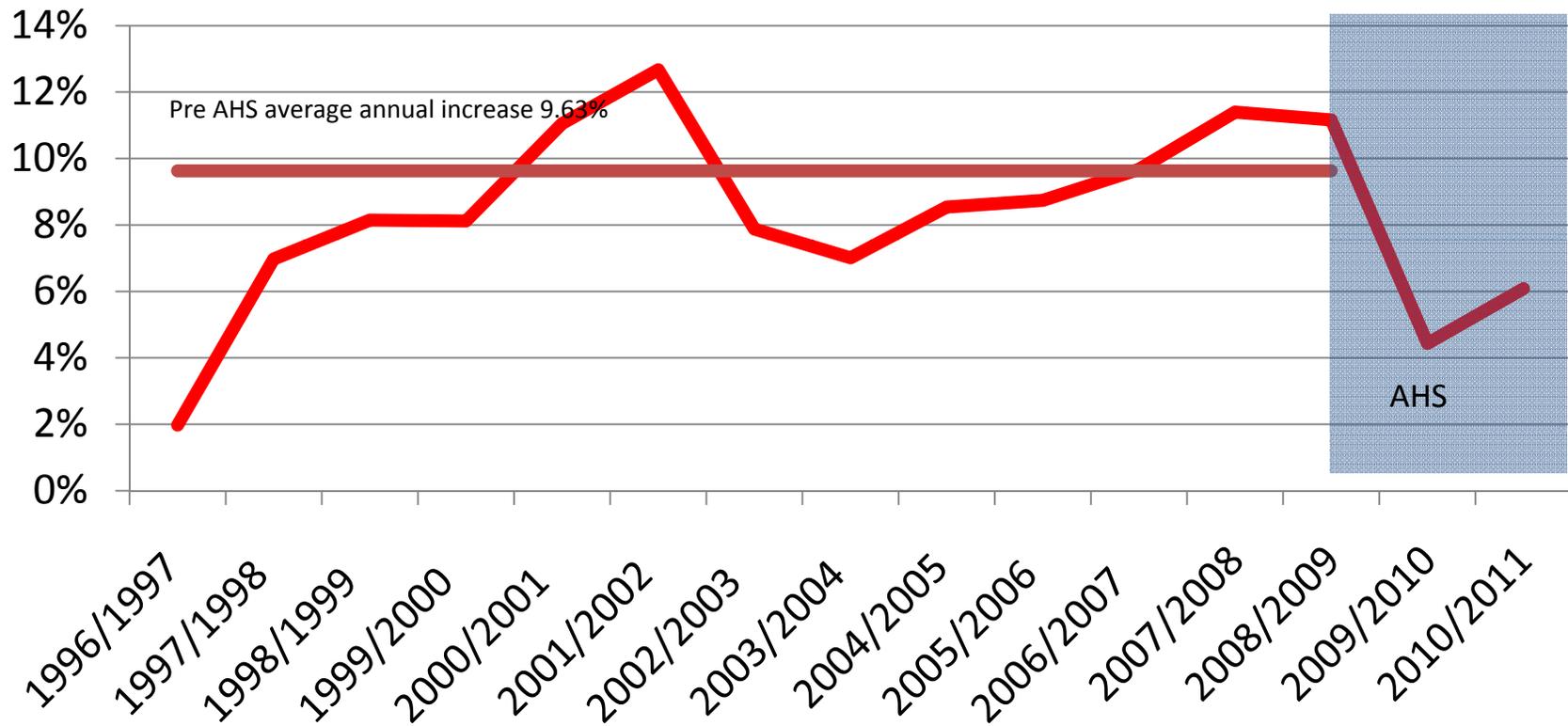


## 2009/10 Performance Agreement Targets for President and CEO

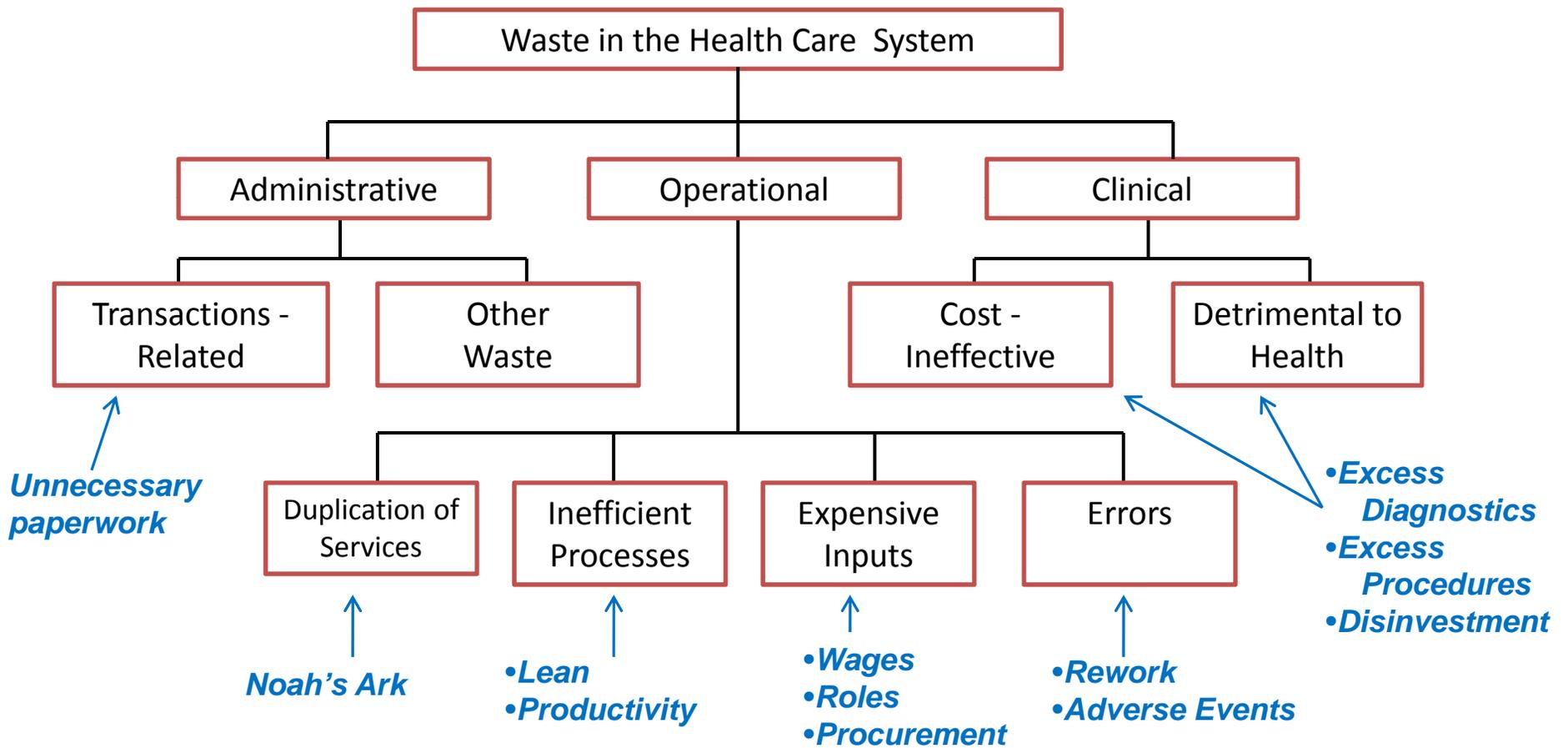
Goal	Focus	Performance Measure	Baseline	2009/2010 Target	3 year Target	Weighting	% of Bonus			
							100%	66%	33%	0%
Access	Improving access	Number of alternate level of care patients in acute care	700	550	350	10%	≤ 550	≤ 650	≤ 700	> 700
	Decreasing wait times	Wait time in Emergency Department for uncomplicated cases (90 <sup>th</sup> percentile)	5.6 hours	5 hours	4 hours	10%	≤ 5 hours	≤ 5.2 hours	≤ 5.3 hours	>5.3 hours
		Wait time in Emergency Department for complex cases (90 <sup>th</sup> percentile)	16.1 hours	14 hours	8 hours	10%	≤ 14 hours	≤ 15 hours	≤ 16 hours	>16 hours
		Wait time for hip replacement surgery (90 <sup>th</sup> percentile)	33 weeks	30 weeks	26 weeks	10%	≤ 30 weeks	≤ 31 weeks	≤ 32 weeks	>32 weeks
Quality	Learning and improving	Develop incident reporting system (including common definitions, approaches, etc.)	n/a	Completed by December 31, 2009	n/a	10%	By Dec. 31, 2009	By Jan. 31, 2010	By March 31, 2010	Later than Mar. 31, 2010
	Improving population health	Seniors Influenza Immunization rates	58%	63%	75%	10%	≈ 63%	≈ 62%	≈ 60%	< 60%
	Responsive to consumers and communities	Establish Health Advisory Councils	n/a	12 HACs by March 31, 2010	n/a	10%	12	-	-	-
Sustainability	Living within our means	Any bonus within the sustainability component is contingent on achieving Board-endorsed budget targets.								
	Fit for the future	Implement organizational structure with associated HR and financial delegations, and budget assignment.	n/a	By September 30, 2009	n/a	10%	By Sept. 30, 2009	By October 31, 2009	By Dec. 31, 2009	Later than Dec. 31, 2009
	Workplace of choice	Develop Board-endorsed human resource management plan.	n/a	By December 31, 2009	n/a	10%	By Dec. 31, 2009	By Jan. 31, 2010	By March 31, 2010	Later than Mar. 31, 2010
		Board-endorsed Strategic Plan	n/a	By June 30, 2009	n/a	10%	By June 30, 2009	By Sept. 30, 2009	By Oct. 31, 2009	Later than Oct. 31, 2009

