

The Office of the National Coordinator for Health IT

***A Record to Rely On: A Workshop on the Intersection of
Electronic Health Records, Health Law, Payment, and
Oversight***

Washington, DC November 29, 2016

**Medical Documentation and Clinical
Reliability**

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Outline

- About AHIMA
- Record of Care
- Usability Challenges with EHR Technology
 - Clinicians
 - Health Information Professionals
- AHIMA's Approach

The American Health Information Management Association (AHIMA)

AHIMA is a not-for-profit professional association representing 103,000 health information management (HIM) professionals

AHIMA is committed to:

- Ensuring the delivery of health information when and where it is needed
- Leading the industry in achieving data integrity through information governance
- Leading collaboration of stakeholders in the development of standards and rules for electronic healthcare documentation and interoperability approaches

AHIMA 2014-2017 Drive the Power of Knowledge. Strategic Plan. URL :

<http://bok.ahima.org/PdfView?oid=107449>

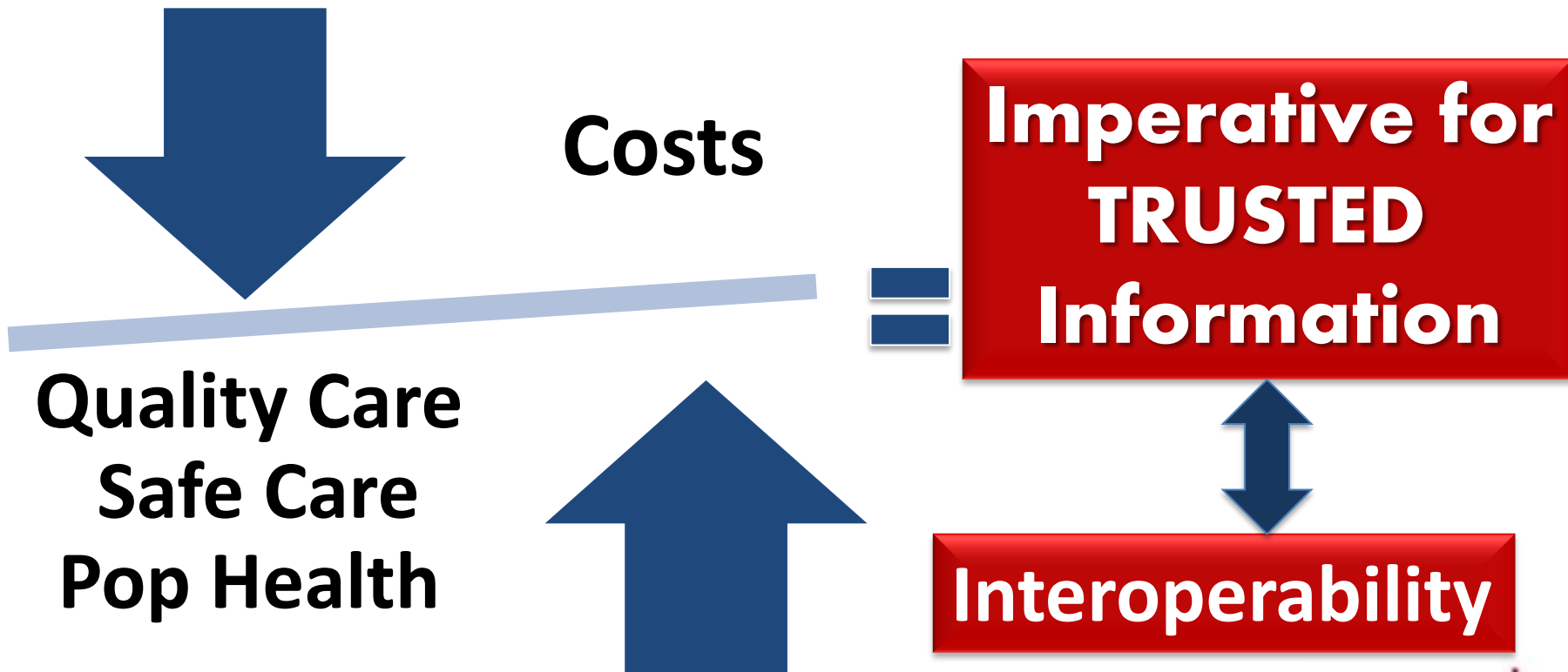
Record of Care

AHIMA Definition:

