



PROJET PANCANADIEN DE SURVEILLANCE ET DE GESTION DE LA
SANTÉ PUBLIQUE EN MATIÈRE DE MALADIES TRANSMISSIBLE

PAN-CANADIAN PUBLIC HEALTH COMMUNICABLE
DISEASE SURVEILLANCE & MANAGEMENT PROJECT

Panorama

Pan-Canadian Public Health Surveillance System

March 26, 2007





Agenda

- Canada Health Infoway
- Pan-Canadian Project Approach
- Panorama's Features
- Prototype Demonstration
- BC Yukon Implementation Project
- Questions and Answers





Canada Health Infoway

- Created in 2001 through a Funding Agreement with Government of Canada
- \$1.2 billion Canadian for 9 investment programs
- Mission: To foster and accelerate the development and adoption of electronic health information systems with compatible standards and communications technologies on a pan-Canadian basis, with tangible benefits to Canadians
- Goal: Interoperable electronic health record in place across 50 per cent of Canada (by population) by the end of 2009



Infoway Health Surveillance Program

- \$100 million, over 5 years, specifically for management of infectious diseases and immunization
- Funds for development and implementation, not operations or maintenance
- System must be bilingual (English / French)
- Implementation projects should be 80/20 cost-shared with provinces and territories
- Must be consistent with EHR architecture, and responsive to public health needs



Pan-Canadian Project Approach

- Leadership by Pan-Canadian Steering Committee
 - Senior public health and IT managers from each Canadian Province and Territory
 - Federal representatives from Public Health Agency of Canada(2), Health Canada, Statistics Canada
 - Representatives from Canadian Public Health Association, Canadian Institute for Health Information, Canadian Medical Association, Council of Chief Medical Officers of Health
- Four Stage Project
 - 1st Stage - Conceptual Solution – 2004
 - 2nd Stage - Solution Specification – 2005
 - 3rd Stage - Procurement – 2005/06
 - 4th Stage - Solution Integration – 2006/08



1st Stage – Conceptual Solution – 2004

- Conceptual Solution Architecture Study and Gap Analysis
- Needs Assessment and Implementation Strategy
 - Included Cost Estimate
- Project scope adjusted to fit the budget
 - Communicable disease case management
 - Outbreak management
 - Immunization management
 - Materials / vaccine inventory management
 - Notifications management
 - Work management



2nd Stage – Solution Specification – 2005

- Developed a solution specification to be used in a procurement process
- Alternatives analysis and existing systems review
- Steering Committee approved an acquisition strategy of “Buy – Adapt - Build”
- Began design for long term governance and funding program
 - PHAC Special Task Group



3rd Stage – Procurement – 2005/06

- Joint Solution Request for Proposal Process
 - 9 bids evaluated over 4 months by 300 reviewers
- IBM Canada is prime contractor and supplies integration technology
 - Scientific Technology Corporation (STC) provides software for communicable disease and immunization management,
 - Sotern provides software for resource management and workload management integration
 - SAIC supplies consulting services and development of lab and outbreak management software



4th Stage - Solution Integration – 2006/08

- Panorama Solution Integration
 - Integrate and enhance software
 - Produce documentation for implementation, training and system operation
 - Test for functional and technical requirements
- Other Pan-Canadian Projects:
 - Pan-Canadian Standards Development Project
 - National Populations Project
 - Surveillance Analytics Project
 - Benefits Evaluation Project
- Provincial / Territorial planning and implementation projects



Delivery Milestones

- July 2007 - Configuration Release of System
 - All 6 modules, tested, some issues outstanding
 - For jurisdiction configuration and set up
- Oct 2007 - First Production Release
 - All 6 modules, fully tested and ready to go
- Jan 2008 – Product Management Board
 - Target date to establish the continuing enhancement and support structure for Panorama
- Mar 2008 – Second Production Release
 - Expands interface message capability to integrate with the electronic health record and additional external systems
 - This completes the System Integration Project and delivers all features of Panorama as contracted



Panorama's Key Features

- Flexible solution designed to address the range of communicable diseases rather than a disease specific approach
- Intuitive and consistent user interface enhances the productivity of front-line workers
- Customized to meet Canadian Public Health requirements
- Configurable for each province / territory implementation
- Fully bilingual system and documentation for all user features



