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SNOMED CT & DIAGNOSTIC IMAGING PROCEDURES

Our Canadian Experience from Ontario's Perspective

October 11, 2013
IHTSDO SHOWCASE
Washington, DC



Presentation Overview

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Participants
- Background
- Approach
- Recommendations and Lessons
- Project Next Steps
- Additional Materials
- Questions . . .

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PARTICIPANTS

ON DI Terminology Project



eHealth Ontario

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **Located in Toronto, Ontario, Canada**
- **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**

Canada Health Infoway – Standards Collaborative

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- 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
- 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.)

Mohawk Shared Services Inc.

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Mohawk Shared Services, 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 and Employee Assistance Programs and Services
- Core strategy is to introduce technology and leading practices to assist hospitals in improving processes and finding additional savings, efficiencies and strategic sourcing

eHealth Standards Program

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- The program is responsible for adapting, implementing and maintaining interoperability standards that support eHealth Ontario projects
- The team provides expertise in Ontario EHR interoperability standards, which are primarily based on four national and international standards – SNOMED CT®, LOINC® HL7 Messaging and Clinical Document Architecture
- Focus of work with interoperability standards to ensure information sent between clinicians and across organizations is consistent
- The goal is to help clinicians – say what they mean, and mean what they say – when electronically communicating vital information about a patient

Diagnostic Imaging Program

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- The diagnostic imaging (DI) program supports DI initiatives and systems such as the picture archiving and communications system (PACS) and regional DI repositories (DI-r)
- eHealth Ontario coordinates the four DI-r projects covering all hospitals in Ontario and provides funding support and the ONE[®] Network that gives providers access to the system
- Authorized health care providers can share images and reports securely with other providers within their respective DI-rs
- The diagnostic images and corresponding reports are stored in a regional repository from which they can be retrieved in digital format



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BACKGROUND

ON DI Terminology Project

Diagnostic Imaging Program Vision

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- **To enable healthcare providers in Ontario with secure electronic access to their patients' comprehensive DI health record from anywhere and anytime, resulting in improved healthcare and patient health in Ontario**

ON DI Terminology Project

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- **The Ontario DI Terminology Project was launched to provide the terminology products for the Ontario Diagnostic Imaging Common Service**
- **DI Common Service will enhance the delivery of patient care in Ontario by building on the successes of regional DI initiatives to 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**
- **Orchestrate the “discovery” of a patients DI record across all the Ontario DI-repositories**
- **Orchestrates the “delivery” of data from a DI-r to the requesting Point of Service (PoS)**

To Enable Access to Ontario's DI Studies

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- **Access Channels for DI Common Service:**
 - **Standardized Provincial DI Viewer**
 - **Provincial Portlet hosted by Provider Portal**
 - **EMRs**
 - **Local PACS (out of scope for Terminology Project)**

ON Diagnostic Imaging Terminology Use

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- **Diagnostic Imaging is one component of the Electronic Health Record (EHR), where information will be accessible to clinicians across the province**
- **ON DI Terminology Set will be deployed through the use of ON Terminology Services by the Provincial Common Integration Services (HIAL), supporting the Ontario DI Common Service User Access Channels**
- **The Project looks to leverage, expand, or develop standard ON DI terminology for: DI Procedure (Description)**
 - **Modalities**
 - **Body Part**
 - **Laterality where applicable**
 - **Contrast where applicable**

Collaborative Involvement

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- **Funding by Canada Health Infoway and eHealth Ontario**
- **Mohawk Shared Services - terminology set and maps**
- **ON DI Common Service – Clinical Advisory Committee (advice)**
- **Parallel work with DI Common Service Project**
- **eHealth Ontario - Standards specifications**
- **ON DI Terminology Set, terminology maps (local to ON) validation – SNOMED CT content (SCT licensing applies)**
- **Guiding materials for implementation with XDS Registry/Repository (XDS-I Guide)**
- **eHealth Ontario - Responsible for the approval, on-going maintenance and sustained use**
- **Canada Health Infoway – SNOMED CT Requests for Change (RFCs)**

Why SNOMED Clinical Terms?

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- To enable the sharing and semantic use of shared information between consumer systems and the four DI repositories (DI-r), a common terminology will be implemented – SNOMED CT®
- SNOMED CT® has been chosen as the pan-Canadian Terminology Standard, as well as Ontario's EHR interoperability standard to support understandable sharing of clinical information by computers for Ontario – International standard with maintenance support for additions
- Investigation confirms that SNOMED CT® provides a clinical standard where information can be referred to consistently and without confusion
- 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 and all ON User Interface terms will be mapped to the corresponding term in SNOMED CT®

Other Terminology Projects Assessed

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- **Similar DI procedure terminology set creation work that has been completed by other organizations was reviewed, including:**
 - **Alberta Health & Wellness**
 - **Ontario DI Repositories (SWODIN, NEODIN, GTA West)**
 - **Newfoundland and Labrador Centre for Health Information**
 - **Radiological Society of North America**
 - **National Health Service (Great Britain)**
- **Currently no other jurisdiction in Canada has completed a project of this scope**

