

# IT-014 Health Informatics Committee

HL7 International Standards and Education Meeting

15<sup>th</sup> – 20<sup>th</sup> May 2011

Version: FINAL-resubmitted

Date Issued: 17/08/2011

Head Author: Heather Grain

Collated by: Standards Australia

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

- *Heather Grain (Delegate)*
- *Vince McCauley (Delegate)*
- *David Rowlands (Delegate)*
- *Grahame Grieve (Delegate)*
- *Hugh Leslie (Delegate)*
- *Richard Dixon Hughes (Delegate)*
- *Patricia Williams (Delegate)*

*With additional input from:*

- *Stephen Chu (NeHTA)*
- *Andy Bond (NeHTA)*
- *Stephen Royce (NeHTA)*
- *Sarah Gaunt (NeHTA)*
- *Tina Connell-Clark (NeHTA)*

## CONTENTS

<b>CONTENTS</b> .....	<b>ii</b>
<b>1 Executive Summary</b> .....	<b>1</b>
<b>2 Introduction</b> .....	<b>2</b>
<b>3 Summary of Key Outcomes and Actions</b> .....	<b>3</b>
<b>4 Meeting Logistics</b> .....	<b>6</b>
<b>5 Anatomic Pathology</b> .....	<b>13</b>
<b>6 Architectural Review Board(ArB)</b> .....	<b>14</b>
<b>7 Clinical Content Object Workbench (CCOW)</b> .....	<b>15</b>
<b>8 Clinical Data Interchange Standards Consortium (CDSIC) / Biomedical Research Integration Domain Group (BRIDG)</b> .....	<b>17</b>
<b>9 Clinical Decision Support (CDS)</b> .....	<b>17</b>
<b>10 Clinical Genomics</b> .....	<b>17</b>
<b>11 Clinical Interoperability Council (CIC)</b> .....	<b>17</b>
<b>12 Clinical Statement</b> .....	<b>18</b>
<b>13 Community Based Collaborative Care</b> .....	<b>18</b>
<b>14 Conformance Testing (ARRA and NIST)</b> .....	<b>19</b>
<b>15 Detailed Clinical Models (DCM)</b> .....	<b>19</b>
<b>16 Education and Marketing</b> .....	<b>20</b>
Marketing.....	21
University Program.....	21
Journal Project .....	22
Learning .....	22
Strategic Plan.....	22
Summits and workshops .....	23
<b>17 Electronic Health Records (EHR)</b> .....	<b>23</b>
<b>18 Electronic Services</b> .....	<b>24</b>
<b>19 Emergency Care</b> .....	<b>25</b>
<b>20 Foundation and Technology Steering Division</b> .....	<b>25</b>
Project and ballot metrics.....	25
<b>21 Generation of Anaesthetics Standards</b> .....	<b>26</b>
<b>22 HL7/CEN/ISO</b> .....	<b>26</b>
<b>23 Health Care Devices</b> .....	<b>26</b>
<b>24 Implementation/Conformance</b> .....	<b>27</b>
<b>25 Implementable Technology Specifications (ITS)</b> .....	<b>28</b>
<b>26 Infrastructure and Messaging</b> .....	<b>28</b>
<b>27 International Council</b> .....	<b>29</b>
Board Report.....	29
Tooling and Chief Technical Officer Report .....	29
OMG Activities with IHTSDO .....	30
Affiliate Agreement Task Force.....	30
Affiliates on the International Council.....	31
<b>28 HL7 Round The World Updates</b> .....	<b>32</b>
<b>29 Modelling and Methodology (MnM)</b> .....	<b>42</b>
<b>30 Patient Administration Work Group (PA)</b> .....	<b>43</b>
<b>31 Patient Care Work Group</b> .....	<b>44</b>

