

**Alberta: The ‘Living  
Laboratory’  
*for the World***

# Health and Health Care



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**

# Health and Health Care in Alberta

*health is a big business*

## OIL + GAS + MINING

- >150,000 employed
  - ~ 7% of workforce
  - \$79B/yr to Alberta's GDP
    - ~ 27.6% of Alberta's GDP
- Oil sands
  - ~21,000 jobs
  - >\$3.7B/yr in royalties
  - \$100B in provincial and municipal taxes over 25 years
- R and D
  - ~\$1B/year on R and D (2010)

## HEALTH + HEALTH CARE

- >190,000 employed
  - ~ 9% of workforce
  - \$21B/yr to Alberta's GDP
    - ~ 7.6% of GDP (health care alone)
- Health Care
  - 100 hospitals ~100,000 public jobs
  - Every dollar spent on public health care generates 21.7 cents in taxes and import duties (Conf. Board – 2013)
    - ~ \$2.5B/year in Alberta in taxes/duties
    - Plus private health care businesses
- R and D
  - ~\$ 478M/year (in 2008)
    - Included ~\$75M/year in biotech

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**Health Information = Oil**

# **AHS UNIQUE OPPORTUNITIES**

**STRATEGIC CLINICAL NETWORKS (SCNS)**

**WITH**

**STRATEGIC FOCUS**

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## **STRATEGIC CLINICAL NETWORKS (SCNS)**