Systematic documentation of a patient's medical history and care that consists of information related to the physical or mental health condition of an individual, as made by or on behalf of a health professional in connection with the care ascribed to that individual

Source: AHIMA Pocket Glossary of Health Information Management and Technology 4th Edition. Chicago, IL. 2014. p.70

Healthcare Transformation



What Will Trust in Information Enable?

Right Patient – Right Information
Safe Use of Health IT
Confidence in Data & Information
Trust Exchange Partners
Higher Quality - Lower Costs
Proof of Value of Care Received
Reliable Analytics
Improved Health of Populations
Reliable Performance Measures



EHR Usability Challenges



EHR Usability Challenges: Clinicians



Usability Challenges with EHR Adoption

5-year US NIST
study of EHR users

National Institute of Standards and Technology (NIST). **Technical Evaluation, Testing, and Validation of the Usability of Electronic Health Records: Empirically Based Use Cases for Validating Safety-Enhanced Usability and Guidelines for Standardization.** NISTIR 7804-1 . September 2015.
URL:
<http://dx.doi.org/10.6028/NIST.IR.7804-1>

NISTIR 7804-1

Technical Evaluation, Testing, and Validation of the Usability of Electronic Health Records: Empirically Based Use Cases for Validating Safety-Enhanced Usability and Guidelines for Standardization

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This publication is available free of charge from:
<http://dx.doi.org/10.6028/NIST.IR.7804-1>

NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

EHR Usability Challenges for Clinicians

- Clinically relevant information is not available for the task at hand
- Inadequate documentation
- Inaccurate information
- Irretrievable information

National Institute of Standards and Technology (NIST). **Technical Evaluation, Testing, and Validation of the Usability of Electronic Health Records: Empirically Based Use Cases for Validating Safety-Enhanced Usability and Guidelines for Standardization**. NISTIR 7804-1 . September 2015. URL: <http://dx.doi.org/10.6028/NIST.IR.7804-1>

Issues with Information for Care Delivery

Issues	Examples
Data design and capture issues	<ul style="list-style-type: none"> • Inconsistent data definition across/between systems • Inability to tag and capture high value data elements • Inconsistencies between data in structured and unstructured notes.
Information integrity and quality issues	<ul style="list-style-type: none"> • Lack of trust in data (impedes ability to utilize for analytics) • Patient identification and patient data from devices, other records • Lack of data quality management efforts / tools • Process breaks / redundancies (shadow records) • Errors found at the 'end of the line' in patient portals
Inability to use data for analytics / advanced reporting	<ul style="list-style-type: none"> • Insufficient knowledge and skill of analysts • Errors found in data are not traced back to source • Siloed ownership at business or clinical level • Little or no ability to report across systems
Lack of interoperability	<ul style="list-style-type: none"> • Cost of interoperability • Systems ability to share data and information • Trust in inbound information from other organizations

Usability & Interoperability Challenges Affect Patient Safety

CLINICALLY RELEVANT INFORMATION NOT AVAILABLE FOR THE TASK AT HAND

- INFORMATION IS NOT RETRIEVABLE, TRUSTWORTHY, OR ACCURATE

INADEQUATE DOCUMENTATION

- INFORMATION IS LOST, NOT DOCUMENTED IN REAL TIME, OR LIVES IN MULTIPLE SYSTEMS

INACCURATE INFORMATION

- INFORMATION IS LOCATED OR DOCUMENTED IN WRONG CHART OR IS CHANGED BY OTHERS

IRRETRIEVABLE INFORMATION

- INFORMATION IS SCANNED AND/OR LOST AND ACCESSIBLE
- TABS ARE NOT REPRESENTATIVES

SUBOPTIMAL AND UNSAFE PATIENT CARE

EHR AS DESIGNED AND IMPLEMENTED DOES NOT FIT THE CLINICAL WORK DEMAND

NIST TIR 7804-1 . September 2015. URL:
<http://dx.doi.org/10.6028/NIST.IR.7804-1>