<b>32</b>	<b>Allergy, Intolerance and Adverse Reaction Topic .....</b>	<b>47</b>
<b>33</b>	<b>Patient Care Project on DCM Methodology .....</b>	<b>48</b>
<b>34</b>	<b>Patient Safety Working Group .....</b>	<b>48</b>
<b>35</b>	<b>Pharmacy .....</b>	<b>49</b>
<b>36</b>	<b>Process Improvement Committee (PIC).....</b>	<b>51</b>
<b>37</b>	<b>Public Health Emergency Response .....</b>	<b>51</b>
<b>38</b>	<b>RIM Based Application Architecture Work Group (RIMBAA) .....</b>	<b>52</b>
<b>39</b>	<b>Security Working Group .....</b>	<b>52</b>
	Ontology Framework.....	53
	Risk Assessment Cookbook .....	54
	Country Updates .....	54
	Privacy Policy Around the World.....	55
	BioBank .....	56
	Meaningful Use .....	57
	Confidentiality Codes .....	57
	Community Based Collaborative Care – Security.....	57
	PASS (Privacy, Access and Security Services).....	58
	Joint Meeting with SOA.....	59
	Patient Privacy .....	60
<b>40</b>	<b>Services Oriented Architecture (SOA) .....</b>	<b>61</b>
	Identity Cross reference service (IXS) .....	62
	RLUS 62 .....	
	Healthcare and Community Services Provider Directory (HCPDS).....	63
	SOA Ontology .....	63
	SOA and IHE.....	63
	Platform Independent Model (PIM) for CTS2.....	64
	Decision Support System (DSS).....	64
<b>41</b>	<b>Structured Documents (SD) .....</b>	<b>65</b>
	CDA R3 .....	66
<b>44</b>	<b>Templates.....</b>	<b>66</b>
	Templates Repository .....	67
<b>45</b>	<b>Terminfo Project.....</b>	<b>68</b>
<b>46</b>	<b>Tooling.....</b>	<b>69</b>
<b>47</b>	<b>V2.x Publishing Committee .....</b>	<b>69</b>
<b>48</b>	<b>Vocabulary .....</b>	<b>71</b>
	Core Principles .....	72
	Vocabulary Facilitation and questions from DCM .....	72
	Glossary Project.....	73
	ISO Conformance Document .....	74
	Update of V2 Terminology Model.....	74
	SNOMED-CT in HL7, RF2 and post-coordination .....	75
	Common Terminology Services 2 (CTS2) .....	76
	CTS2 Specification Layout.....	77
<b>APPENDIX A.....</b>		<b>79</b>
	Acronyms.....	79

## 1 EXECUTIVE SUMMARY

This report has been produced by the unpaid expert members of the Australian Delegation participation in the HL7 International Standards and Education Meeting, 15-20th May 2011 in Orlando, Florida, USA with additional input from NeHTA staff who participated in the meeting.

The co-funding and support of Australian expert volunteer attendance at the HL7 International Standards and Education Meeting by the Australian Department of Health and Ageing and Standards Australia is gratefully acknowledged.

## 2 INTRODUCTION

This report summarises the committee proceedings, issues, actions and outcomes for consideration by Australia from the HL7 International Standards and Education Meeting that was held 15-20th May 2011 in USA. 430 participants from 22 countries took part in the meetings of 62 individual Fresh Look Task Forces, committees and other activities and 30 Tutorials and 2 certification examinations all of which were held concurrently.

Given the participatory nature 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<sup>1</sup> 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 National eHealth Transition Authority (NeHTA) work plans. Australian participants also coordinate their activities through Skype.

---

<sup>1</sup> This included those Australian (and NZ) attendees who were not funded from the DOHA contract administered by Standards Australia.

### 3 SUMMARY OF KEY OUTCOMES AND ACTIONS

The principal issues/actions and recommendations identified by the Australian delegation at the May 2011 HL7 Meeting are summarised in this section. The alignment to Australia and the IT-014 Committee Structure is also listed.