End User Requirements

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A number of assumptions have been made as to the requirements of end users of these systems:

- **Clinicians will be searching for exams for a specific patient**
- **Clinicians would like to see their patient's exams with "like" exams from different organizations displaying the same procedure description**
- **Recent exams should display at the top of a patient's exam list**
- **Clinicians may not know the modality code for a procedure**
- **Clinicians would like to know the laterality of certain body parts**

Terminology Project Scope

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- **Creation of ON 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 will be mapped to the corresponding term in SNOMED CT®**

Terminology Project - Out of Scope

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **Mapping to Management Information System (MIS) codes, Provincial Billing Codes and CCI (Canadian Classification of Interventions) codes**
- **French translation of the ON DI Terminology Set, maps, and guides**
- **Replacement of the local hospital dictionaries or DI-r dictionaries (exception GTA West DI-r)**
- **Independent Health Facilities RIS/PACS dictionaries**
- **Foreign Exam Management (FEM)**

Terminology Project - Resources

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Terminology project team consisted of experts in DI hired by Mohawk Shared Services with support from:

- **A clinical advisory group with representatives from across the provincial DI-r projects, eHealth Ontario and Canada Health Infoway**
- **eHealth Ontario includes DI Program and eHealth Standards Program representation with standards and clinical expertise in terminologies, and clinical expertise in DI**
- **Canada Health Infoway Standards Collaborative is being consulted regarding standards alignment with national/international standard terminologies and leading practices**
- **DI Common Service Clinical Advisory Committee**
- **Physicians from Ontario hospitals are being consulted to address specific issues, as needed**

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APPROACH

ON DI Terminology Project

Terminology Project - Approach (1/2)

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- Started with NEODIN terminology set
- Added terms from GTAW mapping pilots
- Developed guidelines that determine level of specificity and what terms are to be included in the ON DI Terminology set (ON DI User Interface Term)
- Removed duplicates and procedures that did not meet the guiding principles – clean up of terminology set
- Mapped ON DI procedure (UIT) to SNOMED CT® (SCT)
- Determined number of new SNOMED CT® terms required to be added for use in mapping to the ON DI Terminology set
- Submitted initial SNOMED CT® RFCs to Canada Health Infoway for consideration as additions to the Canadian Extension

Terminology Project - Approach (2/2)

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- Resolved difficult questions regarding ON DI Terminology set terms
- Submitted ON DI Terminology Set to eHealth Ontario
- eHealth Ontario updated ON DI Terminology Set with RFCs accepted by CHI
- Proceeded with next phase of mapping project (local to ON DI Terminology set)
- Validated mapping of local to ON DI Terminology set at eHealth Ontario
- Additional RFCs identified for submission to CHI
- Developed the process to submit changes in local DI dictionaries to eHealth Ontario for maintenance of the maps and terminology set

Terminology Project - Pre-Coordination

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The use of multiple SNOMED CT® Concept IDs together in a single data element to represent an expression was investigated as part of the business requirements assessment, and the following key findings resulted in a decision to use a single SNOMED CT® Concept ID, also known as pre-coordination:

- XDS specifies use of SNOMED CT® pre-coordination
- Canada Health Infoway recommends use of SNOMED CT® pre-coordination
- Vendor feedback through SCWGs, and other standards expert contacts identify legacy system complications for multiple codes in a single data element field and field length limitations for codes and descriptions

Terminology Project - Guidelines (1/3)

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- **User interface term (UIT) for DI procedure to fit format of: modality/body part/procedure/laterality/contrast(with)**
- **The ON DI Terminology Set representation is comprised of only the clinical aspects related to the technique of the procedure rather than any administrative properties; other factors which are necessary to support the business of the individual clinical imaging departments such as “location”, “report status” and “visit” are excluded from this representation**
- **Many examinations may be performed in more than one business area; this may have implications for resource allocation in particular (e.g. room/equipment usage and staff allocation); this differentiation is not permitted in the procedure description**

Terminology Project - Guidelines (2/3)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **Special characters such as ./., .+, and .& have been removed; the word 'and' is used where the meaning of a description is altered by the removal of those special characters**
- **Terms like Operative, Direct Puncture, and Guided are not used in the Ontario User Interface Term**
- **Due to the difficulty in fully articulating complex procedures using no more than 40 characters, many words have been abbreviated; however, each abbreviation must be unique**

Terminology Project - Guidelines (3/3)

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- **The first letter of the term string is always be capitalized; all acronyms will be entirely capitalized; the first letter of the laterality is also capitalized**
- **In general procedures are described as the singular in terms of body site; body sites are only expressed as plural when describing it and its sub-types, rather than to refer to paired structures (which should be described in the singular)**
- **Multi-Body Part Examinations & Combined Modality Procedures are also considered in the ON DI Term Set**
- **Proprietary terms are not used; e.g. Mammotome or Cardiolite, Tenkoff Line, Hickman line and Portocath, etc.**

