IT-014 Health Informatics Committee

Executive Summary Report

HL7 Working Group Meeting

15th - 20th January 2012 (San Antonio, USA)

Date Issued: 17/02/2012
Lead Author: Patricia (Trish) Williams
Collated by: Standards Australia

With input from Australian Delegation and other employer funded Australians at the meeting:

- *Trish Williams (Delegate and Report Coordinator)*
- *Heather Grain (Delegate)*
- *Richard Dixon Hughes (Delegate)*
- *Grahame Grieve (Delegate)*
- *Hugh Leslie (Delegate)*
- *David Rowed (Delegate)*
- *Vince McCauley (Delegate)*
- *Andy Bond (NEHTA)*
- *Stephen Chu (NEHTA)*
- *Sarah Gaunt (NEHTA)*
- *Zoran Milosevic (NEHTA)*
- *Vin Sekar (NEHTA)*
- *Phil Wilford (NEHTA)*

TABLE OF CONTENTS

1 INTRODUCTION

HL7 is an international organisation with its origins in the USA, and an expanding group of international users participating in its standards development processes. HL7 provides international standards for inter-system and inter-organisation messaging, for decision support, clinical text document mark-up, user interface integration, EHR/PHR systems functionality as well as a health data model and message development methodology. It produces global health informatics standards through a process of collaboration, which involves its local affiliate, HL7 Australia.

HL7 standards are the dominant health-messaging standards in the USA, Canada, Germany, Holland, Finland, Japan, Korea, Tai wan, New Zealand, and Australia and are being adopted as health-messaging standards by many other countries.

There are many national HL7 organisations that participate in HL7 development activities. These include Argentina, Australia, Brazil, Canada, China, Croatia, Czech Republic, Denmark, Finland, Germany, India, Japan, Korea, Lithuania, Mexico, New Zealand, Pakistan, Switzerland, Taiwan, The Netherlands, UK, Spain, Greece and Ireland.

The January 2012 HL7 International Working Group Meeting was held in San Antonio, USA. The meeting covered 6 days, running from Sunday 15th January to Friday 20th January. On weekdays formal meetings are scheduled from 8am to 5pm. However some meetings are scheduled from 7am and others go to 10pm (and sometimes later) most days.

This HL7 working group meeting was supported with 290 registrants from over 20 countries.

It should be noted that the HL7 International standards work is not structured as "Work Items" that are put forward to the HL7 body for approval, rather most projects arise from the work within the many domain and specialist committees. However, these proposed projects need to be well-defined and documented and require approval by the respective Steering Division and the Technical Steering Committee to ensure appropriate internal (HL7) and external (international standards development organisations) harmonisation.

This report summarises the committee proceedings, issues and actions for consideration by Australia from this HL7 International Standards and Education Meeting.

2 OBJECTIVES OF THE MEETING

The event is a true working meeting, not a conference, with many individual groups meeting to develop, discuss and improve HL7 standards, processes and implementation guides and to determine the most effective way to meet the needs of the stakeholders – both those present at the meeting and those in the wider community of interest. While HL7 engagement with stakeholders in other forums is also strong (through regular, often weekly teleconferences), the ability to influence the work program, outcomes and strategic direction requires physical presence at working group meetings.

The overarching objectives are to benefit the Australian health system and wider community by:

- Improving Australian capacity to implement health informatics standards and eHealth systems by expanding local knowledge and expertise based on international best practice;
- Promoting free trade and its benefits to health ICT (by lowering the cost of integrating and implementing local health information systems, many of which are imported, and by reducing costs to Australian exporters) – both these outcomes require Australian requirements to be embedded into global standards so that they can be adopted in Australia, rather than having different standards across domestic and international markets; and
- Improving Australian health information systems by facilitating a standards-based approach to development and implementation, and achieving interoperability between systems.

Other more specific objectives for Australian engagement in international standardisation via the HL7 International include:

- Monitoring and influencing HL7's strategic positioning as a global Standards Development Organisation (SDO), encouraging its collaboration with other international and global SDOs and assessing and contributing to the strategic positioning of its key products (HL7 V2.x, V3, CDA, EHR, etc.) so as to encompass Australia's health information interchange and related requirements;
- Negotiating the inclusion of Australian healthcare messaging requirements into HL7 V2.8, CDA and V3 specifications for:
    - Patient administration;
    - Diagnostics (pathology, radiology); and
    - Collaborative care (E.g. Electronic Discharge Summaries and e-Referrals, so that Australian requirements become a formal part of these Standards.
- Negotiating the inclusion of Australian health sector requirements into the HL7 Standards so that Australian EHR developments are supported by the upcoming HL7 and related ISO EHR Standards;
- Negotiating the harmonisation of ISO, HL7 and CEN Standards to achieve progressive inter-SDO eHealth standards harmonisation with the long-term goal of a unified set of global health informatics standards;

- Monitoring, and influencing as necessary, new initiatives to standardise clinical data content so as to improve Australia's ability to unambiguously and safely exchange semantically interoperable clinical data;
- Assessing and influencing HL7's work on service oriented architectures (SOA), as required by Australia's national direction setting, and negotiating the inclusion of Australian health sector requirements (in particular, those described by National E Health Transition Authority [NEHTA] into service specifications being jointly developed by HL7;
- Assessing and influencing the positioning, development, implementation, utility and effectiveness of CDA (including CDA Release 3), to support Australia's interest in CDA in its national E-Health program;
- Assessing, exploring and proposing approaches to the embedding and transportation of archetypes in HL7 V2.x messages for referral, diagnostic results and collaborative care to support Australian interest in the use of archetypes for the exchange of clinical information; and
- Progressing the international harmonisation of common data types and vocabulary for healthcare information that will meet Australia's identified requirements.

Additional Australian interests are pursued opportunistically as and where formally agreed upon by the community and to support specific objectives which are required for the development of Australia's national eHealth agenda and other national interests.

Relevance to NEHTA programs

NEHTA has endorsed a range of Australian Standards derived from international standards work by including them in the National E-Health Standards Catalogue. As the implementation of NEHTA's domain-specific initiatives are based on many of these standards, it is important that Australia continues to be involved in the international forums that develop, manage and maintain these, and other potentially relevant, health informatics standards.

3 MEETING LOGISTICS

The table below shows the meeting schedule for some of the larger meeting groups. Most US based meetings have greater than 60 separate working groups and committee meetings.