Topic	Issue / Action / Recommendations for Australia	Recommended for Action by
<b>The Business Model Task Force</b>	<p>As per previous recommendations, the development of the HL7 business model needs close scrutiny and input from HL7 Australia to ensure that Australia is not disadvantaged by the intellectual property (IP) rights and the pricing proposals.</p> <p><b>Action: Review and extensive input into the proposed business model.</b></p>	<p><i>IT-014, Standards Australia (SA), HL7 Australia</i></p>
<b>New Affiliate Agreement</b>	<p>In alignment with any new business model for HL7, the new affiliate agreement must closely meet the needs of the Australian use of HL7 in the national eHealth initiative.</p> <p><b>Action: Australia must have significant input into the new affiliate agreement specifically to ensure localisations are incorporated appropriately for Australia.</b></p>	<p>HL7Australia, SA</p>
<b>National quality (measures) framework (NQF)</b>	<p>The NQF119 paper format measures are proposed to be transposed into e-measures. This will require re-tooling (conversion from paper based to electronic) in order to validate the equality of the measures.</p> <p><b>Action: Consideration of the uses, application and equivalency of this to the Australian eHealth environment.</b></p>	<p>IT-014</p>
<b>Semantic Health Information Performance and Privacy Standard (SHIPPS)</b>	<p>The SHIPPS project will be of use in the Australian environment in highlighting the issues in terms of the increasing use of data for secondary purposes and its relationship to data quality. This will be a significant issue once the PCEHR and related EHR system in Australia is active.</p> <p><b>Action: Progress and outcomes from the project need to be monitored and used to inform development work in data quality. These will also link back into the quality e-measures environment and work.</b></p>	<p>NeHTA, IT-014</p>
<b>Risk Assessment Cookbook</b>	<p>The Risk Assessment Cookbook is being seen as an across the board tool for HL7 workgroups and as such its potential use and potential modification for the Australia context should be considered.</p> <p><b>Action: Review the Risk Assessment Cookbook for its application to Australia's development. Inform changes that could be incorporated for HL7 or EHR.</b></p>	<p>NeHTA, IT-014</p>
<b>Security and Privacy Ontology Ballot</b>	<p>The full ballot for the Security and Privacy Ontology for HL7 will be available in the coming months.</p> <p><b>Action: Allocation of resources (from NeHTA) should be assigned to review this project as its adoption will affect all future work in this area of security and HL7.</b></p>	<p>NeHTA</p>

