Board Report: IHE Patient Care Coordination Domain

**Sponsors:**

* Health Information Management Systems Society (HIMSS)
* American College of Physicians (ACP)

**Leadership:**

* Secretariat: Celina Roth, HIMSS (croth@himss.org)
* Board Representative: John Donnelly, IntePro Solutions Inc.
* Plan Cmte Co-chair: Laura Heermann, Intermountain Healthcare
* Plan Cmte Co-chair: Tone Southerland, Ready Computing
* Tech Cmte Co-chair: Emma Jones, Allscripts
* Tech Cmte Co-chair: Denise Downing, AORN
* Nursing Sub-Cmte Co-chair: Denise Downing, Association of periOperative Registered Nurses

**Membership Rosters:**

* Planning Cmte: <ftp://ftp.ihe.net/Patient_Care_Coordination/ROSTER_PCC/>
* Technical Cmte: <ftp://ftp.ihe.net/Patient_Care_Coordination/ROSTER_PCC/>
* Nursing Sub-Cmte: <ftp://ftp.ihe.net/Patient_Care_Coordination/ROSTER_PCC/>

**Vision and Mission Statement:**

* The **vision** of Patient Care Coordination is to continually improve patient outcomes through the use of technology connecting patients and their care providers across healthcare disciplines and care paths.
* The **mission** of Patient Care Coordination is to develop and maintain interoperability profiles to support coordination of care for patients where care crosses providers, patient conditions and health concerns, or time.

**Activity:**

* Domain Scope: As defined by the Vision and Mission Statements above
* Current Cycle Timeline/Milestones: <http://wiki.ihe.net/index.php?title=PCC_Development_Timeline>
* Background: IHE PCC was established by HIMSS and ACP in 2004 and the Nursing Sub-committee was added in 2008 as this clinical discipline expressed an interest in incorporating nursing documentation into the IHE profile process.

**Most Significant Profiles:**

Todo:

* John to update numbers

Section and Entry templates as defined and used in IHE PCC content profiles are being implemented in the US in many cases under the implementation of the US-based C-CDA implementation guide as defined by Meaningful Use Stage 2. As a result of this there has been a shift in development efforts in the US vendor community focusing heavily on the implementation of C-CDA based templates. However, there is an active dialog ocurring as part of the HL7-IHE Collaboration Committee (<https://docs.google.com/document/d/10L0OE-pL60Q6RAIsuIt9ivA5uybZheF52NzXVXrfl2Q/edit>) effort to resolve issues around competing templates between IHE and HL7.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title** | **# vendor (Cthon)** | **# product (Registry)** | **Description** | **Notes** |
| Medical Summaries (MS) | **71 (Cons); 41 (Create)** | 51 (Cons); 25 (Create) | Describes the content and format of Discharge Summaries and Referral Notes | * Deployments in USA being adapted to the supplement changes anticipated from the C-CDA initiative in USA * Most equivalent to the CCD-documents that are part of the USA’s Meaningful Use (MU) Stage 2 product certification requirements. * Discharge Summary and e-referral document types included as specific documents in HL7 C-CDA ballot |
| Exchange of Personal Health Record (XPHR) | **38 (Cons); 26 (Create)** | 39 (Cons);  24 (Create) | Describes the content and format of summary information extracted from a PHR system for import into an EHR system, and vice versa. | * Deployments in USA being adapted to the supplement changes anticipated from the C-CDA initiative in USA * Most equivalent to the ONC’s HITSP C32 construct that is part of the USA’s Meaningful Use (MU) Stage 1 product certification requirements. |
| Emergency Dept Referral (EDR) | **30 (Cons); 15 (Create)** | 31 (Cons);  13 (Create) | Communicates medical summary data from an ambulatory EHR System to an EDIS System. | * Deployments in USA being adapted to the supplement changes anticipated from the C-CDA initiative in USA |
| Antepartum Profiles (APS, APHP, APL, APE) | **3-12 (Cons), 2-6 (Create)** | 5-11 (Cons);  0-2 (Create) | Records the aggregation of significant events, diagnoses, and plans of care (APS), H&P, results from standard laboratory tests (APL), and educational material provided (APE) during an antepartum episode. | * APS is by far the most adopted profile of the series with the max number of vendors for both the Creating and Consuming actors. * Integration Statements impacted by changes from single APS to suite of ‘AP’ profiles. |
| Emergency Dept Encounter Summary Profiles  (EDES: TN, NN, CTNN, EDPN) | **2-16 (Cons), 2-4 (Create)** | 14-17 (Cons);  3-4 (Create) | A set of profiles to record the care actions conducted in an emergency dept encounter including: triaging a patient upon presentation (TN), nursing care delivered (NN), and the notes from a ED physician (EDPN). A composite triage and nursing care document (CTNN) is also possible. | * Consumption easier to implement due to relationship to other CCC-based profiles |
| Immunization Content (IC) | **25 (Cons), 15 (Create)** | 34 (Cons);  21 (Create) | Exchanges immunization data with Immunization Information Systems (IIS) as well as EMR systems, HIEs, PHR systems, and other public health systems. | * HL7 CDA-based successor to the current HL7 v2 immunization message exchange. * This profile is equivalent to the USA’s ONC HITSP C78 construct. * Although USA’s Meaningful Use (MU) Stage 2 has established the HL7 v2 message as the minimum requirement, a number of States have started to include this document profile also. |
| Labor and Delivery Profiles (LDHP, LDS, MDS |  | 6-10 (Cons);  0-1 (Create) |  | * Follow on care from Antepartum Profiles * Shares some components with Antepartum Profiles for reuse opportunities |

