

Mature architecture, pan-Canadian Standards Support Implementation Efforts



Welcome to the Spring 2010 issue of *Interchange* which brings you the latest news about *Infoway's* standards, architecture and IT privacy and security initiatives.

Since *Infoway's* inception, much effort has gone into the development of a viable archi-

tecture and pan-Canadian standards which can support the national electronic health record (EHR) initiative. The existence today of the nationally accepted Electronic Health Record Solution (EHRS) Blueprint and approved standards adapted to the Canadian context mean that moving forward more swiftly on the implementation front has progressed from the realm of vision to feasibility. The goal of semantic interoperability is poised to become a reality thanks to the mature architecture and standards now in place.

EHRS systems implementation will be the focus over the next few years as we move the core interoperable EHR deployments forward. These implementation initiatives will leverage the assets we have created over the past few years realizing a return on our investment. In order to achieve our benefits realization goals, interoperability and thus the use of the pan-Canadian standards *Infoway* has published, are key.

On page 2 of this newsletter, for example, there's an article on the implementation strategy underway for expanding the adoption of SNOMED CT®. Our Maintenance Services reports that there are plans across Canada to implement or migrate towards its MR2009 release. There is also an article on the new common decision-making naming conventions which have been defined to improve clarity and provide support for our stakeholders. These developments will facilitate implementation efforts across the country.

Another important development we are pleased to report on is the availability of lessons learned documents for those planning the implementation of LOINC (*please see page 5*). In addition, we are now providing new solution tools to assist implementers in the use of other pan-Canadian standards (*please see page 6*). The lessons learned, as well as the tools, are more evidence of how *Infoway* and the Standards Collaborative are ready to facilitate implementation projects in support of the national EHR initiative.

I hope you enjoy reading this latest issue of *Interchange*, and I invite you to submit articles or ideas for our Summer 2010 issue. Now, read on.

Dennis Giokas
Chief Technology Officer
Canada Health Infoway

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SNOMED CT[®] Implementation Strategy

The Standards Collaborative Strategic Committee's endorsed vision for standard terminologies implementation in Canada states: "All points of service systems are able to support entry of data using standardized mechanisms to enable the derivation of coded information to support a variety of processes ranging from clinician-to-clinician communication through to secondary use in a semantically interoperable manner."

In support of the vision, and as part of the SNOMED CT[®] implementation strategy, *Infoway* has completed the following activities:

- Conducted an environmental scan to seek information on SNOMED CT[®] implementation plans and activities in Canada. Topics covered during the 21 telephone interviews included:
 - ◆ Implementation priority;
 - ◆ Challenges and solutions;
 - ◆ Successes and emerging benefit models; and
 - ◆ Perceived role of *Infoway* to help move SNOMED CT[®] implementation forward.
- Developed discussion papers on SNOMED CT[®] extensions and subsets management and terminology issues and usage. Recommendations on *Infoway's* role in each topic were presented.

In the near term, *Infoway* will continue to execute SNOMED CT[®] strategy work and proceed with priority topics such as policy development related to extension management. We will also monitor and engage with SNOMED CT[®] implementation activities.

— Contributed by Bev Knight, manager, terminology, Canada Health Infoway

SC Updates

MAINTENANCE SERVICES

Maintenance Services released Maintenance Release 2009 (MR2009) back in March 2009. We are excited to see there are plans across Canada to implement or migrate towards MR2009.

With a target publication date of March 2010, Maintenance Services is working with the health IT community on a planned delta (PD) release for MR2009. MR2009 PD1 will

Infoway Spring Partnership Conference

Sheraton Centre
Montreal, Quebec
April 19-21, 2010

The Spring 2010 *Infoway* Standards Collaborative Partnership Conference will feature local, regional, pan-Canadian standards-based projects, as well as in-depth and interactive Standards Collaborative Working Group (SCWG) meetings and deliberations for stakeholders from across Canada. It will also include Standards Development Organization's (SDO) constituency meetings for the HL7[®] Canada Constituency, ISO TC/215[®] Canadian Constituency and IHTSDO[®] Canadian Constituency, as well as a host of informative presentations from experts and leaders from across the country and abroad.

In addition to providing excellent opportunities for networking and learning about progress and developments in the Canadian standards and architecture community, the conference will feature a first-time attendee mentorship program and luncheon, as well as the Partnership InfoFair and Welcome Reception, showcasing the latest innovations, projects, research and services in standards by the private and public sectors.

For the most up-to-date registration and program information, visit the [Partnership web page](#) regularly.