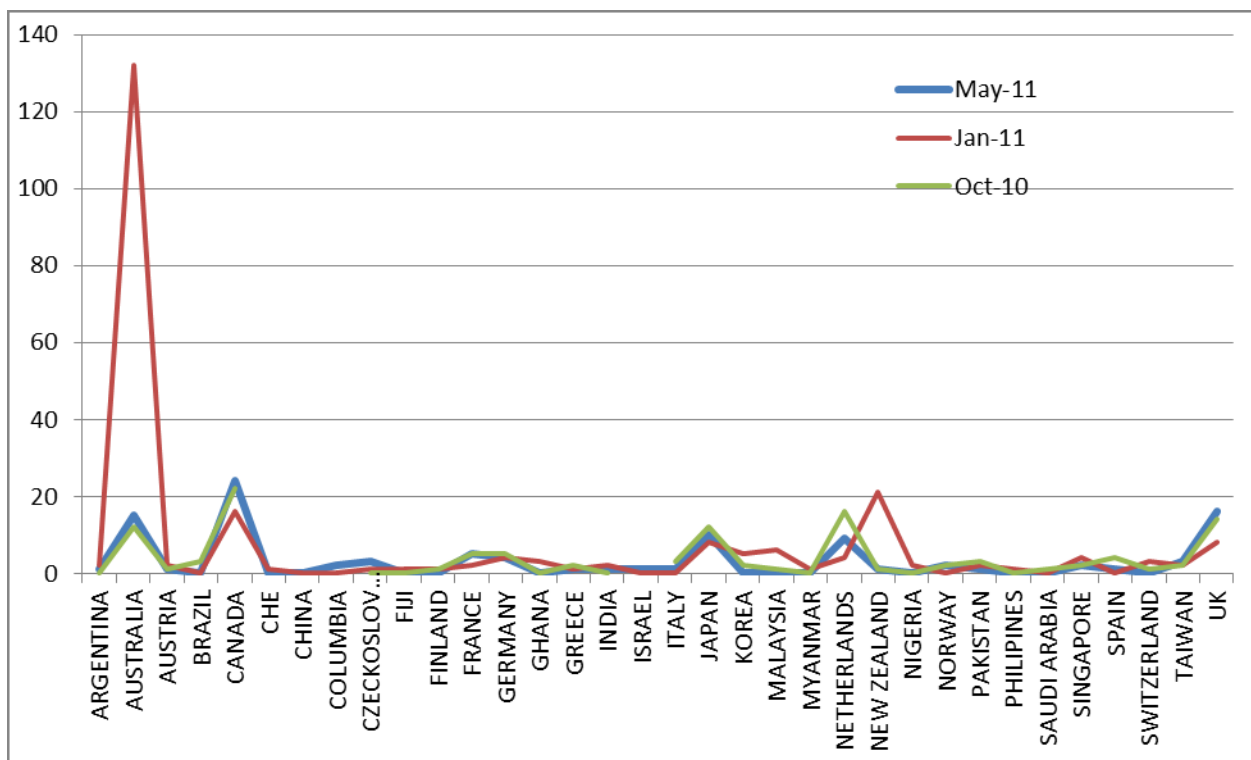
<b>CBCC Confidentiality Codes Project</b>	<p>Whilst still at the proposal development stage, the confidentiality code sets developed from this project need to be aligned with any potential use in HL7 formats for Australia.</p> <p><b>Action: Input to development of confidentiality code sets once project is accepted as a work item.</b></p>	NeHTA, IT-014
<b>Anatomic Pathology</b>	<p><b>Action: Consider whether active Australian oversight of this work is required.</b></p>	IT-014, NeHTA
<b>Webinars available</b>	<p>Develop method within Australia of circulating availability of webinars (particularly when the time zones suit better, or the material is recorded).</p> <p><b>Action: Heather Grain to inform HL7 Australia and SA of upcoming events and opportunities.</b></p>	HL7 Australia and SA to distribute information on relevant webinars.
<b>Development of roles and competencies</b>	<p>Australia needs to define the HL7 related jobs where we have significant needs and to identify what we consider are the appropriate competencies so that we can influence the priority developments at HL7 international and consider the development of an educational strategy for HL7 in Australia.</p> <p><b>Action: HL7 Australia and Nehta/AHIEC consider this issue.</b></p>	HL7 Australia and AHIEC / Nehta
<b>Education Strategy</b>	<p>Identify if there is a need for Australian Education strategy</p> <p><b>Action: HL7 Australia considers and potentially develops an education strategy – this could be incorporated into a broader standards education strategy which has been a priority for IT-014 for some time but which has no funding.</b></p>	SA, HL7, NeHTA, DOHA, JSCHIS
<b>Australian workshops</b>	<p>Possibly covered by an Education Strategy, regular workshops, designed to deliver quantifiable skills (not only to inform) be considered for operation in Australia. This requires understanding of the skill gaps in the community and engagement of the relevant educational approach ensuring suitable pedagogy and outcome identification and assessment.</p> <p><b>Action: Consider development of a skill focused education workshop series.</b></p>	HL7 Australia, AHIEC
<b>Standards websites</b>	<p>There are a number of standards related websites of relevance to the Australian market – e.g. NeHTA, Standards Australia's eHealth site, HL7 Australia, HL7, AIHW data standards pages, etc. Well marked cross links would be useful, to ensure interested parties are aware of the other relevant sources.</p> <p><b>Action: Consider links to relevant websites.</b></p>	Standards Roundtable
<b>Terminology and Health Devices</b>	<p>The Rosetta Terminology, which captures 11073 terminology and co-constraints used by 20+ vendors in IHE PCD domain, was discussed. This terminology has been used for NIST semantic conformance testing over the last 2 years. It is used in OBX-3 and for units (OBX-7). Its coverage is comprehensive – 579 terms, 218 of which are new. All vendors have mapped to or use this terminology directly</p> <p><b>Action: IT-014-06-05 (Diagnostics) to examine Rosetta approach to units of measurement.</b></p> <p><b>Action: Assign this work as a “shadow work item” to a committee at Standards Australia – possibly IT-014-06-05.</b></p>	SA, IT-014-06-05