Meeting	Sat	Sun	Mon	Tue	Wed	Thu	Fri
Advisory Council			RDH				
Affiliate Agreement Task Force (AATF) and access to HL7 IP		RDH		RDH		RDH	
Affiliate Due Diligence Committee				RDH			
Anatomic Pathology							
Architecture Review Board (ArB)					GG		
Arden Syntax				DR			
Attachments							
Board				RDH			
CDISC / BRIDG							TW
Child Health							
CCOW							
Clinical Decision Support				DR	DR	DR	
Clinical Genomics							
Clinical Interoperability Council				NR	HL		
Clinical Statement							
Community Based Collaborative Care			TW		VM, RDH, TW		
Conformance and Guidance for Implementation and Testing			VM	VM	VM	HG	
Detailed Clinical Models		HL	HL	HL	HL	HL	
Education & Marketing			HG	HG		HG, NR	
Electronic Health Records			NR	HL, DR, RDH	TW, NR		
Electronic Services						NR	

Meeting	Sat	Sun	Mon	Tue	Wed	Thu	Fri
Emergency Care							
Financial Management							
Generation of Anaesthetics Standards							
Governance and Operations							
US Government Projects							
HL7 Collaboration with ISO, CEN & other SDOs		VM, HG, RDH, NR					
Health Care Devices			TW		VM		
Imaging Integration							
Implementation Technology Specification							
Infrastructure and Messaging					GG		
International Council		VM, HG, HL, DR, RDH, TW, NR				RDH	
International Membership & Affiliation Task Force (IMATF)	RDH				RDH		
International Mentoring Committee							
ISO/TC215 Organisation & Business Plan Task Force, and liaison meetings							
ISO/TC215 WG2/HL7							VM, DR, RDH, TW
Joint Initiative Council (JIC) liaison		RDH	RDH				
Laboratory							
Modelling and Methodology		GG	GG	GG			
Orders and Observations				HL			
Organisational Relations							

Meeting	Sat	Sun	Mon	Tue	Wed	Thu	Fri
Outreach Committee for Clinical Research							
Patient Administration							
Patient Care			HL, DR	HL, DR	HL	HL	
Patient Safety							
Pharmacy				DR			
Plenary Sessions							
Policy Advisory Committee					RDH		
Process Improvement Committee							
Project Services							
Public Health Emergency Response				DR			
Publishing				NR	NR		
Recognition and Awards							
RIMBAA							
Security			TW	TW	TW	TW, NR	
Sensor Networks							
Services Oriented Architecture		DR	VM	VM, DR	VM, TW	VM, DR,	VM, DR
Standards Development Organisations (SDO) collaboration							
Structured Documents			GG	GG	DR		NR
Templates							RDH
Terminfo Project / Terminology							
Tooling							
US Government Projects							
Vocabulary		HG	HG	HG	HG	HG	HG, NR
V2/V3/V4 Taskforce (now HL7 Fresh Look)			GG, NR		HG		
CIMI – Clinical Information Modelling Initiative	HL attended for 3 days prior to start of WGM.						

Attendees listed above:

Richard Dixon Hughes	**RDH**	**Vince McCauley**	**VM**
Heather Grain	**HG**	**David Rowed**	**DR**
Grahame Grieve	**GG**	**Naomi Ryan**	**NR**
Hugh Leslie	**HL**	**Trish Williams**	**TW**

Tutorials are also offered and these are of great value both to new comers and to older hands to bring them up to date on generic changes made that may not be discussed in their individual committee areas (e.g. vocabulary submission requirements). At this meeting 31 tutorial sessions were held concurrently with 67 working group and task force meetings.

The number of concurrent sessions makes it difficult for a small delegation to effectively follow the issues and to influence change. It is noted that delegates funded by their employer, or individually, to international meetings have no obligation to work with or relate information back to the Australian delegation, though some have done so in the past. It is clearly desirable that there be a cohesive Australian position.

Given the participatory natures of the HL7 committee work, it is vital that Australians are present and participate in the committee work. Intensive work is done in the committees and often 2 or 3 Australian subject matter experts are required to get the Australian requirements into the consensus-based processes. In most cases, beforehand preparation of "Australian Positions" on the matters to be worked on is not effective, as the discussions and views often substantially change during the consensus-building process. Most of the work done in committee is "leading edge" standards development work that often cannot be locally previewed, assessed and commented on beforehand. As a result, the selection process of the funded participants focuses on their expertise and interests as well as their ability to effectively communicate complex technical issues and achieve the desired outcomes for Australia in a collaborative consensus-based committee environment.

As is customary, the Australian participants met on a daily basis to plan and monitor its involvement, identify any additional sessions and/or activities that should be covered and to identify emerging issues - particularly those that are relevant to the Standards Australia IT-014 and/or NEHTA work plans. Australian participants also coordinate their activities through Skype.

4 RECOMMENDATIONS ARISING FROM THE MEETING

The principal issues/actions and recommendations identified by the Australian delegation at the January 2012 HL7 Meeting are summarised in this section. The alignment to the IT-014 Committee Structure is also listed.

