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TERMINOLOGY LESSONS – JURISDICTIONAL VIEW

What You Can Learn from eHealth Ontario's Experience

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Ontario
eHealth Ontario

What You Can Learn . . .

- Today's Session

  - Who we are

  - How Our Standards Help

  - Why Our Standards Matter to DI

  - What Did we Learn

  - More to Learn . . .

WHO WE ARE

Who We Are

- *eHealth Ontario* was established by the provincial government in September 2008 as an independent agency of the Ontario Ministry of Health and Long-Term Care

- *eHealth Ontario* is enabling physicians and health care providers to establish and maintain electronic health records for all of Ontario's 13 million residents

- Located in Toronto, Ontario

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HOW OUR STANDARDS HELP

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How Our Standards Help

Standards Life Cycle

- Needs Identification & Definition
- Option Research & Analysis
- Solutions Development
- Test Pilot
- Training & Education
- Implementation
- Conformance
- Maintenance & Support

Life Cycle Deliverables

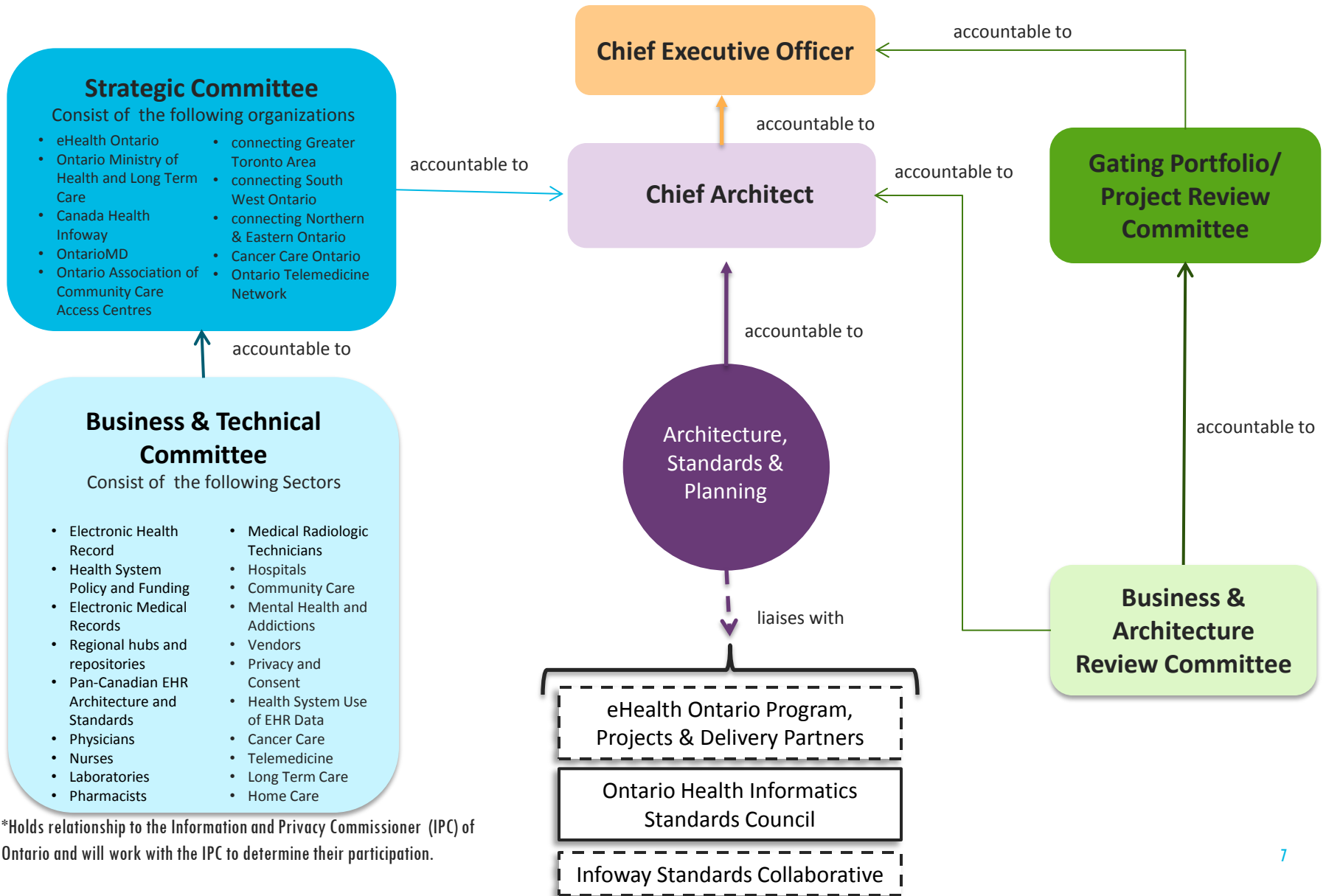Standards Selection Guide

Needs Identification & Definition

Option Research & Analysis

- Needs Used to Identify Options and Assess Best Fit from International, Pan-Canadian and Ontario Standards

Solutions Development

- Standards-based Solutions with Stakeholder Engagement Input

Implementation

- Implementation Support of Standards for Improved Adoption

Maintenance & Support

