IT-014 Health Informatics Committee

Executive Summary Report

HL7 Meeting

Sydney, Australia, January 2011

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Collated by: Standards Australia

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

- *Heather Grain (Delegate)*
- *Vince McCauley (Delegate)*
- *Michael Stein (Delegate)*
- *Grahame Grieve (Delegate)*
- *Hugh Leslie (Delegate)*
- *Klaus Veil (Delegate)*
- *Patricia Williams (Delegate)*

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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, Taiwan, Australia, and New Zealand 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.

This report summarises the committee proceedings, issues and actions for consideration by Australia from the HL7 International Standards and Education Meeting that was held 9-14 January 2011 in Sydney.

2   OBJECTIVES OF THE MEETING

The January 2011 HL7 International Standards and Education Meeting was held at three venues in the heart of Sydney city. These were the Amora Hotel, Standards Australia meeting rooms and Cliftons Meeting and Training Centre and covered 6 days, running from Sunday 9th January to Friday 14th January. On weekdays formal meetings are scheduled from 9am to 5pm. However some meetings are scheduled from 7am and others go to 10pm (and sometimes later) most days.

This was the first time that HL7 has held a working group meeting in Australia and it was rewarded with 325 registrants from over 25 countries.

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.

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 (eg vocabulary submission requirements).

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. The size

of the delegation assisted in our capacity to cover the most important Australian requirements at the Sydney meeting.

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

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.

As is customary, the Australian participants[1] 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.

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[1] This included those Australian (and NZ) attendees who were not funded from the DoHA contract administered by Standards Australia.

3   MEETING LOGISTICS

The table below shows the meeting schedule for some of the larger meeting groups. Meetings held outside of Northern America often have fewer attendees, and fewer groups meeting. Most US based meetings have 61 separate working groups and committee meetings. In Brazil (2010) 50 met, and in Australia 47 groups met. The most active and largest groups progressed their work well. Standards Australia assisted in some cases by providing web meeting facilities to bring some key people who could not be there in person into meetings. Some groups also met for a shorter period of time than they normally would given the limitations on topic discussions due to fewer attendees.

	Sun	Mon	Tue	Wed	Thu	Fri
Architectural Review Board (ARB)	■	■	■	■	■	
Clinical Decision Support (CDS)		■		■	■	
Clinical Genomics (Clin Gen)				■	■	
Clinical Interoperability Council			■	■		
Clinical Statement					■	
Community Based Collaborative Care (CBCC)		■	■	■		
Education		■			■	
Electronic Health Records (EHR)		■	■	■	■	
Electronic Services				■		
Emergency Care (EC)		■	■	■	■	
HL7 Activities with other SDOs	■					
Health Care Devices (Dev)			■	■		
Implementable Technology Specifications (ITS)		■	■	■	■	
Implementation/Conformance (IC)		■	■	■	■	
Infrastructure and Messaging (InM)			■			
International Council (previously Affiliates Council)	■				■	
Marketing Council		■				
Modeling and Methodology (MnM)	■	■	■	■	■	
Nurses in HL7			■			
Orders and Observations (O&O)		■	■	■	■	
Patient Administration (PA)		■	■	■	■	
Patient Care (PC)		■	■	■	■	■
Patient Safety (PS)		■	■	■	■	
Pharmacy (Pharm)		■	■	■	■	

Public Health and Emergency Response (PHER)		▓	▓	▓	▓	
Publishing				▓	▓	
RIM Based Application Architecture (RIMBAA)		▓	▓		▓	▓
Security (Sec)		▓	▓	▓	▓	
Services Oriented Architecture (SOA)		▓	▓	▓	▓	
Structured Documents (SD)		▓	▓	▓	▓	▓
Templates					▓	▓
Tooling			▓	▓	▓	▓
Vocabulary	▓	▓	▓	▓	▓	

This meeting had a large number of well attended tutorials. In total there were 42 tutorials with additional certification examinations being held.

