



Metro Toronto Convention Centre

# Enterprise Information Governance:

## *Connecting Health Information Management with Health Information Technology*

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# Outline

1. What is Enterprise Information Governance (EIG)
2. The chasm between IT and IM: closing the gaps
3. Case Study: EIG at Alberta Health Services
4. The Future
5. Questions & Discussion

# The Information Explosion

- Technology advances
  - mobile devices
  - Telemedicine
  - Sensors, “internet of things”
- Exponential growth in the volume and complexity Information & Data
  - System-generated
  - Patient-generated
  - Genomics
  - Social Media



**Transformation  
Underway**

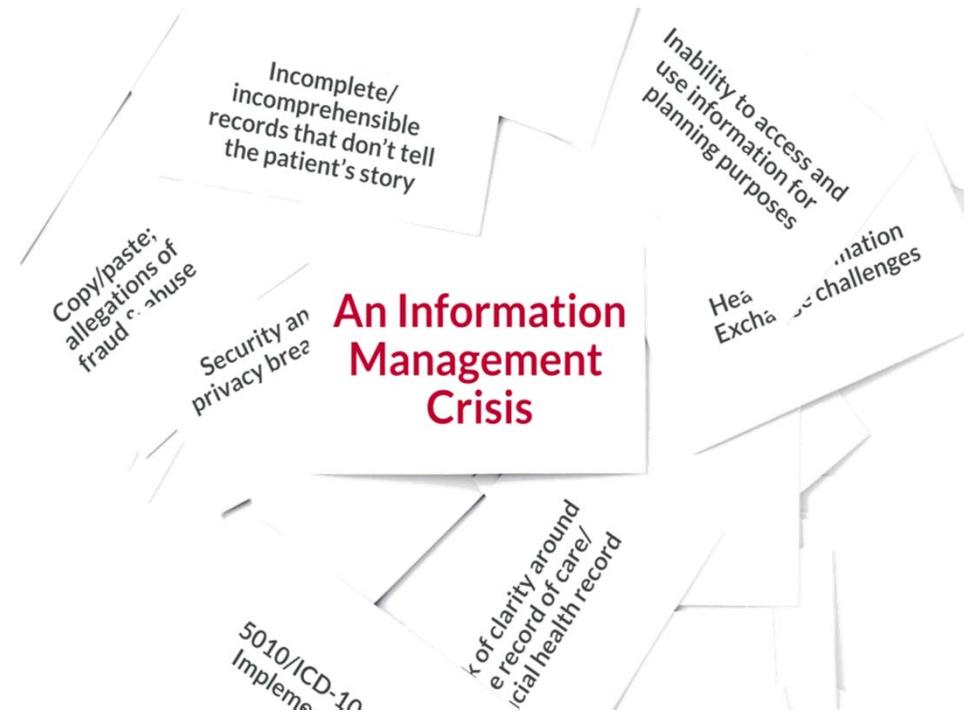
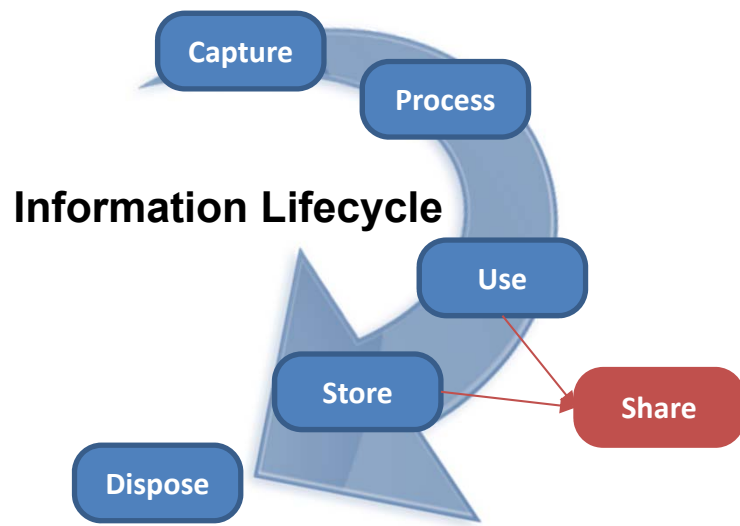
# The Information Explosion