EHR Usability Challenges: Managing Health Information



EHR Usability Challenges for Health Information Professionals

Lack of consistent definitions and content

- What constitutes the official record of care?
- What information is requested and what is disclosed?
- Patient identification errors
- Amendment integrity challenges
- Copy paste errors
- User interface errors

EHR Usability Challenges: HIM Examples

Clinical Documentation Problems

- i. Could not delete visit record
- ii. ADT cannot be processed
- iii. Visit deleted
- iv. Could not save MPI Record
- v. Patient type M not found
- vi. Visit number does not exist
- vii. Could not merge visit record because record number does not exist

Source: Mitcheff M. A Case Study: The Association of Interoperability of Health Information and Potential Patient Safety Concerns. Putting Standards to Work Sessions. Presentation at 2016 AHIMA Convention, Baltimore MD, October 19, 2016.

EHR Usability Challenges: HIM Examples

Clinical Documentation Problems

- viii. ICD9 diagnosis code not found
- ix. Registration status P not found
- x. Received A08 on inactive patient
- xi. Visit did not pass inactive checking
- xii. Failed to load ICD diagnosis list (ICD10 error message)
- xiii. Could not store charge
- xiv. Charge code not found
- xv. No error message

Source: Mitcheff M. A Case Study: The Association of Interoperability of Health Information and Potential Patient Safety Concerns. Putting Standards to Work Sessions. Presentation at 2016 AHIMA Convention, Baltimore, MD.

October 19, 2016.

Addressing EHR Usability Challenges: AHIMA Approach



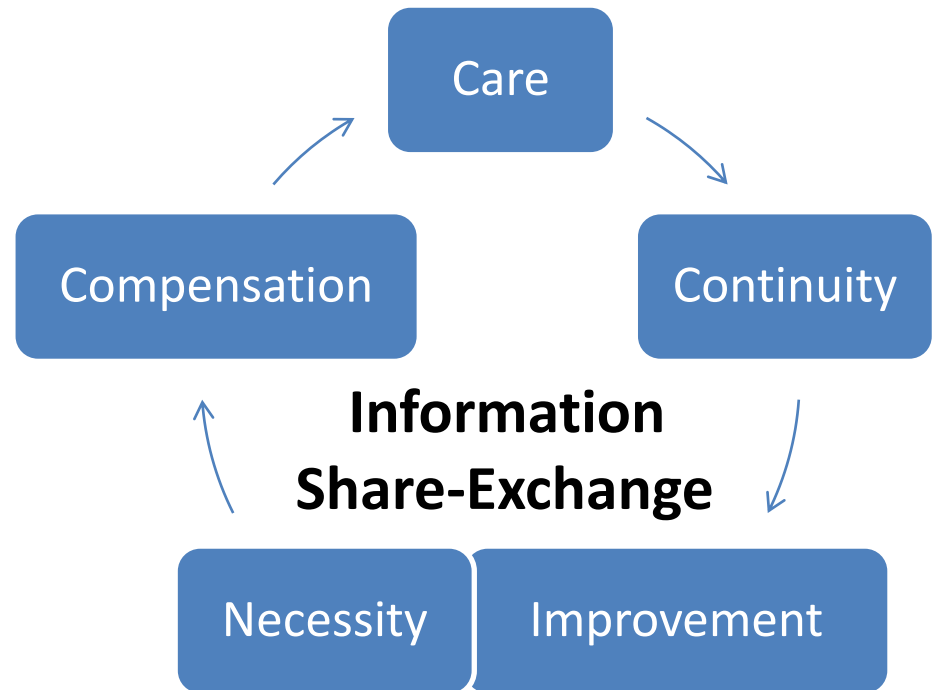
EHR Systems Must Support:

