

Innovating Across an entire health care  
system:

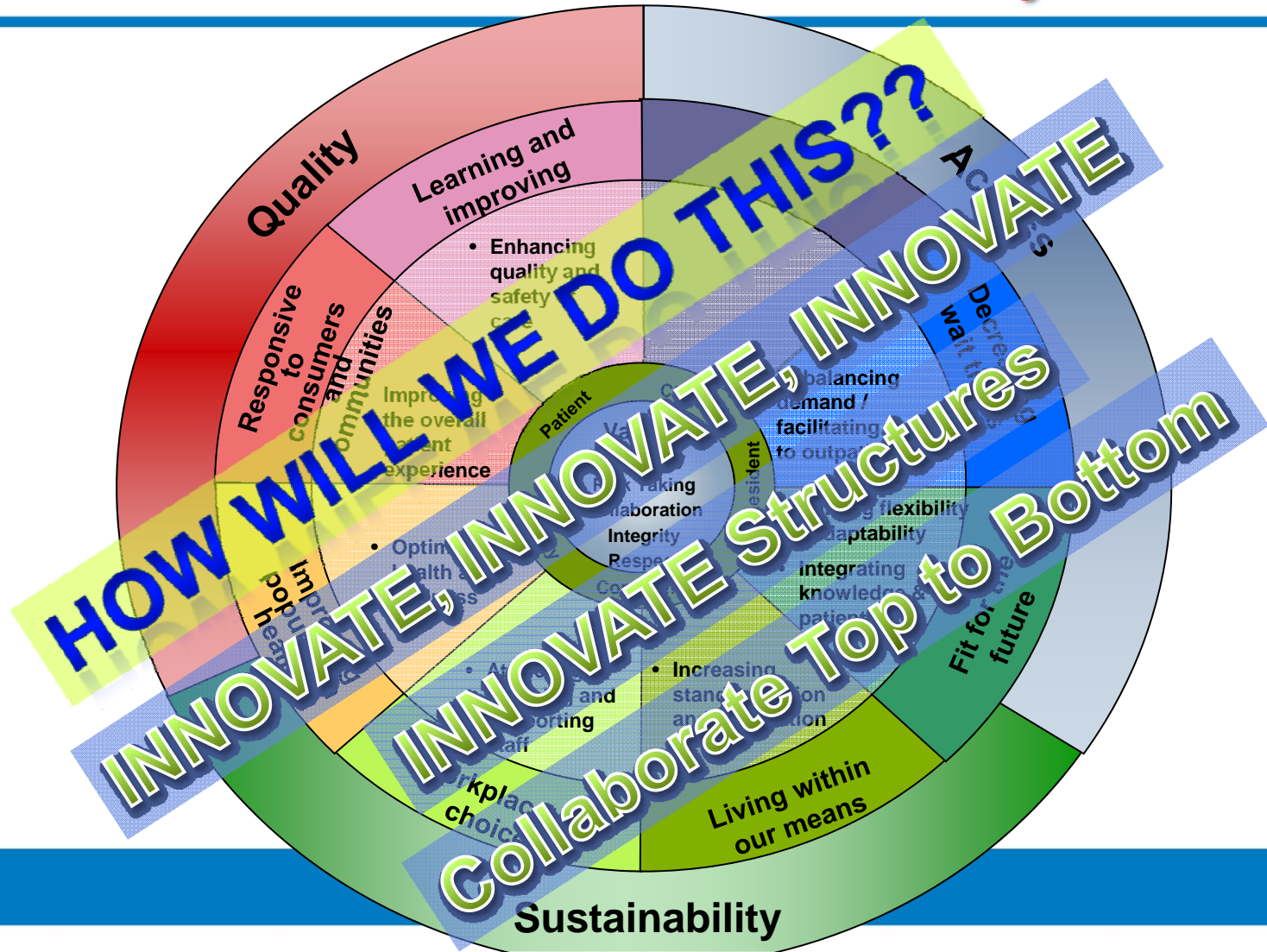
Strategic Clinical Networks in Alberta,  
Canada

**Blair J. O'Neill MD FRCPC**

Senior Medical Director, CVH + Stroke SCN, Alberta Health Services  
Immediate Past President, Canadian Cardiovascular Society