Terminology Project - Format

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

The format of the ON DI Terminology Set has been agreed upon by the ON DI Terminology Project Clinical Work Group to follow the format of:

- **ON Interface Term Description**
- **SNOMED CT® ConceptId**
- **SNOMED CT® Fully Specified Name**
- **ON UIT Identifier**
- **Additional metadata has been added to support changes to any of the above in the ON DI Terminology Set, including version control**

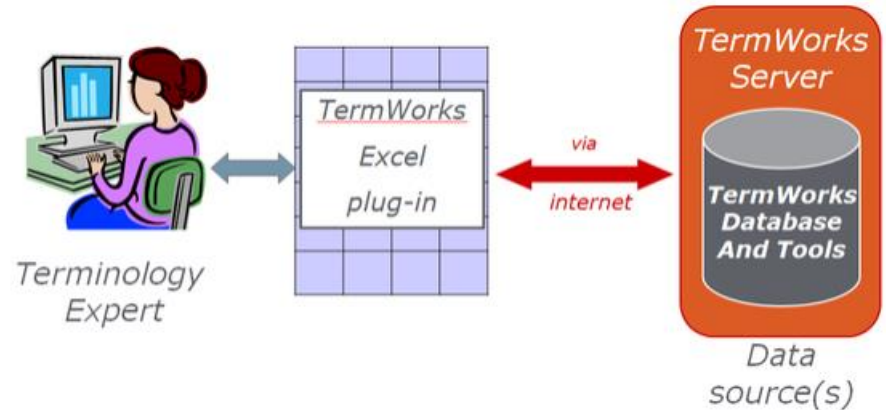
Terminology Project - Mapping

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **Infoway provided access to electronic tools (TermWorks and CliniClue Xplore) for the process of mapping the local dictionaries**
- **The mappers used a team approach to validate the maps to ensure the quality of the data in the ON DI Terminology set**
- **Mappers identified all local terms not successfully mapped to ON DI Terminology Set, and submitted them for review and SCT RFC submission**
- **The mapping of local procedures to the ON DI Terminology Set has been completed for results (procedures representing reports and images) sent to the DI repositories for provincial access**

Mapping with TermWorks

- Uses Microsoft[®] Excel[®] and the Internet
- Assists with mapping local terms to SNOMED CT[®]
 - Easy to use
 - Easy to install
 - Self-paced training available
 - Tool and training are available to SC Premium Members

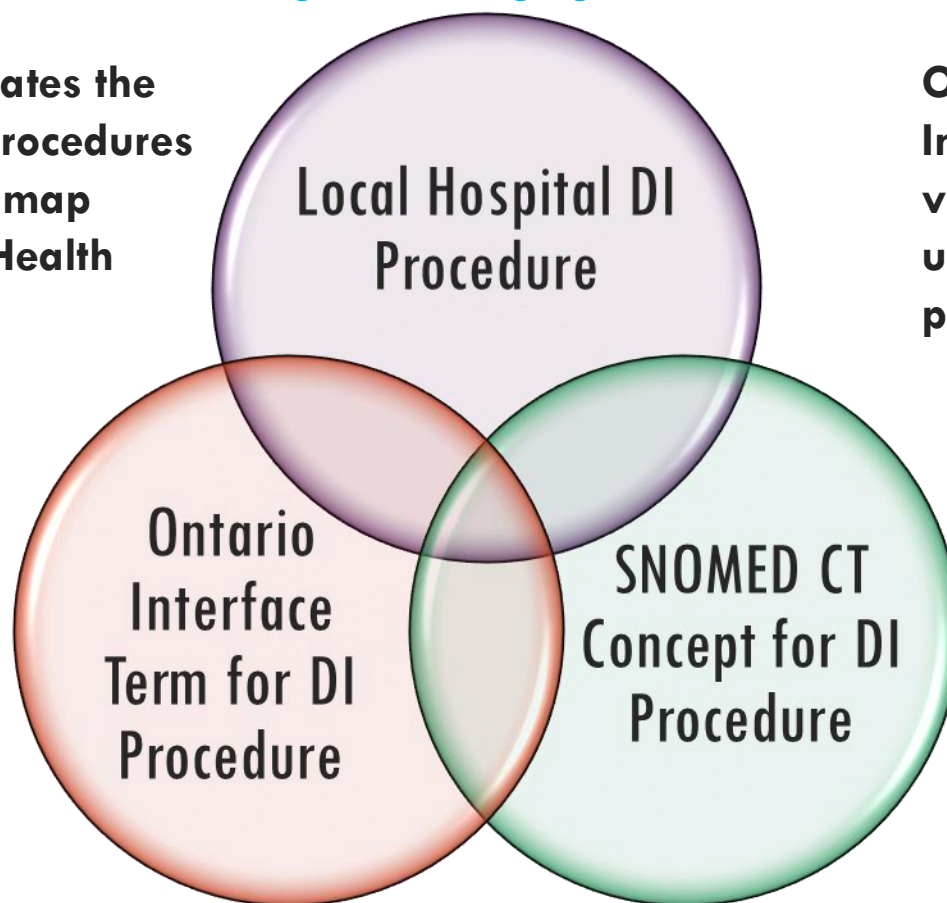


To learn more: contact us at:
Standards@infoway-inforoute.ca

DI Common Service Release 2 – Maps Applied

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The diagram illustrates the intersection of DI Procedures in the terminology map when applied at eHealth Ontario