**WITH**

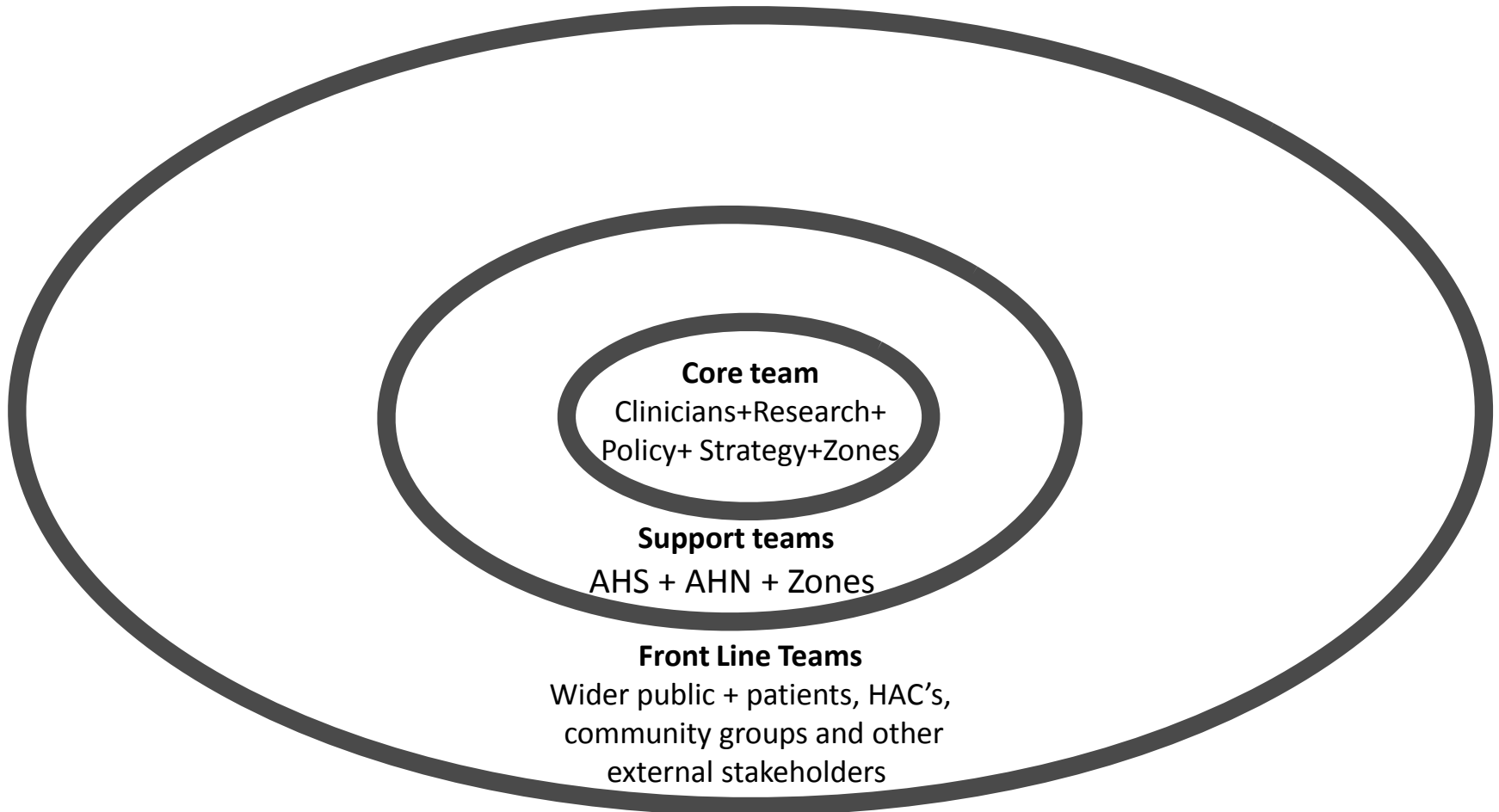
## **STRATEGIC FOCUS**

**IN MAJOR POPULATIONS WITH GLOBAL RELEVANCE:**

1. Diabetes, Obesity & Nutrition
2. Seniors' Health
3. Bone & Joint
4. Cardiovascular and Stroke
5. Cancer
6. Addiction & Mental Health
7. Newborn, Child and Youth Health
8. Maternal Health
9. Complex Medicine - Respiratory, Renal + others TBD
10. Population Health and Health Promotion
11. Primary Care and Chronic Disease Management
12. Neurological Disease, ENT and Vision

# SCN/OCN's engage key communities

*"bottom up" = the game changer*

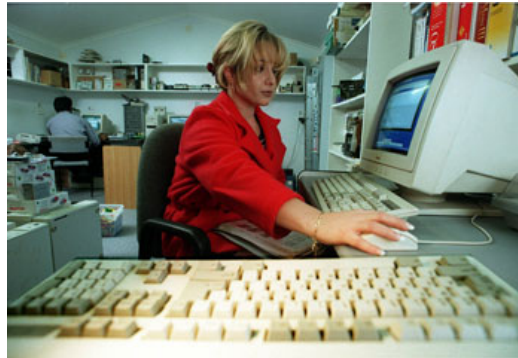


# Key parties involved have *different incentives*

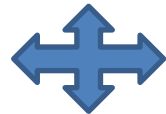
*Difficult trade-offs are required – SCNs = platform to negotiate*



