AHIMA Standards Task Force

Information Governance Standards Project

Specification of Checklists and Use Cases for

AHIMA Information Governance Principles for Health Care (IGPHC)

Chicago, Illinois, USA

2016

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# Synopsis

**Overview**

Built upon the established collaboration with the Integrating the Healthcare Enterprise (IHE) – a collaborative of health information technology (HIT) vendors, users and associations of healthcare professionals to develop interoperability standards – AHIMA has been working with vendors of electronic health records (EHR), other health information systems (HIS) and health information technology (HIT) applications guiding the development of functional standards to support health information management (HIM) practices in electronic environments.

To address user needs with HIT adoption, AHIMA has been leading the development of best practices and guidelines for information management and information governance as a part of a new globally-focused AHIMA initiative on Information Governance (IG).[[1]](#footnote-1),[[2]](#footnote-2) The IG initiative provides an organization-wide framework for managing information throughout its lifecycle, while, supporting the organization’s strategy, operations, regulatory, legal, risk, and environmental requirements. The AHIMA IG Initiative – a key component of AHIMA's overall strategy to develop guidelines, operating rules and standards for healthcare documentation practices – served as a foundation for the AHIMA-IHE collaborative activities, which resulted in publication of the AHIMA-IHE white paper “Health IT Standards for HIM Practices” (<http://qrs.ly/lb4vec0>) in 2015.

This document specifies HIM Checklists and Use Cases for the selected business requirements specified under the eight AHIMA IG principles in health care (IGPHC) such as *information availability, integrity, protection, accountability, transparency, compliance, retention and disposition.* Business requirements under IGPHC principles were specified in the AHIMA Specification of Business Requirements for

AHIMA Information Governance Principles for Health Care published in August 2016 (URL: xxxxx).

 Table 1 shows AHIMA efforts for specifying HIM Checklists and Use Cases completed in 2015 as a part of the AHIMA-IHE white paper as well as the 2016 effort of the AHIMA Standards Taskforce.

Table 1. HIM Checklists and Use Cases for HIT Standards

|  |
| --- |
| Use Cases for HIT Standards  |
| 2015 AHIMA-IHE White Paper | 2016 AHIMA Specification |
| 1. All documents in the episode of care record are accounted for
2. Episode of care record is complete and closed
3. Release of Information (ROI) to external requestor
4. Audit for the episode of care record
5. Audit for the ROI
 | 1. Copy and paste
2. Record and data quality
3. Patient registration
4. Patient matching
5. Transition of care
 |

Specification of HIM Checklists and Use Cases is a part of the collaborative informatics-based approach for translating HIM practices into HIT standards that was deployed in the 2015 AHIMA-IHE White paper. This approach of guiding the development of HIT standards to support HIM practices is shown on Figure 1 below.

**Approach**



 **IG Principles in Healthcare | Use Cases for Standards**

Figure 1. Approach for Guiding the Development of HIT Standards to Support HIM Practices

(Source: AHIMA-IHE White Paper, 2015)

**Target Audience**

This specification is targeted to

1. Organizations (e.g. healthcare organizations, public health agencies, payers/insurance companies, academia) involved in origination, management, and use of healthcare data
2. Health professionals that originate, manage, and use healthcare data
3. Consumers (e.g. patients, care givers, employees, employers) involved in data origination, management, and use of healthcare data
4. Implementers - Organization’s staff involved in implementation of HIT Systems
5. HIT Vendors and consultants involved in the design and implementation of HIT systems
6. Health information exchange (HIE) entities that collect, manage, and share data
7. Standards developers at various standards development organizations (SDOs)
8. Educators involved in HIT, HIM and informatics training.

**Scope**

This specification is applicable for all health information (clinical, financial and operational) on various media and formats created by a healthcare organization in its enterprise information management system. This includes legal health records and information contributed by patients. In 2016, we are focusing on target audiences #1 and 2 .

**Development Process**

HIM Checklists and Use Cases were developed based on the analysis of the selected business requirements specified in the 2016 AHIMA Specification of Business Requirements (currently under public review) as well as literature review of the best HIM practices related to documentation management. The business requirements originally derived from the description of business processes, i.e., statements, provided by each principle in the 2014 AHIMA’s Information Governance Principles for Healthcare (IGPHC)[[3]](#footnote-3) white paper.