- Health Reform: *changes in delivery system, payment models, etc.*
- Increased coordination of care across the continuum
- Population health management
- Data capture, documentation practices and interoperability: *emergence of standards*
- Legislation, regulation, best practices



**Transformation  
Underway**

# Information Imperative



# What is Enterprise Information Governance?

*An enterprise-wide framework for managing information throughout its lifecycle and supporting the organization's strategy, operations, regulatory, legal, risk, and environmental requirements*



# Enterprise Information Governance addresses:

- Who is accountable for what
- How information strategy aligns with the organization's goals
- How information is valued for preservation/retention/managing associated costs
- Roles, policies
- Standards (data and information management)
- Metrics

# What Falls under EIG?

## In General:

- Data standards, integrity and quality
- Privacy and security
- Disaster preparedness and business continuity
- Litigation response/  
e-discovery
- Lifecycle management/  
preservation/ retention

## Health care specific:

- Clinical documentation improvement
- Clinical content management
- Legal Health Record/Designated Records Set policy
- Other



# Haven't we always had Enterprise Information Governance?

- Yes, we have some of the elements relative to some policies/processes/structures
- No, differences are:
  - Strategic orientation
  - Enterprise focused, goes well beyond only health information to include all types, internal as well as external
  - Business strategies (eg. Master Data Management)

# AHIMA Information Governance Maturity Model (draft)



	Level 1	Level 2	Level 3	Level 4	Level 5	Totals
Accountability	2	5	6	5	5	23
Transparency	5	3	7	6	4	25
Integrity	2	3	13	9	5	32
Protection	3	4	7	7	4	25
Compliance	5	3	6	7	5	26
Availability	4	5	9	10	7	35
Retention	3	3	6	4	6	22
Disposition	5	6	12	7	5	35
Totals	29	32	66	55	41	223

**Note:** Maturity Markers - subject to **AHIMA IG Pilot validation** of relevance, rigor, fit, completeness and appropriateness by Principle and Maturity Level.



# Enterprise Information Governance in Healthcare Benchmarking Survey – White Paper

1. EIG programs are less prevalent and less mature than warranted, given the importance of information
2. Most organizations do not yet have a comprehensive strategy for enterprise information governance
3. Information governance framework: need for strengthening and expansion
4. Information lifecycle management practices related to core functions require improvement



Cohasset Associates | AHIMA 2014 "Information Governance in Healthcare – A Call to Adopt Information Governance Practices". <http://www.ahima.org/IGwhitepaper>.

# EIG Leadership: from where?

- *Leadership skills including collaboration, communication, and engagement*
- *change management*
- *project management*
- *information lifecycle management*
- *business process improvement*
- *understanding of healthcare regulatory compliance*
- *information privacy and security*
- *litigation and e-discovery*
- *understanding of business intelligence and data analytics*
- *information technology planning and governance*
- *EHR/clinical decision support*
- *Strategic vs. tactical*



# Closing the gap between IT and IM

## Information Technology

- Infrastructure
- Enterprise Architecture
- Technical Standards
- Application Implementation
- Interoperability
- Access and Security



## Information Management

- Infostructure
- Enterprise Information Governance
- Data and Information Standards
- Meaningful Use
- Privacy and Security
- Data Quality

# Enterprise Information Governance Case Study: Alberta Health Services

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# About Alberta Health Services (AHS)

- AHS is the largest health care services merger in Canada tasked with coordinating the delivery of health supports and services across the province:
  - Amalgamation of 9 former health regions and 3 provincial entities to a single health services board;
  - >100,000 staff serving a population of 3.7 million (including 7,400 physicians);
  - Governed by an “Official Administrator” who reports directly to the provincial government, specifically the Minister of Health;
  - Annual budget of ~\$13B

# Background

AHS' transition to a single provincial health service has identified significant data challenges:

- Clinical and non clinical information systems (paper and electronic) were implemented from a region-specific perspective.
- Lacking and inconsistent use of data standards, data capture methods and different methods for data aggregation and data duplication.
- Automation and integration of information systems is exposing data vulnerabilities.
- There was no centralized coordinated information management governance structure within AHS.
- Independent decisions were being made in the absence of a forum for enterprise-wide decision making resulting in a lack of provincial data/information standards, interoperability and duplication of effort.