<b>International Membership and Affiliation Task Force (IMATF)</b>	<p><b>Action: Continue to negotiate the Affiliate Agreement through HL7 International Board and International Council approval, in particular supporting the Australian model of localising HL7 specifications through IT-014.</b></p> <p><b>Develop recommendations on HL7 International Membership that preferably strengthen but at a minimum do not result in a weakening of Australia's ability to influence global standardisation to meet our needs.</b></p>	<p>HL7 Australia</p> <p>HL7 Australia</p>
<b>PCEHR Access</b>	<p>Consider the relationship and opportunities of the PCEHR support health information needs in times of major disaster. It is appropriate to consider this before such a need arises.</p> <p><b>Action: Nehta to consider.</b></p>	<p>NeHTA / DoHA</p>
<b>Integrating the Healthcare Enterprise (IHE)</b>	<p>A number of Affiliates noted close collaborations, including formal collaborations in some jurisdictions such as Canada, between HL7, other standards bodies and IHE.</p> <p><b>Action: IT-014, NeHTA, DOHA to note.</b></p>	<p>IT-014, NeHTA, DOHA</p>
<b>Interdependent Registries - Provider and patient Registries</b>	<p><b>Action: Disseminate DSTU when published for information of NeHTA, Medicare, DoHA and Jurisdictions implementing Provider registries.</b></p>	<p>SA</p>
<b>General</b>	<p><b>Action: There is a need to review the relationship between SOA specifications and other related profiles and standards. E.g. IXS and PIX/PDQ, RLUS, XDS and hData.</b></p>	<p>NeHTA</p>
<b>Template Interchange format project</b>	<p><b>Action: NeHTA to consider engagement with this project so that an outcome consistent with Canada and New Zealand requirements can be reached.</b></p>	<p>NeHTA</p>
<b>Template usage for conformance/compliance</b>	<p><b>Action: Standards Australia Conformity Assessment taskforce to include the International work on Templates into its work scope. Both Co-chairs of this Committee were at the HL7 meeting.</b></p>	<p>SA</p>
<b>TermInfo</b>	<p>PCEHR and other clinical system implementations should note that this work is seen to be useful and informative, but not practical to implement. Consider Australia's position on Vocabulary sections of Core Principles work.</p> <p><b>Action: NeHTA to note.</b></p>	<p>NeHTA</p>
<b>Vocabulary education</b>	<p><b>Action: Development of an HL7 vocabulary education plan could be leveraged by Australia to develop materials defined as an Australian priority.</b></p>	<p>IT-014, HL7 Australia</p>
<b>Vocabulary conformance</b>	<p>Need to ensure Australian HL7, vendors and NeHTA review the ISO document on conformance and provide comments to the ballot</p> <p><b>Action: Review document at ballot.</b></p>	<p>NeHTA, IT-014-06 members, MSIA</p>
<b>V2 terminology model</b>	<p>Consider if the changes proposed (when finalised) impact Australian HL7 vocabulary – which they are expected to do.</p> <p><b>Action: IT-014-06 to consider the potential impact of these changes and any workload required to manage these changes.</b></p>	<p>IT-014-06</p>

<p><b>CTS2</b></p>	<p>If adopted by Object Management Group (OMG) sites may 'sign up' as initial users, which given the opportunity for them to influence initial next stages and modifications.</p> <p><b>Action: NeHTA to consider whether this would be useful to advance Australian needs in the process and the standard.</b></p>	<p>NeHTA</p>
<p><b>National response for natural disasters</b></p>	<p>In light of the comments made by the Japanese delegation after the natural disaster in 2011, and the requirements for post-disaster health information, consideration of these requirements and Australia's capabilities in this area both now, and in the proposed national eHealth system, should be made.</p> <p><b>Action: Ensure that post-disaster requirements are captured in current and proposed national eHealth plans</b></p>	<p>IT-014, NeHTA, SA</p>

## 4 MEETING LOGISTICS

In line with standard HL7 practice, decisions and outcomes are voted on and documented in the various committees. This is different to ISO TC215 and International Health Terminology Standards Development Organisation (IHTSDO) where countries effectively vote as a block, HL7 International does not 'pass resolutions' in a plenary session as the number of committees would make this extremely impractical, though it is recognised that this process can make harmonisation more difficult. For this reason co-chairs of some of the Work Groups meet on Thursday evening to discuss decisions and ensure all are familiar with directions. The attendees came from 22 different countries and the graph below shows the difference in attendance at this meeting to the previous meeting in October, 2010 and January, 2011.



