



# **Nova Scotia Health Information Strategy: An Overview**

February 26, 2003



## NS Health Information Management Vision

Nova Scotia's health information system will be based on the establishment of a **person-based, portable electronic health record.**

The system will provide live input and extraction of standardized and complete health information from **across the spectrum of health and wellness services and indicators**

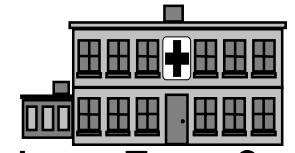
**Protection of individual privacy and confidentiality within the context of a well managed health care system** will be ensured



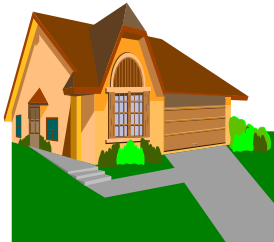
Primary Care



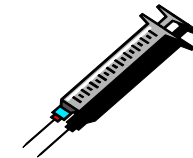
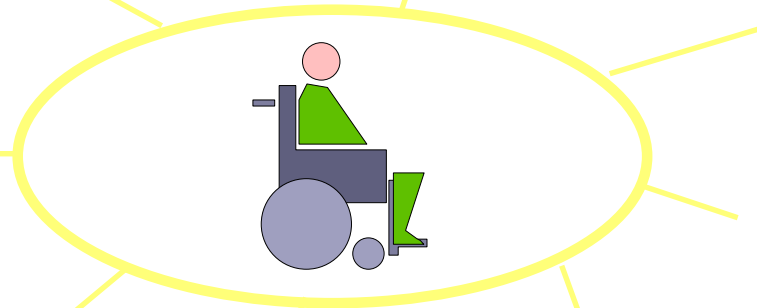
Acute Care