# Background (Contd.)

- Health Information Management realized in the early days of AHS that in order for patient care to be transformed, information needed to be valued and trusted as a strategic asset.
- This includes all information types and all mediums that need to be managed and coordinated at the enterprise level through:
  - Standards
  - Policies, processes & guidelines
  - Identified roles & authorities
  - People, process & technology

# Enterprise Information Management Governance (EIMG)

What is Enterprise Information Management Governance at AHS?

*A centralized coordinated governance structure which supports the organization to obtain assurance that the risks to its information, and thereby the operational capabilities and integrity of the organization, are effectively identified and managed.*

*It does not replace operational responsibility for data/information but provides an overarching structure of policy, standards, guidelines, etc. to support business operations.*

# Key Messages: EIMG Framework

- Foundational “infrastructure” required to enable one health system;
- Focal point for the creation, approval and adoption of data/information standards and related policies & processes;
- Managing information requires shared decision making and planning throughout its lifecycle;
- Data within disparate clinical and non clinical information systems must be interoperable for integration that supports the single view;
- Established processes for the adoption, implementation, maintenance and consistent use of data and information standards to support interoperability;
- Risks must be identified and acted upon.

2013 November

**Leader**  
**Quality & Chief Medical Officer**  
**Dr. Verna Yiu**

**Information Management Governance Chair Advisory Group**

**Access, Security &  
Confidentiality  
Committee**

**Information  
Standards Adoption  
Committee**

**Identification &  
Encounter  
Management  
Committee**

**Clinical  
Documentation  
Committee**

**Records  
Management  
Committee**

**Data Integrity/  
Quality Committee**

**PURPOSE**

Strategic oversight and leadership regarding the management of data and information as an AHS corporate asset/resource, ensuring information integrity and reliability.

**SCOPE**

Support provincial data, information and related business standards, requirements, policy, decision making and issue management across AHS.

**Guiding Principles**

- Patient care centric
- Medium agnostic (paper or electronic)
- System design support with focus on standards and process improvement

**Foundational Responsibilities**

- Information Standards
- Legislative and Regulatory requirements
- Data Quality
- Best Practice
- Change management
- Communication and workflow support
- Collaborative

# Challenges

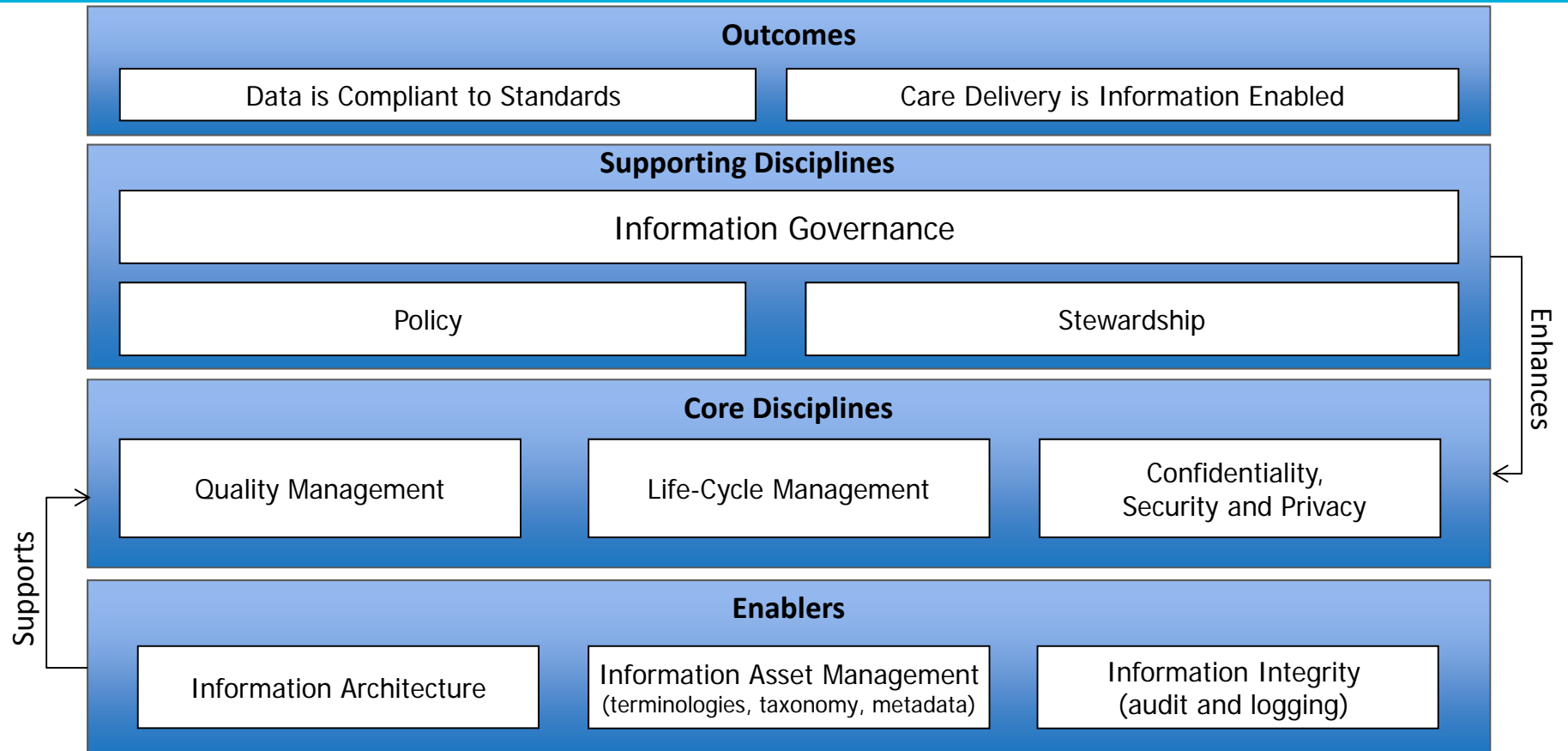
- Changing Executive, Senior Leadership and Executive Sponsor.
- Resources to implement a full EIM Program.
- Organizational awareness and understanding of what is meant by Enterprise Information Management.
- Confusion regarding what is meant by the terms “governance” and “standards”.
- Adoption and implementation of standards.