— Contributed by Jennifer Hall, manager, client services, Canada Health Infoway

protect and solidify the investment in pan-Canadian standards. Throughout 2010, the Standards Collaborative will continue to provide Maintenance Services which will support the pan-Canadian standards and encourage their adoption.

— Contributed by Simon Yan, maintenance services manager, Canada Health Infoway

NAMING CONVENTIONS IN THE DECISION-MAKING PROCESS

Naming conventions in the Decision-Making Process were recently clarified by the Standards Collaborative Strategic Committee (SCSC). These naming conventions offer an increased degree of specificity and clarity to Canadian specifications and support stakeholder access to appropriate content.

The following recommendations were accepted and approved by the SCSC in October 2009 and are currently in use.

Decision 1

Rescind the “pan-Canadian Standard” (pCS) designation as the formal approval name, and adopt “Canadian Approved Standard” (CAS).

Decision 2

When referring to a specific standard and its status in the Decision-Making Process, the following suffixes are required, if applicable:

- ‘name of standard’ – CSS (Canadian Strategy Selection)
- ‘name of standard’ – CDFU (Canadian Draft for Use)
- ‘name of standard’ – CD (Canadian Deprecated)
- ‘name of standard’ – CAS (Canadian Approved Standard)

Decision 3

A fully specified name, an abbreviated name and an acronym will be available for all specifications. The specification’s status is consistently the last component for all names and all specifications. The release date will also be included in the abbreviated name of all specifications.

Example - Fully specified Name

SC-2001-EN - Volume 4 Client Registry - Scope & Tracking Framework - R02.04.00 - 20090316-CDFU

Example - Abbreviated Name

Client Registry Standard- 20090316-CDFU

Example - Acronym

CR- CDFU

Stakeholders with questions are encouraged to contact the Standards Infodesk at standards@infoway-inforoute.ca. Tel: (416) 595-3417 or Toll free: 1 (877) 595-3417

— Contributed by Margie Kennedy, director, services, Canada Health Infoway

SC GOVERNANCE

The nomination period for the annual Standards Collaborative (SC) Governance elections began January 28, 2010. Exciting opportunities on the SC Governance committees and Standards Collaborative Working Groups (SCWGs) are available to those interested in participating in the development, maintenance, implementation and promotion of pan-Canadian health information specifications.

The SC Governance committees provide strategic direction, coordination and guidance on health information specifications in the Standards Product Life Cycle in

Canada. Currently, the SC Governance committees need members with strong domestic and/or international HL7, SNOMED CT[®], ISO TC/215 and other standards experience.

The SCWGs review and provide feedback on specifications and architecture activities as the specifications proceed through the pan-Canadian Standards Life Cycle. Many positions available on the SCWGs present excellent opportunities for those interested in combining strong leadership skills and clinical or technical expertise in a collaborative environment.

Elected positions are open to individuals who are SC members or to those whose organizations are members of the SC. Election details will be posted to the applicable Infoway forums and in the SC Bulletin.

— Contributed by Bryna Smith, project manager, education lead, standards, Canada Health Infoway

Membership: Register now for 2010-2011

The 2009 Standards Collaborative (SC) membership year ends March 31, 2010. We invite renewing members and new members to register for the 2010-2011 membership year by visiting our website in March (visit the [Standards Membership Information page](#)).

Member benefits include:

- Privileged access to pan-Canadian Health Information Standards, including licensed access to International and Domestic HL7 and SNOMED CT standard material;
- Exclusive member pricing for Partnership Conferences and SC Education Summits and HL7 Certification Exams;
- Information-packed weekly bulletins and newsletters informing members of the latest news from the Standards Collaborative as well as the standards community; and
- A new membership orientation program, which assists members with accessing and understanding their benefits.

The new membership year will start April 1, 2010, and continue through until March 31, 2011.

— Contributed by Jennifer Hall, manager, client services, Canada Health Infoway

News from the International Health Terminology Standards Development Organization

DOMESTIC RELEASE OF THE JANUARY 2010 INTERNATIONAL EDITION OF SNOMED CT®

Infoway's Standards Collaborative (SC), the home for SNOMED CT® in Canada, continues to support the terminology mandate with the domestic release of the International Health Terminology Standards Development Organization (IHTSDO) January 2010 core international release of the standard.

The January 2010 release contains new SNOMED CT® concepts, descriptions and relationships. Also new with this release is a more comprehensive set of supporting documentation, including a subset inventory, a stated view of the relationships table, and a developer toolkit.