4 RECOMMENDATIONS ARISING FROM THE MEETING

The principal issues/actions and recommendations identified by the Australian delegation at the January 2011 HL7 Meeting in Sydney 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
HL7 Board new initiatives	The new HL7 strategic initiatives due for release in May, 2011 should be reviewed for their potential impact on the current work programs and the future of e-Health in Australia **Action: Review of strategic initiatives is undertaken when released by HL7.**	HL7 Australia, IT-014 and NEHTA
New Business Model Framework	In the intellectual property (IP) section of the new framework, the pricing considerations for HL7 IP may have an impact on Australia and its adoption of HL7 to the health arena. These considerations apply equally to the adoption/implementation and documents that the new framework will put in place. **Action: Feedback and input into any proposed pricing for HL7 IP model.**	IT-014, Standards Australia and HL7 Australia
New Affiliate Agreement	There will be changes to how IP is handled within the new HL7 Business Model Framework and this will affect the affiliate members and subsequently the new affiliate agreement. **Action: Australia be involved in discussions on new affiliate agreement specifically to ensure localisations are incorporated appropriately for Australia.**	HL7 Australia, Standards Australia and IT-014
Approaches to governance and conformance	**SAIF and ECCF approaches should be considered to information Australian National eHealth processes**	NeHTA, IT-014
DCM Archetype MnM methodology.	The MnM WG has initiated a project to examine the feasibility of using archetypes as the DCM methodology to develop HL7-V3 artefacts. Australia should be actively involved in resourcing this project. **Action: Australia should actively resource this project.**	IT-014 And HL7 Australia And NeHTA
Australian HL7 education program	HL7 international are developing and educational strategy which is somewhat limited. It would be appropriate for Australia to identify requirements, in particular in the environment of new contractual arrangements between Affiliates and the International body. We need to understand what we want to do in order to contribute to the international Affiliate discussions. **Action: Identify the priorities and objectives of educational development and consider the requirements and strategies for skill development (from basic knowledge, through to expertise).**	HL7 Australia

Meeting Education Program	The program offered in this Meeting was very comprehensive, well attended and larger than any previous working group meeting. **Action: Note, and thank you to sponsors for their support.**	All
Vital Records	A new profile for Vital Records (VR) is proposed and working group looking for interest. **Action: Consider input to this specification or potential applicability in eHealth initiative.**	NeHTA
Pharmacy Functional Profile	Balloting on Pharmacy. Pharmacist Functional Profiles & Stand-alone E-Prescribing Pharmacy profile is ready to go ahead. **Action: Review of this in regard to relevancy and application in current Australian space.**	NeHTA
Mobile Healthrecord Profile	As a new addition to the HL7 EHR workgroup, it may be relevant to the Australian PCEHR. This needs review/input for any special requirements for functioning in the Australian environment. **Action: Input to the working group for the Mobile Healthrecord Profile.**	IT-014 and NeHTA
EHR SOA models	The models being developed jointly by HL7, HITSP and NHIN based on the HL7 EHR functional specification (available at http://hssp.wikispaces.com/Reference+Architecture should be assessed for applicability to the PCEHR.	NeHTA
Implementation Technical Specifications	**Action: Continue to track the various implementation efforts**	IT-014-06
Unique Selling Points	What are HL7 Australia's unique selling points and how can these support Australia's eHealth and general healthcare initiatives. **Action: Identify HL7 Australia's unique selling points and objectives in Australia in today's eHealth environment**	HL7 Australia
DCM/Archetypes Project	This project is led by Australians, and is a real chance to drive further alignment between USA & Europe, and between international standards and NEHTA pcEHR related work **Action:** • **Support this work at further meetings** • **IT-014-06-06 to track progress between HL7 meetings** • **NeHTA to participate and track the implications for pcEHR work and provide timely feedback**	IT-014, HL7 Australia, and NeHTA

Provider Registries	This is of interest to Australia. **Action: Continue to make a special effort at the WGMs expose the HL7 International Work Group to the Victorian/Australian requirements.**	IT-014-06 IT-014-06-03 DH Victoria
V2.8 Enhancements	These enhancements are being considered for inclusion in V2.8, which will eventually be balloted by Australia. **Action: Monitor the V2.8 enhancements.**	IT-014-06-03
Upcoming Ballot of Patient Administration V3 R2	Consider the relevance of this work to PCEHR, in particular to identification when forming comments on this work. Consider harmonisation with existing ISO work on identification for individuals and providers supporting registries. **Action: Review and identify any issues of concern**	IT-014-02 IT-014-06-03
Patient Care Work Group	The Healthcare, Community Services and Provider Directory, Release 1 has been published. **Action: Advise IT-014-06-03 and IT-014-06-06.**	IT-014-06-03 IT-014-06-06
Provider Directory	Healthcare Services Directory Service should be adopted as National infrastructure arising from the Victorian experience but using a standards based, Service aggregation implementation **Action: Consider adoption.**	NeHTA
DCM Methodology in MnM WG	This project potentially has significant advantages for Standards Australia, HL7 Australia and NEHTA. NEHTAs work with archetypes would be significantly enhanced with the development of a methodology to generate HL7 Templates from archetypes. **Action: Australia should make sure that resources are involved in this project to ensure that the NeHTA work program can gain the most benefit from it.**	NeHTA
Mapping HL7 pharmacy content	Benchmark current Australian development in e-Prescribing to HL7 pharmacy domain documentation. **Action: Map current e-Prescribing solutions architecture to the HL7 Pharmacy domain documents.**	IT-014-06
Process Improvement Committee	The Decision Making Practices document is of interest to Australia, as it reflects many years of standards development experience and displays a high level of governance sophistication. **Action: Distribute of the DMP V3 to inform local organisations in standards and speciation development.**	IT-014 HL7 Australia NeHTA
RIMBAA /openEHR meeting	A follow-up meeting is scheduled for Orlando in Florida. **Action: Australia should make sure that this meeting is attended.**	IT-014 and HL7 Australia