Record Management and Evidentiary Requirements

- Create, manage, exchange, preserve, and disclose records that meet organizational and jurisdictional policies and regulations
- Produce official business records
- Support current and historical records for evidentiary purposes
- Manage the record and information through its lifecycle from creation to destruction or disposition

We Must Implement Information Governance Programs

**TRUSTED
Information**



The Cost of Poor Information Quality in Healthcare

- **Productivity**
 - Duplication in the EHR creating increased workloads, decreased throughput, increased processing time, or decreased end-product quality
- **Risk and Compliance**
 - Patient safety
 - Patient identification (should be 99.99% accurate)
 - Potential for fraud
 - Data leakage (physicians texting nurses / notes not in chart)

The Cost of Poor Information Quality in Healthcare

- **Financial**

- Increased operating costs
- Decreased revenues
- Missed opportunities
- Reduction or delays in payments / pay for performance \$

- **Satisfaction**

- Patient satisfaction / decreased organizational trust when portal, billing or other information is incorrect
- Low confidence in forecasting by leadership
- Inconsistent reporting and re-work / validation
- Delayed decision making

WHAT IS INFORMATION GOVERNANCE (IG)?

AHIMA DEFINES IG AS “AN ORGANIZATION-WIDE FRAMEWORK FOR MANAGING INFORMATION THROUGHOUT ITS LIFECYCLE AND FOR SUPPORTING THE ORGANIZATION’S STRATEGY, OPERATIONS, REGULATORY, LEGAL, RISK, AND ENVIRONMENTAL REQUIREMENTS.”



Establishes
policy



Determines
accountabilities
for managing
information



Promotes objectivity
through robust,
repeatable
processes



Protects
information with
appropriate
controls



Prioritizes
investments

What is Information Governance?

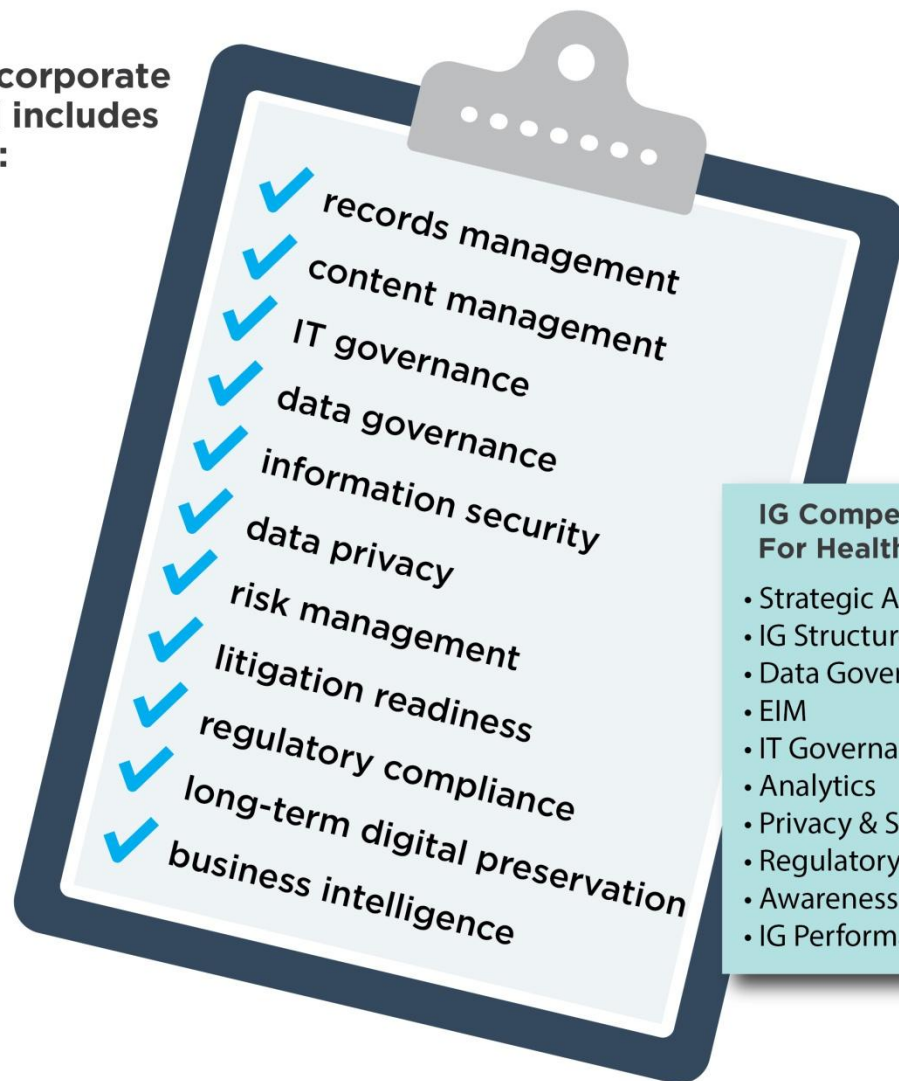
INFORMATION GOVERNANCE FOR HEALTHCARE INCLUDES:



