



#### Health Care in Canada

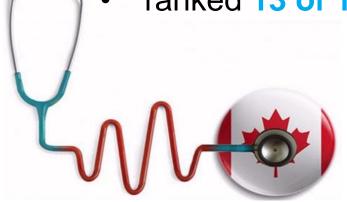
- Health Care is a deeply embedded in the Canadian identity.
- Sustainability is a significant challenge
- Aging population and rising rates of chronic illness
- Growing consumer influence on health care.





#### Canada's Performance to Date

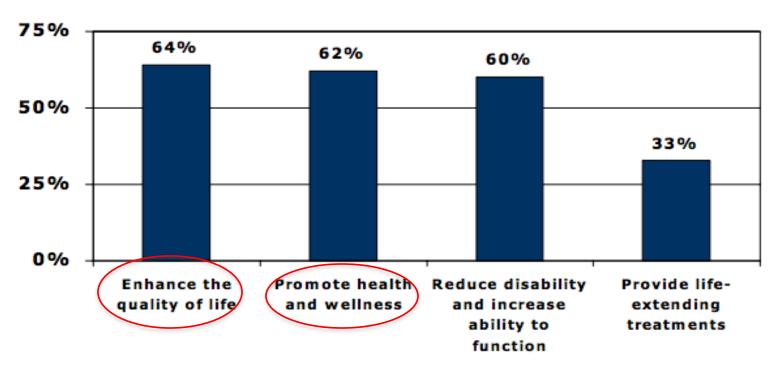
- healthcare consumes 50% of tax revenues
- among the highest cost/capita of OECD countries
- wait times and ALC rates remain a challenge
- lowest EMR adoption in the world
- increasing rates of chronic illness
- ranked 13 of 17 in use of innovation





# Health system goals viewed as very important

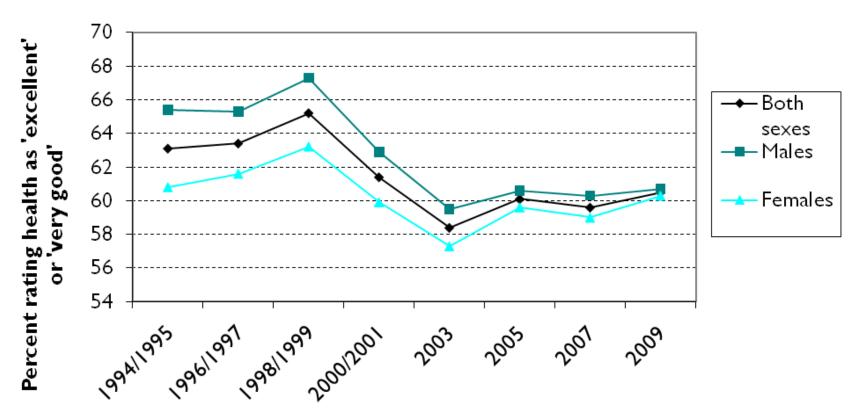
Percentage saying the goal should be "very important."



Source: Mendelsohn M. Canadians' thoughts on their health care system: preserving the Canadian model through innovation. Commission on the Future of Health Care in Canada; 2002 June. Figure 87, How important should each of the following goals be for the health care system; p. 68



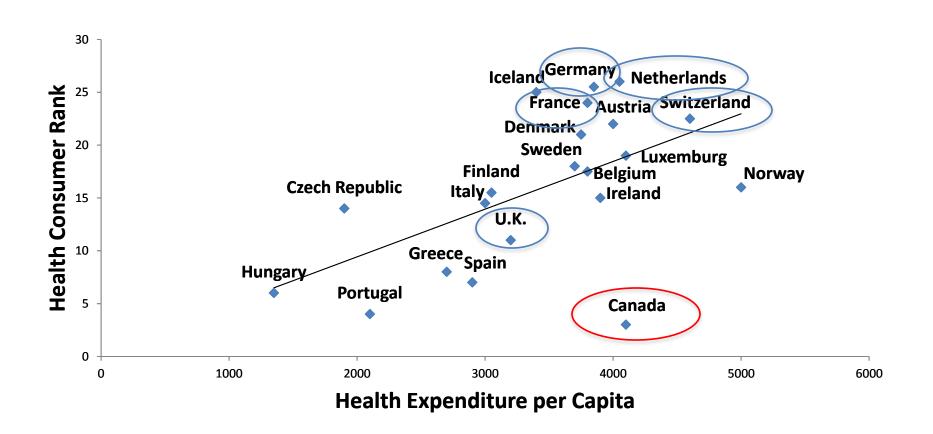
# Self-Reported Health Status by Sex, 1994/1995-2009