Semantic Health Information Performance and Privacy Standard (SHIPPS)	Project scope is currently unclear and also it is slated for the Universal realm whilst the requirement is a legislative US one. Timelines are also aggressive which raises concerns on the quality and also the understanding of the true impact of the standard **Action: Recommend the HL7 Australia monitor the project progress to ensure that there is no International or specific impact to Australia unless relevant.**	HL7 Australia
Trans Border ISO & CEN standard.	The development of this standard to be international and not EU centric would be relevant to the Australian context. It is essential that Australia contribute to this given the differences in geographical trans-border information exchange for Australia and its near neighbours. **Action: Review and input from Australia.**	IT-014, IT-014-06 and NeHTA
ISO 13131 Specification	ISO13131 is a telehealth draft specification on security and privacy services. Since Australia is a potentially large user of telehealth it should be reviewing and contributing to this standard. **Action: Review and feedback.**	IT-014, IT-014-12
Adoption of SHA2 hash	In light of DICOM adoption of SHA2 hash internationally, Australia needs to ensure it is consistent with this wherever possible. **Action: Notification of relevant bodies of its adoption.**	IT-014
Patient education of PCEHR security	In light of Australia's adoption of a PCEHR, the issue of security education for patients, and what educational approach will be used/is required. **Action: Discussion of patient education on security of PCEHR needs to initiated and projects created if required**	NeHTA, AHIEC
RLUS	**This should be assessed as a common Healthcare Registry implementation which can be deployed with registry specific metadata and a standards based common service interface**	NeHTA
	Explore the relationship between RLUS as a National HER Indexing Service and the IHE XDS Architecture.	NeHTA
RLUS	The USA National Health Information Network (NHIN) should be considered as a possible architecture for the Australian PCEHR based on standards (IHE XDS) and an incremental approach.	NeHTA
IXS	Currently the implementation of IHI and HPI by Medicare does not conform to the IXS specification. This is largely due to the timing of the Medicare work and the availability of the specification. **Action: IT-014 Patient Administration to inquire of Medicare as to the Roadmap towards an IHI or HPI service that is compliant with this standard.**	IT-014
Healthcare Provider Service Directory	Look at the Healthcare Provider Service Directory work as well as the Provider Directory to utilise within its work program. Also consider the data defined in ISO/TS 27527:2010 Provider identification and the Australian adaption.	NeHTA
	Suggestion: Work with other National Programs to move the Common Registries Service and Health Services Directory Service rapidly forward in the next few months.	NeHTA

SOA Capability / requirements register	**Action: A register should be developed as part of the national eHealth Model that includes a map of requirements to existing international work.**	NeHTA
GreenCDA	**Action: Continue to track the relationship between international implementation efforts (principally greenCDA) and NEHTA CDA implementation work practices.**	NeHTA
Implementation of Terminology (Core Principles)	All those involved in the implementation to terminology (not just in messages) should become familiar with this document. **Action: Consider how we should inform the Australian community about this piece of work and its relevance to eHealth and EHR, and the skills we need in this area.**	IT-014 HL7 Australia and NeHTA
IHTSDO Workbench	Result of ITSDO workbench review identified licensing and workbench component issues. **Action: Consider the issues related to the workbench and whether they** **A) impact Australia, and** **B) What our position regarding these issues should be at IHTSDO.**	NeHTA
Glossary Process	Glossary development and best practice material to be developed **Action: This is additional workload for IT14-02, but it is work that we can leverage for our own use.**	IT-014 IT-014-02
Terminology Implementation	Understanding of the requirements and principles of common terminology services is a core skill for any person implementing terminology into systems in Australia. There is little knowledge at the moment. **Action: Consideration of the priority and requirements for (at least) development of sufficient knowledge and skill to assess risks and opportunities related to terminology introduction in Australia.**	IT-014 NeHTA
OID Registry Metadata	Ongoing participation in the ISO work in this area is required, including understanding of the approach to be taken by HL7 (who are actively liaising in this process) in order to prepare changes required to Australia's HL7 OID registry where appropriate. **Action: Ongoing support of OID registry project participation at ISO**	IT-014 HL7 Australia
Common terminology services (2)	This service supports safe, longitudinal use of terminology features to support healthcare. There were no NeHTA staff in attendance at the vocabulary work group at this meeting. **Action: Investigate the need for a CTS and the governance required. A national approach would seem vital** **Action: Active engagement and development of knowledge of the terminology issues addressed at HL7 should be encouraged.**	NeHTA

5 FUNDING SOURCE SUMMARY AND AUSTRALIAN ATTENDANCE

33 Australians attended as representatives for the duration of this HL7 meeting. The funding source for these delegate numbers is indicated in the table below. DOHA funded delegates were selected through an independent panel process jointly with NeHTA, DOHA, HL7 Australia and Standards Australia.