A glimpse of changes in comparison with the previous release:

- Limited SNOMED CT® concept codes are now inactive: Limited concepts are now grouped under a sub-hierarchy called "limited status concepts (inactive concepts)" and moved to the "inactive concepts" sub-hierarchy
- Addition of 1,728 new concept codes.

[Click here](#) for more information about the January 2010 SNOMED CT® release.

Education Tutorials

The Standards Collaborative is pleased to announce its upcoming Spring Education event will take place March 3-5 at the Sheraton Centre, Toronto, ON.

Join us for our interactive introductory or advanced courses on HL7 and SNOMED CT® standards. Our leading-edge curriculum will deliver a strong basic knowledge of these standards with an emphasis on pan-Canadian implementation projects and experiences.

Registration and curriculum information will be available soon on the [Infoway Events web page](#).

— Contributed by Jennifer Hall, manager, client services, Canada Health Infoway

IEEE AND IHTSDO SIGN MEMORANDUM OF UNDERSTANDING

IHTSDO announced a new collaboration agreement aimed at coordinating Medical Device Terminology to improve interoperability and Patient Care. This new relationship is with the Institute of Electrical and Electronics Engineers (IEEE). IEEE is the world's largest professional association advancing technology for the benefit of humanity.

This type of collaborative relationship offers the potential to extend the availability of SNOMED CT® in health care at the point of service, and to enhance semantic interoperability. [Click here](#) to read the full press release.

NEW MEMBERS AND THE IHTSDO

Four new members joined IHTSDO in 2009. Cyprus, Spain, Slovenia, and the Slovak Republic have all been declared members of IHTSDO, joining the nine charter members (Australia, Canada, Denmark, Lithuania, Sweden, New Zealand, the Netherlands, United Kingdom, United States of America) and Singapore. Several additional countries are anticipated to complete their membership process shortly.

UPCOMING IHTSDO EVENTS

The Spring 2010 IHTSDO Conference is scheduled for April 26-30, 2010, in Copenhagen, Denmark. Many new initiatives are targeted for discussion (implementations, translations, workbench, etc.), and educational sessions are available in conjunction with the conference for those wishing to enhance their knowledge of SNOMED CT®. Delegates are welcome to contact the Standards Collaborative Infodesk or consult the IHTSDO Canadian Constituency to access information about past conferences or answers to questions about attending international events.

Canada has the privilege of hosting the Fall 2010 IHTSDO Conference in Toronto, October 15-19, 2010. This promises to be an exciting event for Canada and the SNOMED CT® community, drawing delegates from across the globe. A Social Task Force has been established to help plan the events associated with this conference. Materials and plans need to be in place for Spring 2010, so information can be provided to delegates at the Copenhagen conference. If you have some great ideas about how to showcase our beautiful country and unique Canadian culture, please send your ideas to the task force via Zied Kallel at zkallel@infoway-inforoute.ca.

Additional information on both conferences may be obtained at <http://www.ihtsdo.org/about-ihtsdo/ihtsdo-conferences/>.

— Contributed by Zied Kallel, standards analyst, Canada Health Infoway

New Role Profiles Key for Strategic HR Planning



Don Newsham,
*COACH's chief
executive officer*

The need for strategic human resources (HR) planning to address issues such as capacity, career development and role definition is central to the various stages of Electronic Health Record (EHR) implementation and to making the EHR a successful reality in Canada.

A new COACH resource, Health Informatics Professional Role Profiles, represents major progress on this front by providing the first comprehensive, standardized descriptions of the public and private sector roles required to deliver and maintain the EHR. The Profiles document is key to the systems-based planning called for in the landmark November 2009 Health Informatics and Health Information Management Human Resources Report. The report serves as a wake-up call concerning the serious risk of labour and skills shortages jeopardizing the successful implementation of the EHR, which is funded by substantial government investments.

Profiles, a downloadable PDF that is available from www.coachorg.com, provides a common reference point and language for career and HR planning. Employers, health informatics (HI) professionals and students can turn to it for high-level outlines of the main responsibilities, key competencies and qualifications for the 65 job titles on the COACH HIP™ Career Matrix, including new and emerging roles. Based on 500+ real HI jobs, Profiles will foster capacity building in all HI occupational groups, including standards and privacy, and will improve consistency in HI roles.

This resource is immediately applicable for developing and modernizing job descriptions, guiding individual career planning and educating stakeholders about HI. COACH welcomes feedback to enhance Profiles in the future. Next steps include using Profiles as the basis of an interactive tool for identifying career paths.