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
Affiliate Agreement Task Force (AATF) : Renewal of affiliate agreement	The affiliate agreement that governs the arrangements between HL7 International and its affiliates (including HL7 Australia) is being updated for 2012 through 2013 to better reflect the contractual relationships between the parties and provide greater clarity around the use of HL7 International intellectual property. The changes are being negotiated through the AATF, of which Richard Dixon Hughes is now a member, with assistance from and oversight by the HL7 Australia Board with the aim of ensuring that existing rights such as member access to HL7 specifications receive favourable consideration and are incorporated into the draft agreement. Suitably documented arrangements are also being sought to ensure the continued production and publication of Australian HL7 implementation guides as Australian Standards. **Action: HL7 Australia to continue with negotiation of a suitable affiliate agreement for 2012 though 2013 and other arrangements with the aim of facilitating the continued availability of HL7 materials in Australia under reasonable commercial terms and allowing the continued publication of HL7 Implementation Guides as Australian Standards.**	**HL7 Australia,** **others as appropriate**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
International Membership & Affiliation Task Force (IMATF)	The IMATF is considering the medium-to longer-term membership structure of HL7 and its affiliates, including the conflicting desires of some to become a more unitary organisation, while others favour an organisation where all international decisions are made through realm-based affiliates. These discussions overlap the HL7 Board consideration of its forward business plan and potentially impact the role of HL7 Australia and the benefits currently received by its members and the Australian eHealth community. Richard Dixon Hughes has been asked to lead a study into comparative membership structures across the affiliates and assist in proposing new categories for licensing intellectual property. **Action: HL7 Australia to continue engagement on HL7 membership model through IMATF with view to ensuring Australian stakeholders can continue to obtain HL7 membership benefits cost-effectively and have their interests in HL7 represented locally and at the global level.** **Action: Richard Dixon Hughes to compile survey of affiliate membership classes and privileges for IMATF.** **Action: Richard Dixon Hughes to assist Diego Kaminker (Argentina) (Board Member) with development of revised licensing classes to put forward for use in the HL7 IP policy, membership agreements and affiliate agreements.**	**HL7 Australia,** **Richard Dixon Hughes,** **others as appropriate**
International Council: Replacement for IHIC 2012 in Singapore	HL7 Singapore has pulled out of holding IHIC 2012 on 20-21 September 2012 and an alternative venue is being sought, although this is unlikely at this late stage. Richard Dixon Hughes was tasked with preparing an email for circulation to affiliate chairs to canvass alternative venues and/or times. **Action: Richard Dixon Hughes to provide Bernd Blobel with draft letter canvassing the ability/interest of other affiliates in running the IHIC conference in 2012.**	**Richard Dixon Hughes (completed)**
HL7 Board: Communication and development of understanding and skills	HL7 Australia has been asked in previous reports to consider a strategy on this topic. Heather Grain is happy to assist. We have not yet had a report on this issue from HL7 Australia. **Action: Request report on skill development plan and identify priority, and assistance required.**	**HL7 Australia,** **Standards Roundtable**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
HL7 Board: Implementation of proposed new business plan	Building on previous considerations including work by the Business Plan Task Force and the CEO, at its December meeting, the Board agreed on a proposed new business plan with a focus on greater international involvement, more types of membership and the potential for more flexible but broadly applicable membership and licensing arrangements. This plan is still to be communicated and will be the subject of more detailed research. It will probably have some impact on the role of HL7 Australia and the benefits currently received by its members and the Australian eHealth community. **Action: HL7 Australia to participate in review and comment on proposed changes in the HL7 Business Plan with a view to ensuring Australian stakeholders can continue to obtain HL7 membership benefits cost-effectively and have their interests in HL7 represented locally and at the global level.**	**HL7 Australia,** **others as appropriate**
HL7 Board: Strategic Initiatives	Australia should be involved in the Strategic Initiatives ballot to make sure that it aligns with national priorities in Australia. **Action: Join Strategic Initiatives Ballot.**	**Australian Delegation**
HL7 Board: Protection and use of HL7 intellectual property	The stability of HL7 International's financial position is likely to continue to depend on organisations paying a reasonable price for use of its intellectual property (IP), at least for the next few years. Without other sources of revenue, ongoing protection of its IP therefore remains a priority for HL7 International, and this needs to be respected where HL7 IP is used in Australia. **Action: HL7 Australia, Standards Australia and NEHTA to ensure that effective measures are in place to protect HL7 International's IP when distributed and used within Australia.**	**HL7 Australia,** **Standards Australia & IT-014,** **NEHTA**
Advisory Council: Input	HL7 Advisory Council comprises a select group of senior executives that provide strategic input to the HL7 Board through its executive team. The Council has been an important influence on HL7 becoming a more professional and business-like organisation and provides input on the thinking of major stakeholders about HL7 and the environment in which it operates. Richard Dixon Hughes has been Co-chair of the Council since January 2010. **Action: HL7 Australia and any other Australian interests with comments about general matters of potential strategic importance to HL7 International that might usefully be the subject of advice from the Advisory Council to the HL7 Board to advise Richard Dixon Hughes.**	**HL7 Australia,** **IT-014,** **others as appropriate**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
Tooling: HL7 UML-based tooling competition	HL7 Technical Steering Committee (TSC) is seeking suggestions for a tooling competition with a $4K prize sponsored by Sparx Systems (an Australian company). **Action: HL7 Australia to approach the local HL7 community for suggestions of topics for a UML-based tooling competition.**	**HL7 Australia**
Tooling:	The lack of those with skills to support HL7 processes is a major risk. Are these skills also needed in Australia? **Action: Assess risk to Australia and any relevant action needed.**	**HL7 Australia**
Technical Steering Committee (TSC) Harmonisation of v2 vocabulary model with v3	Australia has been a world leader in the use of HL7v2. There is a significant risk of a loss of backward compatibility and international perspective if the activities aimed at harmonisation of the v2 vocabulary model are one-sided and do not have sufficiently broad input and consideration of implementation and transition issues. **Action: IT-014 and HL7 Australia to monitor and ensure appropriate user input is provided to the v2/v3 vocabulary harmonisation project.**	**HL7 Australia,** **IT-014-02,** **IT-014-06**
HL7 Activities with other SDOs	There is an ongoing need to monitor and promote harmonisation between the various health informatics standards development organisations (SDOs). **Action: As Australian TC215 Head of Delegation and observer for HL7 affiliates on the Joint Initiative Council (JIC), Richard Dixon Hughes to continuing monitoring progress in harmonisation of HL7, ISO, CEN, IHTSDO, GS1 and CDISC activities and report on it regularly to IT-014.**	**IT-014,** **Richard Dixon Hughes,** **Heather Grain**
Architecture Review Board (ARB): SAIF CD Localisation	**Action: Develop Australian localisation of SAIF CD. This action is in line with the current eHealth Interoperability Tiger Team, which involves NEHTA, Standards Australia's IT-014 committee and its member organisations. Current eHealth Interoperability Framework should consider adopting the SAIF Governance Framework, which is currently not addressed.**	**IT-014-06**
Community Based Collaborative Care (CBCC) Support for progressing Services Directory and CBCC reporting	CBCC has been side-tracked into a security activity and needs redirection. **Action: IT-014 and HL7 Australia continue monitoring the activities of CBCC with a view to progressing work on Community Services Directory in conjunction with SOA and other needs for functionality in the CBCC sector.**	**IT-014,** **HL7 Australia**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
CBCC: Refactoring Confidentiality Codes harmonisation.	Given the unknown use of such coding in the PCEHR and other aspects of data transfer in the new eHealth architecture, it would be helpful for NEHTA to brief IT-014-04 on the methods intended to be used for confidential coding in data transfer at the archetype level. **Action: NEHTA to brief IT-014-04 committee on the design and inclusion of confidentiality codes in data transfer for the PCEHR and eHealth data exchange.**	**NEHTA to advise IT-014-04**
Clinical Decision Support (CDS): Gaps in the standards work and potential new work items.	The CDS WG has capacity for new work items and readiness to take them on. It has, at the meeting, agreed to take on one new priority item (Desired EHR Interfaces and Capabilities for CDS) pushed from Australia with work by teleconference to commence early February. **Action: CDS standards gaps, as identified at the meeting, be reviewed against Australia's needs and a priority group of these identified to take as new work proposals.** **Implications for Australia:** CDS standards targeted to Australian requirements becoming available for better quality of care and implementable by Australian vendors.	**IT-014,** **IT-014-13,** **Professional Colleges,** **MSIA**
CDS: HL7 desired EHR Interfaces and Capabilities for CDS	CDS systems are many and varied according to vendor technology, knowledge representation, authoring specialty and clinician requirements. No single EHR-based main application vendor can be expected to provide a monolithic or single-shop solution covering all the needs of a clinical client community such as Australian General Practice. Standards are required to make this economically feasible and safe on the scale required. The RACGP is already distributing bolt-on CDS packages for some Australian EHR-based applications. **Action: This project is adopted as high priority, promoted to vendors and knowledge authors (including medications information groups) and an integration strategy be developed for Australian industry**. **Implications for Australia:** Leverage of extensive already-deployed clinical systems in Australia. Enabling of widespread safe, reliable and economically feasible multi-supplier deployments.	**IT-014,** **IT-014-13,** **MSIA,** **RACGP.**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
CDS: Cross Platform Interoperability Implementation Guide for Immunisation. **New Project** **Sponsor SOA** **CDS a co-sponsor with PHER, ArB.**	HL7 and other groups including IHE, have multiple different implementation standards around immunisation communication. These include V2, V3, CDA and a proposed services implementation. Implementation guidelines in use by Australian GP systems, and guidelines distributed by jurisdictional authorities, but standards in place in Australia to support this are limited to Version 2 Implementation Guides. Immunisation registries in use in Australia need standardised data which will need to come from multiple source systems which may in turn use different communication and semantic implementations. Immunisation crosses multiple areas and Standards. **Action: Standards Australia via, IT-014, to identify groups doing CDS and workflow around immunisation and advise them of the project, our assessment of its importance and invite input with a view to implementation in Australian GP systems, knowledge bases, and jurisdictional guideline systems. Groups will include MSIA, Jurisdictions, RACGP and IHE Australia.** **Recommendations for Australia:** Australia should work to further standardise immunisation for the different platforms required here and to ensure CDS can interoperate with systems based around these standards. Australia should define requirements in this area and advance the project at all the WGs involved ensuring our requirements are met. **Implications for Australia:** Interoperability with new CDA and Service-based standards for CDS and Immunisation registries. Reduced costs to implementers with published guidelines and re-usable interface specifications.Support of Australian industry implementations via MSIA.	**IT-014,** **IT-014-13,** **IT-014-06-04**
CDS: Health Quality Measure Format (HQMF) Implementation Guide	**Issue**: The project is US Realm specific but has value to Australia. It is relevant to CDS and population-based applications. EHR systems need to be appropriately structured to represent quality measures, both process and outcome – based, and to support queries around these. There is a need to see how CDS and Quality management work together and this highlights the difference between individual patient CDS vs. population health. **Action: Monitor the project as it comes through CDS and SD Work Groups to gain a clearer picture of how process- and outcome–based quality measures are queriable when represented in EHRs and used for CDS.** **Implications for Australia:** will provide input to EHR requirements for quality and CDS.	**IT-014, IT-014-13**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
CDS: Context Aware Information Retrieval (Infobutton) SOA Implementation Guide.	Moving to release 2 with Moving to services base in line with CDS Services project. CDA / CCD based payloads are likely. Is a CDS standard but relevance to Australia is undetermined. **Action: Monitor, assess relevance to Australia. Assess CDA representation of CDS as per this standard.** **Implications for Australia:** One of several standards for assessment buy CDS community in Australia expectedly through the new IT 014-13. Implications on our future use of CDA.	**IT-014 , IT-014-13,** **HL7 Delegates**
CDS: Virtual Medical Record (vMR) for Clinical Decision Support	CDS systems rely on data in EHRs and on inputs and outputs in different formats. Standards for content are required to bridge this gap. An Australian group has been a leader in the development and utilisation of this standard. **Action: Support and raise awareness of the project in stakeholder communities, with particular note on local industry's leadership in this. Encourage vendor consideration of interfacing capability via vMR concepts. Assess Australian needs and ensure the new release meets these. Clarify whether the projects V3 "structured document" aligns with our CDA implementations' use of clinical content.** **Implications for Australia:** This project is important in ensuring our initiatives across messaging, CDA, EHR can be brought together to enable improved care and safety through standardised CDS.	**IT-014, IT-014-13,** **MSIA,** **Professional Colleges**
CDS: Order Set Publication Standard	The ordering of interventions including treatments medications, pathology and imaging is an important part of clinical practice and a major determinant of patient outcomes against national cost. Generalist Clinicians need deployed CDS to assist in this process. Standards are needed to allow knowledge authors drawn from clinical and diagnostic specialties to enable these processes. **Action: Review the standard from perspective of GP and Allied Health needs, vendor and localised V3-CDA capability, expert authors and government funders. Confirm applicability, identify gaps, and work at HL7 CDS to close any such.** **Implications for Australia:** This project has potential to impact favourably on an enormous number of clinical encounters by primary care physicians with optimisation of health outcomes and with rationalisation and where appropriate, containment, of diagnostic testing.	**IT-014, IT-014-13,** **MSIA,** **Professional Colleges, particularly Pathology and Radiology and RACGP,** **HIC and** **Medicare**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
CDS: openCDS	There are many and diverse standards in CDS even within its main SDO, HL7. Assessment of their relative applicability and their tying together is required. Implementation is costly and technically challenging for vendors. This project addresses these. **Action: Use this project to understand, and support assessment of, the multiplicity of CDS standards and systems integration requirements for Australia.** **Implications for Australia:** Australia has the potential to clarify and target appropriate CDS standards for particular application and clinical tasks while easing the path, reducing costs, and expanding local and international markets for specialised knowledge and application vendors.	**IT-014, IT-014-13,** **MSIA**