Patients



Administrators



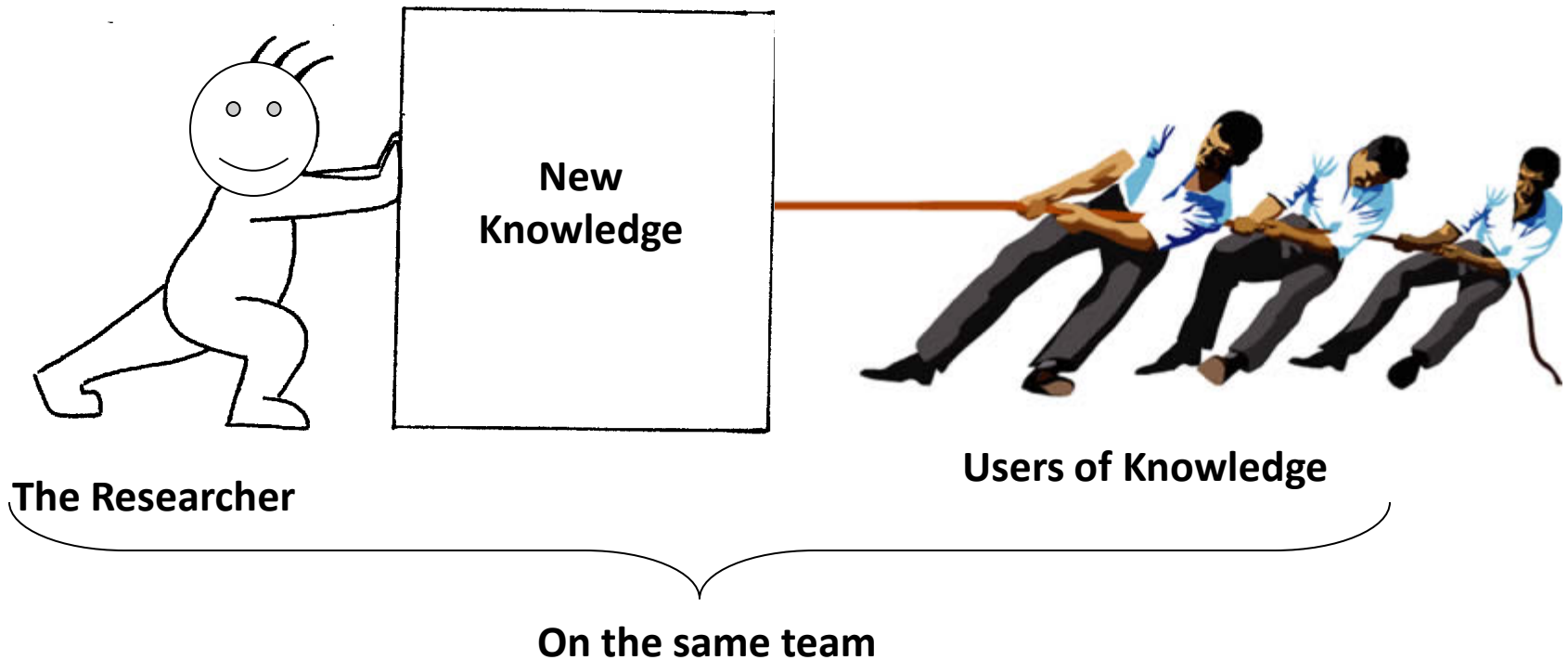
Policy Makers/Payers



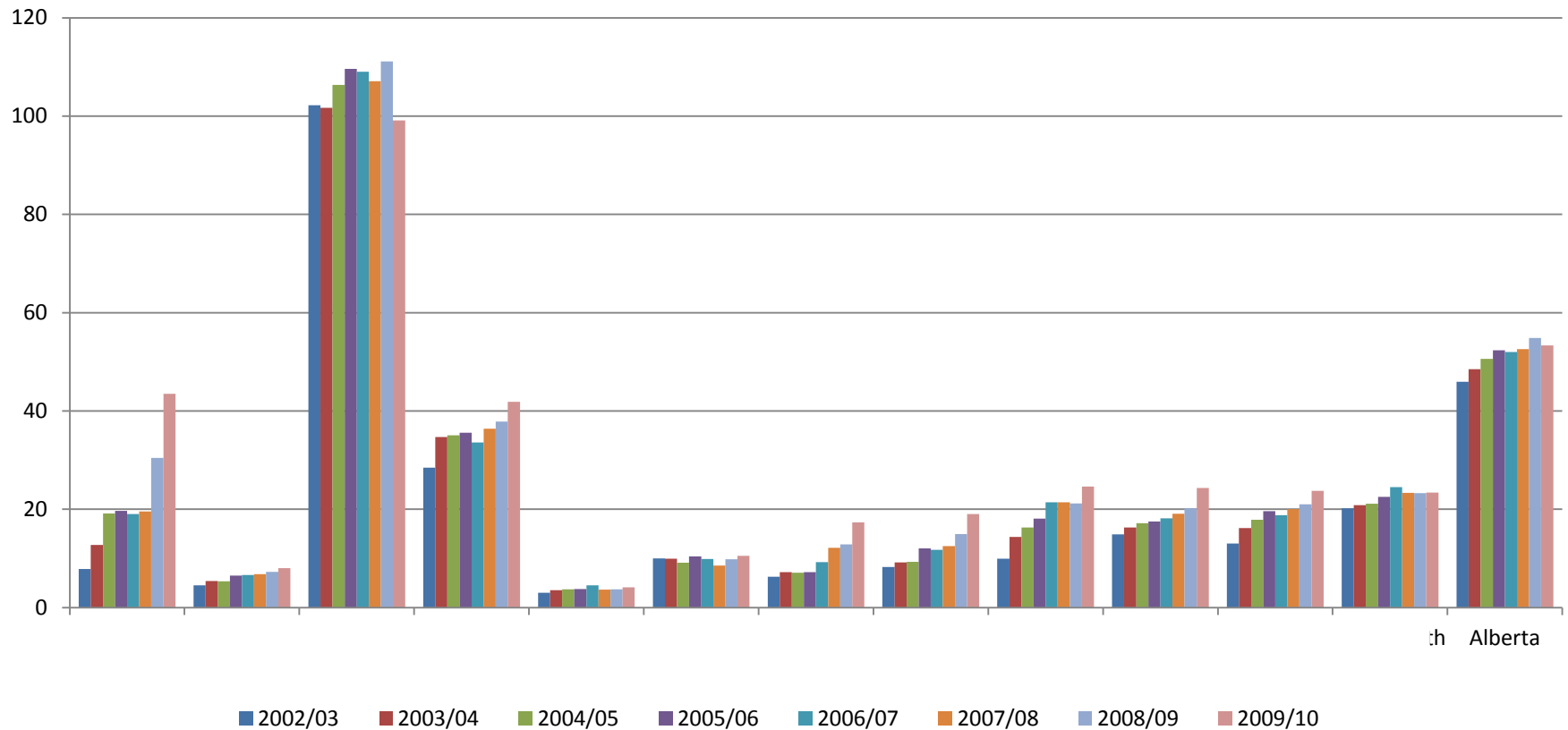
