### 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

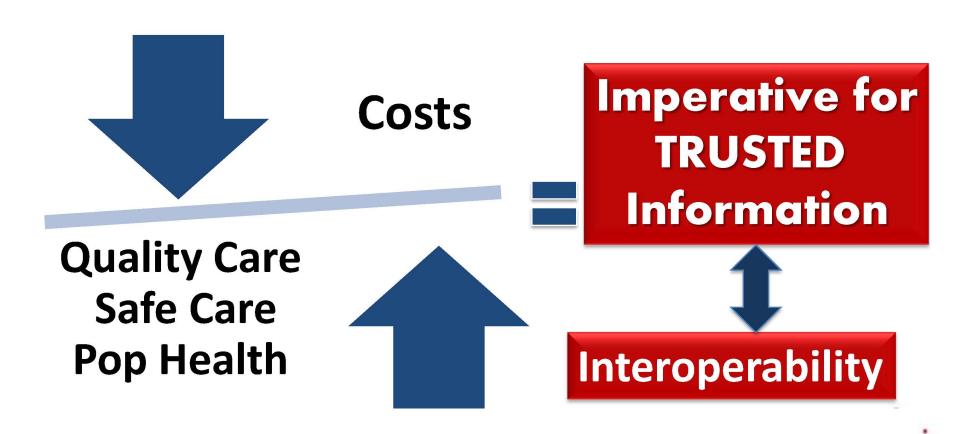
AHIMA 2014-2017 Drive the Power of Knowledge. Strategic Plan. URL: <a href="http://bok.ahima.org/PdfView?oid=107449">http://bok.ahima.org/PdfView?oid=107449</a>

### 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 4<sup>th</sup> Edition. Chicago, IL. 2014. p.70

### **Healthcare Transformation**



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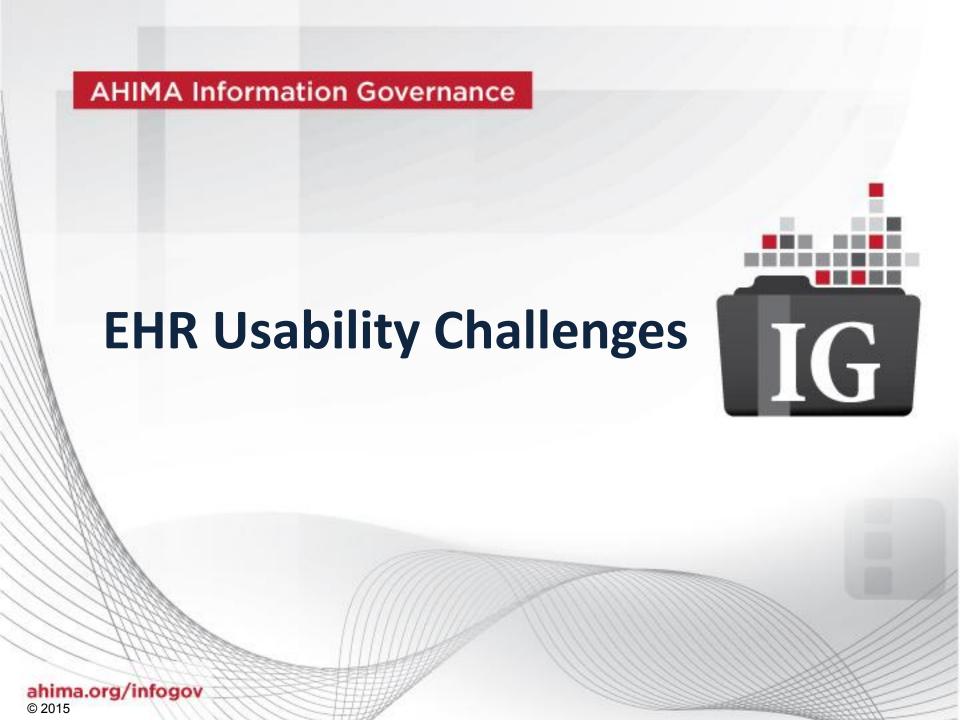


### What Will Trust in Information Enable?

**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** 







**AHIMA Information Governance** 

# 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/

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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

> 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: <a href="http://dx.doi.org/10.6028/NIST.IR.7804-1">http://dx.doi.org/10.6028/NIST.IR.7804-1</a>

### Issues with Information for Care Delivery

Issues	Examples
Data design and capture issues	<ul> <li>Inconsistent data definition across/between systems</li> <li>Inability to tag and capture high value data elements</li> <li>Inconsistencies between data in structured and unstructured notes.</li> </ul>
Information integrity and quality issues	<ul> <li>Lack of trust in data (impedes ability to utilize for analytics)</li> <li>Patient identification and patient data from devices, other records</li> <li>Lack of data quality management efforts / tools</li> <li>Process breaks / redundancies (shadow records)</li> <li>Errors found at the 'end of the line' in patient portals</li> </ul>
Inability to use data for analytics / advanced reporting	<ul> <li>Insufficient knowledge and skill of analysts</li> <li>Errors found in data are not traced back to source</li> <li>Siloed ownership at business or clinical level</li> <li>Little or no ability to report across systems</li> </ul>
Lack of interoperability	<ul> <li>Cost of interoperability</li> <li>Systems ability to share data and information</li> <li>Trust in inbound information from other organizations</li> </ul>

### 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



### **AHIMA Information Governance**

# 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**

- 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, continued

### Clinical Documentation Problems, continued

- 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.