For more information: Visit www.coachorg.com or contact COACH at info@coachorg.com or by phone at (416) 494-9324, or toll-free at 1-888-253-8554.

— Contributed by Don Newsham, CEO, COACH: Canada's Health Informatics Association

eHealth 2010 Interoperability Showcase: Bringing Interoperability to Life

If you've ever tried to explain to your friends or family the challenges and complexities of establishing the pan-Canadian EHR you know firsthand how difficult it can be to make interoperability real for people. The good news is you're not alone. The better news is that the Interoperability Showcase is back by popular demand to help make interoperability come alive.

The Showcase is a vendor-neutral demonstration of e-health applications using the pan-Canadian EHR standards and IHE profiles to exchange health information. The demonstration is conducted by multiple vendors whose applications represent systems found in a range of health care settings. A clinical scenario is used to guide eHealth Conference attendees through a tour of the systems – allowing them to see how clinical data is passed from one system to another, thereby facilitating improved patient care.

Building on the success of previous years' showcases, the eHealth 2010 Interoperability Showcase will include a broader clinical scenario that will make the pan-Canadian EHR a reality by demonstrating components of the EHRS Blueprint exchanging data with point of service applications. For more information, please visit: <http://www.e-healthconference.com/showcase-info.html>.

— Contributed by Gavin Tong, director, Gordon Point Informatics, Ltd. and member of the Interoperability Showcase Planning Committee

Introducing Lessons Learned

There is much value in capturing lessons learned — gathering specific insights gained during one project and outlining future considerations that can be usefully applied on future projects. In order to support our stakeholders with their projects, Infoway has developed a process to capture lessons learned and has created two initial documents specific to mapping issues within the lab domain.

The first lessons-learned document outlines the considerations and recommended actions for Logical Observation Identifiers Names and Codes (LOINC) mapping and is intended for individuals in the planning stages of their project. The second lessons-learned

document discusses the issues in mapping HL7 V2.x messages from Laboratory Information System and Point of Service applications to the pan-Canadian Laboratory Messaging and Nomenclature specification in Jurisdictional Laboratory Information Systems.

These documents can be found in the SCWG 5 forum, under the Work Programs and Discussion Documents folder.

We are committed to developing further lessons learned and will periodically update you when new documents have been published. If you have any questions or would like to suggest topics for lessons learned, please contact the Standards Infodesk: standards@infoway-inforoute.ca.

— Contributed by George Power, manager, implementation services, Canada Health Infoway

Solution Tools Update

New and improved tools are available to assist implementers in using the pan-Canadian specifications.

NOMENCLATURE AUTOMATED MAPPING ASSISTANT (NAMA)

NAMA is now available from *Infoway*. NAMA is a tool that assists users in mapping local lab test codes to those in the pan-Canadian Laboratory Observation Code Database (pCLOCD). When a set of local lab nomenclature codes is loaded into NAMA, a user can select a local code, easily search for candidate matches from among the pCLOCD codes and save the matches. NAMA produces a nomenclature mapping table that can be used in downstream applications. This tool is available to be shared with developers across Canada, thanks to the efforts of the EHR/Saskatchewan Laboratory Results Repository team who originally developed the application as the Saskatchewan Automated Mapping Assistant (SAMA) and British Columbia's Ministry of Health Services - Health Sector IM/IT Division which acquired and modified SAMA, and released it as NAMA. You can request NAMA from standards@infoway-inforoute.ca. NAMA is provided on CD with installation and user guides.

EVEREST FRAMEWORK

Infoway participated in the development of the Mohawk College MARC-HI Everest Framework, a free, open-source .NET HL7 V3 message development environment. Everest facilitates working with HL7 V3 data types, RMIM structures and Implementable Technology Specification (ITS) formats. The software allows users to easily create standards-compliant messages and content from within a .NET-

enabled application. Using Everest, application developers can program against one set of HL7 V3 models, and serialize/de-serialize to many different ITS formats. The MARC-HI Everest Framework also allows applications to consume or produce these models using a wide array of transport mechanisms. Everest includes support for HL7 V3 Canadian Realm MR2009, XML ITS 1.0 and XML Data Types R1, WCF and File based transports. Everest code, along with instructions, tutorials and user guides, can be downloaded from <http://everest.marc-hi.ca/>.

— Contributed by Phyllis Koton Neel, director, solution tools, Canada Health Infoway

ISO/TC215 –Health Informatics Activity Update

ISO/TC215 held Joint Working Group (JWG) Meetings in Durham, North Carolina, October 17-21, 2009. The event included a pre-meeting Global Health Informatics Technology Standards Summit (GHITSS) at which the *Infoway* Standards Collaborative Governance model and Canada's standards-based electronic health record (EHR) progress was showcased as one of several international success stories.