Canadian Index of Health and Wellbeing, 2010



## Cost vs. Quality





## Collision of supply and demand drives up healthcare costs

New, more expensive therapies and diagnostic tools

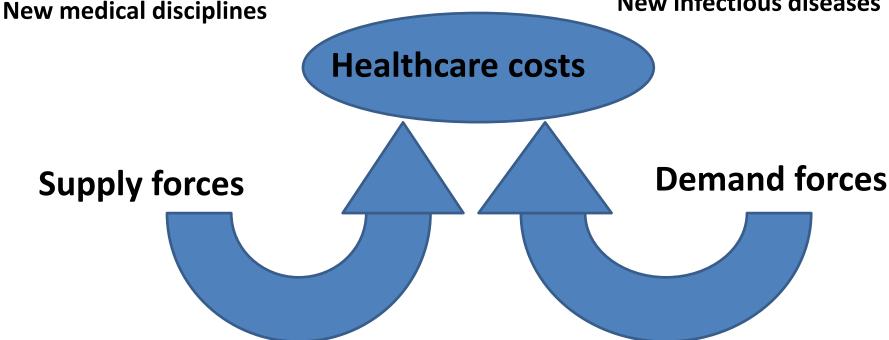
**Major information projects** 

**Higher expectations** 

Aging populations

Lifestyle-driven disease

New infectious diseases





2030 2030 2010

#### What do Canadians Value?

Patient
Experience,
Stewardship,
Teamwork



Quality of Life, Health, Wellness

Collaborative
Partnerships
with
Providers

Sustainable, Integrated Care

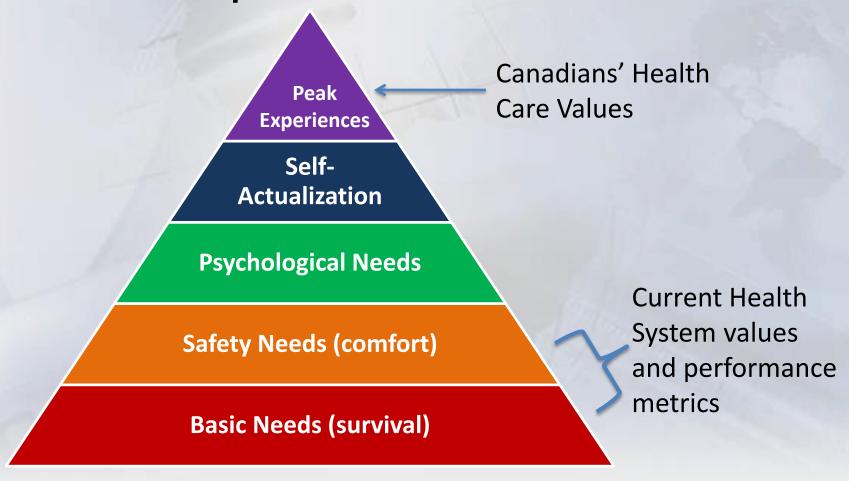
Leader of Quality Advocacy, Professionalism



Community Governance, Equity



# Are Health Systems delivering on the Value Proposition to Canadians?





# How Performance Metrics Align with Values

Canadians' Values	Performance Metrics
Excellent Care	Safety (falls, infections, pressure ulcers, mortality)
Organizational Reputation	Survey item: "would you recommend this hospital?"
Sustainability	Cost/case, total margin
Community: equity, access	Wait times for ED, surgery
Health System Stewardship	Expenditures as % GDP



#### INNOVATION TRENDS IN HEALTH CARE



Consumer Trends

Aging Population: "Boomers"