CDS: Clinical Genomics in CDS	Laboratories are doing gene testing and sending reports and data back to referring organisations. The use of this data in CDS will increase and systems need to be able to handle this. **Action: Ensure awareness of this work by groups doing and / or dependent on genetic testing. Monitor the work via the HL7 CDS WG.** **Implications for Australia:** Genetic testing, reporting and clinical management have potential to benefit from implementations which make use of these emerging standards as applied to CDS.	**IT-014, IT-014-06-05, IT-014-13,** **College of Pathologists,** **Genetic Testing Labs,** **Jurisdictional Genetic Counselling facilities**
Clinical Information Modelling Initiative (CIMI)	Australia should become actively involved in supporting this initiative in its formative days. This initiative is strongly supported by many national health programs and is likely to inform the international approach to detailed clinical models into the future. NeHTA is already a voting member of this group. **Action: Standards Australia support involvement in the CIMI initiative. This is likely to mean support for travel to co-located meetings with HL7 and also independent meetings.**	**Hugh Leslie,** **Graham Grieve,** **Standards Australia**
Conformance and Guidance (CGIT): **Value set maintenance especially in CDA documents**	**Action: Maintenance of value sets will become too difficult and costly (Canada Infoway) using current tooling and methodologies. Implementation of CTS2 to assist this process should be considered.**	**DoHA,** **NeHTA**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
Conformance and Guidance (CGIT): **HL7 V2.8 Conformance Requirements**	**Action: Version 2. is nearing completion of ballot comment resolution and should be published in the third quarter of this year. New requirements should start to be included in educational materials for the Australian Standards Community and vendors when it becomes available.**	**IT-014-06,** **SA Conformance Task Force,** **MSIA,** **HL7 V2 Conformance testing community (e.g. AHML)**
Conformance and Guidance (CGIT): **HL7 V2.9**	**Action: New and updated proposals for HL7 V2.9 are now being considered and will remain open for the next meeting cycle. Any proposals should be submitted to the relevant committee.**	**IT-014,** **HL7 Australia**
Education and Marketing: **Communication and development of understanding and skills**	We will receive a request to identify our educational requirements. We need to consider how we determine our requirements and priorities. **Action: Request report from HL7 Australia on skill development plan and identify priority, and assistance required.**	**HL7 Australia,** **Standards Roundtable**
Education and Marketing: **Consider the educational approach and issues raised by Canada and identify Australia's requirements**	Identify capacity to deliver and options for development and certification of competency (not just certification of attendance) in HL7 related topics. **Action:** HL7 Australia to prepare a document identifying strategy to deliver.	**HL7 Australia,** **Standards Roundtable**
Electronic Health Record (EHR): EHR Systems Functional Model Release 2 (EHR-S FM R2)	Since Australia last had significant involvement in producing release 1.0 and the subsequent international standard release 1.1 of EHR-S FM (ISO HL7 10781-2009 Electronic Health Record-System Functional Model, Release 1.1), the document has been extensively revised and restructured based on implementation experience, primarily in the US with some in Canada and Europe. **Action: IT-014-09 to continue monitoring development of EHR-S FM R2, contributing where possible, but with a view to ensuring that there is strong Australian engagement.**	**IT-014-09**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
EHR: Personal Health Record (PHR) Systems Functional Model (PHR-S FM)	In the process of progressing from DSTU to a full ANSI/HL7 normative specification, this HL7 specification is also set to become an international standard providing a functional framework for specifying the characteristics of shared personal health record systems. It is potentially applicable to conformant PCEHR repositories but is still some way from completion. **Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress.**	**IT-014-09**
Health Care Devices: current projects	Whilst the current projects are relevant to the hospital environment, rather than eHealth in general, the future projects in long term care may be relevant to the Australian healthcare environment. **Action: Monitor future initiatives.**	**IT-014**
Modelling and Methodology (MnM): CDA	**Action: Australia should continue to closely monitor CDA developments overseas, especially the consolidated health story, and CDA R3.**	**IT-014-06,** **IT-014-06-06**
Patient Care: Detailed Clinical Models (DCM)	Australia should continue to have input to discussions within HL7 about this important topic. **Action: Australia should remain involved in DCM work.**	**Hugh Leslie**
Patient Care: System of Concepts for Continuity of Care (ContSys)	**Action: IT-014-06 should look at ContSys with a view to adopting the language and concepts within the Australian context.**	**Standards Australia,** **IT-014-06**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
Patient Care: System of Concepts for Continuity of Care (ContSys)	The ContSys project covers a broad area of clinical modelling and information representation not normally addressed by one WG. It includes, in a generic form, content and clinical data representation as well as processes, interactions and workflows. There is collaboration and strong support for it within Australian academic primary care. It may not align with some of our concepts and definitions. **Action: Review project in IT-014 with Australian ContSys participants. Distribute the ContSys specification to all relevant IT-014-xx WGs for discussion of applicability to their work and recommendations for changes in the May ISO ballot. Review it against our Care Plan static and dynamic modelling.** **Implications for Australia:** Advantages of an ISO standard and of having a generic high level conceptual framework which ties together areas which have traditionally been the domains of separate workgroups and standards specifications but which require an integrated approach for our collaborative and continuing care.	**IT-014, IT-014-06,** **IT-014-02, IT-014-09,** **IT-014-13,** **RACGP**
Patient Care: System of Concepts for Continuity of Care (ContSys)	The ContSys project was taken towards being a Joint Initiative between HL7 and ISO at the last ISO meeting but its position and way forward at HL7 is unclear. The WG voted for it to become a candidate for the PC DAM. This requires more investigation. **Action: Push at both ISO and HL7 to ensure the ContSys acceptance and passage via JIC. Manage it as project within Patient Care. Further consider usability as DAM for PC.** **Implications for Australia:** Advantages from international collaboration and harmonisation of our work across the standards we seek to use.	**IT-014,** **HL7 Australia,** **Australian delegates to HL7 working at Patient Care**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
Patient Care: Care Plan Topic **--Modelling and ContSys Project**	Care Planning is a key process in the Australian community where Medicare heavily funds the activity in its Primary Care driver as well as Nursing, Allied, and Community Health. PC standards are developed for V3 messaging, which is inappropriate for Australia. Value of the project to us is the RIM-independent DAMs and its directing content for our Collaborative Care Communication standards. Bringing ContSys into the modelling will provide the more general framework. **Action: Keep this work at DAM level and use it in IT-014-06-06 Collaborative Care Communications work. Review the modelling against ContSys.** **Action: Make its review a standing work item at IT-014-06-06 where it fits with existing projects. Control of work focus to be responsibility of PC delegates.** **Implications for Australia:** Shareable clinical data amongst providers collaborating in co-ordinated care of the patient.	**Standards Australia via delegates,** **NEHTA,** **Co-chairs and** **IT-014-06-06**
Patient Care: Care Plan Topic **--Behavioural model**	The Behavioural model for Care Planning is rudimentary and needs substantial work. IHE is more advanced in this despite its document-centric approach. Such a model is needed to properly inform understanding and communications around shared responsibilities in the Australian contexts of Referral, Collaborative Care and Community Health. The ContSys representations will provide a direction for these workflow and process-based requirements. **Action: PC increases the priority of the Behavioural Model in its Care Plan work and does this in-line with ContSys. IT-014-06-06 maintain an open item to monitor this as part of its Referral work, and seek update and collaboration from IHE Australia.** **Implications for Australia:** Ensures the interactions selected for communications standards development comprise an optimally targeted set.	**Standards Australia,** **IT-014-06-06,** **IHE Australia,** **Patient Care Co-chairs and delegates.**
Patient Care: Care Plan Topic **--Scheduling**	Scheduling is an important part of workflow in Care Planning and the SOA WG is looking for a clinically focussed WG to collaborate on a scheduling service standard. **Action: IT-014-06-06 reviews the existing HL7 scheduling standard and considers the value of a services based implementation.** **Implications for Australia:** Efficiency in shared care workflows and consequent improvement in outcomes an overall health cost reductions.	**Standards Australia,** **IT-014-06-06**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
Patient Care: Care Plan Topic: Primary Care Focus	Key role of Primary Care in Australian setting: Primary Care Storyboard was previously developed by DR earlier in the process but subsequently subsumed by, or morphed into, Chronic Disease. Primary Care should have its own storyboard and use cases as it is a major focal point and the initiator of Care Plans in Australia. **Action: Primary Care work is delivered via a separate storyboard and modelling is checked against Primary Care requirements.** **Action: The previous storyboard is retrieved if possible and refined or re-written and modelling of Primary Care Data and Processes is explicit in the project.**	**IT-014, IT-014-06, RACGP**
Security/CBCC: Data Segmentation for Privacy	The consolidated view of the PCEHR will need to consider the need to persist privacy indicators. Any tags or other indicators will need to be maintained as information is potentially imported from multiple sources. **Action: Alignment and consistency of persistence of privacy data (tags) needs to be assured. What work is being done in this area to ensure this in the PCEHR and wider e-health system?**	**NEHTA**
Security/CBCC: Data Segmentation for Privacy	Provenance (the persistence of security and privacy tags/provisions) once information is sent from an HIE (e.g. PCEHR) to a local system, and information is subject to subsequent disclosure must be assured. **Action: Alignment and consistency of persistence of security and privacy indicators throughout local and other systems.**	**NEHTA**
Security/CBCC: Data Segmentation for Privacy	There is an issue when assigning security and privacy tags when collating data from multiple sources or splitting up data (as in segmentation) and reassembling it. The consolidated view of the PCEHR may do this. How is the level of restriction calculated or assigned in this case? In addition, when information is synthesised into new information, how is the security and privacy tagging assigned and provenance maintained? **Action: Explanation of assignment and persistence demonstrated in Australia's PCEHR and eHealth information exchange standards.**	**NEHTA, IT-014**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
Security Workgroup: Security and Privacy Ontology - Project No: 646	As this ontology is a general framework for security and privacy definitions in the healthcare environment, its construction and subsequent adoption by the healthcare community requires that it be comprehensive and informed by international security experts, and that it contains a global perspective. **Action: To contribute to the discussion and development of the Security and Privacy Ontology to ensure that it reflects the potential usage and applicability to the Australian healthcare context.**	**IT-014-04**
SOA/Security: Data segmentation and access control	Given that the PCEHR security formulation is not being publicly released, it is difficult to specifically advise on any impact such a project may have in Australia. However, given that data segmentation is becoming a prominent topic throughout the HL7 and has significant ramifications for security, Australia should maintain an oversight on such projects. **Action: Monitor progress and scope of new proposal to assess applicability to Australian healthcare**.	**IT-014-04 and NEHTA**
Security: RBAC	Whilst the RBAC database is populated with US centric structural and functional roles, its applicability and potential adaptation to the Australian context should be considered, as most of these roles are generic. **Action: Investigate need for RBAC use in national or local security architecture and software.**	**NEHTA and IT-014-04**
Security: Data Segmentation	Data segmentation is becoming a popular and leading topic in the international community reading the tagging of information for persistent security and privacy characteristics. **Action: Monitor the progress and adoption of data segmentation internationally and report back to IT-014 an understanding of the aspects that could be useful to Australian eHealth is better defined. (Currently this is not referred to in any of the proposed Australian standards).**	**IT-014-04**
Structured Documents: CDA R3	**Action: Australian delegates to HL7 need to continue to be involved in developing and helping to shape CDA R3. It is important that we lobby for inclusion of the currently defined Australian extensions that are not incorporated in CDA R3. Australian delegates need to pay closer attention to CDA R3 Level 4 conformance and signing content within documents, as it could have some bearing on implementation of CDA in Australia.**	**NEHTA**
Structured Documents: FHIR	**Action: Australia should monitor the development of FHIR closely to ensure that known Australian requirements are catered for.**	**IT-014-06**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
Structured Documents: FHIR	Action: Australian HL7 stakeholders should monitor the emergence of FHIR as it could streamline the complexities encountered by heath care vendor in adopting Australian CDA standards.	HL7 Australia
Structured Documents: QRDA	Action: Australian HL7 stakeholders should monitor emergence of QRDA as this may be of great benefit for introducing health care reporting standards in Australian heath care and PCHER system.	HL7 Australia
SOA : Cross-paradigm interoperability implementation guide for Immunization	Action: The output from this work could be used by Australia to unite state and federal approaches to management of immunisation data using a SOA approach. This would work by adding standards based compatibility and interoperability layer on top of the disparate systems currently in use.	Medicare, DoHA and the State Jurisdictions
SOA/Pharmacy: Medication Statement Service	Action: This Service may be useful for the PCEHR consolidated view of Medications. Its progress should be followed with a view to possible incorporation in a future release that incorporated medication statements from diverse sources.	NEHTA
SOA: Healthcare and Community Services Provider Directory Service (HCSPD)	Action: DCA, an Australian Company and MSIA member, will be building the platform specific Object Management Group (OMG) part of the standard. They have not undertaken this kind of development previously. They are in fact the first Australian Company to do this. They need to be provided with government (Victorian and Federal) support as needed to ensure a successful outcome that can be used in the Australian National roll-out of this service.	Australian Federal and Victorian State government
SOA: Healthcare and Community Services Provider Directory Service (HCSPD)	Action: The HL7 Standard for HCSPD should be formally adopted by Standards Australia IT-014.	IT-014
SOA: CTS2	Action: CTS2 can now be implemented rapidly using the Mayo Toolkit and provides a complete multi-terminology management and real-time distribution capability. This should be considered for SNOMED, AMT, PharmCis and other reference terminology sources.	DoHA, NEHTA
SOA: CTS2	Action: This service specification is likely to become a full HL7 standard in the near future. IT-014 should be planning resources for formal Australian adoption this calendar year.	IT-014