Providers



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



## Alberta Specialist Office Visit Rates per 1000 (Age/Gender Standardized)

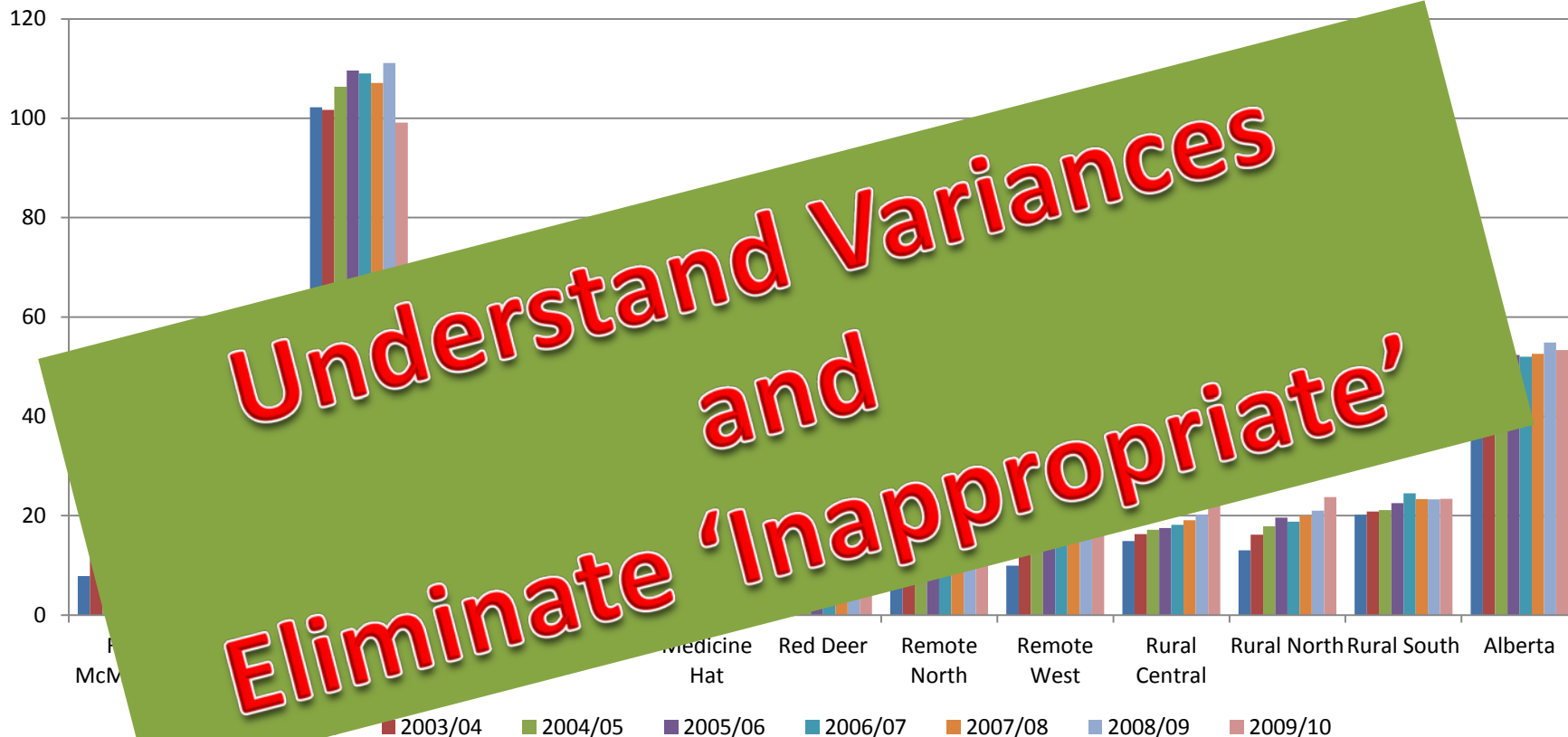




Alberta Health  
Services

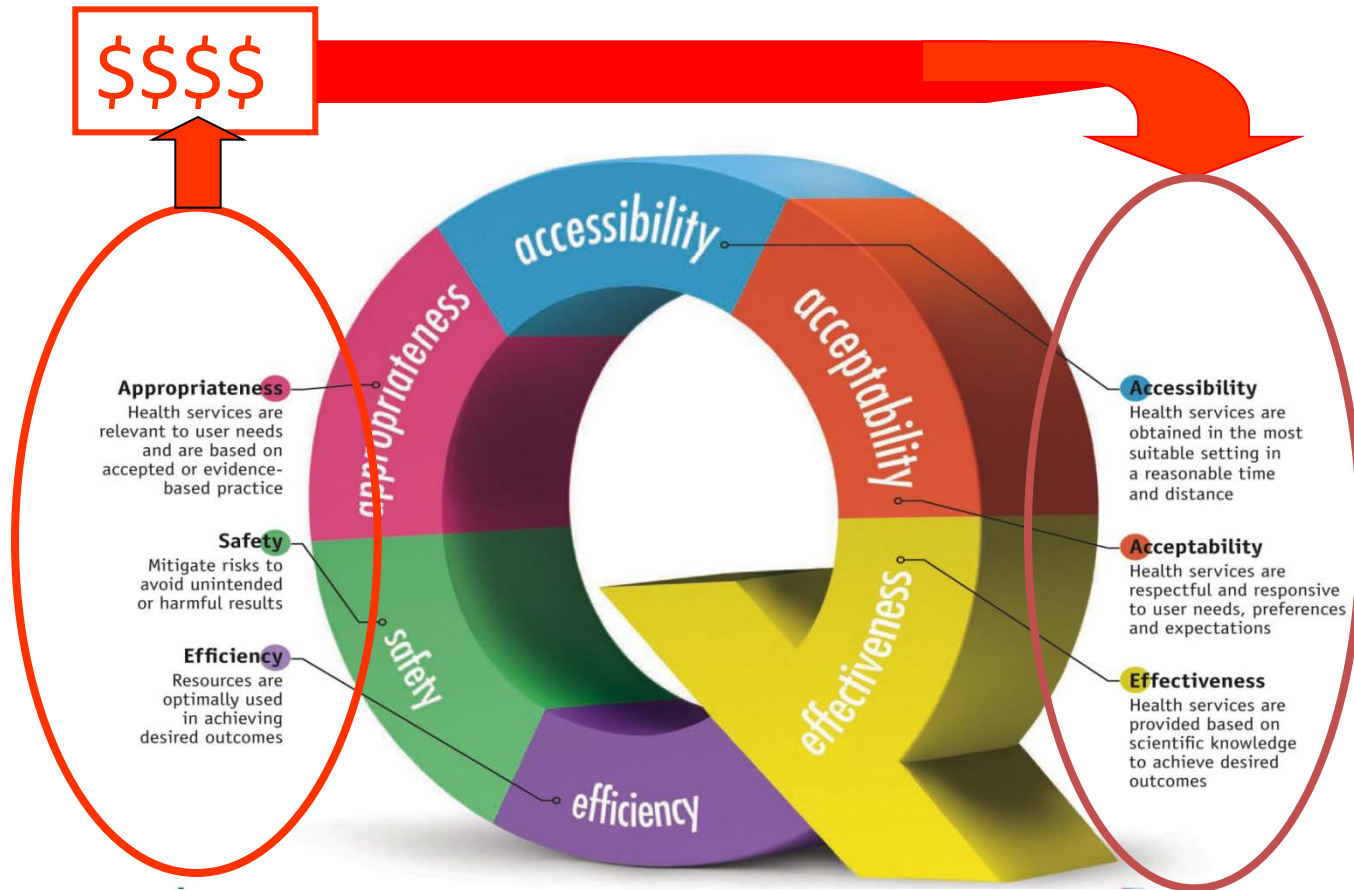
# *For Clinicians and Administration*

Alberta Specialist Office Visit Rates per 1000  
(Age/Gender Standardized)