Drive to Achieve Value in Health systems



# Consumers who will Transform Health Care: Women and Baby Boomers

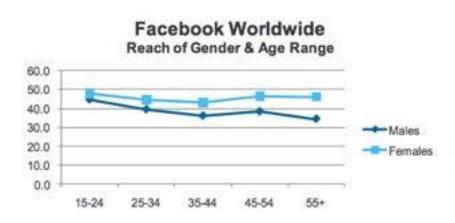


- Women, 48 years old make majority of health decisions for families
- 7 million women in Canada provide care for both children and aging parents
- Need to transform from provider focused to consumer focused



#### Consumer Drive towards Mobile health

- Women 45 years old and older are the group most responsible for growth in social media site usage
- Women spend 24.8 hours per month online
- Women and people between 35 and 54 years old are most apt to perform social networking activities via mobile device







#### Consumers of the Future?

- People 45-plus account for 43% of all Canadians
- Baby boomers are responsible for over half of all consumer spending in the United States
- The very first baby boomers turned 65 in January 2011
- Four million boomers will retire each year for almost two decades
- There are now more people in Canada over
   65 than under 14
- 279,000 Canadians have recently, or expect to become, caregivers to an elderly relative

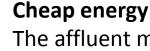


## The world in which Boomers grew up conditioned their expectations for the future



#### **Economic prosperity and affluence**

Boomers grew up during a long period of economic prosperity and relative wealth.



The affluent middle-class lifestyle that defined the American made possible by the low price of oil, made car ownership a possibility for most.



#### **Material security**

Boomers are used to a high standard of living and material comfort, with easy access to credit and low interest rates.



Few Boomers have ever known shortages of goods or services.

#### **Social optimism**

The victory in the Second World War and the sustained scientific and technological innovation, boomers are optimistic about society's ability to advance and progress.



### Baby Boomers: Core Values

Individuality



"I don't want to be like anyone else."

Self-Focused



"My fulfillment comes first."

Agelessness



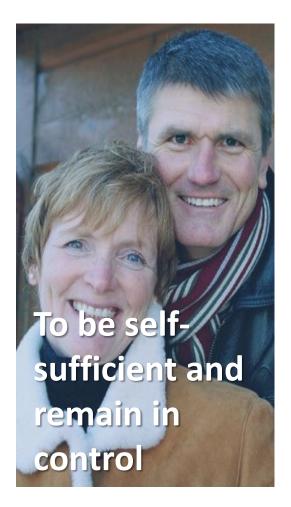
"I will continue to be active on all fronts, no matter how old I am."

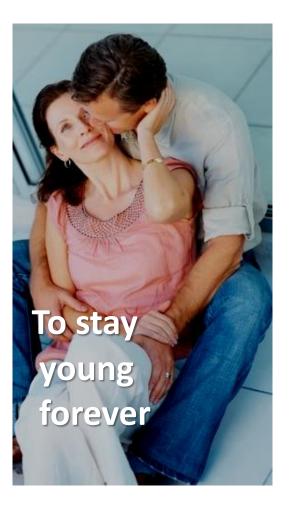
Magna, 2012



## Given these core values, Boomers are constantly striving to meet these goals







#### Baby Boomers: Dominant behaviors

- Always looking for the next adventure (and buying it)
- Searching for/spending that aid their never-ending self-exploration journey
- Looking for experiences that make them feel special, unique, and respected
- •Instant gratification, living in the moment
- Strive feel on top of things, in control,
   and not missing any information –
   Boomers hate not knowing things





# How do we deliver on the Value Proposition for the Population?

Health System Innovation

Leverage consumer engagement to drive innovation and change

Measure impact in terms of value



How do you Transform the Health System? Move Care Upstream, in "the palm of your hand"

- Personal Health Records empower consumers to manage health and wellness
- Give people the tools to manage their own care and communicate with providers
- Use Hand-held, point-of-care devices to redesign how care happens