Only the Ontario Interface Term is visible to the end user in the access points mentioned

Sample Map: Local to ON DI Terminology

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

Name of Local Site:	Local Site Location:	Date Local Set submitted to Project:	
Local Site System Administrator:	e-mail address	Phone Number	Extension

eHealth Standards Program Tracking Log INTERNAL USE ONLY	1st Review	2nd Review
Date uploaded to portal:		
Reveiwed by:		
Date Reveiwed:		
Notes:		
Status:		
Date Communicated To Submitter:		
How Communicated To Submitter:		

RIS Procedure Code	RIS Procedure Description	PACS Procedure Code (This is the DICOM code)	PACS Study Description (This is the DICOM code)	PACS Procedure Description (This is the DICOM code)	PACS body Part (This is the DICOM code)	PACS Modality (This is the DICOM code)	Laterality (This is the DICOM code)	Ontario User Interface Term Identifier	Ontario User Interface Term Description

Resulting map includes SNOMED CT, but this is not visible in the working map with local site DI Procedure dictionary that was used to create map the final map to be applied

Terminology Project Timelines

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- The project started in September 2011
- A team of DI technologists was hired by MSS to support mapping of local procedures to the ON DI Terminology Set.
- Local sites provided a copy of their local RIS/PACS dictionary to support the mapping exercise
- Mapping of local codes to the ON DI Interface Terms completed in September 2013 (NEODIN, SWODIN, HDIRS)
- The creation of the Ontario Diagnostic Imaging Terminology Set mapped to SNOMED CT ® is expected to be completed by December 2013
- Submission of Requests for Change (RFC) for SNOMED CT® to Infoway for pan-Canadian extensions – expected to be completed by December 2013