AHIMA Standards Taskforce of subject matter experts (SMEs) conducted thorough review of each checklist and use case in consensus-based discussions. In addition, the requirements were reviewed by a broader audience of HIM professionals during the public comment period. Finalized statements were further used to harmonize the requirements with the AHIMA Information Governance Adoption Model (IGAM)[[4]](#footnote-4). So, organizations interested in IGAM assessment could prove that each requirement has been met.

**Glossary**

Glossary of terms was developed in the 2015 AHIMA-IHE White paper. In 2016, we continued to update the glossary as a separate document. We are also in the process of uploading our terms into the Standards Knowledge Management Tool (SKMT, URL: http://www.skmtglossary.org/) – an international Joint Initiative for Global Standards Harmonization Health Informatics Document Registry and Glossary.

**Resources**

Actors

Table 1 contains the **list of actors** that is used across various HIM Checklists and Use Cases. This list includes both Business Actors (users) and Technical Actors (information systems and HIT application). This separation between business (humans) and technical (information systems) actors is important to align actors specified in the HIM Checklists and Use Cases with the applicable technical actors from the IHE interoperability standards, e.g., Content Creator (information systems that acts as information sender) and Content Consumer (information systems that acts as information receiver).

Table 1. HIMS Checklists and Use Cases: Business and Technical Actors

|  |  |
| --- | --- |
| **Actors** | **Roles** |
| Business Actors |
| *Primary users:** clinical care professionals
 | deliver direct patient care |
| * public health professionals
 | involved in direct patient care |
| *Secondary users* :* health information management staff
 | information management (capture, validation, retention, etc.) |
| * compliance staff
 |  |
| * billing staff
 |  |
| * regulatory staff
 |  |
| * legal staff
 |  |
| * insurance carriers
 |  |
| * researchers
 | clinical research, healthcare services research, etc. |
| * public health professionals
 | public health surveillance, policy and assurance |
| Technical Actors |
| Health Information System (HIS) |  |
| Electronic Health Record (EHR) |  |
| Laboratory Information Management System (LIMS) |  |
| Clinical Imaging Systems |  |
| Pharmacy Information Systems |  |
| Public Health Information Systems |  |
| Patient Portal |  |
| mHealth Application |  |

References

Each HIM Checklist and Use Case section contains references to the materials used in their development.

**Document Structure**

Sections that follow provide specifications of HIM Checklists and Use Cases. Each section presents requirements using the following outline:

* Business Requirements
* Definitions
* Actors (business, technical)
* Problems
* Solutions
* HIM Checklist
* HIM Use Case
* References

# Specifications of HIM Checklists and Use Cases

## Copy and Paste

Business Requirements

| Health Information Integrity (I): Business Requirements |
| --- |
| I-16. Ability to establish parameters for “enable / disable” capabilities for “copy and paste” HIT function. |
| I-17. Ability to track “copy and paste” usage (e.g., via color coding, flags, notes, and/or using other visual identifiers), so information from a previous entry is identifiable and viewable in a subsequent entry, as well as presented in a complete chronological sequence within a single episode of care. This will include maintaining metadata on “copy and paste” usage in a data audit of the use of “copy and paste” function including the source, date, time, author of performing copy and paste. |

|  |
| --- |
| **Health Information Compliance: Business Requirements** |
| C-8. Ability to develop internal controls to monitor adherence to rules, regulations, and program requirements, thus assessing and ensuring compliance |

Sections that follow were developed based on the *AHIMA Copy Functionality Toolkit – A Practical Guide: Information Management and Governance of Copy Functions in Electronic Health Record Systems*. 2011. URL: <http://bok.ahima.org/doc?oid=105646>

Definitions

The term ***copy*** means any one of the following synonyms: copy and paste, cloning, copy forward, re-use, carry forward, and save note as a template and any intent to move documentation from one part of the record to another.

Actors

ADD specifics from Table 1. HIMS Checklists and Use Cases: Business and Technical Actors

Problems

Problems (risks) to documentation integrity of using “copy and paste” capability include:

* Inaccurate or outdated information on the patient that may adversely impact patient care
* Information on the wrong patient that may adversely impact patient care
* Redundant information, which causes the inability to determine current information
* Inability to identify the author or intent of documentation
* Inability to identify when the documentation was first created
* Inability to accurately support or defend E/M??? codes for professional or technical billing notes
* Propagation of false information
* Internally inconsistent progress notes
* Unnecessarily lengthy progress notes

Solutions

Utilization of “copy and paste” capability in health information systems is based on:

