

CHIPPing Away: Federal Government Investment in Health IT?



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The Vision



- ◆ Improve the quality and accessibility of health care
- ◆ Enable integrated health services delivery
- ◆ Empower the individuals and communities
- ◆ Build on federal, provincial and territorial infostructures
- ◆ Strengthen privacy protection



Where it all began...



- ◆ 1991: Wilk: National Task Force on Health Information Report
- ◆ April 1994: Information Highway Advisory Council
- ◆ Oct. 1994: National Forum On Health
- ◆ 1996: CANARIE Health Info Iway Report



Where it all began



- ◆ Jan. 1997: Office of the Health and Information Highway
- ◆ August 1997: Advisory Council on Health Infostructure
- ◆ March 2001: Canada Health Infoway, Inc



What is the health infostructure?



- ◆ The Health Infostructure is a health information highway utilizing the newest information and communications technologies (ICTs) to enhance and strengthen our health system

Pan-Canadian Health Infostructure



- ◆ The essence of the work toward building a pan-Canadian health infostructure is collaboration and information sharing between the health jurisdictions:
 - Federal
 - Provincial
 - Territories.



Major Provincial Networks



- ◆ Newfoundland:
 - The Unique Personal Identifier/Client Registry (UPI/CR) project is the cornerstone of Newfoundland and Labrador's Health Information Network (H.I.N.).

- ◆ Nova Scotia
 - The Nova Scotia Telehealth Network, connecting 43 health care facilities

Major Provincial Networks



◆ New Brunswick:

- **Wellness Network** is a secure private network (WAN), linking all hospitals and/or health centres in all eight health regions with a 100% fibre-optic infrastructure. In addition, the province has adopted and implemented Meditech system as its standard HIS



Major Provincial Networks



- ◆ Prince Edward Island:
 - Since 1995, Island Health Information System (IHIS) has linked health care sites province-wide, and since 1997 the Island Health's Wide Area Network has been deployed in the province

Major Provincial Networks



◆ Quebec:

- The "Réseau de télécommunications sociosanitaire" (RTSS) is the information infrastructure on which health related information applications will be implemented throughout Québec.
- It is a secure private network based on large bandwidth telecommunications technologies provided through a public-private partnership.
- It currently links approximately 1600 health institutions.



Major Provincial Networks



◆ Ontario:

- Smart Systems for Health (SSH) will be Ontario's health information network.
- When fully operational, Smart Systems will allow for the secure collection, storage and exchange of personal health information and provide the information tools and resources for the delivery of integrated health services



Major Provincial Networks



◆ Manitoba:

- Manitoba Health and the RHAs have been working towards defining a common vision in support of restarting the Health Information Network (HIN).
- The connection of all healthcare facilities to HIN will enable the appropriate clinical information systems to become provincial in nature and support the national objective of building an Electronic Health Record



Major Provincial Networks



◆ Saskatchewan:

- The Saskatchewan Health Information Network (SHIN) was established in 1997 by Order-in-Council as a Treasury Board Crown Corporation. SHIN's mandate is to implement, own, operate and manage a provincial health information network to facilitate the sharing of information in a timely, secure and appropriate manner reflecting the priorities of the health system



Major Provincial Networks



◆ Alberta:

- Alberta we//net is the umbrella for a series of province-wide and regional initiatives to build an integrated health information network in Alberta. That network will facilitate improvements to the delivery of health services to Albertans by improving access to health information.



Major Provincial Networks



◆ British Columbia:

- Established in 1996, HealthNet/BC interconnects virtually all hospitals, health agencies, and health authority offices.
- Public and private sector health professionals, laboratories, continuing and long-term care facilities are being encouraged to connect to HealthNet/BC as their clinical information sharing capabilities evolve

Major Provincial Networks



◆ Yukon:

- The Yukon Telehealth Network is the initiative of the Yukon Department of Health and Social Services (DHSS). The telehealth programs defined for this project will be delivered to six participating sites
- These systems will run on an IP-based frame relay LAN telecommunication service provided by Connect Yukon and will utilize a gateway to the ISDN switched network in Southern Canada



Major Provincial Networks



◆ Northwest Territories:

- The Digital Communications Network is a frame relay star network linking all health, education and administrative facilities in all NWT communities.
- The WestNet started in 1998 and offers scheduled services for 15 telehealth specialties