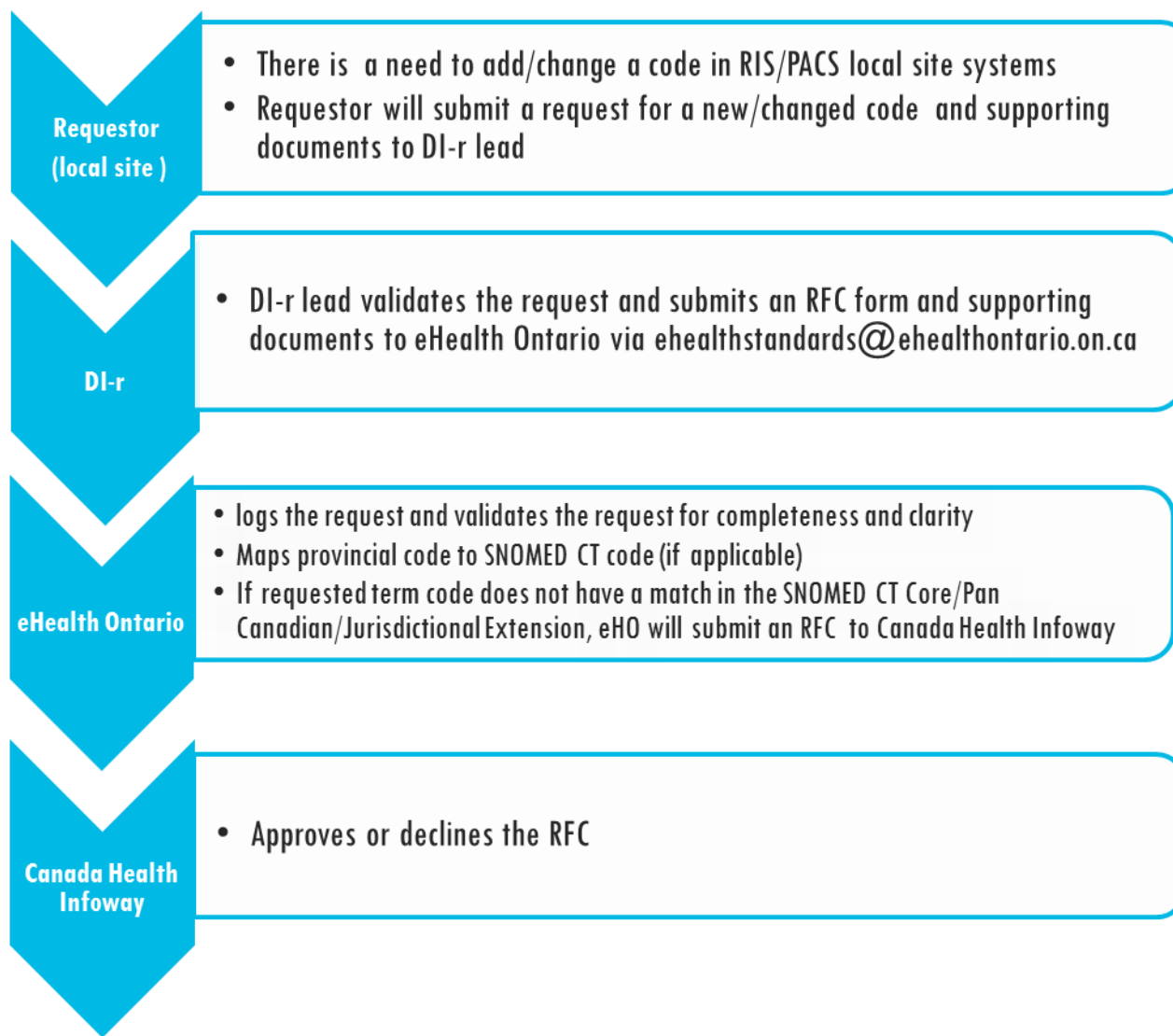
Post Project Accountabilities

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Continuation of the ON DI terminology project - eHealth Ontario
- Changes to local dictionaries, including addition, deletion, or modification of terms, must be communicated to eHealth Ontario by submitting the eHealth Ontario RFC form to ehhealthstandards@ehealthontario.on.ca
- Submission of request for change (RFC), for approval by CHI - eHealth Ontario
- On-going maintenance of ON DI Terminology set and Mappings (SNOMED CT ® new releases, approved RFCs, Requests submitted by sites and clinical users) – eHealth Ontario
- Communication of changes to ON DI Terminology set to sites – eHealth Ontario

Request for Change Process (Terminology)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures



Request for Change Form (Terminology)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

Ontario DI Terminology Project RFC Submission							
Information about the Requestor						Submit To:	healthstandards@ehealthontario.on.ca
Date	Hospital Name	Contact Name	Email Address	Phone Number	Received Date:		
					Received by:		
Please complete the columns below and provide additional information and supporting documentation.							
RIS Procedure Code	RIS Procedure Description	PACS Procedure Code (This is the Dicom code)	PACS Modality (This is the Dicom code)	PACS body Part (This is the Dicom code)	DICOM LATERALITY CODE (If available)	CONTRAST (If available)	Comments

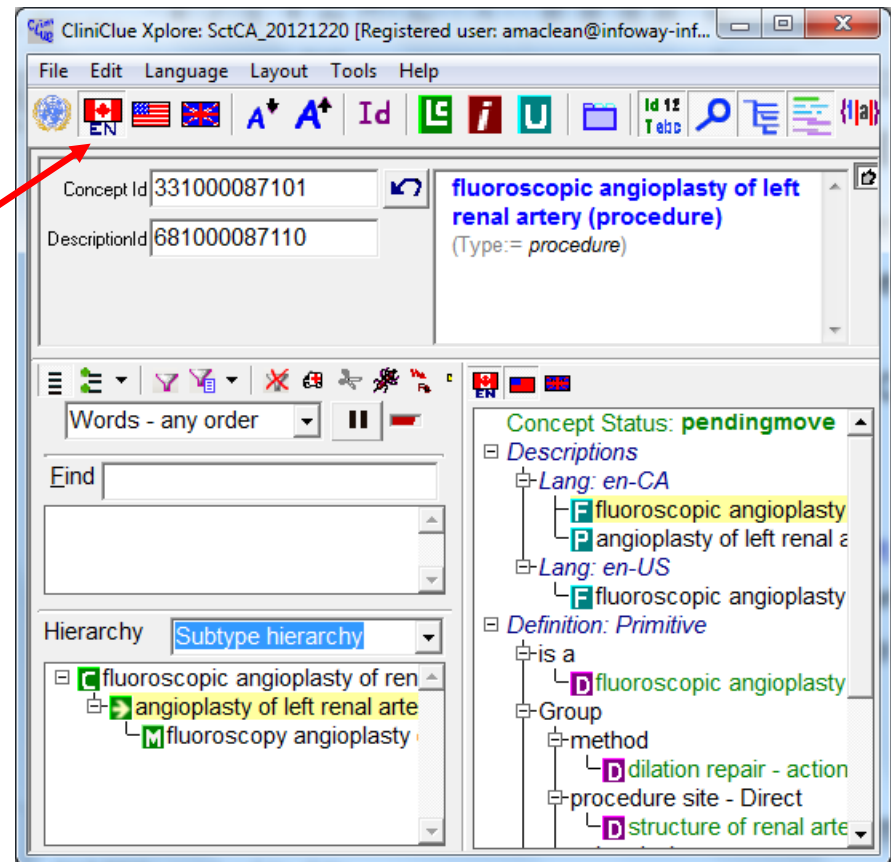
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Sample Only

ON DI Requests for Change (RFCs)

- >800 DI specific RFCs were submitted to *Infoway*
- >500 have been published in our pan-Canadian extension (Dec 2012)
- These can be viewed in CliniClue
- [InfoCentral](#) has:
 - [SNOMED CT core release and support documentation](#)
 - Canadian [EN](#) and [FR](#) extensions
 - [SNOMED CT Terminology Implementation toolkit](#)

CliniClue browser



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Request for Change Examples

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

When do we need to complete an RFC form?