**Significant Deployment Activity:**

* ASIP Sante (France)
  + Profiles: APS, LDHP, LDS, MDS, IC, RCK; production installation
* Arsenal IT
  + Profiles: XDS-MS; pilot installation Jan 2015
  + Workflow profiles (XBeR-WD, XTB-WD) are being considered for future pilot installation
* North Carolina Health Information Exchange [NCHICA]
  + Profiles: XDS-MS; pilot installation
* Keystone Health Information Exchange [KeyHIE] (Geisinger Health System)
  + Profiles: XPHR, XDS-MS; production installation
* Health Information Exchange of New York [HIXNY]
  + Profiles: XPHR, XDS-MS; production installation
* Greater Rochestor RHIO (GRRHIO)
  + Profiles: XPHR; pilot installation
* San Diego County HIO
  + Profiles: IC; production installation
* Due to the recent ONC initiative to harmonize the CDA template guidance, entitled the CDA Consolidation (C-CDA) project, resulting in a CDA ballot in Fall 2011, the IHE PCC content profiles utilizing CDA that were planning to be utilized in USA interoperability initiatives are now expected to reflect the results of this new HL7 Ballot result. This C-CDA initiative in 2011-2012 has a direct impact on the further deployment of the PCC Content Profiles, at least in the USA. This initiative established a harmonized set of data section templates/OIDs related to specific HL7 CCD-based document types identified in the ONC-sponsored projects, e.g. Transitions of Care. The approach taken for the incorporation of the results of this USA-based C-CDA initiative on the complete set of PCC Content Profiles, which are intended for use by the international HIT community, is to support either the USA-specific C-CDA templates or those previously included in the PCC content profile (see Summary of Future Plans below).
* IHE PCC profiles have been the underpinning of a number of interoperability constructs published by the HHS/ONC HITSP initiative in the USA. Commencing in 2012, the ONC successor organization to HITSP, the Standards and Interoperability (S&I) Framework, has established its own repository of interoperability implementation guides resulting from its own projects, e.g. Transitions of Care, and other S&I endorsed community-led projects, e.g. Public Health Reporting. The ongoing uptake of IHE profiles, at least in the USA region in the near term, is contingent on 1) their editing to reflect the C-CDA template/OID guidance, and 2) the incorporation into one or more of these ONC-sponsored projects. The goal of the C-CDA Harmonization effort in PCC is to allow such implementations to produce one template that conforms to both.
* Todo: John to provide blurb - add details about IHE/HL7 Collaboration workgroup

**Demonstrations and Other Events:**

* HIMSS Annual  Conference (USA)
  + Theme-focused demonstrations including Ambulatory, Emergency and Acute Care settings, Public Health agencies, Clinical Research organizations, Laboratory Services, Imaging Services and Home Care
* Public Health Information Network (PHIN) conference (USA)
  + Public health focused demonstrations (e.g. Immunization and Cancer Registry Reporting and Utilization)
* HIMSS/World of Health IT (WoHIT) (2012: Copenhagen, Denmark)
  + Theme-focused demonstrations including Ambulatory, Emergency and Acute Care settings and Laboratory Services. Not continued in 2013.
* HIMSS AsiaPac12 (2012: Singapore)
  + Theme-focused demonstrations including Ambulatory, Emergency and Acute Care settings, and also Home-based and clinically-deployed devices

**New Profiles:**

* Reconciliation of Content and Care Providers [RECON] (<http://ihe.net/uploadedFiles/Documents/PCC/IHE_PCC_Suppl_RECON.pdf>)
  + This profile enables information contained in Health Information Systems and Exchanges to be used to support automation of these reconciliation tasks and clinical workflows. This profile explains what information can help reconciliation, and how it can be used to assist healthcare providers to automate this complex task.
* Multiple Content Views [MCV]