Long-Term Care

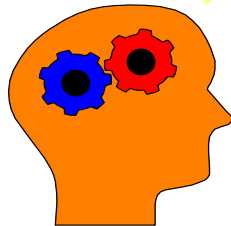


Home Care

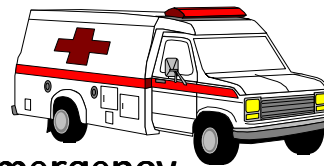


Public Health

Mental Health



Emergency Services



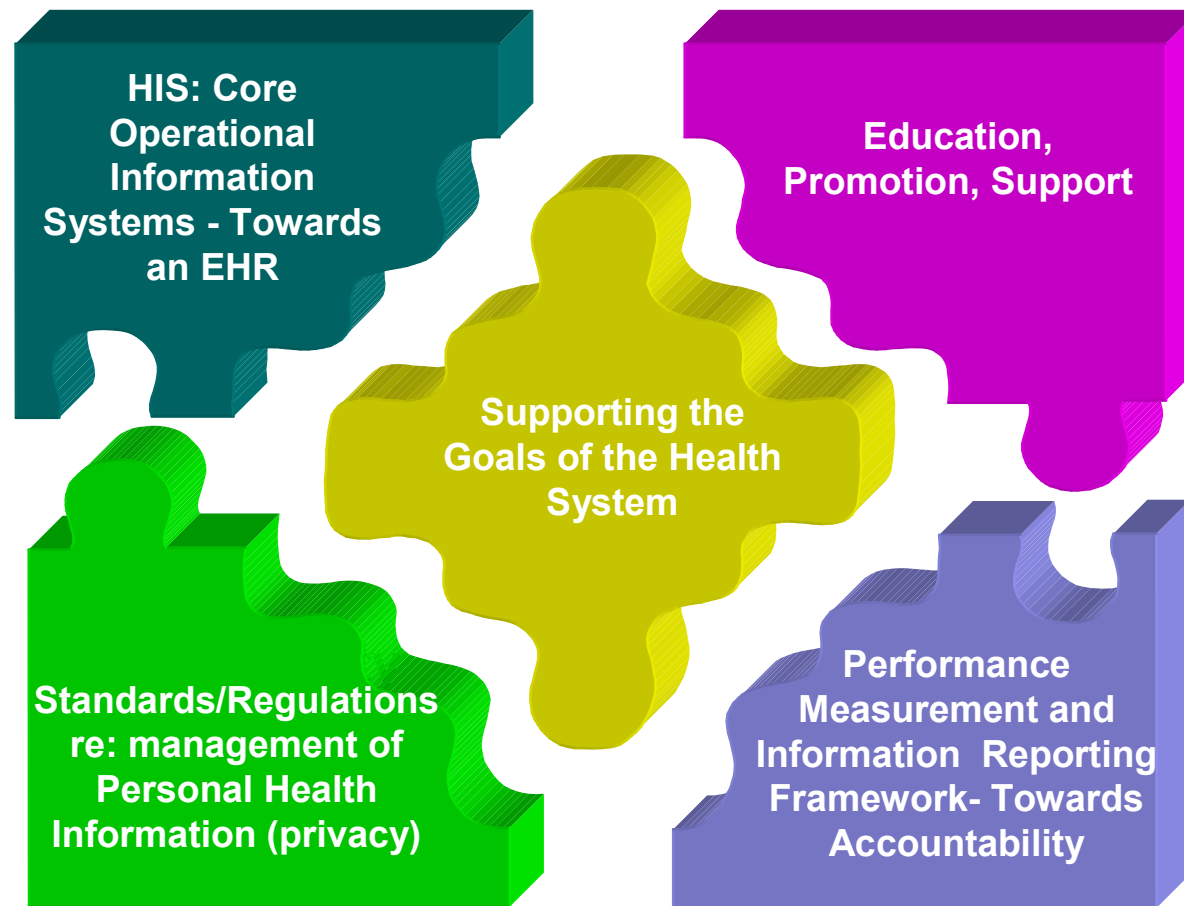
R<sub>x</sub>

Pharmacy

**Patient focused, community-based integrated service delivery requires... information follows the patient**



# Building Blocks- First Priorities of an IM Strategy for NS





## HIS: Core Operational Information Systems - Towards an EHR



## Nova Scotia Health Information System – A History

1995	Strategic Plan
97/98	RFP for HIS by Regions; preferred vendor selected
'99	Health Information "Action Team"
'99	New government
99/00	Update of strategic plan
2000	CIO portfolio created with a mandate to implement
00/01	HIS implementation plan developed
Spring 01	Implementation approach approved and implementation begun » April 2001 – endorsed by CEO's