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
SOA: hData Record Format - Service Developer Community	**Action: Developers should be educated to understand the simplified development and rapid results that can be realised using hData.**	**MSIA,** **AIIA,** **ACIVA**
SOA: PASS	**Action: PASS should be examined for suitability as a Standards based, flexible, SOA approach to access control and audit for the PCEHR. In particular Canada Infoway may be prepared to share the output from its project to extend the PASS audit capability.**	**DoHA,** **NEHTA**
Templates: Specification of business requirements for a templates registry	The first "for comment" informative ballot of this project has been completed with one negative comment to resolve. The proposal seems to be proceeding by default without strong support and connection to existing other work in the field and likely commitment of the resources needed to implement and maintain such a registry within the global eHealth community. **Action: IT-014 continue to monitor developments with a view to supporting harmonisation of this proposed work with other activities within HL7, the ISO work on DCM quality processes.**	**IT-014 (through IT-014-09 and IT-014-02)**
Vocabulary: **Facilitation**	As HL7 move to coordinated (shared vocabulary V2 and V3) we need to consider how we handle local issues related to vocabulary facilitation. **Action: Identify if this is a priority for Australia and consider how to meet the skills and needs.**	**NEHTA,** **HL7 Australia**
Vocabulary: **Conversion from existing code sets to SNOMED-CT**	How is this issue being handled in Australia? **Action: Consider the priority and relevance of this issue to Australia.**	**NEHTA,** **HL7 Australia**
Vocabulary: **Binding and CDA content maintenance**	How is this issue being handled in Australia? **Action: Consider the priority and relevance of this issue to Australia.**	**NEHTA** **IT-014-06**
Vocabulary: **Common Terminology Server 2**	It is understood that NEHTA discounted this work. It would seem appropriate for this decision to be reconsidered given the learning contributed through international collaborative effort. Considerable intellectual capacity has now gone into resolving elements not covered suitably in the initial work. **Action: Consider Australia's position on CTS2 use.**	**NEHTA**