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

<b>Meeting</b>	<b>Sun</b>	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>
Anatomic Pathology		O				
Architecture Review Board (ArB)	X	X	X	X	X	
CCOW				X		
Clinical Decision Support			X	X	X	
Clinical Genomics			X	X	X	
Clinical Interoperability Council			X	X	X	
Clinical Statement					X	
Community Based Collaborative Care		X	X	X		
Education & Marketing		X	X		X	
Electronic Health Records		X	X	X	X	
Electronic Services				X		
Emergency Care		X	X	X	X	
HL7/CEN/ISO/IHTSDO/GS1/C DISC	X					
Health Care Devices		X	X	X	X	X
Implementation / Conformance		X	X	X		
Infrastructure and Messaging			X	X		
International Council	X			X		
Modelling and Methodology	X	X	X	X	X	X
Orders and Observations		X	X	X	X	X
Patient Administration		X	X	X	X	
Patient Care		X	X	X	X	X
Patient Safety		X	X	X	X	
Pharmacy		X	X	X	X	X
Public Health Emergency Response		X	X	X	X	
Regulated clinical research information management		O	O	O	O	
Security		X	X	X	X	
Services Oriented Architecture		X	X	X	X	
Steering Divisions (X 4)		X				

Structured Documents		X	X	X	X	X
Templates					X	X
Terminfo Project (complete – now in Vocabulary)			N			
Tooling			X	X	X	X
Vocabulary		X	X	X	X	X

Note: 'X' indicates days the Task Forces and Committees defined to be of relevance to Australia met. 'O' indicates emerging areas which might be relevant to Australia for consideration of coverage in future. 'N' indicates a group which has concluded and is no longer running – this work has generally been subsumed into the work of another committee (which is indicated).

This meeting had a large number of well attended tutorials. In total there were 30 tutorials with additional 2 certification examinations held.

#### 4.1 Delegation and Attendance

Attendances at this meeting were very high. There were 15 Australians (12 in the delegation) and 1 New Zealander at the meeting which reflects the interest and need for HL7 deliverables and education. The delegation would like to thank all of the sponsors, with special thanks to the Department of Health and Ageing for fiscal assistance and to NeHTA for their fiscal and staff support.

In summary, the work at the HL7 International Standards and Education Meeting offers a real opportunity to further the alignment of Australia PCEHR standards and international standards, and to further the alignment of European and American developments.

#### 4.2 Funding Source Summary and Australian Attendance

There were fifteen Australians whom attended for the duration of this meeting, twelve of whom were in the formal 'delegation'. 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.

Funding Source	Number	Change from Previous meeting
Full funding by employer: Private	3	+3
Full funding by employer: States/Territories or National Initiatives (NeHTA)	5	-21
Funding assistance – DOHA through Standards Australia contract	7	0
Total:	15	-18

The significant difference between numbers of NeHTA members at this meeting compared to the last is due to convenient location of the January 2011 meeting being held in Australia, allowing a large delegation to easily attend, and this meeting being held in the USA.

The full list of NeHTA delegates is listed below:

- *Andy Bond (NeHTA)*
- *Sarah Gaunt (NeHTA)*
- *Stephen Chu (NeHTA)*
- *Stephen Royce (NeHTA)*
- *Tina Connell-Clark (NeHTA)*

## AUSTRALIAN DELEGATES - WORK PRIORITY AREAS

The table below shows the difficulty in covering the multiplicity of issues discussed concurrently. Delegation members attended as many of the relevant sessions as physically possible, but it is not possible to cover the broad requirements in depth with the current delegation size. Members of the delegation seek to support each other and back each other up to ensure coverage wherever possible. An example of this was Trish Williams (TW) who was scheduled to cover emergency services and security – two groups which ran concurrently for three days.

The current expectation of full coverage by the Australian delegation would potentially benefit from a review. Given the intense nature of the meeting structure and the commitment of members to participate and inform the discussions as experts in their respective fields, as well as observing, means that it is neither possible nor practical to attend and cover multiple workgroups - particularly as most meet on the same days and quarters. This is somewhat dependent upon the current work load of the workgroup at a specific meeting, however for instance the Security workgroup is integrated into numerous other workgroups and therefore to be able to cover groups other than the main group meeting and its associated joint workgroup meetings was not possible.