* Organizational acceptable uses
* Operational processes and checklists
* Documentation guidelines – what are they?
* Responsibility – Which One?
* Auditing and reporting
* Sanctions

**Business Requirements #I-16 and #C-8**

Checklist: Ability to Establish Parameters for “Enable /Disable Copy & Paste” Action

* Define organizational policy for copy & paste action by
	+ Specifying clinical documentation in which copy & paste action can be performed
	+ Specifying actors (business and technical) responsible for performing copy & paste action
	+ Specifying audit procedure and documentation for performed copy & paste action
	+ Specifying training procedure for the personnel involved in performing and auditing copy & paste action

**Business Requirements #I-17and #C-8**

Checklist: Ability to Perform and Track “Copy and Paste” Usage by HIT Users

* Perform copy & paste action by
	+ Coping necessary section(s) in the original document
	+ Pasting necessary section(s) into the new document
	+ Verifying copied/pasted section(s) between the original and new documents by providing electronic signature and date/time stamp of completed action
* Identify copy & paste action retrospectively by
	+ Viewing highlighted copied text in the original document
	+ Viewing highlighted pasted text in the new document
	+ Identifying/tracking the identification numbers of the original and new documents
	+ Identifying/tracking the actors (business and technical) of the original document
		- Business actor: name, role, signature
		- Technical actor: system name and ID
		- Date/time stamp when the original document was created
	+ Identifying/tracking the actors (business and technical) who performed copy& paste action (name, role, signature) and where the action was performed
		- Business actor: name, role, signature
		- Technical actor: system name and ID
	+ Identifying/tracking the date and time of the performed copy& paste action
		- date/time stamp
* Generate the audit log of copy & paste actions in real time by specifying
	+ The name of actor performing the copy function
		- Business actor: name, role
		- Technical actor: system name and ID
	+ What information was copied
	+ The original document information was copied from
	+ The new document where information was pasted to
	+ Date/time when the action was performed

Scenarios

The following case scenarios demonstrate the appropriate use of copy & paste action.

**CASE SCENARIO 1**

*A 65-year-old woman is a direct admission from her primary care physician (PCP) for pneumonia. She is admitted to the hospital under the care of her PCP to a general medicine floor. The PCP documents an extensive history and physical examination in the HER and orders the appropriate tests. On day one of the hospital stay, the physician completes a progress note. On subsequent days two and three, the physician completes progress notes updating the patient’s progress and documents the results of all tests. On day four, the patient is discharged home. The PCP copies forward the chief complaint and physical examination from the progress note on day one. The PCP indicates that the information is copied by inserting quotation marks around the documentation and noting “copied from day 1 note.” He notes on the final progress which phrases have been copied forward and then adds new content underneath.*

**Result:** The physician appropriately used the copy functionality.

**CASE SCENARIO 2**

*Jane Doe presents to a hospital emergency room for a laceration. While washing dishes this 35-year-old female cut her hand on a knife in the dishwater. She presents to the ED, is triaged, and moved to examination room 1. Following evaluation from the physician, the patient receives 10 sutures with instructions to follow up in 10 days for suture removal. The physician documents his emergency room encounter for this visit, including a complete history and physical and system evaluation. In 10 days the patient returns with no complaints, and her sutures are removed. The physician examines the patient and finds no signs of infection and instructs the nurse to remove the stitches. The physician then pulls up his prior ED note, highlights the history and physical and system evaluation sections, and copies that information into the new visit history. The ED coder reviews the documentation and bills for a Level 5 ED visit.*

**Result:** The first visit was reported consistent with facility E/M guidelines. However, the second encounter was inappropriately reported at the same level as the first visit because the physician pulled forward documentation of services that were not actually performed on the second encounter. The ED coder could not determine that the documentation within the record was from a previous encounter.

**What should have happened?** If the physician utilized the copy functionality the physician should have noted the original source document and updated the note with the specific information from this encounter. System functionality would allow the user to confirm that the physician copied an entry. The ED coder would recognize the information that was pulled forward, and could then establish the ED level for the second encounter based appropriately on the services performed during that encounter only.