Adopting an IG program shows an organization's commitment to managing its information as a valued strategic asset.

INFORMATION GOVERNANCE IS AN EMERGING SUPER DISCIPLINE

It is a subset of corporate governance and includes key concepts of:

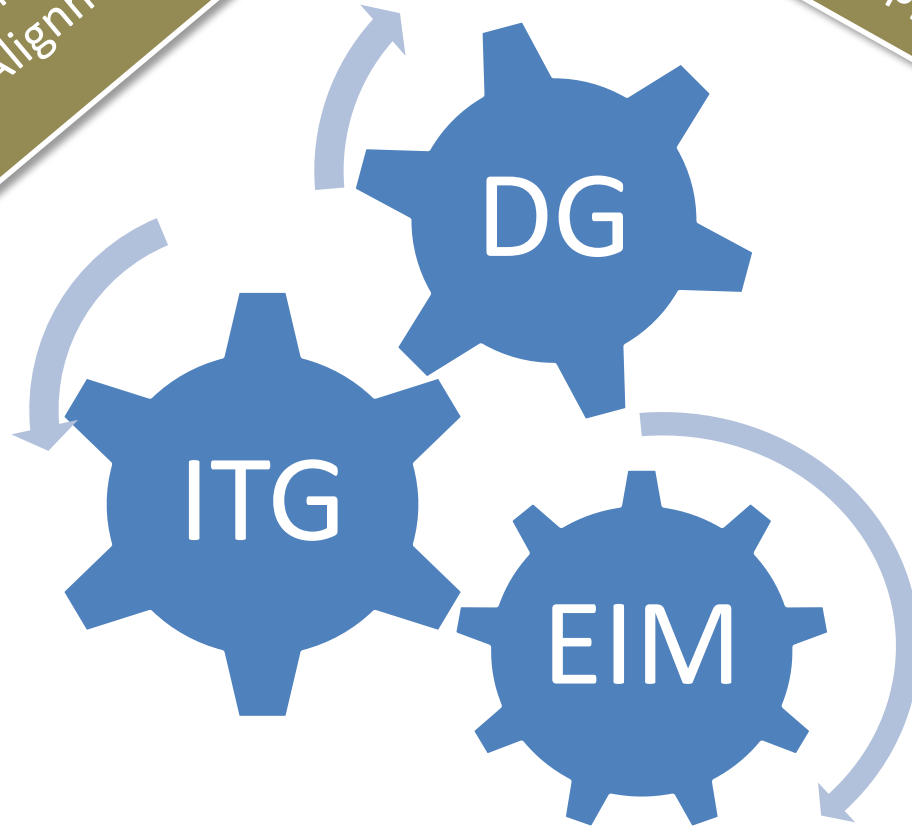


Robert F. Smallwood
[Information Governance](#)
[Concepts, Strategies, and Best Practices](#)