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
ISO/TC215/WG2 Work Program	This was an "out-of-cycle" update meeting at which there were no major issues for Australia. IT-014 committees to continue progression of the relevant ballots and work as per outcome of the October 2011 ISO/TC 215 meeting. **Action: IT-014 continue to monitor developments in WG2 with a view to supporting and taking action on upcoming ballots.**	**IT-014,** **IT-014-06**

5 FUNDING SOURCE SUMMARY AND AUSTRALIAN ATTENDANCE

Eight Australians attended as representatives for the duration of this HL7 meeting, seven of whom were in the formal 'delegation'. The funding source for these delegate numbers is indicated in the table below.

DOHA provided funding assistance for the following delegates:

- Heather Grain
- Patricia Williams
- Vince McCauley
- Richard Dixon Hughes
- Hugh Leslie
- Graham Grieve
- David Rowed
- Naomi Ryan

Funding Source	Number	Change from Previous meeting
Full funding by employer: Private	2	+2
Full funding by employer: States/Territories or National Initiatives (NEHTA)	6	+2
Funding assistance – DOHA through Standards Australia contract	8	+1
Total:	16	+5

There was a team of delegates from NEHTA who attended the HL7 meeting and these NEHTA delegates are listed below:

- Andy Bond
- Sarah Gaunt
- Stephen Chu
- Zoran Milosevic
- Vin Sekar
- Phil Wilford

6 AUSTRALIAN LEADERSHIP POSITIONS

The table below lists leadership positions held by Australians at the HL7 meeting in January 2012.