- Maintenance & Support of Standards Drives Evolution for Improved Alignment with Needs

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How Our Stakeholders Help

Strategic Committee

Consist of the following organizations

- eHealth Ontario
- Ontario Ministry of Health and Long Term Care
- Canada Health Infoway
- OntarioMD
- Ontario Association of Community Care Access Centres
- connecting Greater Toronto Area
- connecting South West Ontario
- connecting Northern & Eastern Ontario
- Cancer Care Ontario
- Ontario Telemedicine Network

accountable to →

Chief Executive Officer

← accountable to

↑ accountable to

Chief Architect

← accountable to

Gating Portfolio/ Project Review Committee

accountable to ↑

Business & Technical Committee

Consist of the following Sectors

- Electronic Health Record
- Health System Policy and Funding
- Electronic Medical Records
- Regional hubs and repositories
- Pan-Canadian EHR Architecture and Standards
- Physicians
- Nurses
- Laboratories
- Pharmacists
- Medical Radiologic Technicians
- Hospitals
- Community Care
- Mental Health and Addictions
- Vendors
- Privacy and Consent
- Health System Use of EHR Data
- Cancer Care
- Telemedicine
- Long Term Care
- Home Care

↑ accountable to

accountable to ↑

Architecture, Standards & Planning

liaises with

Business & Architecture Review Committee

accountable to ↑

eHealth Ontario Program, Projects & Delivery Partners

Ontario Health Informatics Standards Council

Infoway Standards Collaborative

*Holds relationship to the Information and Privacy Commissioner (IPC) of Ontario and will work with the IPC to determine their participation.