- **A change to a new procedure, or new or revised equipment or method**
- **A submitted request for a procedure that already exists or doesn't follow the naming convention for a procedure**

Why do we need to complete an RFC form?

- **If there is a change/ addition or new code added to the local site maps, it will need to also be mapped to the ON DI Terminology Set in order for that study to be discoverable**

What supporting documents need to be submitted with the RFC form?

- **Provide sample report showing description of the DI procedure without PHI (Screenshot) and other details about the need for the procedure in the DI dictionary**

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RECOMMENDATIONS AND LESSONS

ON DI Terminology Project



Recommendations (1 / 3)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **Pre-coordinate SNOMED CT® to support a single code to represent the modality, body part, procedure, laterality, and contrast**
- **Create the Ontario DI Terminology Set, including an Ontario user interface term, ON UIT identifier, SNOMED CT® concept ID, SNOMED CT® Fully Specified Name for use by eHealth Ontario in the HIAL and DI Common Service**
- **Create the Ontario DI Terminology Set local hospital to ON DI Terminology Set maps using the stable ON DI Terminology Set for use by eHealth Ontario in the HIAL and DI Common Service**
- **Develop a mitigation plan to address any changes to the ON DI Terminology Set and maps for GTA West from the initial ON DI Terminology Set to the published set**

Recommendations (2/3)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **Test the ON DI Terminology Set accuracy with the GTA West DI-r**
- **Obtain approval of the ON DI Terminology Set and maps by eHealth Ontario governance committees**
- **Maintain guiding principles, editorial guidelines, and mapping guidelines to support continued use in managing adjustments to the ON DI Terminology Set and maps**
- **Use key messages regarding the mapping approach, request for change processes, and requirement to use the RFC process to address any changes to the local hospital DI procedures to eHealth Ontario and for any changes to the business requirements in future**

Recommendations (3/3)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **Well defined Business Requirements, with review as the project progresses**
- **Well defined and user adopted RFC Process, with deprecation guidelines**
- **Clearly documented Guiding Principles and Guidelines, with clear understanding, with iterative review and revision**
- **A clear differentiation between guiding principles for User Interface Term development and mapping with SNOMED CT®, and mapping for local to the ON Terminology Set documentation needs to be developed, with clear understanding that this is an iterative process**
- **Testing of mapping tools is necessary to ensure able to meet needs**
- **Clearly stated and understood procedure terms and descriptions to create maps accurately from local site dictionaries**
- **Decision logs need to be made available regarding how the terminology set was developed in order to help mappers with local mapping**

Key Stakeholder Engagement

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **The terminology project's successful completion depends upon the engagement and participation of resources from the hospitals, and independent DI facilities, Mohawk Shared Services, Inc., eHealth Ontario, and Canada Health Infoway**
- **Local RIS/PACS dictionaries will need to remain current in the maps to the ON DI Terminology set to result in reports and images that are retrievable as part of the provincial EHR**

International Standards - Positive Changes

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **Increased interest in maintenance of data dictionaries locally**
- **Interest in future use of SNOMED CT from some local hospitals**
- **Interest in opportunities to learn more about how the standards will be used with DI Common Service in future**
- **Opportunity to contribute to Canadian Extension and future IHTSDO Release of SNOMED CT for areas not covered currently**
- **IHTSDO DI Editorial Guidelines updated based on input from Infoway and the experience in this project**

Lessons Learned – Mohawk Shared Services Inc. (1/2)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Having project team members meet via WebEx/Teleconference with *Infoway* Standards Collaborative members (*Infoway*) processing the RFCs established a collegial and efficient working relationship. Initial meetings helped to set context and understanding about the project for *Infoway*.
- Regularly scheduled meetings were very effective in having the right resources available for the SNOMED CT RFC submission review. It was also important to have the appropriate subject matter experts on these calls thereby avoiding delays with getting responses back to *Infoway* and making better use of everyone's time.
- Clear communication from *Infoway* on options for submitting RFCs and setting expectations regarding timelines for providing SNOMED CT identifiers back to the project team helped manage the ON DI Project timelines and resource allocations.
- ON DI Project team members found themselves to be more effective after having developed some expertise in working with the diagnostic imaging terms in SNOMED CT.

Lessons Learned – Mohawk Shared Services Inc. (2/2)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- *Infoway's* processing all of the RFCs before returning SNOMED CT identifiers (SCTIDs) back to the project team promoted consistency in the new descriptions created and supported their identifying duplicate requests.
- The project team found that reviewing terms within a modality and similar procedures across modalities supported a consistent assignment of proposed FSNs and new concept parents.
- RFC submissions were kept to approximately 50 terms per batch with the intent to accelerate the return of some SNOMED CT identifiers. However, because all identifiers were provided in a timely manner, it would have been more efficient to submit larger batches that included all requests for a modality.