# Alberta Health Services: Strategic Plan focused on Access, Quality and Sustainability



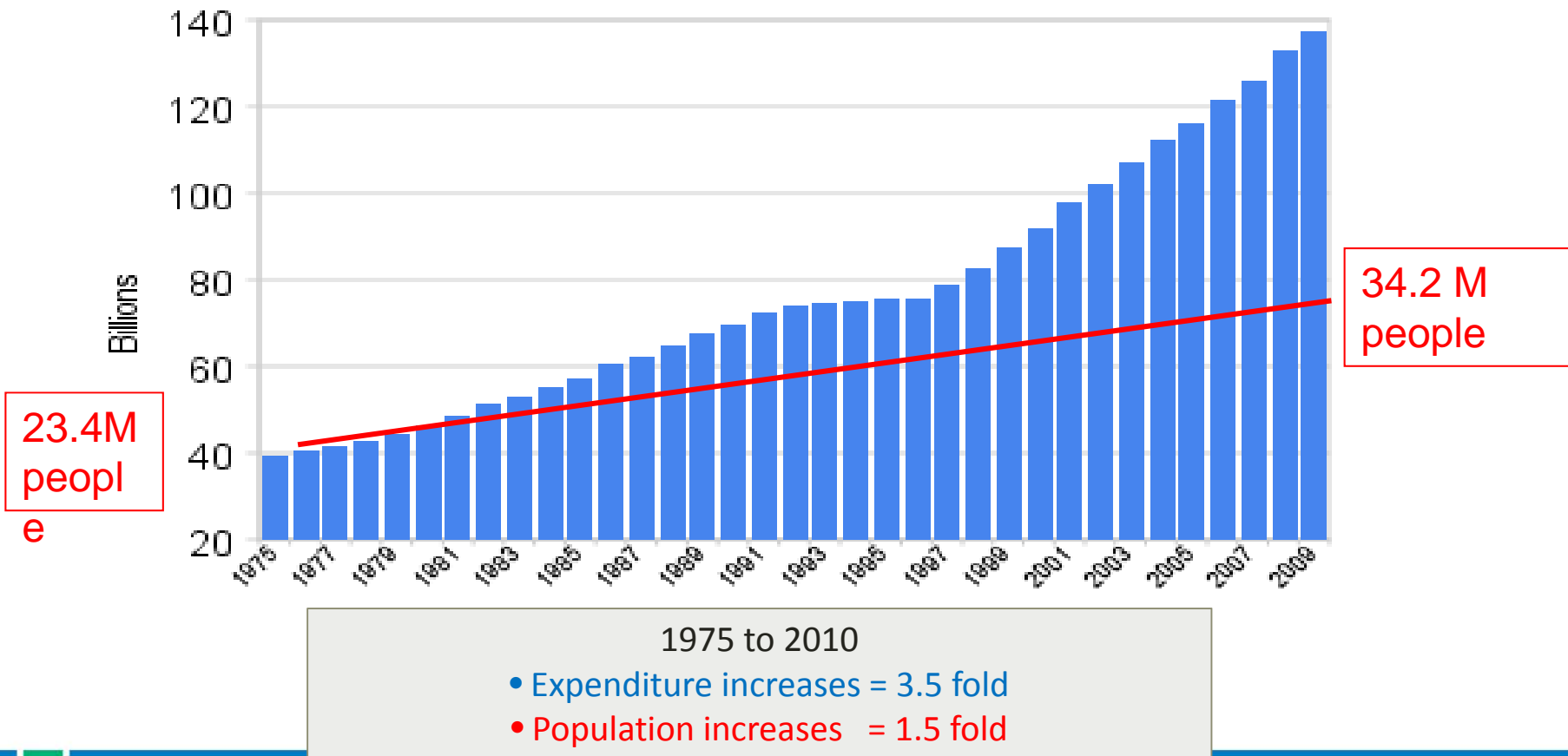


# *The Landscape in 2013*



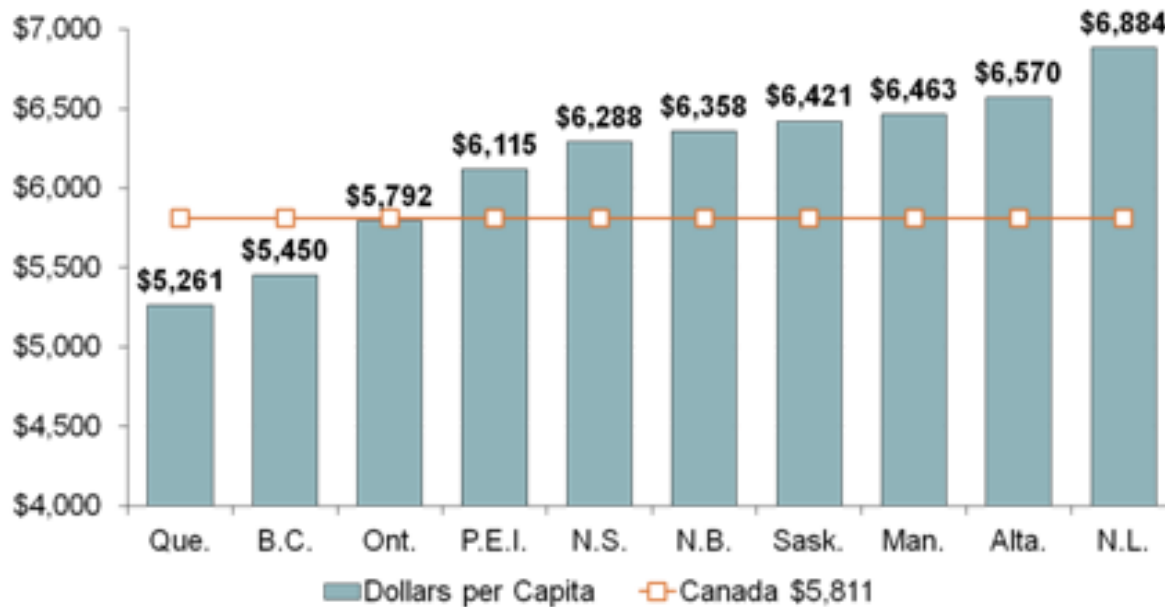
# Non-sustainable cost increases in Canada

Total Health Expenditure in Constant 1997 Dollars