# Annual increase in health spending\* in Alberta

\* excluding EMS, AADAC



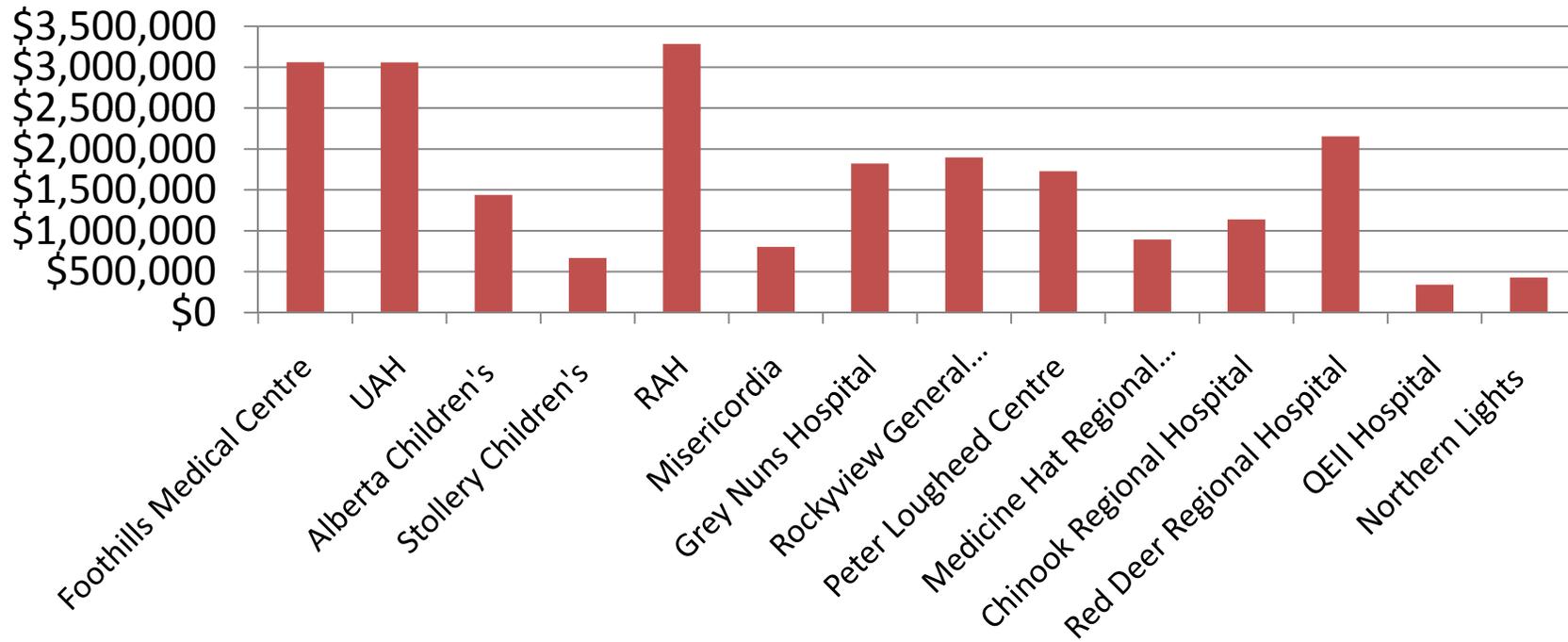
# Conceptual model to analyze waste



Source: Bentley, T. G. K., R. M. Effros, et al. (2008). "Waste in the U.S. Health Care System: A Conceptual Framework." *Milbank Quarterly* 86(4): 629-659

# Improving quality is one strategy to reduce costs

## Savings from 25% reduction in 7 day re-admissions



# 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:

Robert G. Evans, M. L. Barer, et al. (2010). "Pharaoh and the Prospects for Productivity in HHR." *Healthcare Policy / Politiques de Santé* 5(3): 17-26

# 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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