Attendee	Position (held at the meeting)	Funding Source	Work Group or Committee
Grahame Grieve	Co-Chair Invited Member Co-Chair	Standards Australia via the DoHA Funding Agreement	Structured Documents (Developers of CDA) Architectural Review Board Modelling and Methodology Work Group
Heather Grain	Co-Chair (re-elected this meeting) Invited Member	Standards Australia via the DoHA Funding Agreement	Vocabulary Policy Advisory Committee
Richard Dixon Hughes	Co-chair Non-Voting Member Chair HL7 Australia Invited Member Invited Member Alternate Representative	Standards Australia via the DoHA Funding Agreement	Advisory Council to the Board of HL7 International HL7 International Board of Directors International Council and Affiliate Chairs Meetings, Affiliate Agreement Task Force (AATF), International Membership & Affiliation Task Force (IMATF) Affiliate Due Diligence Committee (of HL7 International Board) Policy Committee (of HL7 International Board – invited by HL7 Chair) HL7 Affiliates at Joint Initiative Council (JIC) for Health Informatics SDO Harmonisation
Andy Bond	Invited Member	NEHTA	Architectural Review Board
Zoran Milosevic	Invited Member	NEHTA	Architecture Review Board

Vince McCauley	Invited lead author for joint SOA/OMG/IHE white paper on comparison of IHE profiles and selected SOA specifications	Standards Australia via the DoHA Funding Agreement	SOA
Hugh Leslie	Co-chair	Standards Australia via the DoHA Funding Agreement	Patient Care

7 ACRONYMS LIST

Abbreviation	Meaning
ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communication and Media Authority
ACSQHC	Australian Commission on Safety and Quality in Health Care
ACT	Action
ACTUG	Australian Clinical Terminology Users Group
ADA-JDA	Australian Design Award James Dyson Award
ADL	Archetype Definition Language
AG	Advisory Group
AGDA	Australian Graphic Design Association
AHIEC	The Australian Health Informatics Education Council
AHIMA	American Health Information Management Association
AHMAC	Australian Health Ministers' Advisory Council
AHML	Australian Healthcare Messaging Laboratory
AIDA	Australian International Design Awards
AIHW	Australian Institute of Health & Welfare
AIIA	Australian Information Industry Association
AMT	Australian Medicines Terminology
ANSI	American National Standards Institute
ArB	Architecture Review Board
AS HB	Australian Handbook
AS/NZS	Australian/New Zealand Handbook
AS/NZS ISO	International Standards adopted by Australia and New Zealand
AU	Australia abbreviation in the Int'l comment form
AWI	Approved Work Item
BAU	Business As Usual
BCA	Building Codes of Australia
BRS	Business Requirements Specification
Cal-X	The California Exchange (Cal-X) is a data and information exchange to support healthcare, medical, public health, and homeland security needs in a collaborative, shared, secure, and cost-effective manner.
CAPOLCO	Consumer policy
CASCO	Conformity Assessment

Abbreviation	Meaning
CBCC	Community Based Collaborative Care (Workshop)
CCD	Continuity of Care Document
CCHIT	(US) Certification Commission for Health Information Technology
CD	Committee Draft (third stage in developing an ISO or IEC standard)
CDA	Clinical Document Architecture
CDC	Centre for Disease Control (US Government agency)
CDISC	Clinical Data Standards Interchange Consortium
CDS	Clinical Decision Support (Workgroup)
CDV	Committee Draft for Vote
CEN	European Committee for Standardization (Comité Européen de Normalisation)
CENELEG	European Committee for Electrotechnical Standardisation
CEO	Chief Executive Officer
CGIT	Conformance and Guidance for Implementation and Testing Committee
CIC	Clinical Interoperability Council (Workgroup)
CIMI	Clinical Information Modelling Initiative (from Fresh Look Task Force)
CIS	Clinical Information Systems
COAG	Council of Australian Governments
COM	Comment
conHIT2011	European Health Informatics Conference 2011
ContSys	System of Concepts for Continuity of Care
CRM	Customer Relationship Management
CTO	Chief Technical Officer
DAFF	Department of Agriculture, Fisheries and Forestry
DAM	Domain Analysis Model (comprehensive model of a domain) [HL7]
DCM	Detailed Clinical Model
DCOR, COR	Draft Corrigendum
DEVCO	Developing country matters
DIA	Design Institute of Australia
DICOM	Digital Imaging and Communications in Medicine
DIISR	Department of Innovation, Industry, Science & Research
DINZ	Design Institute of New Zealand
DIS	Draft International Standard (fourth stage in developing an ISO or IEC standard – the main opportunity for public input)
DMP	Dossier Médical Partagé (Shared Medical Record) (France)

Abbreviation	Meaning
DoHA	(Australian Government) Department of Health and Ageing
DSTU	Draft Standards for Trial Use (HL7 and ANSI)
EC	European Commission [the administrative arm of the EU]
ECCF	Enterprise Compliance and Conformance Framework
EEC	European Economic Community
EFMI	European Federation of Medical Informatics
EHR	Electronic Health Record
EHR-FM	EHR Functional Model
EHRS or EHR-S	Electronic Health Record System
ELGA	Austrian CDA Implementation Guide in Development
ELS	End Point Location Service
EMEA	European Medicines Agency
EN	European Standard (Européen Norm)
ENA	Energy Networks Association
EPM	Enterprise Project Management
epSOS	European Patients Smart Open Services. A European initiative (23 countries) to exchange pharmacy information including prescriptions, across the EEC using IHE profiles and local standards. See www.epsos.eu
ETP	Electronic Transfer of Prescriptions
EU	European Union
FCD	Final committee draft
FDAM	Final Draft Amendment
FDIS	[ISO] Final Draft International Standard (for vote to publish)
FRS	Functional Requirements Specification
FYI	For your information
GCM	Generic Component Model
GDP	Gross Domestic Product
GP	General Practitioner
GS1	An international SDO – primarily in the supply-chain domain
HCD	Health Care Devices Committee
HDF	HL7 Development Framework
HI	Health Identifiers
HIE	Health Information Exchange
HIMSS	Healthcare Information and Management Systems Society

Abbreviation	Meaning
HISC	Health Informatics Standing Committee
HITSP	Health Information Technology Standards Panel
HL7	Health Level Seven (International)
HL7 ELC	HL7 E-Learning Course
HPI	Healthcare Provider Identifier
HPI-I	Healthcare Provider Identifier for Individuals
HPI-O	Healthcare Provider Identifier for Providers
HQMF	Health Quality Measure Format
HSSP	Healthcare Services Specification Project [joint HL7/OMG]
IC	International Council (HL7)
ICD10AM	The Australian NCCH modification of ICD-10 codeset for the coding of diseases and procedures
ICD10-AM	International Classification of Diseases, Version 10, Australian Modification
ICD9CM	International Classification of Diseases 9 Clinical Modification
ICH	International Conference on Harmonisation (of Technical Requirements for Registration of Pharmaceuticals for Human Use)
ICHPPC	International Classification of Health Problems in Primary Care
ICNP	International Classification for Nursing Practice
ICOGRADA	International Council of Graphic Design Associations
ICPC2+	International Classification of Primary Care 2
ICSID	International Council of the Societies of Industrial Design
ICSR	Individual Case Safety Report [related to Medicines/Devices]
ICT	Information & Communications Technology
IDA	International Design Alliance
IDEA	Industrial Design Excellence Awards
IDMP	Identification of Medicinal Products
IDSA	Industrial Design Society of America
IEC	International Electrotechnical Commission (an international SDO)
IEEE	Institute of Electrical & Electronic Engineers (US) (also an SDO)
IF	International Forum of Design
IFI	International Federation of Architects/ Designers
IG	Implementation Guide
IHE	Integrating the Healthcare Enterprise
IHI	Individual Healthcare Identifier
IHTSDO	International Health Terminology Standards Development Organisation