# Maturing the Framework

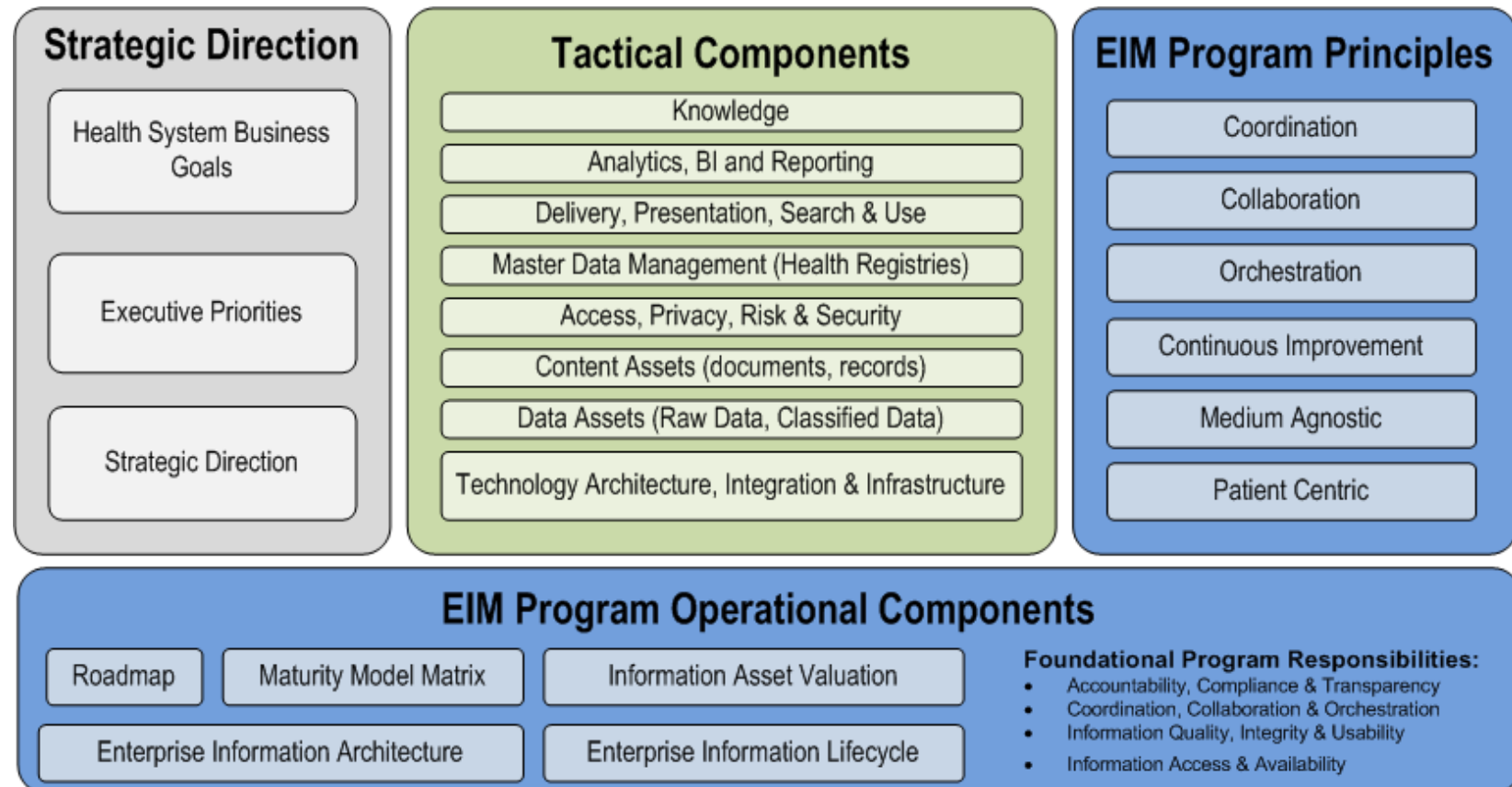
## Opportunities

- The IMG Framework is the **first step** in the progression of AHS towards an **Enterprise-wide** Information Management Program.
- The focus of the IMG Framework is at the enterprise level and will influence and improve the information management lifecycle, including consistent data, data definitions, data use and leading practices for Information Management.
- Gaining acceptance requires ongoing Executive and Senior Leadership support and clear and consistent communication regarding the purpose, goals, approval structure, progress and outcomes of the standing committees and working groups.
- Align the IMG Framework with organizational priorities such as the Provincial Clinical Information System and Provincial Health Analytic Network to name a few
- Leverage and align the “organic” Data Governance models to an enterprise model.

# EIM Conceptual Model



# EIM Program Framework





# Difference between EIMG and EIM?

Enterprise Information Management Governance (EIMG) is a foundational component of an Enterprise Information Management (EIM) Program.

- Both EIMG and EIM are strategic business disciplines.
- An EIM program cannot succeed without EIMG supporting information management directives across the organization.
- The components of EIMG include the following:
  - Information governance organization component
  - Data stewardship component
  - Data quality management component
  - Metadata management component
  - Privacy, confidentiality and security
  - Information life cycle management component



# Difference between EIMG and EIM? (Contd.)

EIM is an integrated discipline for structuring, describing and governing information assets, regardless of organizational and technological boundaries, to improve operational efficiency, promote transparency and enable business insight.

