

Making health care accessible to remote communities



Overview

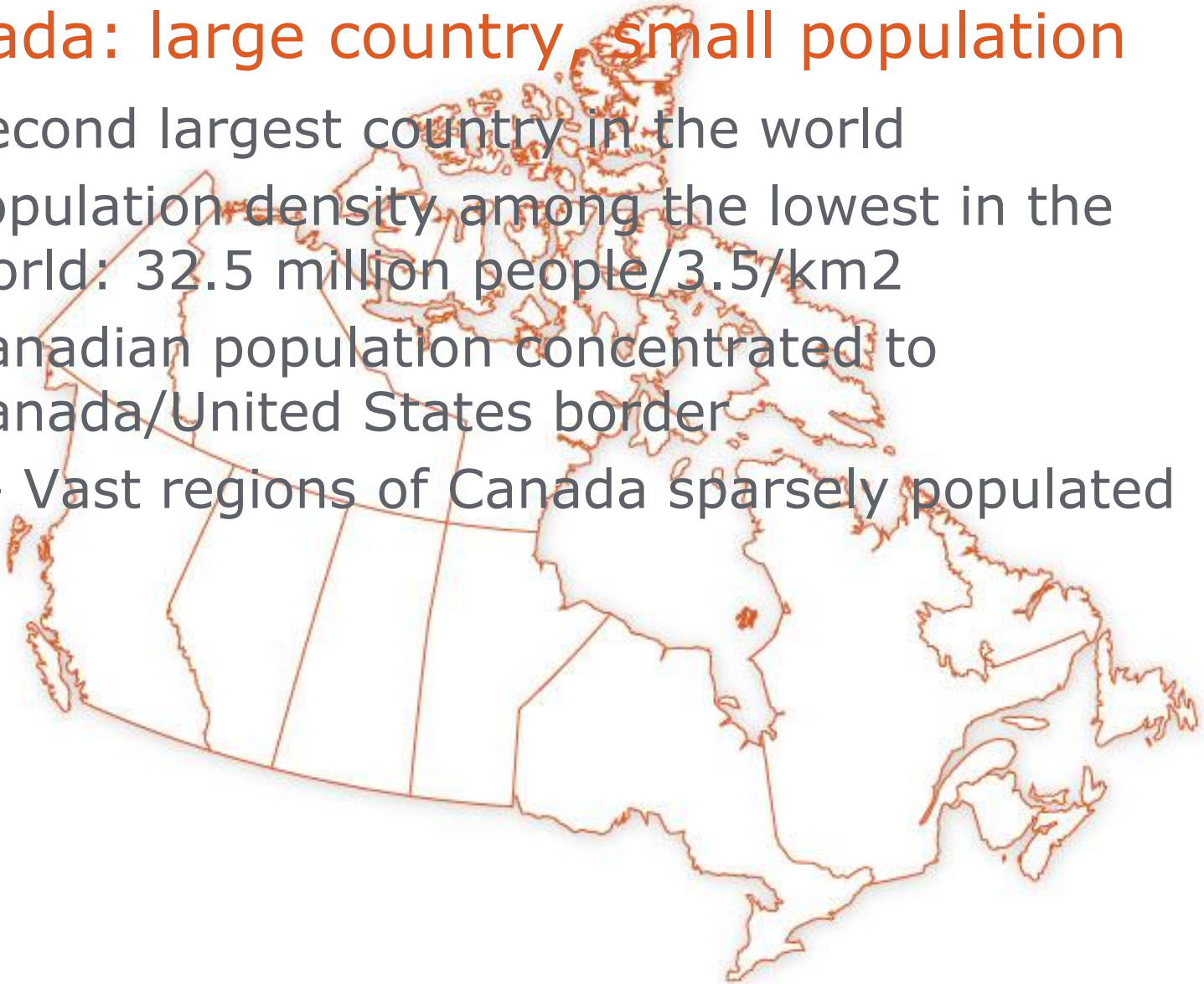
- Addressing the challenge
- *Infoway's* telehealth approach and strategies
- Advances and success stories
- Next steps

Addressing the challenge



Canada: large country, small population

- Second largest country in the world
- Population density among the lowest in the world: 32.5 million people/3.5/km²
- Canadian population concentrated to Canada/United States border
 - Vast regions of Canada sparsely populated



Challenges in remote care

- The social determinants of health affecting all Canadian communities in remote geographies, including First Nations, are influenced by contextual factors:
 - limited access to health services close to home
 - limited resources to travel to distant health services
 - limited infrastructure to enable travel