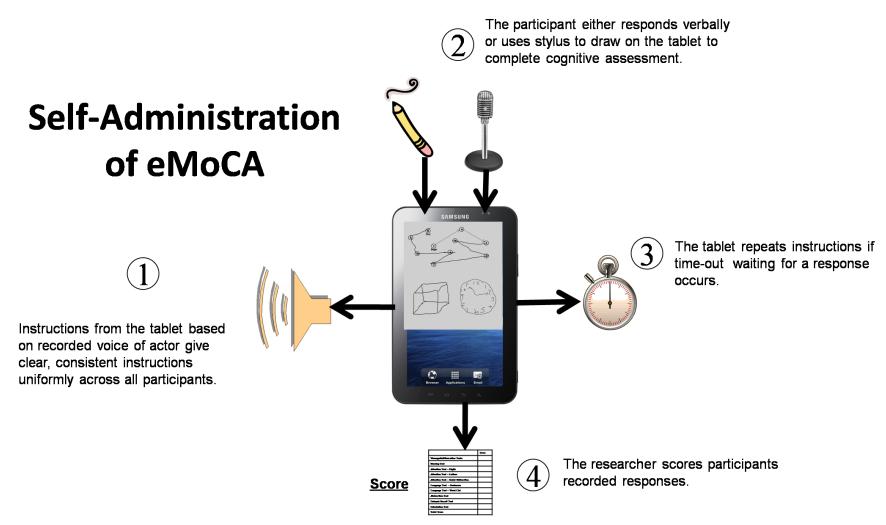


#### Mobile Health Tools: the eMoCA

- Study: created electronic version of MoCA test, testedon 400 adults.
- No significant difference in average test scores between two groups.
- Time for test completion accounted for difference in scores
- eMoCA may offer easy screening for cognitive changes in primary care practices







This version of the eMoCA was developed by the authors of this poster.



### AngioDefender™



"The best early indicator of cardiovascular risk that impacts both heart health and vascular dementia."



Everist Genomics – helping Ivey lower cost and improve outcomes.

Lord Howe is amongst the attendees at Healthcare International Innovation Expo, London, 13-14 Mar 2018, seeking Health In information about Angio Defender



# Caregiver Burden of Alzheimer's and Dementia: Opportunities for Innovation

- By 2038, 561,000 Canadians with Alzheimer's disease (AD)
- Cumulative cost = \$153 billion
- Home care services: underfunded (3.5% system costs)
- Emerging findings:
  - Caregivers need Coaching, navigating system
  - Social networks, respite critically important to reduce risk of burnout
  - Substantial private costs to families spent on purchasing support services





## Innovation in Dementia Care: "Innovation Laboratory"



- 45 bed retirement home for people living with dementia
- Leverage innovations to create personalized models of care and supportive environments for quality of life:
  - Sensor surveillance and personal communication systems
  - Electronic access to social network
  - Agitation prediction sensors
  - Caregiver training protocols

B'nai Brith Centre of Innovation Excellence for Alzheimer's Care

## An Expanded Model of Pharmaceutical Care in the Grocery Environment

- Grocery retail environments are shifting towards health and wellness market
- Pharmacists are most trusted and most accessible, viewed as "surveillance" for quality care
- collaboration with dieticians, offering a comprehensive management of disease risk.
- Emerging focus on chronic illness, diet and lifestyle





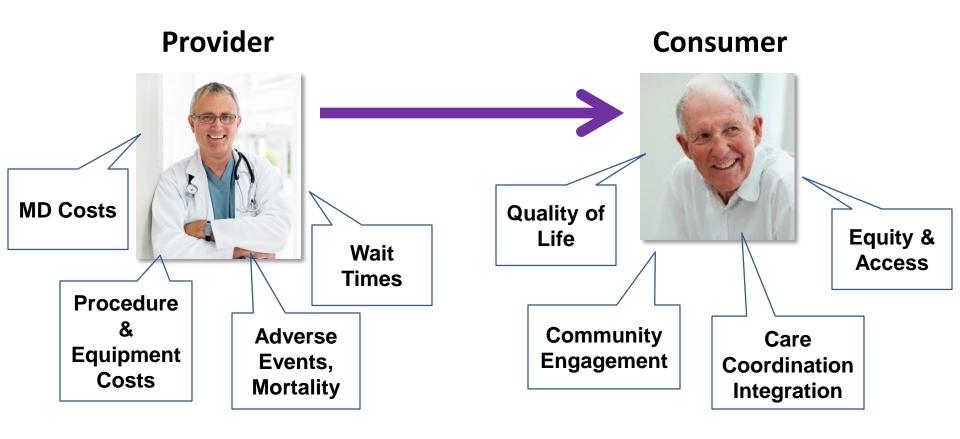
#### Trends in Innovation Research

- Value based health care
- Personalization of health services to achieve health and wellness outcomes
- Shift from hospital dominant to Integrated community services to achieve value for Canadians
- Move health care "upstream", shift from provider centric to consumer centric