#### **AHIMA Information Governance**

# Addressing EHR Usability Challenges: AHIMA Approach



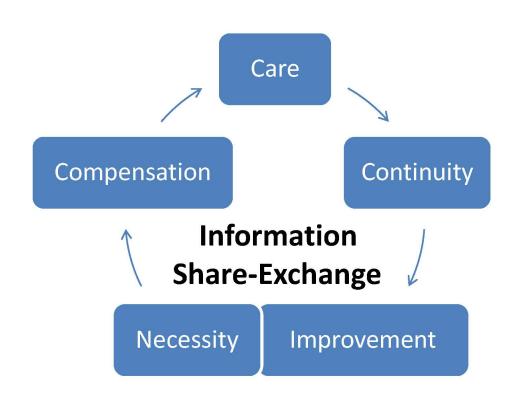
### **EHR Systems Must Support:**

### 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







### 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, continued

#### 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."







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:

records management content management ✓ IT governance data governance information security ✓ data privacy risk management ✓ litigation readiness ✓ regulatory compliance long-term digital preservation business intelligence

IG Competencies
For Healthcare:

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

Robert F. Smallwood
Information
Governance
Concepts, Strategies,
and Best Practices

### **Information Governance for Healthcare**

Organizational Organizational

Strategic Alignment Organizational Supports

IG <u>Principles</u> For HealthCare™\*: Accountability Transparency Integrity Protection Compliance Availability Retention Disposition



#### **IG** Competencies

For Healthcare: Strategic Alignment IG Structures

DG

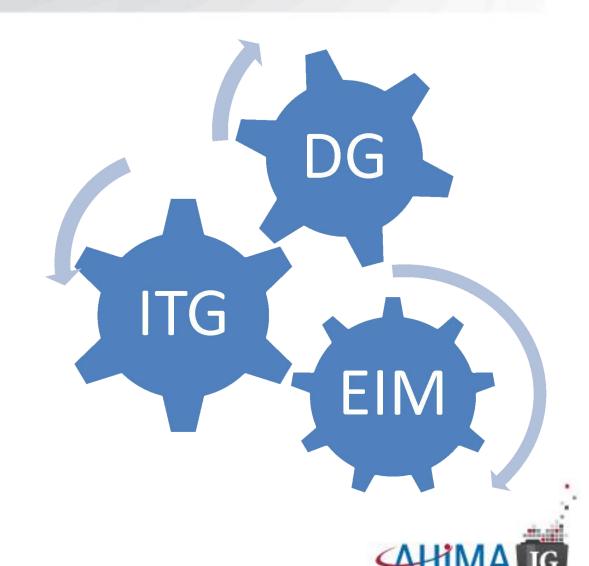
**EIM** 

**ITG** 

Analytics
Privacy & Security
Regulatory & Legal
Awareness &
Adherence
IG Performance

### Information Governance for Healthcare, continued

### CORE COMPETENCIES





#### AHIMA Information Governance

# 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,
- 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

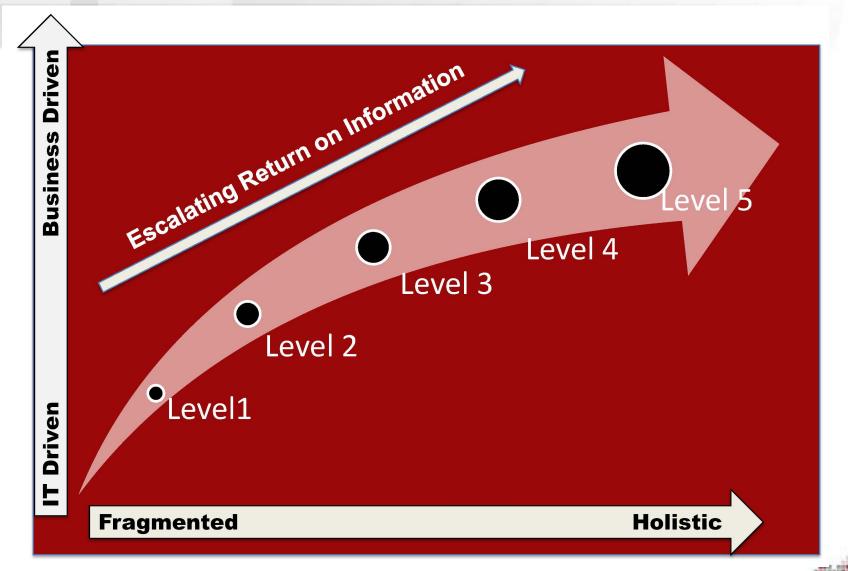
ITG

- 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, 2

Escalating Return on Information Driven Scores by Competency and **Total Score by Organization** SI 8 Level 4 **IG Competencies** Level 3 For Healthcare: **Strategic Alignment** Level 2 **IG Structures** DG **EIM** 70+ individual level1 Driven ITG "markers" of maturity scored **Analytics** Across the 10 Competencies **Privacy & Security Regulatory & Legal Fragmented H** 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**