# Expenditures per Province in Canada

Total Health Expenditure per Capita, Provinces and Territories, 2011 (Forecast)



Y.T.	\$8,995.6
N.W.T.	\$10,242.3
Nun.	\$11,928.6

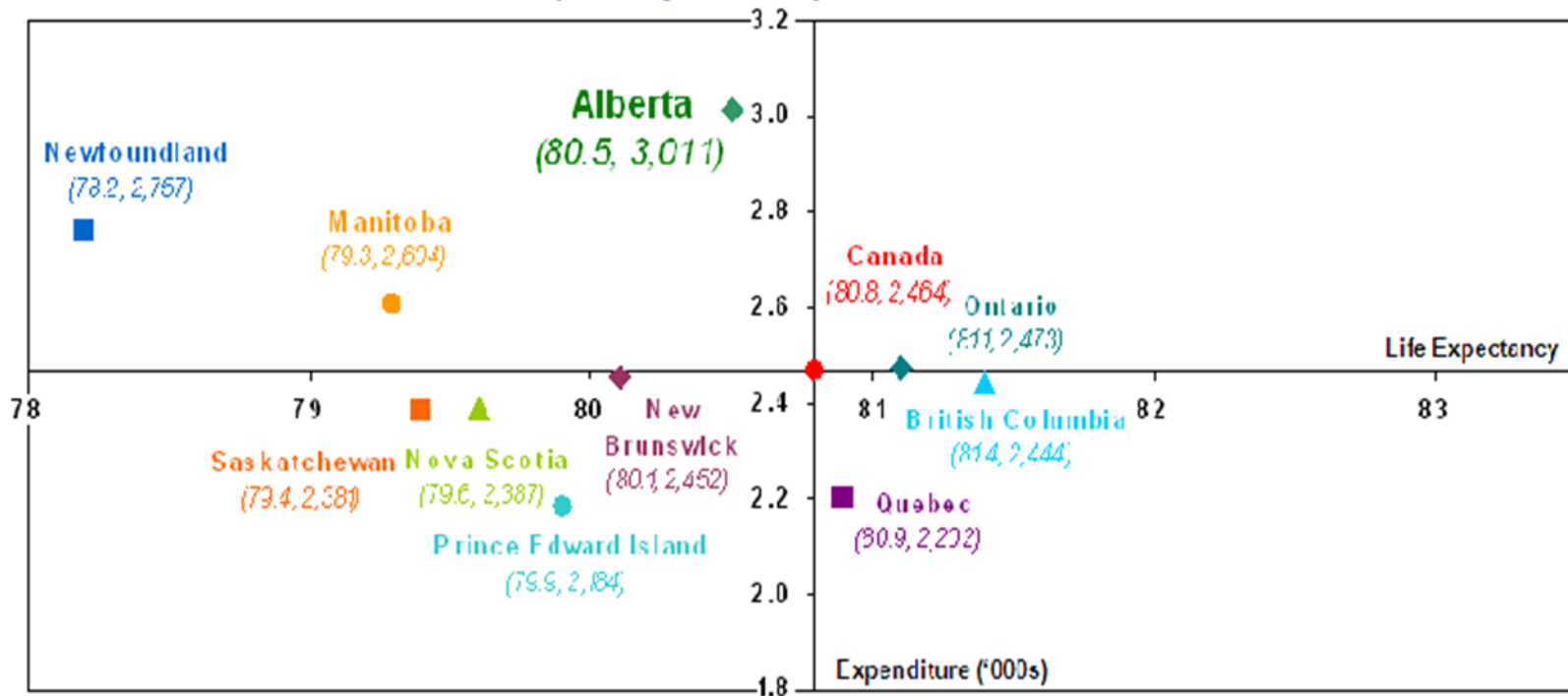
Sources  
National Health Expenditure Database, CIHI; Statistics Canada.