Dashed boxes indicate organizational units with multiple sub groups

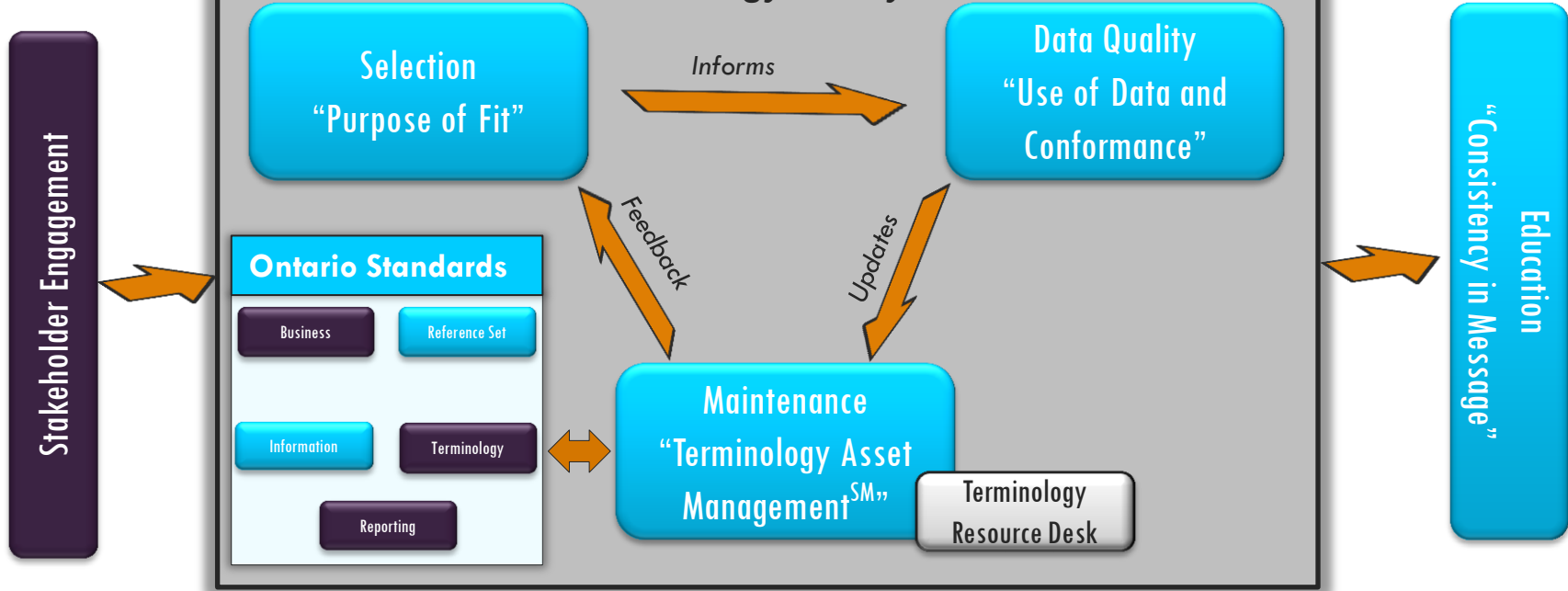# How Terminology Helps Us Succeed

Ontario Terminology Standards Framework

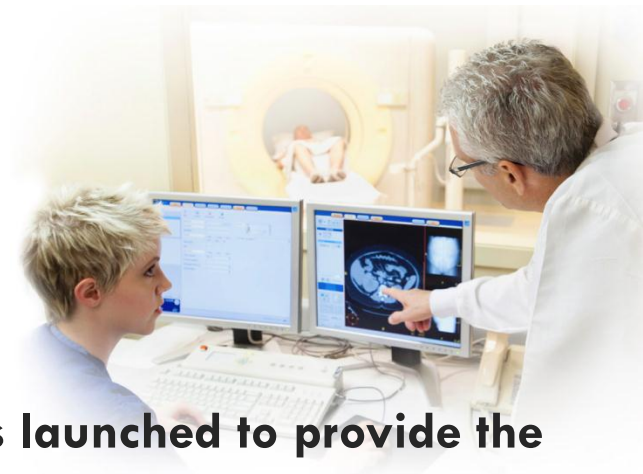(Governance (SDO, OHISC, Infoway SC, etc.)

Terminology Life Cycle

Stakeholder Engagement

Selection "Purpose of Fit"

Informs

Data Quality "Use of Data and Conformance"

Feedback

Updates

Ontario Standards

Business | Reference Set

Information | Terminology

Reporting

Maintenance "Terminology Asset Management^{SM}"

Terminology Resource Desk

Education "Consistency in Message"

Terminology Infrastructure "Tools & Technology"

WHY OUR STANDARDS MATTER

How Terminology Helps

The Ontario DI Terminology Project was launched to provide the terminology products for the Ontario Diagnostic Imaging Common Service Release 2

- **DI Common Service**
  - **Will enhance the delivery of patient care in Ontario by building on the successes of regional DI initiatives**
  - **Will provide comprehensive secure access to a patient's provincial longitudinal DI record from anywhere and at any time, within the context of a provincial electronic health record**

How We Help DI Succeed

ON DI Terminology Set Format
ON Interface Term Description (SCT Synonym)
SNOMED CT® ConceptId
SNOMED CT® Fully Specified Name
ON UIT Identifier

- **Creation of ON User Interface Terms to support the following imaging modalities:**
  - ❑ General Radiography (CR & DR)
  - ❑ Fluoroscopy & Angiography
  - ❑ Ultrasound
  - ❑ Mammography
  - ❑ CT & MR
  - ❑ Bone Density
  - ❑ Nuclear Medicine & PET

- **Mapping of DI (RIS/PACS) dictionaries from all hospitals in Ontario to the ON DI terminology to support the creation of a complete ON DI Terminology set**

- **All ON User Interface Terms mapped to the corresponding term in SNOMED CT®**

How We Learn Together

Canada Health Infoway - Standards Collaborative	Mohawk Shared Services Inc.