Technology Features

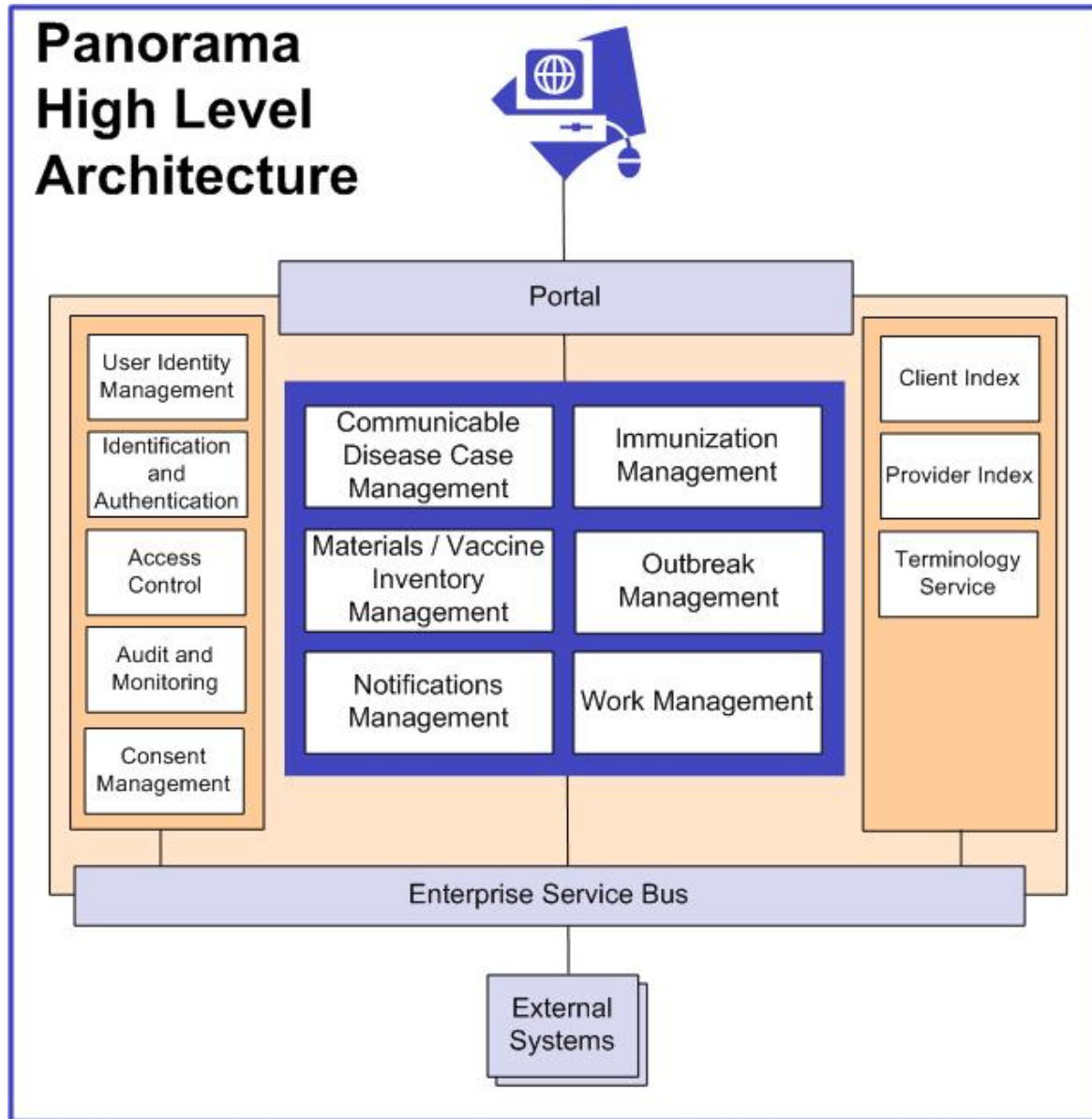
- A “Buy - Adapt - Build” Strategy using
 - Existing commercial “off-the-shelf” software
 - Custom adaptations and integration
 - New software features
- Modular approach permits jurisdictions to install functions most relevant to their needs and to integrate or interface with their existing systems.
- Multiple implementation technologies supported
 - Wide range of hardware vendors, 5 operating systems, 3 databases
 - Requires specific middleware software (Websphere, Tivoli)
- Panorama provides off-line use for immunization and questionnaires when networks are not available



Panorama Integration Features

- Panorama will be an integral part of Canadian Electronic Health Record (EHR) systems by exchanging data through HL7 V3 messages
- Messages with EHR Systems:
 - Client, Provider, and Location Registries
 - Hospital ADT Systems
 - Lab Systems
- Messages with Physician Office Systems:
 - Client Registry
 - Case Management
 - Client Immunization Status and Input Immunization Data
 - Notifiable Condition Reporting





In Summary

- Panorama is a unique and effective set of tools for public health professionals to
 - Collect, share and analyze health information
 - Assist in managing public health services
 - Provide rapid access to current information
- Panorama is being designed and developed in a collaborative Pan-Canadian process with all provinces and territories
- Provinces and Territories have a commitment to continuing support and improvement of Panorama for years to come



Prototype Demonstration

- Prototype developed in February 2006 through Joint Solution Procurement process
 - Extensive collaborative workshops with Public Health participation
 - Workflows based on scenarios provided during the process
- Leverages existing software solutions in use in the US, Canada and Europe for:
 - Disease surveillance and case management
 - Immunization and vaccine management
 - Workflow management
 - Alerting
- Incorporated Canadian lessons learned for Outbreak Management, iPHIS and evolving public health informatics standards



Primary Actors

- Dr. Lillian Lewis
- Fred Speed
- Dr. Moh
- Sally Storm RN
- Nurse Mike
- Physician at health center
- Clinical case of meningitis
- Medical Officer of Health
- Public Health Nurse
- Immunization Nurse



Scenario

- The medical officer of health is called by a local ER physician who is attending to a teenage boy with clinically compatible meningococcal meningitis.
- Despite lack of lab confirmation the medical officer of health assigns his nurse epidemiologist to initiate an investigation



Prototype Demonstration

- To run demo:
 - Open folder on CD called “Demo Recording”
 - Double click file called “Double Click Here for Demo”