17

# Are we getting the results?

## Does Size of Expenditures Matter?

Total Life Expectancy<sup>1</sup> vs. Constant (2002)<sup>2</sup> Provincial Health Expenditure<sup>3</sup>  
per Adjusted Capita<sup>4</sup>, for 2006



<sup>1</sup>Source: Statistics Canada, Table 102-0511 - Life expectancy, abridged life table, at birth, Canada, provinces and territories, annual (years), CANSIM.

<sup>2</sup>Adjusted for inflation using Alberta-specific CPI for Alberta and Canadian CPI applied across remaining provinces. Statistics Canada, CANSIM, table 326-0021.

<sup>3</sup>Source: Canadian Institute for Health Information, National Health Expenditure Trends, 1975 - 2008 (Ottawa, Ont.: CIHI, 2008).

<sup>4</sup>Adjusted for Age and Gender differences in expenditure using the Indirect Method and weighting by All-Sector Expenditure in Alberta (2007/2008 Population-Based Funding Weights). Alberta's weights were applied across all provinces.

# *Changes are needed:* Alberta as an example

---



# *Innovation*

---

- Translating ideas or inventions into a goods or services that creates value for clients or customers
- In the health care context, an innovation can be a device, a drug, a technique, a method, a system or a service.
- Innovations can be 'procured' from outside or they can be developed 'within'.



## *Provincial Mandate of AHS/SCN's*

---

- Improve population health
- Eliminate health disparities
- Ensure continuous quality improvement
- Innovate health services
- Discover and translate new knowledge
- Focus on patient outcomes
- Develop appropriate clinical practices
- Make patient safety a priority
- Ensure value for money + sustainability through evidence

# A Successful and Sustainable Formula for Quality Health Care

\$\$\$\$



**Initial SCN Goal: Innovate, Eliminate 'Waste' and Reinvest Resources  
To improve Quality and Create a Sustainable System**

## *Why Networks?*

- 
- Facilitate collaboration, joint decision-making and shared learning
  - Promote the use/uptake of clinical experience, knowledge and research to reduce variation and improve care
  - Involve partners along a broad continuum in planning, improving and innovating healthcare services
  - "a crucial propellant for innovation is collaboration"

# Strategic Clinical Networks

*Support Provincial Innovation,  
Improvement and Sustainability*

- **Phase One (established June, 2012)**
  - Obesity, Diabetes and Nutrition
  - Seniors' Health
  - Bone & Joint
  - **Cardiovascular Health and Stroke**
  - Cancer
  - Addiction & Mental Health
- **Phase Two (TBA, 2013)**
  - Population Health and Health Promotion\*
  - Primary Care and Chronic Disease Management\*
  - Maternal Health
  - Newborn, Child and Youth Health
  - Neurological Disease, ENT and Vision
  - Complex Medicine (current Respiratory Clinical Network + others TBD)