Abbreviation	Meaning
IMATF	International Membership and Affiliation Task Force
InM	Infrastructure and Messaging (Workgroup)
IP	Intellectual Property
IS	International Standard
ISO	International Organization for Standardization
ISO/CS	ISO Central Secretariat
ISO/TC 215	ISO Technical Committee (Health Informatics)
IT	Information Technology
IT-014	Standards Australia Committee IT-014 (Health Informatics)
ITS	Implementable Technology Specifications
ITTF	ISO/IEC Information Technology Task Force
ITU-T	International Telecommunications Union – Standards Division
IXS	Identity Cross Reference Service
JI	Joint Initiative on SDO Global Health Informatics Standardization
JIC	Joint Initiative Council (responsible for governance of the JI – with current members being ISO/TC215, CEN/TC251, HL7 International, CDISC, IHTSDO and GS1)
JIDPO	Japanese Industrial Design Promotional Organisation
JSC-HIS	Joint Standing Committee on Health Informatics Standards
JSON	Java script Object Notation
JTC	Joint Technical Committee
JTC 1	ISO/IEC Joint Technical Committee 1 Information Technology
JWG	Joint Working Group [under the JI, unless otherwise specified]
KPI	Key Performance Indicator
LB	Letter Ballot
LMIC	Low and Medium Income Countries
LOINC	Logical Observation Identifiers Names and Codes
LPO	Local PCEHR Officer
MBS	Medical Benefits Scheme
MBUA	Member Body User Administrators (Person who maintain the ISO Global directory in each country)
MDA	Model Driven Architecture
MM	Maturity Model
MnM	Modelling and Methodology (Workgroup)
MOR	Monthly Operational Report

Abbreviation	Meaning
MOU	Memorandum of Understanding
MSIA	Medical Software Industry Association
MT	Maintenance committee (IEC)
NASH	National Authentication Service for Health
NATA	National Association of Testing Authorities
NEHIPC	National E-Health and Information Principal Committee
NEHTA	(Australian) National E-Health Transition Authority
NH&MRC	National Health and Medical Research Council
NHCIOF	National Health Chief Information Officer Forum
NHIN	(US) National Health Information Network
NHISSC	National Health Information Standards and Statistics Committee
NHS	(UK) National Health Service
NIH	(US) National Institutes of Health
NIST	National Institute of Standards and Testing (USA)
NMB	National Member Body [of ISO or CEN]
Normapme	European Office of Crafts, Trades and Small and Medium sized Enterprises for Standardisation
NP	New Work Item Proposal (current ISO/IEC abbreviation)
NPACC	National Pathology Accreditation Advisory Council
NPC	National Product Catalogue
NQF	National quality (measures) framework
NSO	National Standards Office
NWIP	New Work Item Proposal (obsolete ISO/IEC abbreviation – see "NP")
O&O	Orders and Observations (Workgroup)
OBPR	Office of Best Practice Regulation
OCL	Object Constraint Language
OHT	Open Health Tools Foundation (www.openhealthtools.org)
OID	Object Identifier
OMG	Object Management Group
ONC	Office of the National Coordinator for Health Information Technology (within US Department of Health and Human Services)
OSI	Open Systems Interconnection
OTF	Organisation Task Force [ISO TC 215]
OWL	Web Ontology Language
PA	Patient Administration (Workgroup) [HL7]

Abbreviation	Meaning
PACS	Picture Archive Systems
PAS	Patient Administration Systems
PBS	Pharmaceutical Benefits Scheme
PC	Patient Care (Workgroup) [HL7]
PCEHR	Personally Controlled Electronic Health Record
PDAM, DAM	Proposed Draft Amendment
PDF	Portable Document Format
PDTR, DTR	(Proposed) Draft Technical Report
PHDSC	Public Health Data Standards Consortium
PHER	Public Health and Emergency Response (Workgroup)
PHM	Powerhouse Museum
PHR	Personal Health Record
PHTF	Public Health Task Force
PIM	Platform Independent Model
PIP	Practice Incentive Payment
PIR	Post Implementation Review
PKI	Public Key Infrastructure
PM	Project Manager
PMBOK	Project Management Body of Knowledge
PMO	Project Management Office
PMP	Project Management Plan
PMS	Practice Management System
PMTL	Project Management Team Leader
PoC	Point-of-Care
PSM	Platform Specific Model
PWG	Pharmacy Working Group (HL7)
RACGP	Royal Australian College of General Practice
RCPA	Royal College of Pathologists Australia
RFID	Radio Frequency Identification
RHIO	(US) Regional Health Information Organisation
RIM	Reference Information Model
RIMBAA	RIM Based Application Architecture
RIS	Radiology Information Systems
RLUS	Resource Locate Update Service (HSSP)

Abbreviation	Meaning
RM-ODP	Reference Model of Open Distributed Processing
RO	Responsible Officer
SA	Standards Australia
SAIF	Services Aware Interoperability Framework
SC	Subcommittee
SD	Structured Document
SDO	Standards Development Organisation
SHIPPS	Semantic Health Information Performance and Privacy Standard
SIG	Special Interest Group
SKMT	Standards Knowledge Management Tool
SLA	Service Level Agreement
SMB	Standards Management Board (IEC only)
SME	Subject Matter Experts
SMTP	Simple Mail Transfer Protocol
SNOMED	Systematised Nomenclature of Medicine
SNOMED CT	Systematised Nomenclature of Medicine- Clinical Terms
SOA	Service Oriented Architecture
SOAP	Simple Object Access Protocol
SP3	Standards Professional Project Practitioners
STC	Technical Steering Committee
T3SD	Technical and Support Services Steering Division
TC	Technical Committee
TCM	Traditional Chinese Medicine
TCP/IP	Transmission Control Protocol/Internet Protocol
TEAM	Traditional East Asian Medicine – This term, though inadequate is used to represent Traditional Chinese Medicine, Traditional Korean Medicine, Traditional Japanese Medicine.
TF	Task Force
TM	Traditional Medicine
TMB	Technical Management Board (ISO only)
TOGAF	The Open Group Architecture Framework
TR	Technical Report (an informative ISO or IEC standards publication)
TS	Technical Specification (a normative standards publication having a lower level of consensus than a full international standard)
UAT	User Acceptance Testing

Abbreviation	Meaning
UCUM	Unified Code for Units of Measure [Regenstrief Institute]
UHI	Unique Healthcare Identifier
UML	Unified Modelling Language
UN	United Nations
VMR	Virtual Medical Record
VOC	Vocabulary Committee (HL7)
W3C	World Wide Web Consortium
WCM	Web Content Management
WD	Working Draft (second stage in developing an ISO or IEC standard)
WG	Working Group or Work Group
WGM	Working Group Meeting
WHO	World Health Organization
WI	Work Item
WTO	World Trade Organisation
XDS	(IHE's) cross enterprise Data Sharing protocol
XML	Extensible Markup Language