**CASE SCENARIO 3**

*A 55-year-old male is admitted through the emergency department of a large academic medical center following a motor vehicle accident. The patient is admitted to the intensive care unit for a left temporal bone fracture, left femur fracture, grade-2 spleen laceration, and multiple cuts and bruises. In the course of his hospital stay, the patient is followed by the trauma service, neurosurgery service, and orthopedic service, all of which have attending physicians, residents, and physician assistants in addition to medical students. The patient remains in ICU for five days before he is transferred out to the surgery unit to be followed by the trauma service. During his stay in ICU, the trauma medical student initiated daily progress notes for the trauma service, which were expanded upon by the trauma resident and physician assistant within the electronic record. Each progress note was then co-signed by the attending physician. The orthopedic medical student copied forward diagnostic information from the previous day’s documentation, added new documentation and then forwarded it to the orthopedic attending for co-signature. Both wrote new progress notes each day, which were signed by the attending physicians. The neurosurgery medical student used the copy functionality to copy the neurosurgery progress note from the previous day and add his follow up. The neurosurgery resident simply added his information below the medical student’s. The attending co-signed each note without noticing that the student had used copy functionality and selected a level of service based on the entire note.*

**Result:** The trauma service was writing new notes each day that were then co-signed by the attending service. No documentation issues were identified. The orthopedic service used copy functionality to bring forward diagnostic information only. In addition to this diagnostic information, the medical student and resident wrote different clinical information and updates. The orthopedic attending co-signed each note; therefore no documentation issues were identified. The neurosurgery service, however, used copy to pull forward information from the initial progress note, thus implying that the neurosurgery service was providing the same level of detail in the examination on subsequent visits as on the initial visit. If that is not in fact occurring, the neurosurgery service may be at risk for fraud related to the level of service.

**What should have happened?** The neurosurgery service should have indicated which information was pulled forward from previous notes and which information was new information. The attending physician is ultimately responsible for the progress notes within the patient record and should ensure that any resident utilizing copy functionalities has been adequately trained in a manner consistent with organizational policies

## Record or Data Quality

Business Requirements

**TO BE ADDED**

Sections that follow were developed based on Brenski A,Dickson B, Adhikari S, et.al. Principles of Documentation. Electronic Health Record. WHERE. February 29, 2012

Definitions

The **medical record** serves as the principal repository of data and information about health care services delivered to a patient. It is a tool in communication to all clinicians involved in the care of a patient. As such, documentation should be a concise depiction of patient acuity, services rendered, medical necessity and outcomes. This should include pertinent facts, findings and observations about a patient’s care delivery, providing a clear picture of services delivered. It is the responsibility of every individual documenting in the medical record to provide accurate, timely and appropriate documentation in the medical record. Principal functions of the medical record are:

1. A service **documentation** tool with information constituting a permanent account of the services a patient received during an established encounter whether virtual or in person.
2. A **communication** tool for all care providers with concise, complete and accurate information.
3. A **diagnostic** tool providing a consolidation of clinical information aiding the care provider in making informed decisions regarding the patient’s treatment plan.
4. A **patient safety** tool providing a means for the care provider to assess potential risks to a patient’s health and well being.
5. A **discharge planning** tool promoting appropriate follow up care upon discharge.

**Medical record quality** is ….

**Maintain medical record quality** is the ability to capture relevant information in a concise and complete manner while avoiding redundancy.

**Data quality** is …

**Maintain data quality** is the ability to….

Actors

|  |  |
| --- | --- |
| Actors | Roles |
| Business Actors |
| *Primary users:** clinical care professionals
 | deliver direct patient care |
| * public health professionals
 | involved in direct patient care |
| *Secondary users* :* health information management staff
 | information management (capture, validation, retention, etc.) |
| * compliance staff
 |  |
| * billing staff
 |  |
| * regulatory staff
 |  |
| * legal staff
 |  |
| * insurance carriers
 |  |
| * researchers
 | clinical research, healthcare services research, etc. |
| * public health professionals
 | public health surveillance, policy and assurance |
| Technical Actors |
| Health Information System (HIS) |  |
| Electronic Health Record (EHR) |  |
| Laboratory Information Management System (LIMS) |  |
| Clinical Imaging Systems |  |
| Pharmacy Information Systems |  |
| Public Health Information Systems |  |
| Patient Portal |  |
| mHealth Application |  |

Problems

Today, both HIM professionals and clinicians have been experiencing overwhelming challenges with usability of the electronic health records (EHR) systems due to shortcomings in supporting user needs.[[5]](#footnote-5),[[6]](#footnote-6),[[7]](#footnote-7),[[8]](#footnote-8), A five-year study recently published by the US National Institute of Standards and Technology (NIST), on usability of EHR systems[[9]](#footnote-9) identified the following four issues with adoption that may negatively impact patient safety:

1. Clinically relevant information is not available at the task at hand
2. Inadequate documentation
3. Inaccurate information and
4. Irretrievable information.