• Arose from consultations with:
    • *Infoway* and Canadian Institute for Health Information (CIHI) Boards
    • Federal, provincial and territorial Deputy Ministers of Health
    • as well as domestic and international health information standards stakeholders
	• One of the largest not-for-profit shared services organizations in Ontario
	• Comprised of four business streams:
	    • Mohawk Hospital Linen Services
	    • Mohawk Supply Chain Services
	    • Mohawk Diagnostic Imaging Repository
	    • Employee Assistance Programs and Services

• To establish standards to support *Infoway's* mandate in fostering and accelerating the deployment and use of eHealth solutions • To provide services to support and maintain these standards • To act in a formal liaison role to international Standards Organizations (e.g. IHTSDO, HL7, IHE, ISO, etc.)	• To introduce technology and leading practices to assist hospitals in improving processes and finding additional savings, efficiencies and strategic sourcing

• Funded MSSi
• Participated in the ON DI Terminology Project:
    • Advisory — DI Domain, Terminology, Tools
    • RFCs — SNOMED CT
	• Developed:
	    • ON DI Terminology Set Release 2
	    • Local to provincial set maps
	    • Guide — Release 2, mapping for local to provincial

Our Results . . .
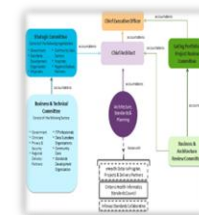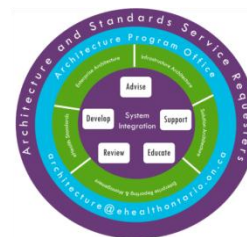
- **ON DI Terminology Set (Publish version 3 for DI CS Release 2)**

- **ON DI Terminology Maps (local to provincial)**

- **Mapping Guide**

    - **Overarching Guiding Principles – in/out of scope for terminology set**

    - **Principles for modality specifics**

    - **Mapping Guidance – examples, exceptions**

    - **Posted in SCWG 10 (Terminology Set version 2)**

    - **Set and Map Maintenance (eHealth Ontario Terminology Set version 3)**

- **Additions to Canadian Extension – SNOMED CT**

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WHAT DID WE LEARN

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A) What Did We Learn

Lesson Learned	Description	Opportunity

Competencies
• domain
• terminology
	• Require knowledge of
	  • terminology rules
	  • clinical domains
	  • non-clinical domains
		• Engagement of domain and terminology experts
		  • multiple perspectives

Domain SME
• on-going resource
	• Require domain SME for
	  • on-going clarification of questions
	  • RFCs beyond project
		• Continued collaboration for
		  • accurate explanation of clinical/ non-clinical domains
		  • data quality

Clinical advice
• multiple sources
	• Clinical advice from
	  • DI SMEs
	  • Radiologists
	  • Primary Care
		• Increased awareness
		  • interest in future use of SCT
		  • DI Set and dictionary maintenance

B) What Did We Learn

Lesson Learned	Description	Opportunity

SDO/SMO
• advice
• support
	• CHI and IHTSDO involvement
	  • terminology authorities for guidance
		• Early guidance with questions and decisions
		  • limited experts with experience
		  • update to guides

Multiple perspectives
• collaboration
	• Require clinical and technical knowledge and experience with
	  • terminology
	  • mapping
		• Enhance solution and use of terminology with expertise in
		  • clinical
		  • technical
		  • terminology
		  • mapping

Terminology Selection
• Aligned with Purpose
	• Important to know how terminology will be used by
	  • systems
	  • Format
	  • purpose
		• Ensure the best terminology is selected to meet the
		  • needs
		  • best fit
		  • available options
		  • future plans (analytics)

C) What Did We Learn

Lesson Learned	Description	Opportunity

Confirm and focus business use
• Minimize Potential Misuse
	• Terminology sets and maps created for one purpose may not translate for another
	   • keep intended meaning with concepts, sets, maps, and guides
		• Address potential for adaptation of the terminology for
		   • use that changes the meaning
		   • breaks the editorial guidance

Assess your terminology business model and practices
• Align with Service Needs
	• Terminology business model variance in processes
	   • automated
	   • manual
	   • central
	   • decentralized
		• Determine your practices and tools to support TAM early
		• Opportunity to collaborate on future model as terminology adoption increases

Environmental scan of systems
• Align with Terminology Decisions
	• RIS and PACS systems have different data standards
	   • this can influence your options
		• Address any concerns early with vendors and systems users
		   • know your options for terminology use