DOHA provided funding assistance for the following delegates:

- Heather Grain
- Patricia Williams
- Vince McCauley
- Klaus Veil
- Hugh Leslie
- Michael Steine
- Graham Grieve

- David Rowed (selected as a Reserve but not funded at this meeting)

Funding Source	Number	Change from Previous meeting
Full funding by employer: Private	0	0
Full funding by employer: States/Territories or National Initiatives (NeHTA)	26	+20
Funding assistance – DOHA through Standards Australia contract	7	0
Total:	33	+20

There was a large team of delegates from NeHTA who attended the HL7 meeting due to the opportune location in Australia.

The full list of NeHTA delegates is listed below:

- *Andy Bond (NeHTA)*
- *Tina Connell-Clark (NeHTA)*
- *Stephen Royce (NeHTA)*
- *Zoran Milosevic (NeHTA)*
- *David McKillop (NeHTA)*
- *Kai Locke (NeHTA)*
- *Vin Sekar (NeHTA)*
- *John McMillan (NeHTA)*
- *Devendra Maisnam (NeHTA)*
- *Matthew Cordell (NeHTA)*
- *Paul Williams (NeHTA)*
- *Sandra Lim (NeHTA)*
- *David Bunker (NeHTA)*

- *Stephen Chu (NeHTA)*
- *Sarah Gaunt (NeHTA)*
- *Philip Willford (NeHTA)*
- *Andrew Zander (NeHTA)*
- *Andrew Goodchild (NeHTA)*
- *Reuben Daniels (NeHTA)*
- *Hoylen Sue (NeHTA)*
- *Andy Berry (NeHTA)*
- *Richard Towney-O'Neill (NeHTA)*
- *Wil Pelecanos (NeHTA)*
- *Andrew Howard (NeHTA)*
- *Kanishk Sudarsanan (NeHTA)*
- *Trevor Perry(NeHTA)*

6   AUSTRALIAN LEADERSHIP POSITIONS

The table below lists leadership positions held by Australians at the HL7 meeting in Sydney in January 2011.

Attendee	Position (held at the meeting)	Funding Source	Working Group or Committee
David Rowed	Chair	Standards Australia via the DoHA Funding Agreement	HL7 Australia
Grahame Grieve	Co-Chair Member Co-Chair	Standards Australia via the DoHA Funding Agreement	Structured Documents (Developers of CDA) Architectural Review Board Modelling and Methodology Working Group
Heather Grain	Co-Chair	Standards Australia via the DoHA Funding Agreement	Vocabulary
Klaus Veil	Member Co-Chair Co-Chair	Standards Australia via the DoHA Funding Agreement	Organisational Relations Board Committee Patient Care Working Group V2.x Publishing Working Group
Richard Dixon Hughes	Co-chair Member Member Co-Chair Non-Voting Member Member	Self-Funded	Advisory Council to the Board of HL7 International EHR WG v2/v3 CDA Strategy Taskforce Sydney 2011 International Organising Committee HL7 International Board of Directors HL7 International Business Plan Task Force
Stephen Chu	Co-Chair	NeHTA	Patient Care Working Group

7   ABBREVIATIONS

ArB	Architecture Review Board
CDA	Clinical Document Architecture
CDS	Clinical Decision Support Workgroup
CIC	Clinical Interoperability Council Workgroup
CBCC	Community Based Collaborative Care Workgroup
DAM	Domain Analysis Model
DCM	Detailed Clinical Models
DTSU	Draft Standard for Trial Use
ECCF	Enterprise Compliance and Conformance Framework
EHR	Electronic Health Record Workgroup
HL7	Health Level 7 International
IC	Implementation/Conformance Workgroup
InM	Infrastructure and Messaging Workgroup
ITS	Implementable Technology Specifications
MDA	Model Driven Architecture
MnM	Modeling and Methodology Workgroup
O&O	Orders and Observations Workgroup
OMG	Object Management Group
PA	Patient Administration Workgroup
PC	Patient Care Workgroup
PHER	Public Health and Emergency Response Workgroup
PIM	Platform Independent Model
PSM	Platform Specific Model
RIMBAA	RIM Based Application Architecture
RLUS	Retrieve Locate, and Update Service
RM-ODP	Reference Model of Open Distributed Processing
SAIF	Services Aware Interoperability Framework
SDO	Standards Development Organization
SOA	Services Oriented Architecture
T3SD	Technical and Support Services Steering Division
vMR	Virtual Medical Record