IG Competencies For Healthcare:

- Strategic Alignment
- IG Structure
- Data Governance
- EIM
- IT Governance
- Analytics
- Privacy & Security
- Regulatory & Legal
- Awareness & Adherence
- IG Performance

Information Governance for Healthcare

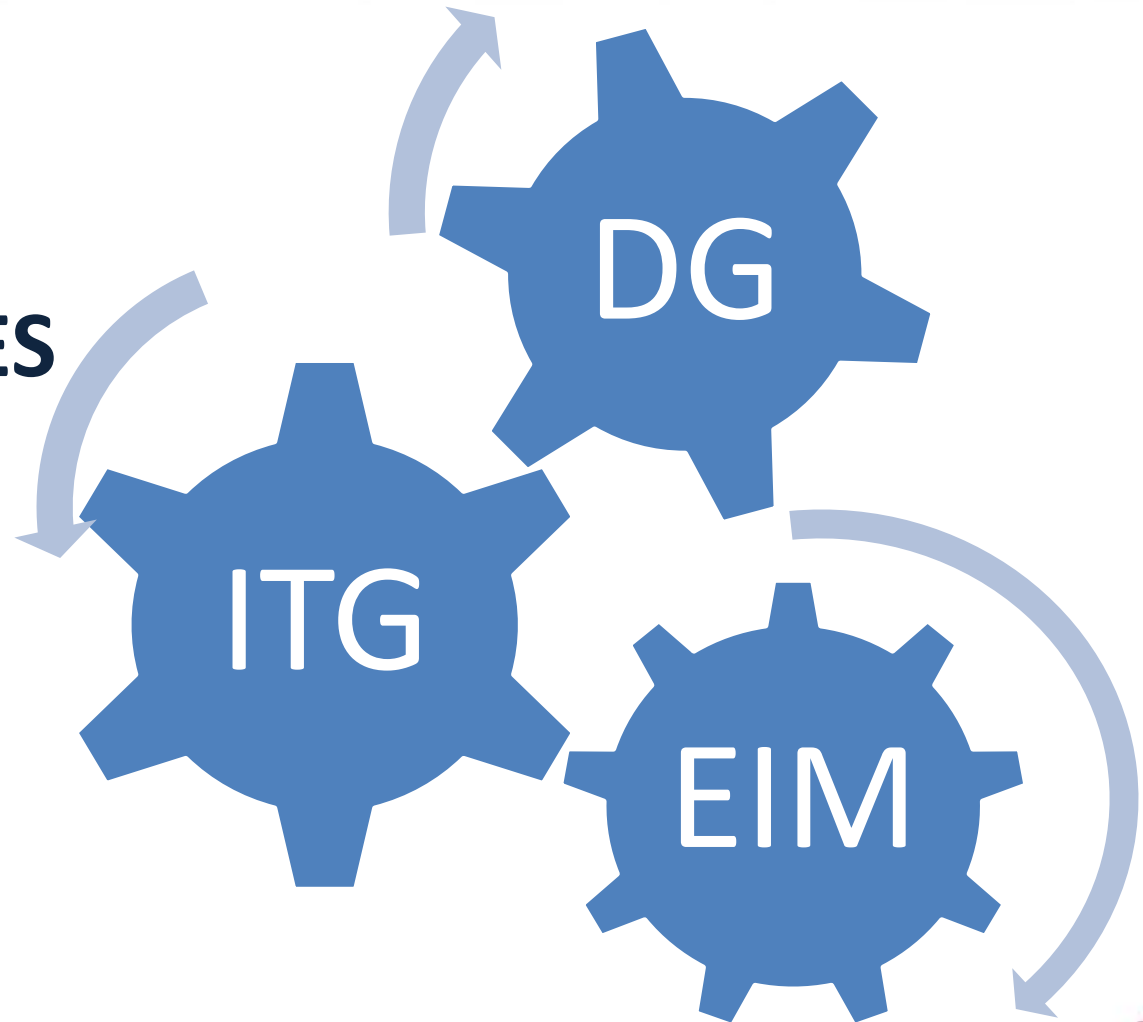


IG Principles For HealthCare™*:
Accountability
Transparency
Integrity
Protection
Compliance
Availability
Retention
Disposition