# Composition of an SCN

**SMD-VP Dyad Co-leads**  
**Scientific Director/Associate SD**  
**Executive Director/Network Manager**

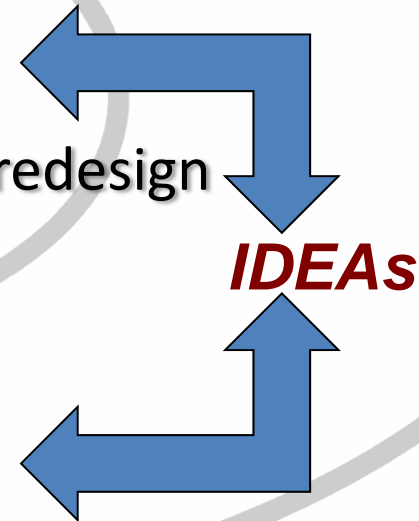
## **Role of Core Committee**

- Engagement Bottom to Top
- Determine priorities and strategic direction
- Represent as broad a group as possible but especially their immediate constituency – rural/urban
- Evidence Based Best Practices
- Think Innovation; “Next” Practices; System redesign
- Suggest things we can stop
- Think Geographic Equity
- Think Enhanced Quality

Core team  
Clinicians+  
Strategy+

Support teams  
AHS + AHN + Zones

Front Line Teams  
Wider public + patients, HAC's,  
community groups and other  
external stakeholders



# SCN's -an integral component of Alberta Innovation and Research & Development



## Health is a **global business**:

- ✓ Improving Prevention, Health, and Health Care Quality and Sustainability

## Alberta has **major competitive advantages**

- ✓ Our Provincial Approach is unique
- ✓ Our Health system is unique
- ✓ Our Universities are aligned
- ✓ Our R and D structure is unique
  - ☐ Health/Energy/Environment/Food

## Health generates **major economic value**

- ✓ MANY industries related to health
- ✓ Major Supply chains (drugs/lab /repairs)
  - ☐ Health Human Resources
- ✓ Rapid and low cost access to **high quality health data = a key**

# SCNs align 'top to bottom'

## SCN's engage academics with Health Care System



Patients



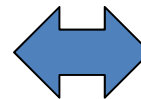
Administrators



Providers



Policy Makers/Payers



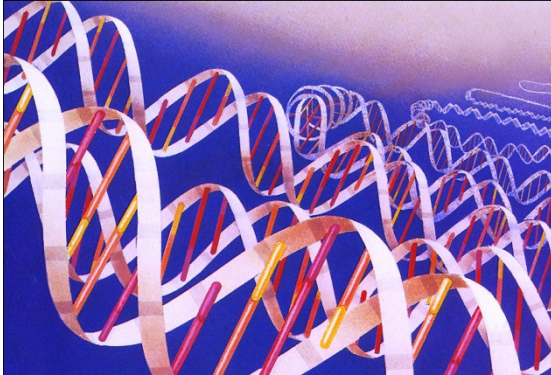
Researchers



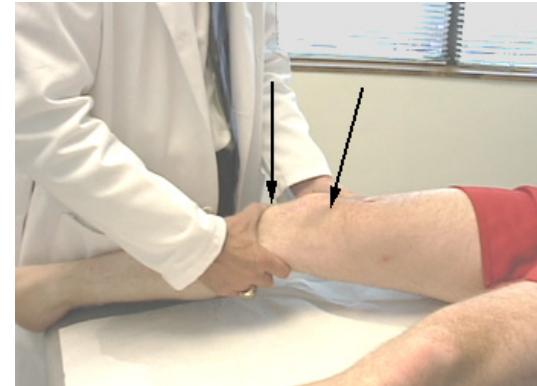
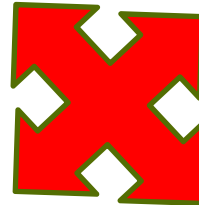
# Integrating the four pillars of health research