Major Provincial Networks



◆ Nunavut:

- The *Ikajuruti Inungnik Ungasiktumi Telehealth Network (IIU Network)* presently connects five sites in the territory - Baffin Island, Pond Inlet, Cape Dorset, Cambridge Bay, and Gjoa Haven. The network is used to provide medical consultations and support the personnel manning the remote nursing stations.
- The vision is to expand this network to link to all 26 communities in the territory



Federal Investments



- ◆ First federal investment of \$50 M over three years in health infostructure in February 1997
- ◆ Second federal investment of \$366 M over three years in February 1999
- ◆ Third federal investment of \$500 M in Canada Health Infoway Inc. in March 2001



HISP



- ◆ In 1998-2000, OHIH implemented a \$10 million funding initiative, Health Infostructure Support Program (HISP), in support of pilot testing of health care service innovations using information and communications technologies (ICT).
- ◆ 120 proposals were received and 36 projects selected for support.

CHIPP



- ◆ The Canada Health Infostructure Partnership Program (CHIPP) is a two year, \$80 million, shared-cost incentive program aimed at supporting the implementation of innovative Telehealth/EHR applications in health services delivery across Canada



Why invest in IT for Healthcare?

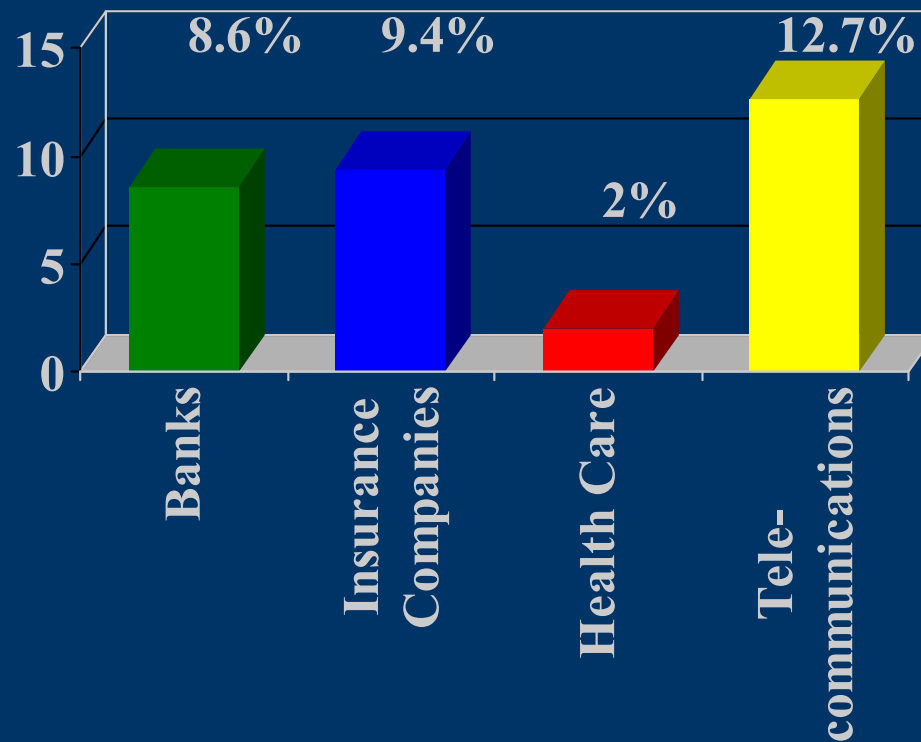


- ◆ ICT-enabled applications are emerging as an enabling feature of national importance for transforming health care delivery in Canada in the information age
- ◆ They can significantly improve:
 - accessibility
 - quality of health care
 - efficiency
 - protection of the long term viability of the health system

We need to catch up!



◆ Only 2% spent on ICTs



What are the Objectives of CHIPP?



- CHIPP aims at supporting collaboration, innovation, and renewal in health care delivery across Canada through the use of ICT.
- CHIPP invests primarily in large model implementation projects in two strategic areas: telehealth and electronic health records (EHR).



Odd Bedfellows



- ◆ Unprecedented Partnerships:
 - Health org.
 - Industry
 - Gov't
 - Academia/Research org.

Who are leading these projects?