D) What Did We Learn

Lesson Learned	Description	Opportunity
Incorporate terminology tools at start - earlier the better	• Terminology mapping and terminology management is faster and more accurate with the right tools	• Identified need for Apelon DTS® and TermManager® for terminology management at eHealth Ontario

Variation in terminology practice — subjective practice	• Consistency and quality of terminology set and maps influenced by duration of project and team changes	• Document all decisions (format/rationale)
		  • terminology set
		  • maps
		  • guiding principles

Detailed tracking of local terminology decisions	• Request for Change (RFC) rationale and supporting decisions make sense at some point	• Opportunity to minimize rework and follow up with local sites after responses from
		  • Infoway
		  • IHTSDO

E) What Did We Learn

Lesson Learned	Description	Opportunity

Document decisions effectively	• Project members may change,
	• Comments and rationale
	    • meaningful
	    • easily understood
		• Minimize rework
		• Address changes smoothly with minimal impact to project

Infoway RFC processes and tools knowledge	Need to have • strong understanding • be able to respond to requests for clarification • include terminology and domain SMEs in RFC activities	• Make effective use of time by Infoway/IHTSDO, and SMEs • Supports effective response times • Accuracy of terminology modeling

Mapping methods/decisions clearly documented	• Set and Mapping alignment and consistent practices
	    • validation
	    • maintenance
		• Opportunity to
		    • minimize rework
		    • reduce changes
		    • meet quality
		    • achieve consistency

F) What Did We Learn

Lesson Learned	Description	Opportunity
Provide SNOMED CT Core content related to RFCs to Infoway	• Visibility into complete terminology set for alignment in creation of Canadian Extension (Core + RFCs)	• Improves modeling of terminology • Minimizes duplication in assignment of SCT concepts

Terminology content matures with use	• Many terminologies are in need of improvement
	• Are being developed to meet different purpose
	• Expect to contribute
		• Opportunity to contribute to
		  • Canadian Extension
		  • future IHTSDO Release of SNOMED CT for areas not covered currently

Terminology management is an emerging area	• Terminology authorities are collaborating
	• Early stage terminology
	  • expertise
	  • Knowledge
	  • practices
		• Opportunity to participate in development of terminology to terminology mapping
		• Early evolution of terminology use across more domains
		• Innovation for terminology management and tools

CONTACT US

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Sign-up for the Blueprint Bulletin:
www.ehealthontario.on.ca/sign-up

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MORE TO LEARN . . .

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A) Added Resources for You . . .

Source	Website
IHTSDO (SNOMED CT) National Release Center - Infoway Standards Collaborative	http://www.ihtsdo.org/members/ca00/
InfoRMS – Infoway Request Management Systems*	https://infocentral.infoway-inforoute.ca/3_Tools_and_solutions/InfoRMS
Infoway's Terminology Toolkit*	https://infocentral.infoway-inforoute.ca/2_Standards/Terminology_Toolkit/SNOMED_CT_Terminology_Toolkit
IHTSDO SNOMED® in Action	http://snomedinaction.org/sct-table.html
InfoCentral – User Interface Guidelines*	https://infocentral.infoway-inforoute.ca/3_Tools_and_solutions/User_Interface_Guidelines_for_Clinical_Coding_of_Data/User_Interface_Guidelines
Infoway Standards Collaborative Working Groups* (SCWG 9 – Terminology, SCWG 10 – DI)	http://forums.infoway-inforoute.ca/index.php/en/

*(sign in required)

B) Added Resources for You . . .

Source	Website
CHIMA SNOMED CT Primer	https://www.echima.ca/snomed-ct-primer/
IHTSDO SNOMED CT Starter Guide	http://ihtsdo.org/fileadmin/user_upload/doc/download/doc_StarterGuide_Current-en-US_INT_20140222.pdf
AHIMA Data Mapping Guide Data Mapping and Its Impact on Data Integrity	http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_050525.pdf
AHIMA JAHIMA Article – Terminology Competencies Feb 2014 **"New Name of the HIM Game"**	http://library.ahima.org/xpedio/idcplg?IdcService=GET_HIGHLIGHT_INFO&QueryText=%28terminology+asset+management%29%3cand%3e%28xPublishSite%3csubstring%3e%60BoK%60%29&SortField=xPubDate&SortOrder=Desc&dDocName=bok1_050567&HighlightType=HtmlHighlight&dWebExtension=hcsp