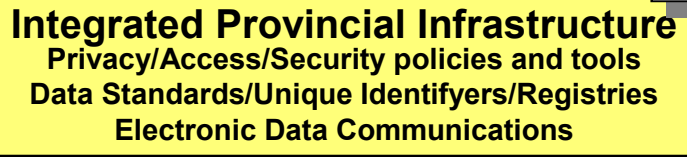
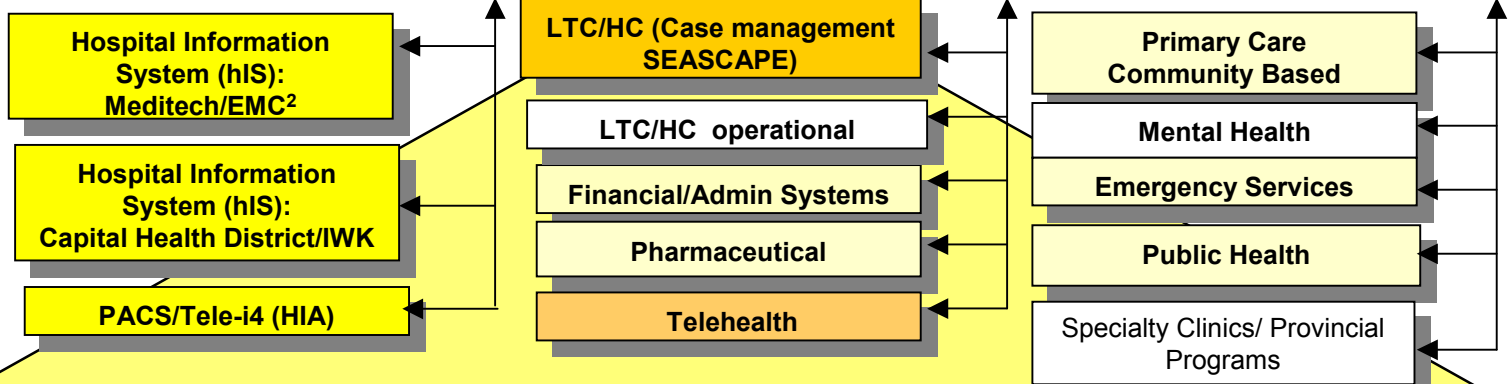
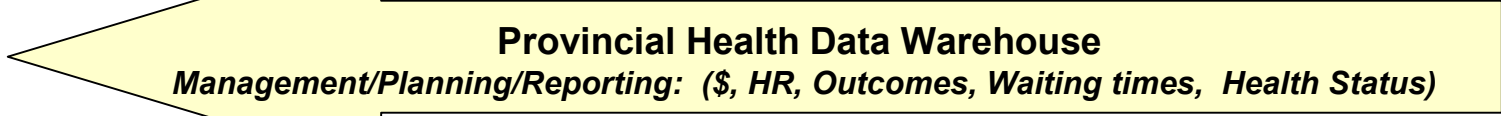
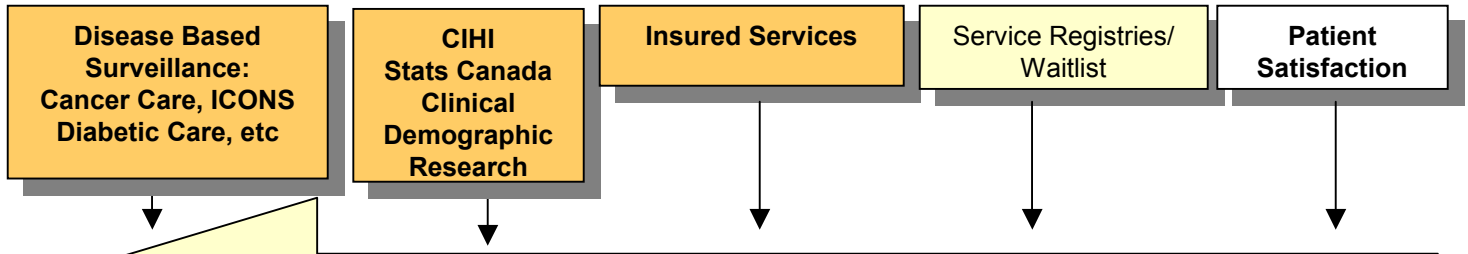


# Information Management Strategy: Development Principles

- *Driven by “business” (health system/user) needs , supported by technology*
- *Build on strengths and investments of current system - but do not throw good money after bad*
- *Build on a clarified and appropriate provincial role; recognize limitations and look for other mechanisms to fill gaps*
- *Reliable, secure and meets CSA standards for information management;*
- *Sustainable, affordable and can evolve over time;*
- *Achieves clear gains throughout the development process - NOT a big bang approach*
- *Supports user ownership and meaningfulness of information as it's collected - value add, availability, accountability, timeliness*
- *Set in the regional, national and (in some cases) international context*

Health Information Systems

Health Information Systems

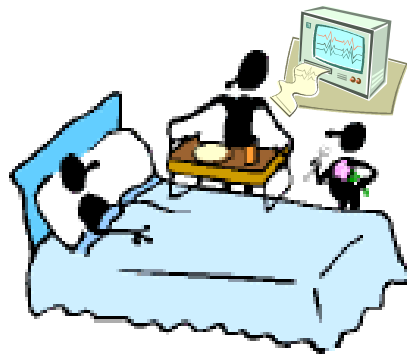


- Component largely in place
- Funded project
- Scoping underway
- Component absent or partly in place





# **Nova Scotia Hospital Information System (NSHIS) The Foundation of an E.H.R. for Nova Scotia**





## Goal

- To lead the country in employing province-wide EHR to improve care
  - Romonow, Kirby, First Ministers' Accord
  - National Steering Committee on Patient Safety, IOM



## Overall Project Objective

(approved by Steering Cttee Fall '01)

*Achieve a single integrated operational hospital information system using Meditech software in District Health Authorities 1–8 interfaced to District Health Authority 9 and the IWK, and available remotely to physicians in their offices.*



## The Nova Scotia Hospital Information System End Result - a Platform for EHR

*The NSHIS is seen as vehicle for building the province wide, person-based, electronic health record*