- ◆ Eligible CHIPP applicants include
 - government institutions and
 - not-for-profit organizations engaged in or responsible for health care delivery, (e.g. hospitals, regional health authorities, provincial/territorial health ministries, professional associations, and federal departments)

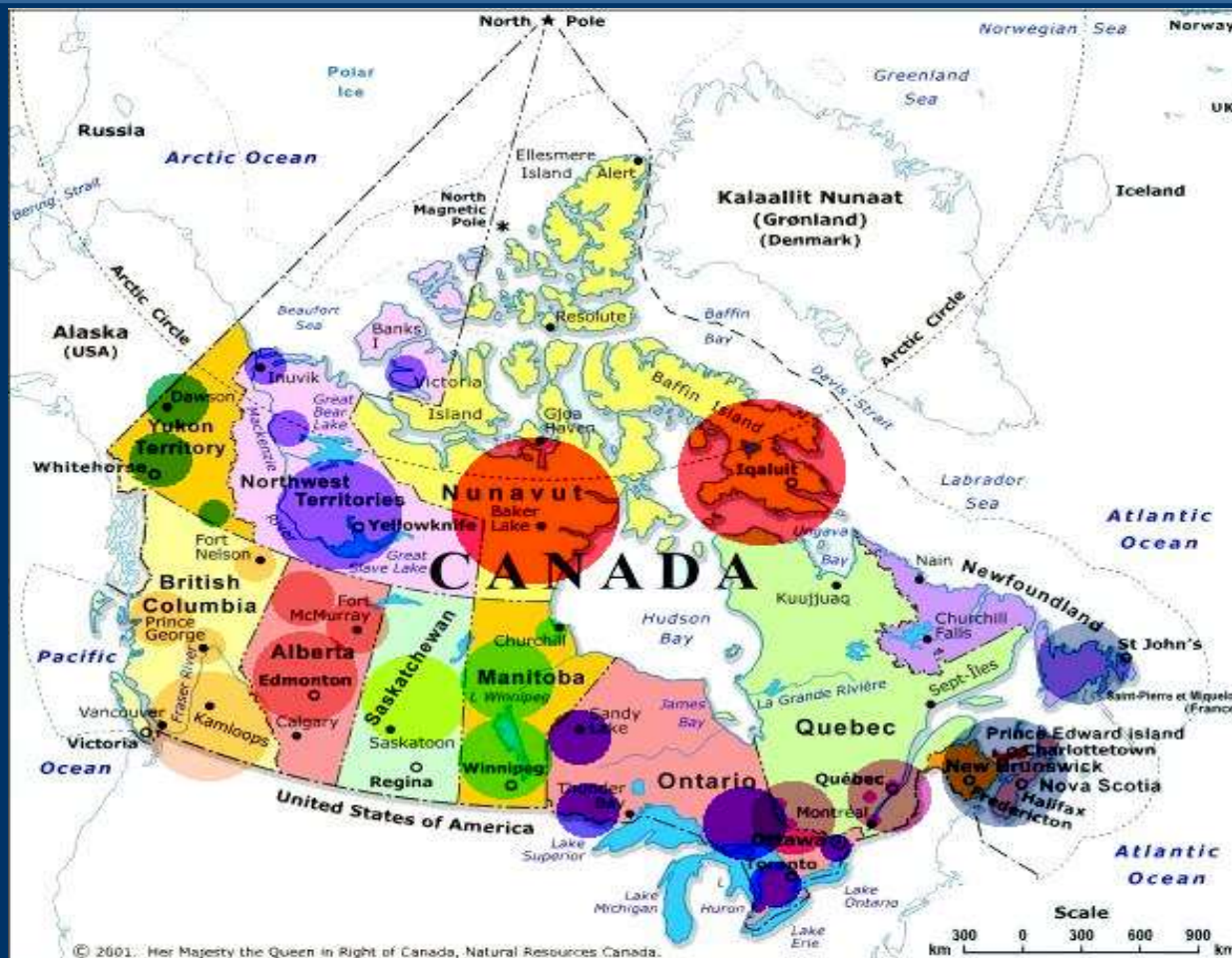


Was there interest?