# *For Policy: Direct Economic Benefits for Albertans*

## Improving Quality and Sustainability

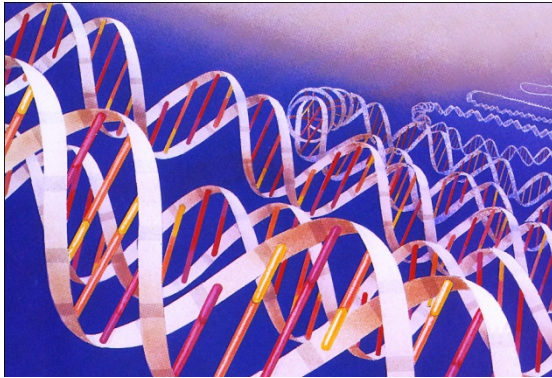


*Evidence can also generate value - externally*

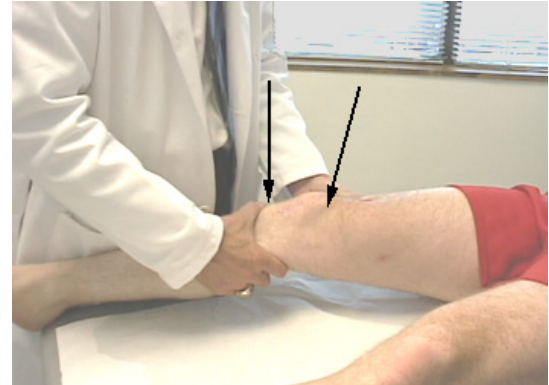
## For Researchers

# Integrate the four pillars of health research

*research networks to connect, analyze, innovate and export*



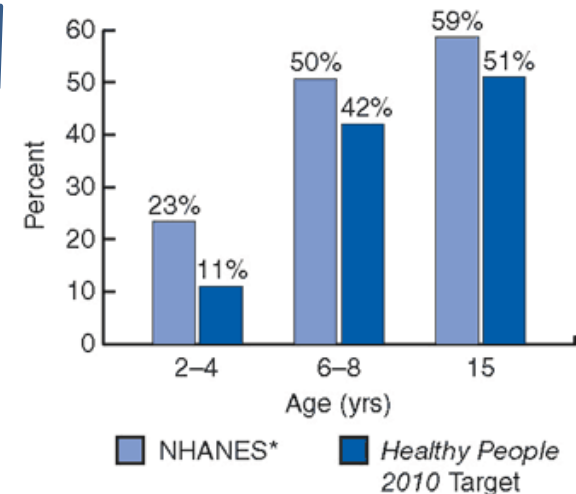
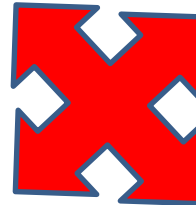
Basic research