The e-health potential

- Canada's e-health partnerships, tools, and services are integral to improving access to health care in remote areas
- Providing front-line clinicians with access to tools and support needed to provide quality patient care
- Shift to providing services closer to home and strengthening community-based care is key component of Canada's health system transformation
- Technology will support the evolution of community-based health services, including home care and primary care

Infloway's telehealth approach and strategies

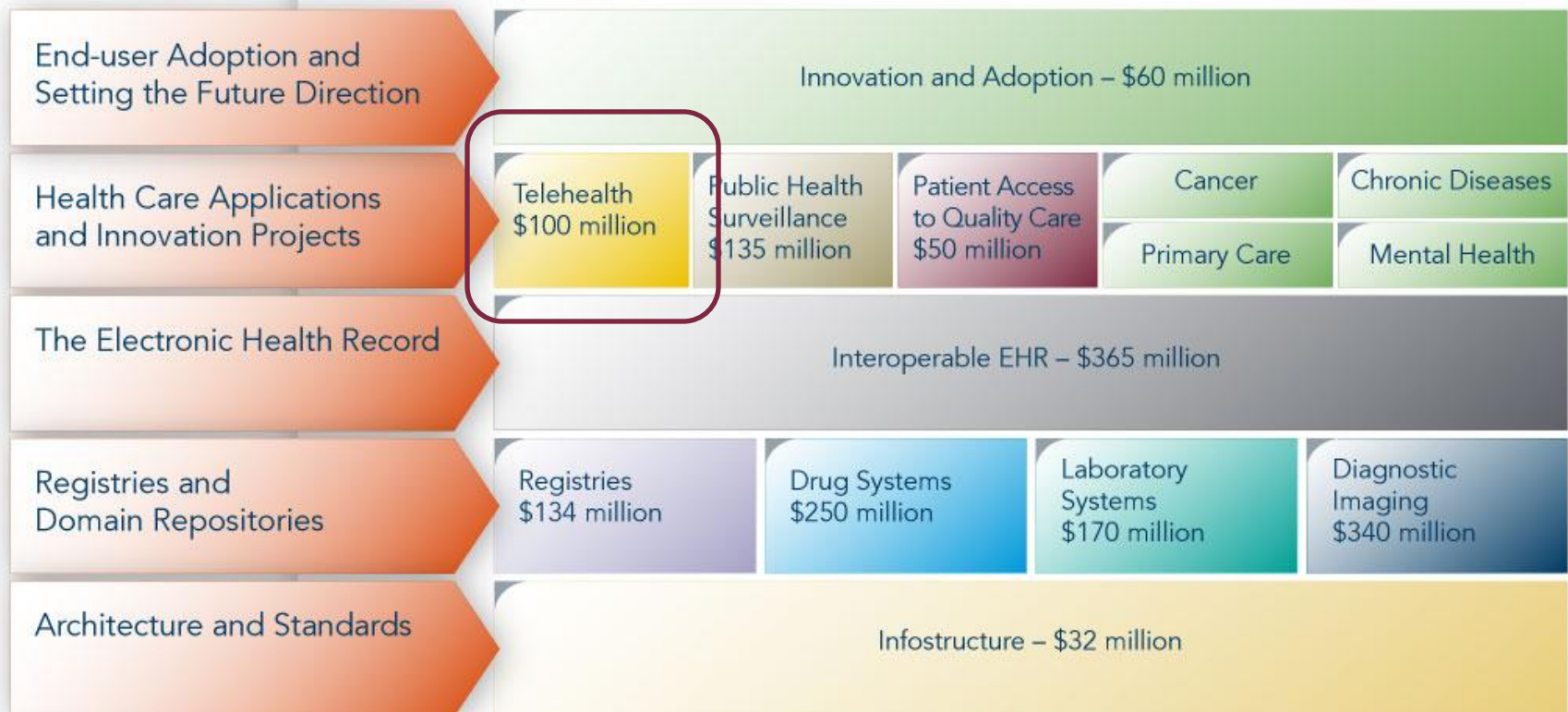


Canada Health Infoway

- Created in 2001 as independent, not-for-profit corporation
- \$2.1 billion in federal funding (including \$500 million recapitalization in 2009 federal budget)
- Accountable to 14 federal/provincial/territorial governments
- Goal by 2010 to have all Canadians benefiting from modern health information systems, half of our population having electronic health record accessible to their authorized health care providers