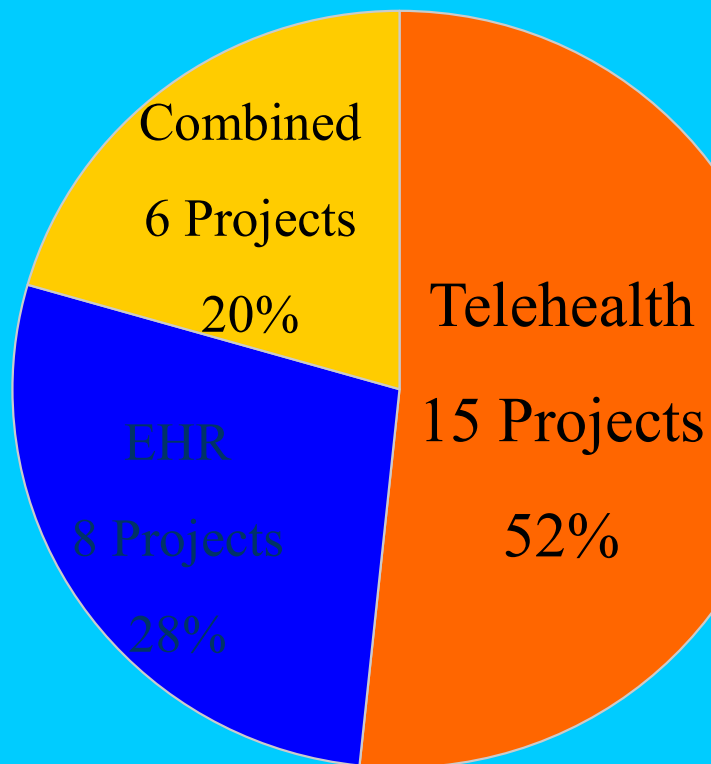


- ◆ 180 applications were received
- ◆ Representing well over \$500M in funding request
- ◆ 29 projects were selected for funding

CHIPP Across Canada



Types of Projects Funded



EHR



- ◆ Individual-based
- ◆ Longitudinal
- ◆ Linked and Virtual
- ◆ Dynamic
- ◆ Access with consent and based on role



Creating the EHR



◆ Stage 1

- Client Data
- Provider Data
- Laboratory Data
- Pharmacy Data

◆ Stage 2 (could include)

- Communicable disease and immunization datasets
- Diagnostic Imaging datasets
- Continuing Care Minimum datasets



Privacy and EHR



- ◆ Constitutional and legislative protections
- ◆ Government policies
- ◆ Professional codes of ethics
- ◆ Public's views
- ◆ Organizational policies
- ◆ Privacy impact assessments
- ◆ Technology assistance