During the ISO/TC215 meetings, numerous projects were discussed, including the following key initiatives:

1. The Draft International Standard (DIS) currently out for ballot, for 10159 Messages and communication — Web Access Reference Manifest (WARM). The scope includes:
 - The format for web access reference pointers, information object identifiers, information object filenames and associated information required to enable local web access to the referenced information objects.

Domestic stakeholders have the opportunity to contribute to this ballot via SCWG 6 Infostructure and Architecture by

CONTACT INFORMATION: INFOWAY STANDARDS COLLABORATIVE

For any information or questions about the *Infoway* Standards Collaborative, including pan-Canadian or international standards or our services, please contact the Standards Infodesk at:

standards@infoway-inforoute.ca

Or use the following telephone numbers:

Toll-free calls: 1-877-595-3417

Local calls in the greater Toronto area: 416-595-3417

March 24th, 2010. For more information on domestic activity please refer to the [SCWG 6 forum](#).

2. The DIS ballot, expected to be released in March 2010, for 27789 Audit Trails for electronic health records. The scope includes:

- Providing details on a secure audit record for each time a user accesses or processes personal health information; and
- Specifying the common base for an audit trail framework in terms of audit trigger events and data.

Domestic stakeholders will have the opportunity to contribute via SCWG 8 IT Privacy and Security Services. For more information on domestic activity please refer to the [SCWG 8 forum](#).

Please see the DIS ballot packages for further scope and document details. For further information on ISO/TC215 work, please refer to the [ISO/TC215 Canadian Constituency forum](#).

Furthering the work of ISO/TC215 standards development, the next Plenary Meeting is scheduled to be held May 9-13, 2010, in Rio de Janeiro, Brazil.

For more information on ISO/TC 215 activities, please contact the *Infoway* Standards Collaborative Infodesk at: standards@infoway-inforoute.ca.

— Contributed by Andrea Ciemny, standards analyst, Canada Health Infoway

HL7 update

HL7 CANADA

The Standards Collaborative welcomed Jay Zimmerman as the new HL7 Subject Matter Expert (SME) in the SDO Relations portfolio. Jay joined *Infoway* as Registries subject matter expert and has provided his extensive expertise for the past two years to Maintenance Services, a variety of stakeholders, and SCWG 7. Jay is also the co-chair of the Patient Administration Working Group at HL7 International. Jay's new role allows him to contribute more directly to *Infoway's* relationship with HL7 International, leverage his HL7 domestic and international experience to advance the Canadian HL7 mandate and support the various service areas within *Infoway*. Jay will also be contributing to the HL7 Canada Council as ballots and other HL7-related issues are addressed.

The January 2010 Ballot cycle closed on January 11, 2010. Twenty eight ballots were presented for consideration. The HL7 Canada Council met on January 7, 2010, to review submissions from domestic stakeholders, make final

decisions, and execute Canada's voting privileges. Four affirmative votes, four negative votes and 20 abstentions were lodged on behalf of Canada.

As membership representation continues to be discussed at HL7 International under the One Member One Vote (OMOV) initiative, Canada is in a position of gaining eight votes. Dialogue continues at the international level to consider how these additions can be implemented. HL7 Canada Head of Delegation Michael van Campen is centrally involved in this initiative and represents Canada's interests.

HL7 INTERNATIONAL

HL7 Inc has formally approved a change to their name from HL7 Incorporated to HL7 International. This change reflects an increased awareness of the broad interest and participation in HL7 globally, and sets the stage for a repositioning of the corporate headquarters to foster balanced international participation.

New HL7 Affiliates in 2009 include HL7 Russia in September, followed by HL7 Hong Kong in October. Planning for the establishment of an HL7 Europe office is also underway. Additional information will be available in the coming months.



INTERCHANGE

Interchange is an e-publication of Canada Health Infoway that brings you news about standards, architecture and privacy. In addition to news about pan-Canadian standards, this newsletter also includes updates on international activities of HL7, International Health Terminology Standards Development Organization (IHTSDO), Digital Imaging and Communications in Medicine (DICOM) and ISO/TC 215 as well as the services of the *Infoway* Standards Collaborative. We welcome submissions on standards and architecture-related topics of general interest to the health informatics standards community.

To comment, submit or suggest a news item or appointment, please e-mail Dennis Giokas at archinfo@infoway-inforoute.ca

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