Lessons Learned – eHealth Ontario (1/4)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Consistent spreadsheet formatting (Excel) is recommended including applying “text” to format columns that contain identifiers (Parent Id, Concept Id, etc). This is instead of “Number” so that analysis and data migration with numbers between applications such as Excel and Access, do not result in automatic rounding; this happens when the number exceeds a certain length.
- Quality checks in spreadsheet formatting prior to submission to eHealth Ontario and *Infoway* prevent accidental double spacing between words. This is easily accomplished using a quick technique of highlighting the entire spreadsheet, and ‘find and replace’ for the double spaces, so Excel will find all the double spaces and replace them with a single space.
- Communicating the RFC process step by step to everyone involved helped a great deal in accomplishing a smooth process where everyone was aware of their roles and responsibilities for submission, review, and update to the terminology set upon response from *Infoway*.

Lessons Learned – eHealth Ontario (2/4)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Managing terminology content to avoid confusion around the status of RFCs and duplication requires an accurate tracking log (TL) with the status of all changes to terminology codes and descriptions, including the status of RFCs maintained by a single point of contact following terminology management best practices.
 - A TL should be created to serve as the source of truth in the early stages of creation of the terminology set.
 - Codes and descriptions should not be physically removed from a terminology set; just logically removed, i.e. marked as retired or withdrawn, or deprecated with history of change recorded and stored in the TL for future terminology management decisions that could otherwise undo an earlier decision with consequences to another stakeholder unknowingly.
- Determine what supporting background documents are necessary to validate RFCs and include this expectation in the communication from the early stages of the project to all potential stakeholders involved in the RFC process.

Lessons Learned – eHealth Ontario (3/4)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Engage clinical experts from existing or related committees where possible as representatives of stakeholders to ensure end-user business requirements are verified in complex RFCs in advance of submission.
- Document RFC timelines for Canadian extensions and SNOMED CT universal content in the project planning to understand where and when the terminology set will be published and maintained by terminology authorities at the pan-Canadian and international SDOs. Recognizing that some RFCs may be processed by the terminology authorities at different times, and this may result in terminology content being in more than one location at any one time.
- Recognize that existing RFC processes and forms should be assessed for alignment with the needs of any new project to ensure corporate terminology best practices where possible for organizations taking on future custodianship of the resulting terminology content, and on-going maintenance.

Lessons Learned – eHealth Ontario (4/4)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Involving the implementing organization in the review of the RFCs in advance of submission to *Infoway*, and inclusion in the written questions back to the project team from *Infoway*, assisted with clarifying questions that may have arisen after the response from *Infoway*, and avoided resubmissions and reduced questions in meetings.
- Including the implementing organization in the submission and the meetings made it possible for the responses to be easily updated into the latest version of the terminology set, and handling of the RFCs in the next phase of the project for user interface terms and submission to *Infoway* for SNOMED CT RFCs.

Lessons Learned – Canada Health Infoway (1/4)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Managing requestors' expectations is important. Although *Infoway* strives to process RFCs in a timely manner, some RFCs are complex and require significant investigation and background work to be completed correctly, which takes time.
- Having project team members responsible for completing the RFCs attend SNOMED CT education sessions resulted in their submitting high quality RFCs.
- Establishing a communications list at the beginning of the RFC process ensures the right people are kept informed and receive the same information.
- Receiving RFCs grouped together by modality (example: X-rays, CT scans) increases processing efficiencies for *Infoway*.
- Receiving all RFCs in one batch helps identify any duplicate requests.
- Scheduling regular meetings with the project team reserves time in people's calendars and allows for quick responses to general questions and issue resolution. It is easier to cancel meetings if they are not needed than to schedule ad hoc meetings.

Lessons Learned – Canada Health Infoway (2/4)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Developing formalized meeting agendas with clear objectives keeps discussion on track. Meeting notes capturing key discussion points and decisions provide an important reference.
- If there is a question on a particular RFC, providing the submitter with the original RFC in question, along with other RFCs related to the same modality, facilitates an easier and informed response. The question needs to be stated clearly and include sufficient detail.
- Receiving responses to questions in writing provides important documentation and may be a useful reference when processing similar RFCs in the future.
- Providing all SNOMED CT identifiers back to the project team at one time makes it easier for the team to work with the content.
- Assigning a submitter identification number to each RFC when there are multiple RFCs facilitates referencing a specific request by all stakeholders. It also enables aligning returned SNOMED CT identifiers with the correct internal term.