Solutions

The overall HIM Quality Use Case is focused addressing challenges ##2-3 identified in the NIST report. It consists of two use cases:

1. Use Case 1: Maintaining adequate documentation (record quality) and
2. Use Case 2: Maintaining accurate information (data quality).

Both use cases are focused on the communication between HIM professionals and clinicians addressing documentation (record) and data quality concerns. These concerns include:

**Business Requirements #I-16 and #C-8**

Checklist: Ability to Maintain Record Quality

***Patient registration??***

***Original Entries***

1. All entries in the medical record should be made as soon as possible after the observation, discussion or event, and should indicate the actual date and time of the observation, discussion, or event.
2. Entries in the medical record should primarily include information which the provider has obtained directly from the patient, family member, caregiver, or outside medical records
3. Entries need to be specific, factual, and objective, but may contain subjective interpretations.
4. Entries documenting any patient encounter should accurately reflect the patient’s condition at that time.
5. Other patients’ names should not be referenced in another’s record.
6. The use of abbreviations should be minimized and restricted to those on the approved abbreviation list. Dangerous abbreviations should not be used. (See dangerous abbreviations list).
7. Links that pull patient data should only be included when clinically relevant to that encounter.
8. The provider authenticating the note is responsible for the accuracy of the data contained in the note.

***Late entries, clarifications and addenda***

1. Late entries, clarifications and addenda are permissible but must be clearly indicated as such at the beginning of the documentation. These entries must include the date and time the entry was entered into the record and not when the entry should have been made.
2. Changes in the patient’s condition and treatment plan need to be documented and provide evidence of follow through regarding patient stability or problem resolution.
3. Relevant communications and attempts at communication with the patient’s family and / or other care providers should be documented.

***Other providers’ information***

1. Other providers’ information may be used but must be appropriately referenced.

***Consent***

1. The process of informed consent for procedures and treatment must be documented in the record and should include details of risks, benefits, alternatives, and consequences of no treatment.
2. The process of informed consent for information sharing with primary users (other providers involved in direct care) and secondary users must be documented in the record and should include details of risks, benefits, alternatives, and consequences of non-sharing of information.

***Discharge Summary***

1. The patient’s discharge summary should contain a concise summary of patient’s illness, treatment provided, response to treatment, condition at discharge, final diagnoses, and discharge instructions.

**Business Requirements #I-16 and #C-8**

Checklist: Ability to Maintain Data Quality

1. Data entry has to be done*….*
2. Copying information (e.g. copy and paste, pull forward) from one section of the medical record to another has inherent risks for medical errors which should be recognized by all providers.

References:

Brenski A,Dickson B, Adhikari S, et.al. Principles of Documentation. Electronic Health Record. WHERE. February 29, 2012

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Hersh W. Copy and Paste Commentary. WHERE. July/August 2007

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Dennard J. Nurses Agree: Avoid Copy and Paste in the EHR / EMR. WHERE. April 23, 2010.

## Patient Registration

Business Requirements

**TO BE ADDED**

Sections that follow were developed using materials from Southern Illinois Healthcare, Carbondale, Illinois

Definitions

Actors (business, technical)

Table 1. HIMS Checklists and Use Cases: Business and Technical Actors

|  |  |
| --- | --- |
| **Actors** | **Roles** |
| Business Actors |
| *Primary users:** clinical care professionals
 | deliver direct patient care |
| *Secondary users* :* health information management staff
 | information management (capture, validation, retention, etc.) |
| * compliance staff
 |  |
| * billing staff
 |  |
| * regulatory staff
 |  |
| * legal staff
 |  |
| * insurance carriers
 |  |
| Technical Actors |
| Electronic Health Record (EHR) |  |
| Patient Portal |  |
| mHealth Application |  |