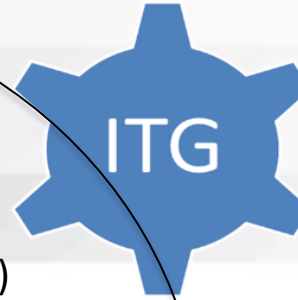
IG Competencies For Healthcare:
Strategic Alignment
IG Structures
DG
EIM
ITG
Analytics
Privacy & Security
Regulatory & Legal
Awareness & Adherence
IG Performance

Information Governance for Healthcare

CORE COMPETENCIES



Core IG Program Competencies



- Enterprise IT Infrastructure Planning
- IT Governance Framework(s) Adoption
- IT Governance Scoped for Evolving Changes in Platforms
- IT Execution per Best Practices

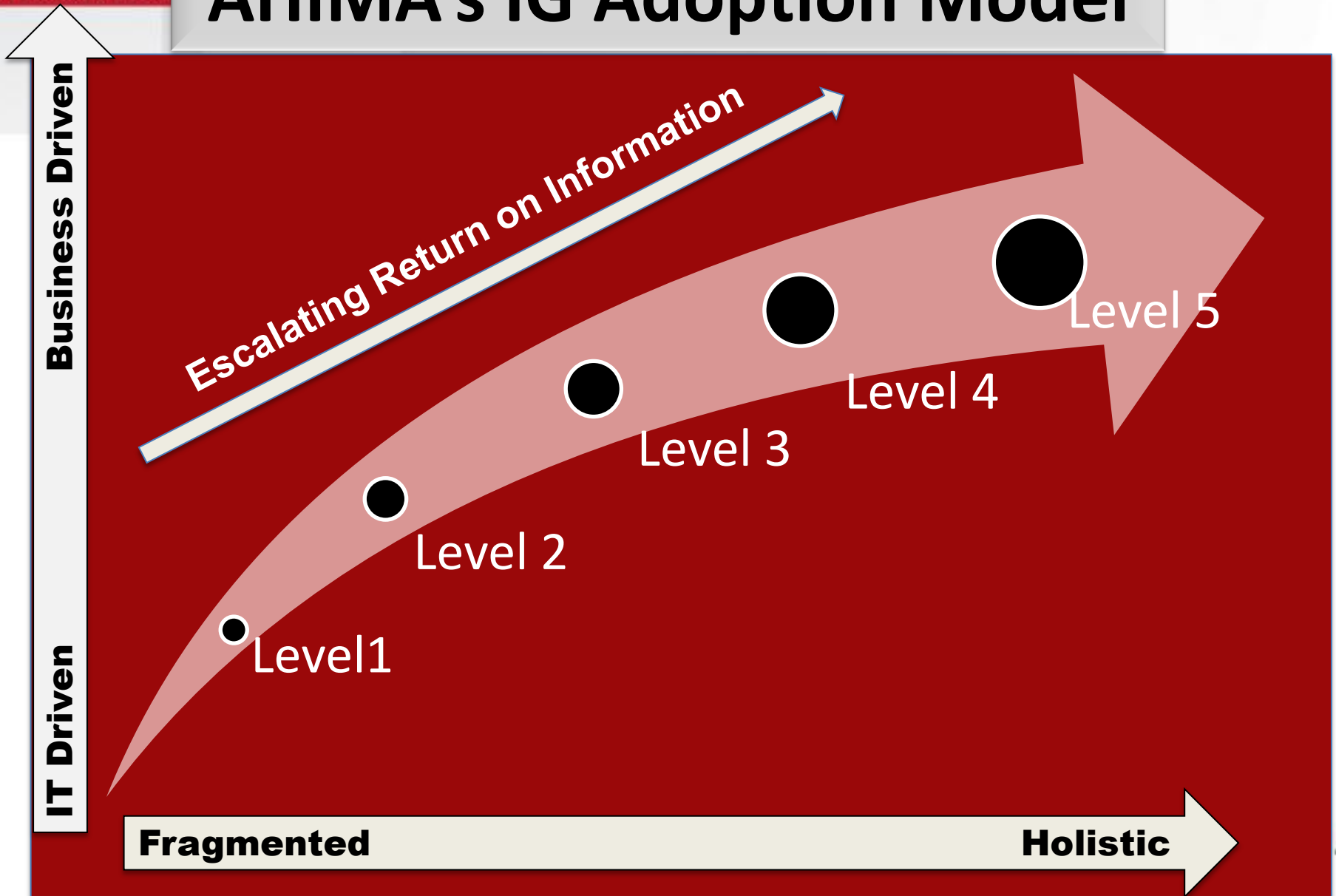


- Enterprise Information Planning & Execution
- Information Organization & Classification
- Electronic Document, Record, & Content Mgmt
- Information Lifecycle Mgmt
- Information Protection
- Appropriate Use
- Information Sharing, Release, Exchange
- Chain of Custody
- Long-Term Digital Preservation

- Enterprise Information Planning
- Enterprise Data Planning
- Enterprise IT Planning
- Data and Information Organization & Classification
- Master Data Mgmt
- Taxonomies Mgmt
- Metadata Mgmt

- Enterprise Data Planning
- Data Quality Control and Quality Mgmt
- Data Categorization
- Master Data Mgmt
- Taxonomies Mgmt
- Metadata Mgmt
- Data Dictionary Mgmt
- Data Lifecycle Mgmt

AHIMA's IG Adoption Model



AHIMA's IG Adoption Model

Business Driven

IT Driven

Escalating Return on Information

Scores by Competency and
Total Score by Organization

Level 1

70+ individual
"markers" of maturity scored
Across the 10 Competencies

Level 2

Level 3

Level 4

Level 5

Fragmented

- IG Competencies
- For Healthcare:
- Strategic Alignment
- IG Structures
- DG
- EIM
- ITG
- Analytics
- Privacy & Security
- Regulatory & Legal
- Awareness & Adherence
- IG Performance

Information Governance and Standards