(<http://ihe.net/uploadedFiles/Documents/PCC/IHE_PCC_Suppl_MCV.pdf>)

* + This profile provides guidance on how text in CDA documents may be tagged to achieve different rendering behaviors. This allows one document to serve different needs based upon the requirements of the person viewing the document. The viewing requirements of a patient differ from the requirements of a healthcare provider. The profile identifies many of the requirements expressed by patients, classifies these requirements, identifies the rendering behavior associated with each, and provides guidance on how to tag CDA content in order to bind it to an identified behavior. Use of this profile allows one CDA document to serve the needs of different Document Consumers. This profile is strictly about the rendering of the narrative, and the view has no relationship to content that may be imported by other actors.
* A Data Access Framework using IHE Profiles (White Paper)
  + The purpose of this white paper is to provide a framework of modular, substitutable and interoperable integration profiles that shows how IHE enables data access for a wide variety of use cases and can reduce integration costs by encouraging standards based integration both within and across enterprises.

Trends:

* The uptake and deployment of PCC Content profiles are highly related to the specific use case priorities being promoted in a region. For example, the ONC-sponsored projects are the leading impetus for which clinical exchanges are deployed in the USA.
* Patient Care Coordination, as an overall objective, has both clinical and administrative components as reflected by the industry initiatives of PCMH (Patient-Centered Medical Home) and ACOs (Accountable Care Organizations). The PCC domain scope and profiles to-date have only addressed the clinical exchange component. The IHE position/coverage of the administrative requirements for this objective is becoming increasingly important.
* Although PCC has historically focused heavily on content profiles it is moving toward workflow type profiles, having published several such profiles over the past few years. As a result PCC is beginning to look outwards to other domains to figure out how to bridge gaps that may exist in clinical workflows between and across various IHE domains.
* Consideration of new implementation guides and standards such as C-CDA and FHIR and how they relate to existing and future work in PCC.

**Summary of Future Plans: [Overall Objective: less new profiles and more consolidation and workflows]**

The following strategic goals are reviewed annually by PCC and adjusted as needed based on stakeholder and committee member input in order to ensure the focus of PCC remains relevant to industry needs. The strategic goals as defined this year include focus on Content, Workflow, and Nursing.

* **Content**
  + Coordinate with external standards development organizations (SDOs) to develop and promote the use of content templates
  + Develop strategies to support multi-level content template guidance to benefit the global community
* **Workflow**
  + Develop new profiles by reaching outward to other IHE domains to coordinate workflows across care paths
  + Develop white papers by researching new areas that could benefit from standards based interoperability guidance
* **Nursing**
  + Explore and understand the benefit of IHE profile work in the nursing space by partnering with nursing organizations and initiatives
  + Develop profiles and white papers to support and explore various nursing specific workflows

Following are more specific action ideas that are being considered by PCC:

* Participate in harmonization and alignment activities with HL7 as part of the IHE-HL7 Coordination Committee to ensure work efforts in each group complement and do not compete with one another
* Engage various nursing professional organizations for participation in the PCC Nursing Subcommittee to assist with producing guidance on the nursing perspective as it relates to the overall vision and mission of the PCC domain.
* Continue to assess the uptake plans of the USA-sponsored C-CDA initiative on the international HIT community and monitor the adoption of the C-CDA Harmonization profile published for Trial Implementation in 2013. Author and execute CP’s against the IHE PCC TF and C-CDA Harmonization supplement as needed to align with any future C-CDA changes that are reflected in HL7 C-CDA ballot results.
* Coordinate Patient Plan of Care and Patient-centered Coordination Plan supplement development with AORN Syntergy for peri-operative structured nomenclature *(incorporation of the C-CDA project results topic moved this to a lower priority)*
* Continue edits to the PCC Technical Framework to emphasize the XDS folder capability for the deployment of groups of related PCC content profiles, e.g. APS being one of the documents contained in an Antepartum Document folder; TN being one of the documents contained in an Emergency Dept Encounter folder, etc *(incorporation of the C-CDA project results topic moved this to a lower priority)*
* Investigate incorporating a FHIR option in the QED profile as this profile is a long-standing PCC profile (published in Aug 2008) with minimal support from the vendor community*.*
* Coordination with Quality, Research and Public Health [QRPH] domain regarding QED instances in support of QRPH outcomes and requirements and the structuring of PCC profiles to provide maximum “re-purposing” of its content for QRPH profiles
* In general, the near-term focus of the PCC domain, besides the effective incorporation of the C-CDA results on the TF of the Domain, is the organization of existing profiles into harmonized sets of information exchanges and their respective workflows and to promote the uptake of these sets into products. Deployment of the PCC profiles beyond the initial MS and XPHR profiles in harmonization with national/regional projects and priorities will also be emphasized.