Telehealth

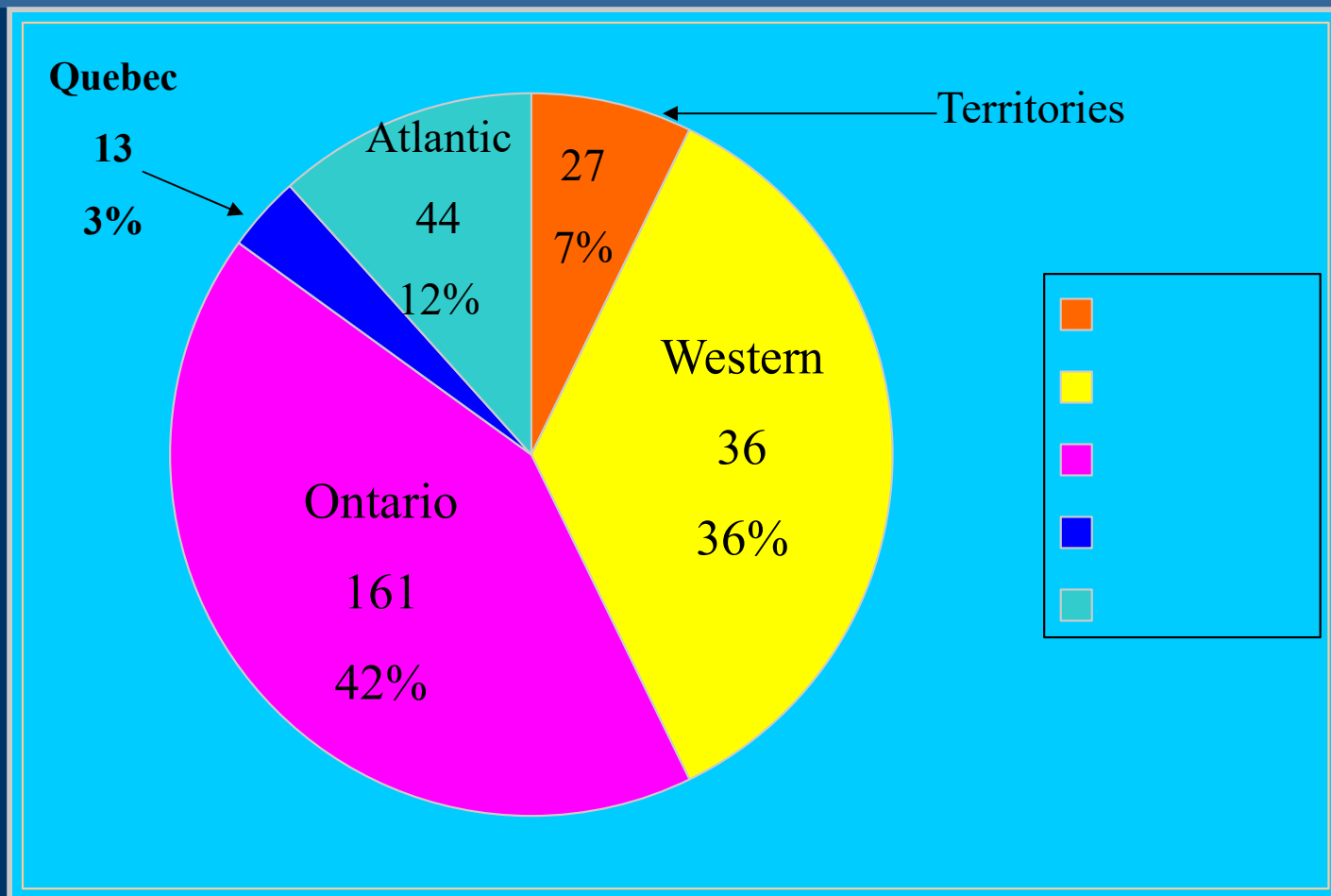


- ◆ "Telehealth involves using information and communications technologies to deliver health information, services and expertise over short and long distances."

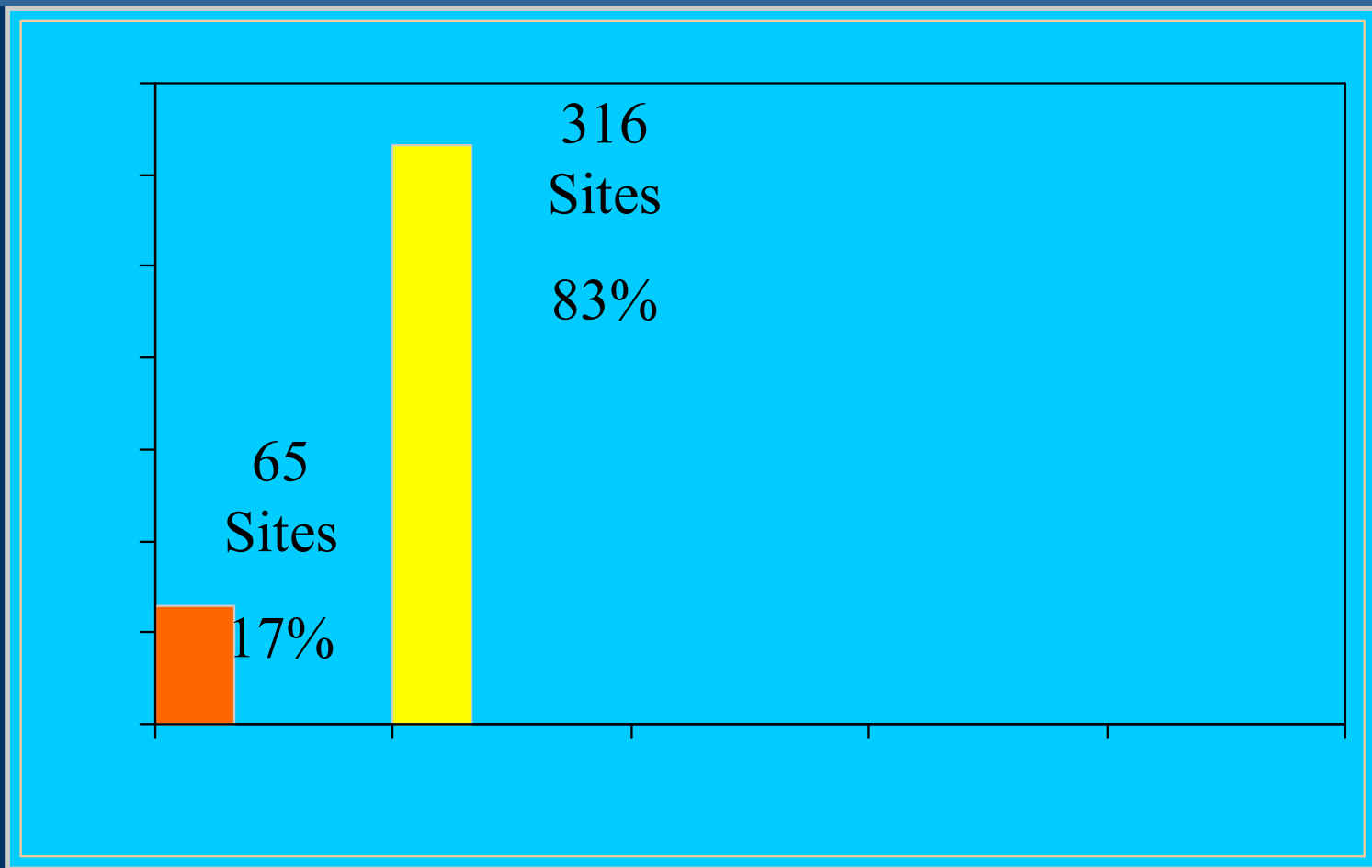
(Source: Canada Health Infoway: Paths to Better Health: Final Report, Advisory Council on Health Infostructure. Ottawa: Health Canada, February 1999)