Infoway programs

Ten investment programs totalling \$1.6 billion



Telehealth program objectives

- Increase Telehealth coverage in First Nations, Official Language Minority, northern, remote and rural communities
- Increase clinical utilization and sustainability of existing Telehealth networks
- Increase integration of Telemedicine activities into mainstream health service delivery
- Increase crucial Telehealth link to EHR
- Increase Telehomecare applications to support care givers and improve patient quality of life
- Support clinician retention, training and peer support through Teletraining applications in remote areas
- Promote early adopters of Telediagnostic technologies to demonstrate system benefits

Dimensions for telehealth investment

Geographic

- Northern
 - North of the 60th
- Remote
 - South of the 60th
- Rural

Cultural

- Aboriginal
 - First Nations, Inuit and Métis
- Official language minorities
 - French in anglophone communities and English in francophone communities

Clinical

- Telehealth domains
- Clinical impact
- Provider adoption

Management

- Governance
- Resource Management
- Knowledge Management
- Partnerships

Technology & Standards

- Telehealth interoperability
- Link to EHR
- Adoption of standards

Telehealth – strategic directions

- Expansion of telehealth networks and clinical services
- Telehealth solutions in new models and settings such as telehomecare and telepathology
- Increase coverage in mental health solutions
- Increase coverage of Aboriginal communities in all Canadian jurisdictions

Telehealth – the generations

Telehealth solutions can be categorized into 3 generations:

Thinking about EHR

1st Generation

- Codec Based Videoconferencing
- Non-integrated hardware based solutions
- No capture or creation of data
- Access to EHR through a viewer (read only)

Integrating with EHR directly or indirectly

2nd Generation

- Potentially integrated solutions that create and capture data, some of which will be relevant for the EHR
- Support minimum messaging standards in order to access EHR directly or through a CIS

Fully Integrated with the EHR

3rd Generation

- Fully supported iEHR POS application
- Compliance with pan-Canadian EHR standards

Signposts of success



Generation 2 linking health care

Yukon Telehomecare:

Mobile data solution enabling clinicians to conduct patient assessments, develop care plans at point of care

Ontario Telehomecare:

Telehomecare program model that can be applied to chronic disease management in health care settings and elsewhere

Post-cardiac Surgery: Home - Telehealth

Hospital to home patient monitoring

BC Teleophthalmology

Focus on diabetes prevention/screening to at-risk First Nations population, linking health care providers in rural/remote communities to retinal specialists in the BC Vancouver Island network for viewing and interpretation

BC Telepathology

Integrated provincial telepathology network

Collaboration to support community-based services

- Enhance community-based health services in Cape Breton First Nations communities
- Collaboration of five Cape Breton First Nations communities, and regional, provincial and federal health programs to implement sustainable First Nations telehealth initiative
- Expansion from one unit to total of six units implemented in the communities

Outcomes

- Increased access to federal, provincial and regional health services
- Strong working teams developed
- Supported further collaboration and communication among the five First Nations communities
- Reduced travel time and costs, less time away from work and family, and less travel in inclement weather

Improving diabetes care in Quebec

- Rates of diabetes among First Nations communities in Canada are three to five times higher than those of general Canadian population
- Diabetes is among primary causes of blindness because of its effect on person's retina
- Follow-up and monitoring is essential to diabetes care, but with limited community services, many patients not monitored
- Living in remote geographies, many people have limited access to health services

Managing chronic disease with teleophthalmology

- Digital retinal scanning for diabetic retinopathy in 29 First Nation communities in Quebec
- Support and enhancement of community-based services
- Digital scans sent to secure server, then reviewed by ophthalmologists for screening/diagnosis
- Screenings done in community, then patients referred to specialists for care

Anticipated outcomes

- Early intervention, diagnosis, treatment
- Access to essential health services
- Chronic disease management
- Support to front-line clinicians
- Collaboration between health centres

Moving forward on Canada's vision for health care



Moving forward on improving remote care

- Continue *Infloway* funding for First Nations projects linked to existing telehealth networks within territories and provinces if new funds are available
- Expand each of services
- Finish projects in progress
- Continue to stimulate investments
- Focus new clinical investments on remote and rural communities
- Encourage new investments in telehomecare, telehealth generation 2 and generation 3
- Ensure Telehealth integration in Canada's EHR network

The promise

- Increased patient participation in care
- Well-managed chronic illness
- Improved access to care in remote and rural communities
- Better prescribing practices
- Reduction in duplicate or unnecessary tests
- Reduced wait times
- Saving lives





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Thank you