A key tenet of the EIM Program is the orchestration of existing effort, people, processes, and technology to ensure information can be used effectively across all domains of the care continuum.

This includes all organizational information, both internally and externally created and managed in all systems for all functions and in any media format (paper, film, microfiche, digital).

# Examples of EIM Issues

## No coordinated Master Data Management:

- Provider Registry
  - 2 possibly 3 versions of the Provider Registry
  - 3 Systems in AHS has batch integration all others are manual import
  - Most provider tables are maintained at the application level
  - Small Army of Data Quality Staff in AHS required to maintain Accuracy and Quality of Information
  - Source Systems i.e. CPSA database provides poor quality information as the authoritative source
- Client Registry
  - 2 versions of Client Registry
  - Unsupported software
  - Inappropriate data flow – sometimes compromise our own data

# Next Steps

- Strategic Alignment with Executive Committees, key business and IT stakeholders (Analytics, Policy & Forms, ERM, IT)
- Complete Detailed Development of EIM Program Framework
- Complete EIM Principles
- Develop EIM Program Framework Implementation approach
- Complete Development of EIM Program Operational Model
- Develop and Implement EIM Program Communication and Orientation Materials
- Coordinate Standards Inventory Project
- Realign and refine existing IMG BU processes with the EIM Program
- Complete Stakeholder engagement strategy

# QUESTIONS?

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