research networks connect, analyze, innovate and export

Basic research

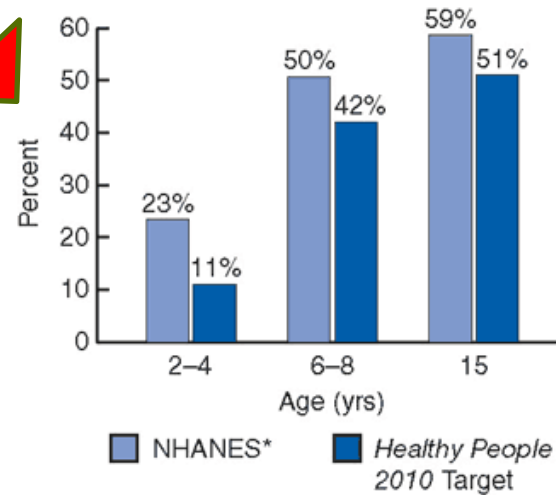


Health systems research



Clinical research

Prevention, Population and Public Health research

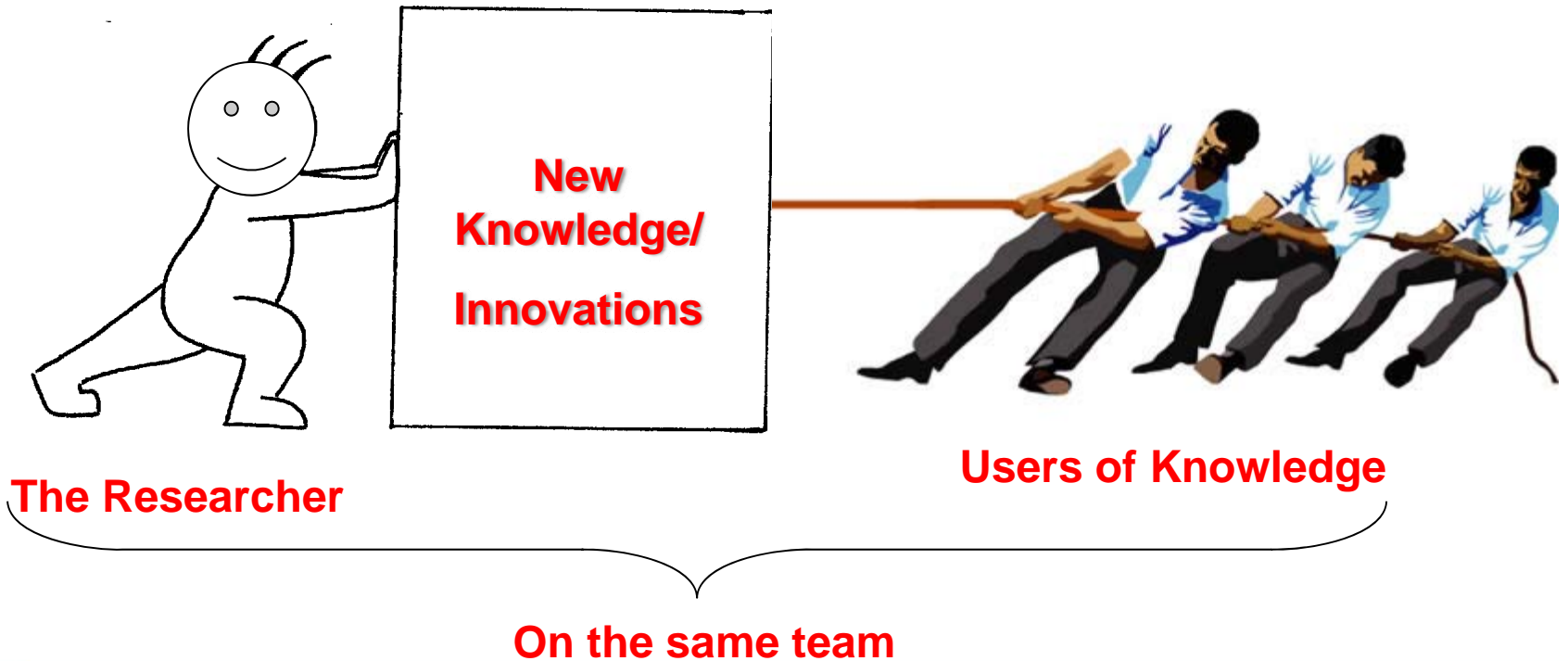




# *The SCN's can Address Translational Gaps in Research Uptake*



# The Best 'Knowledge Translation Networks' with engaged end-users (clinical, policy, public, etc)



# *Highly Qualified People = Key collecting and analyzing linked data*

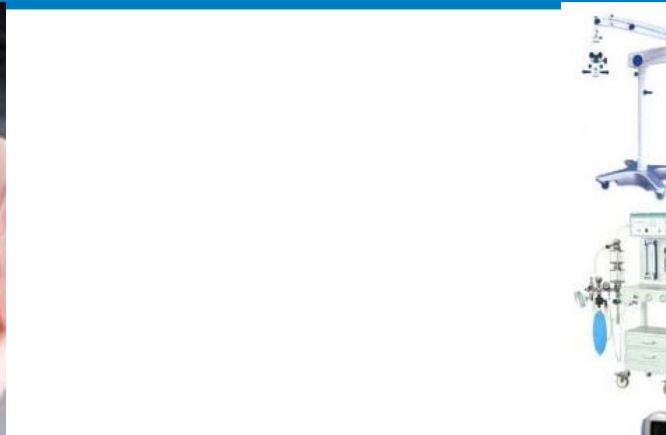


## **Biggest Research/Innovation Opportunities**

- ✓ Provincial Networking with Partners (leverage)
- ✓ Easy and Rapid Data Access
- ✓ Exceptionally High Quality Data
- ✓ Linked and Analyzed Data
- ✓ @ Low Cost

# Opportunities

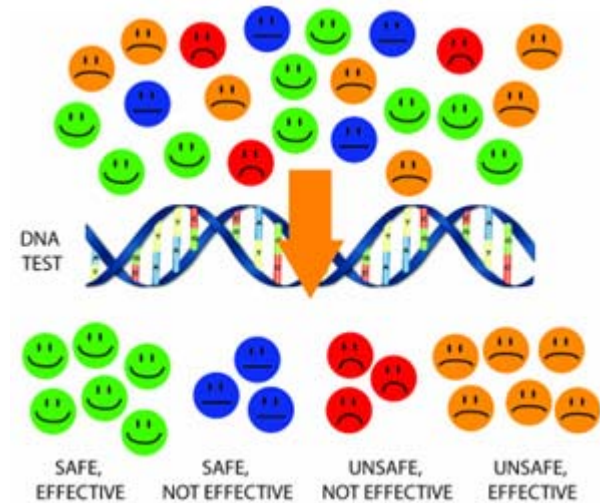
*comparative effectiveness data will define value for \$\$*





# Other Opportunities

*data to inform personalized medicine*



[http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_132382.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_132382.pdf)

# *Research and Innovation: Key enabler to achieving the highest performing health system*

---

Alberta Health Services (AHS) partnered with the Universities in the Academic Health Network (AHN) enact Alberta's Health Research and Innovation Strategy (AHRIS) in order to achieve:

1. improved health for Albertans
2. evidence-informed health care across the province
3. a sustainable health care system from the direct and indirect economic benefits of these approaches

## *Skilled People/Innovation Platform/Knowledge Translation*

---

- Test new ideas
- Translate new strategies to improve acute care and CDM