Clinical research

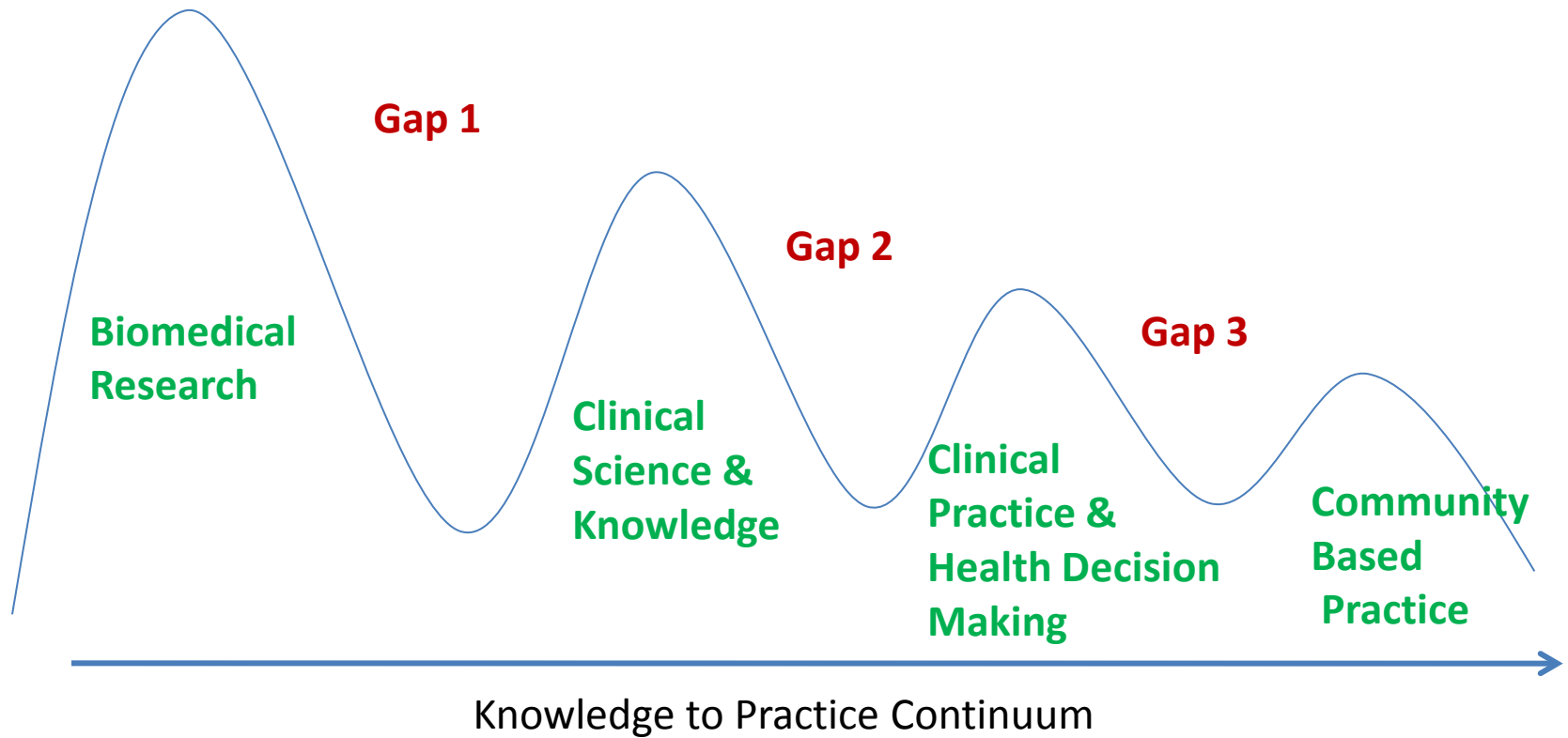


Health systems research



Prevention, Population and  
Public Health research

***For the System Overall* – Will be Able to Address  
Translational Gaps in Research Uptake**





# Highly Qualified People = Key

*collecting and analyzing linked data*



# Highly Qualified People = Key

*collecting and analyzing great data*



## Biggest Business Opportunities

Provincial Networking with Partners (leverage)

- ✓ Easy and Rapid Data Access
- ✓ Exceptionally High Quality Data
- ✓ Linked and Analyzed Data
- ✓ @ Low Cost





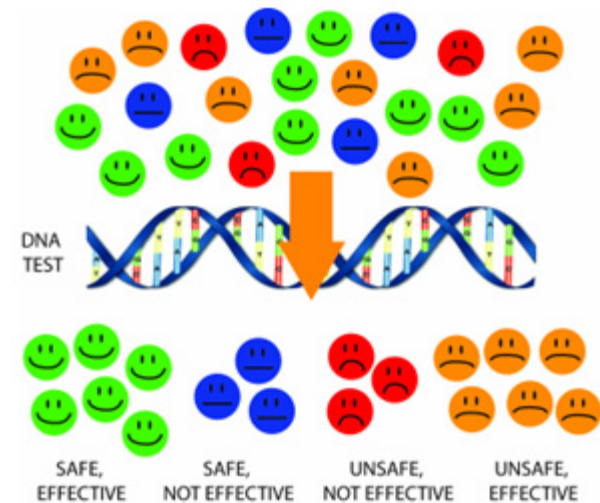
# Biggest Opportunity #1

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



# Biggest Opportunity #2

*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)

# Technologies to Support

- Workforce Education – HQP (import and export)
- Information Technologies and Networking
- Data Systems and Analytics
- Knowledge translation and change management
- Health Economics
- Biotechnologies and nanotechnology
- “Omics” (genomics, proteomics, metabolomics)
- Bioengineering

# *Our Biggest Problem to Overcome*







GenomeAlberta



UNIVERSITY OF  
ALBERTA



Alberta Health  
Services

University of  
Lethbridge



MOUNT ROYAL  
UNIVERSITY  
1910



CALGARY  
ECONOMIC  
DEVELOPMENT



INSTITUTE OF  
HEALTH ECONOMICS  
ALBERTA CANADA



UNIVERSITY OF  
CALGARY



.....and MANY OTHERS

# The Living Laboratory

*integrate to innovate*



Suggest we create processes to define how we can all fit

We need to avoid duplication and find synergies  
in creating 'the living laboratory'

# Start with SPOR: AIHS + AHS + AH + Universities

*CIHR matching to create our provincial platform*

## Our (Draft) Platform for Patient Oriented Research

1. Data Platforms and Services (NDAP; DIMR; Netcare; eHealth; Cancer; registries)
2. Pragmatic (*provincial*) clinical trials
3. Health systems research, implementation research and KT
4. Patient engagement research
5. Consultation and Research services
6. Methods support and development
7. Career Development in Methods and Health Services Research

Stars are aligned in Alberta - **now**