- At the end of the project rollout (FY 2004/05), NS will have:
  - ***Institution and physician-office accessible consolidated electronic EMR*** (for hospital based-encounters, including all lab and DI encounters, order-entry-results)
  - an end-to-end all-in ***lab information*** system (all labs in Nova Scotia are in-hospital), including scheduling, order entry/results reporting, available within institutions and to physician offices
  - a ***pharmacy/medication order-entry-results*** system with clinical decision support within hospitals
  - a multi-media, province-wide ***radiology information system*** (linking PACS, tele-radiology and traditional radiology data) including scheduling, order entry/results reporting, available within institutions and to physician offices
  - a province-wide ***census/ADT*** (single bed management system)



## The Nova Scotia Hospital Information System End Result - a Platform for EHR

- At the end of the project rollout (FY 2004/05), NS will have:
  - Sound platform for a broad ***data repository*** to advance improved planning and assessment of health care system performance
  - a province-wide framework for ***privacy policies***, access rules, auditing function, consent/view obligations and rights, and security architecture
  - A single, collaborative, potentially arms length (under consideration by government) ***province wide governance structure*** for Nova Scotia's health information system



## Implementation Dates

*IWK/  
CDHA  
Inte-  
gration*

*Remote  
Access  
to  
Doctors'  
Offices*

- February 1, 2003
  - DHA 7 (GASHA)
- June 1, 2003
  - DHA 8 (Cape Breton Healthcare Complex)
- November 1, 2003
  - DHA 8 (Rural sites)
- February 1, 2004
  - DHAs 1,2,3 and DHAs 4,5,6

***Est. Completion – 2005***



Standards/Regulations re:  
management of Personal  
Health Information (privacy)



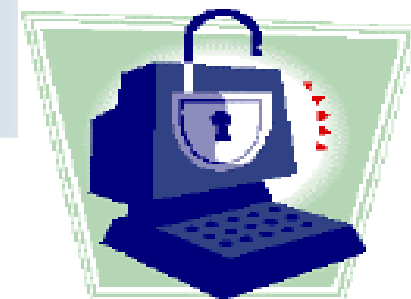
## Health Information Management Policy

*Develop strengthened approach to protecting personal health information in all media*

- 3 pronged
  - specific to HIS implementation
  - policies and practices w/ DoH
  - Broad Health Information Policy framework - possibly leading to legislation

Built on the principle of the need to **balance** the need to protect the privacy of personal health information with the personal and public value of sharing that information in an appropriate and respectful manner





## Privacy is an integral component of the NSHIS

*“It is our responsibility to develop a hospital information system that respects the privacy of every patient’s personal health information.”*

### Key guidelines for NSHIS

- Users only have authorized access to the information they need to do their job
- There must be balance between the patient’s right to privacy and the benefit derived by the patient when users have appropriate access to health information



# Privacy Framework

- Access
- Patient Rights
- Monitoring & Audit
- Protocol for Breach
- Training
- Communications



Performance  
Measurement and  
Information Reporting  
Framework- Towards  
Accountability



# Performance Measurement and Accountability

- Building a data and reporting/delivery model to support decision making at all levels
- Build Info Systems which reflect measurement and accountability priorities
- Supporting local/provincial needs for public accountability AND national commitments
  - Reporting framework project
  - Waitlist

Ensure information resources are leveraged to their fullest capacity

Support development of population health model by providing data and feedback on health across the continuum



Education,  
Promotion,  
Support



## Education, Communication and Support

- Training, communications a critical part of each implementation
- Foster champions where they exist
- Involve and consult with key stakeholders throughout
- Support research and education efforts to better understand, evaluate, and educate

Ensure sound change management efforts facilitate uptake by professionals, and interest by the public



## Critical Success Factors

- **FOCUS, FOCUS, FOCUS**
- **Balance between reasoned plans and flexibility to take advantage of time-limited opportunities (e.g. federal \$\$)**
- **Manage expectations**
- **Collaborate with stakeholders; take advantage of expertise and resources**
- **Education/Promotion/Communication must provide the foundation of all other activities . . .can never do enough**
- **Determine appropriate governance structure post implementations**
- **Work with Atlantic and National colleagues to leverage cost and revenue effective opportunities**