- Improved and completely linked Health Informatics Capability in order to mine data for innovations
- Enhanced Clinical Trials Program
- Provincial Biobanking and “Alberta Genomics for Health” Plan
- Targeted technology and product development
- Personalized Medicine
- Support centers of excellence and networks in critical disciplines

# *Research and Innovation: Key enablers to achieving the highest performing health system*

- 1. Align AHS within the Alberta Health Research Policy Framework**
  - Map to Alberta's Health Research and Innovation Strategy
  - Measure impact of Research, Innovation and KT
- 2. Build Stronger Partnerships**
  - Academic Health Network (AHN) and AIHS
  - Physicians and other clinicians
  - Attracting research and innovation partners to Alberta
  - Industry
- 3. Maximize Value of Health Care System Resources**
  - Leverage AHS Resources with Partners
  - Further develop and link high quality data

# *Research and Innovation: Key enablers to achieving the highest performing health system*

- **4. AHS Resources as an engine for research**
  - QI and System Sustainability supported by excellent research
  - Prioritizing, Funding and Measuring Research in AHS
  - Start Small with High Impact Studies; seed capacity
- **5. Create a culture of research and innovation in AHS**
  - *Strategic Clinical Networks* as Provincial Mechanisms
- **6. Incent Research of High Value to AHS**
  - Incenting Strategic and Investigator Initiated Research of value
  - Sharing Gains of Research with those who did the work
  - Awards and Recognition



***Strategic Clinical Networks: Bringing Science and  
Best Practices Together to Define Next Practices  
integrate to innovate***



*Stars are aligned - **now***



**Thank You**