Distribution of Telehealth Sites



Distribution Between Rural and Urban



Atlantic



- ◆ Health Infostructure Atlantic (HIA)
 - All 4 provinces are working together to develop the foundations which include
 - Common Client Registry
 - Case Management system
 - Tele-i4 (PACS and Tele-radiology)



Quebec



- ◆ 3 Telehealth Projects
 - Primary Care Telemedicine in Temiscamingue
 - Tele-oncologie in Trois-Riviere
 - Tele-Homecare in Orleans
- ◆ 2 EHR Projects
 - SI-RIL in Laval
 - MOXXI in Montreal



Ontario



- ◆ 5 Telehealth projects will be linking 161 sites in Ontario
 - Outreach (40)
 - North Network (60)
 - Eastern Ontario Telehealth Network (19)
 - Southwestern Ontario Telehealth Network (40)
 - Center for Minimal Access Surgery (2)



Ontario



- ◆ 2 EHR Projects:
 - COMPETE II (Diabetes Management), Hamilton
 - Regionally Accessible Secure Cardiac Health Record, Ottawa

West



◆ 4 EHR Projects

- SLICK, Alberta (Diabetes screening)
- Integrated Community Mental Health Information System, Victoria BC
- SYNAPSE Multi-Jurisdictional Mental Health Information System, North Shore Health Region, BC
- HealthNet B.C. Provider Registry, Victoria BC



West



◆ 7 Telehealth Projects

- HealthLink Okanagan, BC (Telecare)
- Bridges to Better Child Health, (pediatric oncology EHR also being developed)
Victoria, BC
- Mental Health Evaluation and Community Consultation Unit (Mheccu), linking 2 sites in BC and 2 sites in Yukon



West



- ◆ 7 Telehealth Projects (cont'd)
 - BC Telehealth Program
 - Central BC and Yukon (PACS & Tele-radiology) (6 sites)
 - MBTelehealth, Manitoba (tele-consultations)
 - Telehealth Saskatchewan (12 sites and 10 specialities)



North



- ◆ Nunavut
 - IIU Network (15 sites and 6 specialties)
- ◆ NWT
 - Westnet Tele-ophthalmology Project (diabetes)
- ◆ Yukon
 - Yukon Telehealth (6 sites)



CHIPP Status



- ◆ CHIPP projects are viewed as key health infostructure building blocks in almost all jurisdictions
- ◆ P/T health ministries are well engaged in the implementation of CHIPP projects.
- ◆ A privacy assessment and a standards survey are being conducted for all projects.



How Will We Measure Success?



- ◆ Better health outcomes
- ◆ Better accessibility
- ◆ More integration
- ◆ Cost efficiencies
- ◆ Client satisfaction