Lessons Learned – Canada Health Infoway (3/4)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Informing stakeholders that *Infoway* has no control over RFCs submitted to IHTSDO being included in SNOMED CT core content or which SNOMED CT release accepted RFCs will be included helps manage expectations.
- Having an IHTSDO resource available to respond to questions on SNOMED CT editorial guidelines is critical to processing RFCs correctly and in a timely manner.
- Using the submitted RFC form to document initial review information and QA findings prior to adding the requests to the internal RFC requests – All spreadsheet improved *Infoway* processing efficiencies. Questions for the ON DI project team and their responses were also documented on the RFC form. The pertinent information can then be copied to the RFC requests – All spreadsheet by a coordinator. Final QA was completed from requests – All spreadsheet prior to importing the RFCs into the terminology tool.

Lessons Learned – Canada Health Infoway (4/4)

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- Listing RFCs from all batches in one list helped uncover inconsistencies, duplicates and probable missing requests.
- The 2011 “Editorial Principles for clinical imaging procedures” (i.e. DI editorial guidelines) are being revised by the IHTSDO Content Committee. As a result of processing the DI RFCs, additional “Canadian” content has been proposed by *Infoway* for inclusion in the final guidelines. *Infoway* will need to review and apply the finalized DI editorial guidelines.
- Earlier discussion with the project would have better facilitated decisions with issues related to SCTID length – some DI repositories used the DICOM 16 character length for the procedure code.

eHealth Ontario
It's working for you.

NEXT STEPS

ON DI Terminology Project



Next Steps – eHealth Ontario

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- **Validation of the local hospital maps for terminology format and editorial guideline compliance**
- **Submission of approximately 600 remaining new terms to Infoway for SNOMED CT**
- **Update to the local maps to address the migration from ON DI Terminology Set Release 2 (developed prior to local dictionary mapping)**
- **Release 3 will incorporate additional terms added as a result of decisions made by industry experts during the mapping activities as well as inclusion of all new SCT codes**
- **The ON DI Terminology Set, Release 3 is expected by March 2014, and will be made available to members of the Infoway Standards Collaborative once published in the eHealth Ontario website, and Infoway's InfoCentral**

Special Thank You

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

- A special thank you to the participants from:
 - Canada Health Infoway
 - Mohawk Shared Services Inc.
 - eHealth Ontario – Diagnostic Imaging Program
 - eHealth Ontario – eHealth Standards Program
- For contributing to the achievements of this project, and the advancement of our lessons in terminology adoption and implementation – to date and continuing . . .



CONTACT US

ON DI Terminology Project

Contact Information

eHealth Ontario: SNOMED CT & Diagnostic Imaging Procedures

■ For further information, questions, and comments, please contact:

■ healthstandards@ehealthontario.on.ca

■ Thank You!



ADDITIONAL MATERIALS

ON DI Terminology Project

Source: Canada Health Infoway Standards Collaborative

Try an *Infoway* Standards
Collaborative Membership!

Standards Collaborative (SC)

Membership

- Open to anyone interested in products and services that help ensure health information is available and understandable when needed
- Able to access licensed pan-Canadian standards and other resources to support a wide range of business and clinical needs (ex. sharing of accurate information between settings, clinical decision support, etc.)
- Two types of membership available
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- Membership year runs from April 1, 2013- March 31, 2014

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*

Questions about SC Membership?

Contact *Infoway* Standards Collaborative Infodesk
standards@infoway-inforoute.ca

1877-595-3417

or 416 595 3417

Standards Collaborative Education

- *Infoway* offers Terminology and other standards education to suit your needs
 - Terminology Basics
 - SNOMED CT[®]
 - LOINC[®]

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Additional Resources

- InfoCentral: https://infocentral.infoway-inforoute.ca/2_Standards/1_pan-Canadian_Standards/Terminology/1_SNOMED_CT
- SNOMED CT files: https://infocentral.infoway-inforoute.ca/2_Standards/1_pan-Canadian_Standards/Terminology/1_SNOMED_CT/1_Download_SNOMED_CT_International_data_files
- SNOMED CT CDN EN Extension: https://infocentral.infoway-inforoute.ca/2_Standards/1_pan-Canadian_Standards/Terminology/1_SNOMED_CT/6_SNOMED_CT_English_Canadian_Extension
- SNOMED CT CDN FR Extension: https://infocentral.infoway-inforoute.ca/2_Standards/1_pan-Canadian_Standards/Terminology/1_SNOMED_CT/4_SNOMED_CT_Releases
- SNOMED CT Toolkit: https://infocentral.infoway-inforoute.ca/2_Standards/Terminology_Toolkit/SNOMED_CT_Terminology_Toolkit
- Link to Educational offerings: <https://www.infoway-inforoute.ca/index.php/programs-services/standards-collaborative/standards-education>
- Request for access to TermWorks: https://infocentral.infoway-inforoute.ca/3_Tools_and_solutions/Terminology_Tools/Access_Request

- The *Infoway* educational offering: *Fundamentals of SNOMED CT* is being offered as just before Partnership in Halifax on Nov 25 and 26.

- To find our more or register please go to:
- <https://www.infoway-inforoute.ca/index.php/events/upcoming-events/partnership-conference/partnership-conference-program>