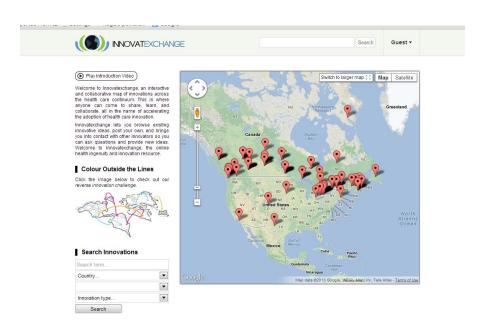


## Shift Performance metrics from Provider Centric to Consumer Centric





### **Sharing Lessons Learned**



www.innovatexchage.ca



LINKS e-Portal



#### Our Unique Approach & Business Model



International network, resources and talent



#### BUILD THE EVIDENCE FOR INNOVATION ADOPTION



#### **Research Innovation**

- New technology
- New therapies

**Proof of Concept** 

#### **Clinical Innovation**

- Patient care implementation
- Clinician adoption
- Integration into service delivery

**Proof of Relevance** 

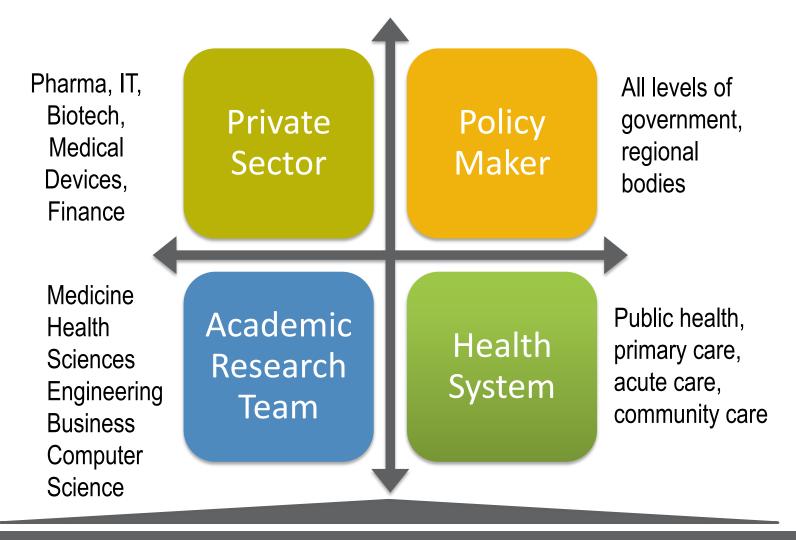
#### Innovation Adoption across Health Systems

- IT decision support
- Service delivery model redesign
- Performance metrics support adoption
- Financial model for reimbursement
- Leadership to drive innovation
- Clinical guidelines Integration
- Consumer uptake

Proof of Value and Reimbursement



#### **Our Innovation Model**



#### Leverage Network, Capabilities and Capacity



### **Creating Culture of Innovation**

- Create Cultures of Innovation
  - "Living Laboratories"
- Build Leadership Capacity for innovation and entrepreneurship
- Build Collaborative
   Networks to develop and test
   new or existing technologies
   in the health sector

#### **Outcomes:**

- ✓ Strengthen health system productivity and sustainability
- ✓ Build innovation capacity





#### Conclusions

"Strive not to be a success, but to be of value"

- Albert Einstein

- Transform Canada's health systems to achieve Canadian values of health, wellness and quality of life
- Measure success of health systems in terms of values, sustainability and innovation
- Disseminated and collaborated across health systems to accelerate innovation – global innovation pipeline





#### **Thank You**

www.ivey.ca/healthinnovation

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