Problems

TBD

Solutions

TBD

HIM Checklist

TBD

HIM Use Case

|  |
| --- |
| **Use Case Name: Patient Registration – Outpatient Visit Scheduled via Call or in Person** |
| Actors | Business Actors: Patient, Registrar Staff |
| Technical Actors: EHR system, Patient Portal, mHealth application |
| # of Step | Workflow Steps | Record Documents and Data |
| 1 | Patient calls/comes to clinic to schedule a visit | Pt demographics (name, DoB, address, Insurance ID)Visit demographics (clinic name, provider name, date, time)Reason for visit |
| 2 | Registrar staff schedules the visit |
| 3 | Registrar staff validates patient information and assembles record for the visit | Same as aboveNew visit record is open |
| 4 | Patient comes to the clinic |  |
| 5 | Registrar staff asks patient to complete medical summary information and consents | Medical Summary , Consents |
| 6 | Registrar staff enters updated patient information and assembles record for the visit | Updated visit record |
| 7 | Registrar staff sends visit record to clinician | Updated visit record |
| Entry Condition | EHR - registration |
| Exit Condition | EHR - triage |
| Quality reqs | Real time patient information verification |

|  |
| --- |
| **Use Case Name: Patient Registration – Outpatient Visit Scheduled Online** |
| Actors | Business Actors: Patient, Registrar Staff |
| Technical Actors: EHR system, Patient Portal, mHealth application |
| # of Step | Workflow Steps | Record Documents and Data |
| 1 | Patient schedules visit using patient portal or mHealth application | Pt demographics (name, DoB, address, Insurance ID)Visit demographics (clinic name, provider name, date, time)Reason for visit |
| 2 | Registrar staff is notified about scheduled visit completed via patient portal or mHealth application  | Notification about scheduled visit |
| 3 | Registrar staff validates patient information and send confirmation to patient regarding scheduled visit via patient portal or mHealth application | New visit record is open Confirmation about scheduled visit |
| 4 | Patient comes to the clinic |  |
| 5 | Registrar staff asks patient to complete medical summary information and consents | Medical Summary , Consents |
| 6 | Registrar staff enters updated patient information and assembles record for the visit | Updated visit record |
| 7 | Registrar staff sends visit record to clinician | Updated visit record |
| Entry Condition | Patient Portal, mHealth application and EHR-registration |
| Exit Condition | EHR - triage |
| Quality reqs | Real time patient information verification |

References

TBD

## Patient Matching

Business Requirements

**TO BE ADDED**

Sections that follow were developed based on ….

Definitions

TBD

Actors (business, technical)

TBD

Problems

TBD

Solutions

TBD

HIM Checklist

TBD

HIM Use Case

TBD

References

TBD

## Transition of Care

Business Requirements

**TO BE ADDED**

Sections that follow were developed based on the Health Information Technology Standars panel (HITSP) Interoperability Specification (IS) 09. Consultations and Transfer of Care. URL: <http://www.hitsp.org/InteroperabilitySet_Details.aspx?MasterIS=true&InteroperabilityId=362&PrefixAlpha=1&APrefix=IS&PrefixNumeric=09>

Definitions

TBD

Actors (business, technical)

TBD

Problems

TBD

Solutions

TBD

HIM Checklist

TBD

HIM Use Case

TBD

References

TBD

1. American Health Information Management Association (AHIMA). Information Governance Principles for Healthcare (IGPHC). Chicago, IL. 2014. URL: <http://www.ahima.org/~/media/AHIMA/Files/HIM-Trends/IG_Principles.ashx> AHIMA thanks ARMA International for use of the following in adapting and creating materials for healthcare industry use in IG adoption:   Generally Accepted Recordkeeping Principles® and the Information Governance Maturity Model. [www.arma.org/principles](http://www.arma.org/principles). ARMA International 2013. [↑](#footnote-ref-1)
2. Cohasset Associates and American Health Information Management Association (AHIMA). Professional Readiness and Opportunity. Information Governance in Healthcare White Paper. Minneapolis, MN. 2015. URL: <http://www.ahima.org/~/media/AHIMA/Files/HIM-Trends/IGSurveyWhitePaperCR_7_27.ashx?la=en> [↑](#footnote-ref-2)
3. American Health Information Management Association (AHIMA). Information Governance Principles for Healthcare (IGPHC). Chicago, IL. 2014. URL: <http://www.ahima.org/~/media/AHIMA/Files/HIM-Trends/IG_Principles.ashx> AHIMA thanks ARMA International for use of the following in adapting and creating materials for healthcare industry use in IG adoption:   Generally Accepted Recordkeeping Principles® and the Information Governance Maturity Model. [www.arma.org/principles](http://www.arma.org/principles). ARMA International 2013. [↑](#footnote-ref-3)
4. American Health Information Management Association (AHIMA). Spell out IGIQ.org - PROVIDE THE FULL REFERENCE [↑](#footnote-ref-4)
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