- Enabling **functional interoperability** by standardizing information management practices in healthcare
- Enabling **semantic interoperability** by creating trusted information via content standardization activities
- Collaborating with vendors and SDOs to support **technical interoperability**



Standards for Functional Interoperability

ISO/TC215 Standards on Information Governance (IG)

ISO/TR 22221:2006 Health informatics, Good principles and practices for a clinical data warehouse
ISO 27799:2008 Health informatics, Information security management in health using ISO/IEC 27002
ISO 21091:2013 Health informatics, Directory services for healthcare providers, subjects of care and other entities
ISO/TS 22600-1 Health informatics, Privilege management and access control - Part 1: Overview and policy management
ISO/TS 22600-1 Health informatics, Privilege management and access control - Part 2: Formal models
ISO/TS 22600-1 Health informatics, Privilege management and access control - Part 3: Implementations
ISO 27789 Health informatics, Audit trails for electronic health records
ISO/TS 25237:2008 Health informatics, Pseudonymization
ISO/TS 21547:2010 Health informatics , Secure archiving of electronic health records - Part1: Principles and requirements
ISO/TR 21548:2010 Health informatics, Secure archiving of electronic health records - Part 2: Guidelines

*TR – Technical Report

**TS – Technical Specification

What will Information Governance and Interoperability Standards enable?

Right Patient – Right Information
Safe Use of Health IT
Confidence in Data & Information
Trust Exchange Partners
Higher Quality - Lower Costs
Proof of Value of Care Received
Reliable Analytics
Improved Health of Populations
Reliable Performance Measures



Questions