**ACTION: After the delegation is selected the work program is reviewed and people allocated to the meeting schedule. Given the strong overlap in some areas, where meetings are occurring concurrently, the coverage requirements need to be considered by the delegation selection process to maximize the ability of the delegation to meet National needs.**

Meeting	Delegate	Sun	Mon	Tue	Wed	Thu	Fri
Advisory Council	RDH , ALL	X					
Affiliate Due Diligence Committee (ADDC)							
Architecture Review Board (ArB)	GG, AB	X		X	X		
Board Meeting	RDH , DR			X			
CCOW	VM				X	X	
CDISC/BRIDG	GG (unable to attend due to agenda conflicts)						
Clinical Decision Support	TW (unable to attend due to agenda conflicts)				X	X	
Clinical Genomics	VM			X	X	X	

Clinical Interoperability Council (CIC)	HL			X	X	X	
Clinical Statement	VM					X	
Community Based Collaborative Care							
Conformance Testing (ARRA and NIST)	AB (held with ARB)	X		X			
Detailed Clinical Models	TW, GG, HL SC		X				X
Domain Expert Steering Division	TW, VM		X				
Education	HG, TCC		X	X		X	
Electronic Health Records	RDH		X	X	X	X	
Electronic Services	DR				X		
Emergency Care	TW (unable to attend due to agenda conflicts)		X	X	X	X	
Foundation and Technology Steering Division	GG, HG		X				
Generation of Anaesthetics Standards	HL		X	X	X		
HL7 Round the World Updates	RDH, HG, DR, TW	X					
HL7/CEN/ISO	ALL, HG	X					
Health Care Devices	VM		X	X	X	X	X
Implementation / Conformance	Covered by AB, HG, in concurrent sessions with Vocabulary and ArB.		X	X	X		
Implementable Technology Specifications (ITS)	GG		X	X	X	X	
Infrastructure and Messaging	GG (unable to attend due to agenda conflicts)			X			
International Council Meeting	ALL, DR	X				X	
Marketing	HG		X	X			
Modelling and Methodology	GG	X	X	X	X	X	X
Organisational Relations	RDH		X				
Patient Administration Fresh Look Task Force (PA)	VM		X	X	X	X	
Patient Care Work Group	DR, HL, SC		X	X	X	X	
Patient Care Project on DCM Methodology							

Patient Safety WG	VM		X	X	X	X	
Pharmacy	TW, SC		X	X	X	X	X
Process Improvement Committee							
Public Health Emergency Response	TW (unable to attend due to agenda conflicts)		X	X	X	X	
RIMBAA Work Group	Unallocated prior to meeting - AB attended		X			X	X
Security WG	TW			X	X	X	
Services Oriented Architecture (SOA)	VM		X	X	X	X	
Steering Division – (X4)			X				
Structured Documents	VM, GG, SG		X	X	X	X	X
Technical Steering Committee (TSC)							
Templates	GG, RDH SC					X	
Terminfo Project	HG			X			
Tooling	GG, VM			X		X	
V2.X Publishing Committee							
Vocabulary	HG		X	X	X	X	

Notes:

(X) = committee meetings that participants attended

(initials) = participated in meeting

- Heather Grain (HG)
- Vince McCauley (VM)
- David Rowlands (DR)
- Grahame Grieve (GG)
- Hugh Leslie (HL)
- Richard Dixon Hughes (RDH)
- Patricia Williams (TW)
- Stephen Chu (SC)
- Andy Bond (AB)
- Stephen Royce (SR)
- Sarah Gaunt (SG)
- Tina Connell-Clark (TCC)

### 4.3 Australian Leadership Positions

The table below lists leadership positions held by Australians at the HL7 meeting as at May 2011.

Attendee	Position (held at the meeting)	Funding Source	Work Group or Committee
David Rowlands	Chair	Standards Australia via the DoHA Funding Agreement	HL7 Australia
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	Standards Australia via the DoHA Funding Agreement	Vocabulary
Richard Dixon Hughes	Co-chair Invited Member Invited Member Non-Voting Member Invited Member	Standards Australia via the DoHA Funding Agreement	Advisory Council to the Board of HL7 International EHR WG v2/v3 CDA Strategy Taskforce HL7 International Board of Directors HL7 International Business Plan Task Force
Stephen Chu	Co-chair	NeHTA	Patient Care
Andy Bond	Invited Member	NeHTA	Architectural Review Board
Klaus Veil	Co-chair Co-chair	Did not attend	Publishing Patient Care

## 5 ANATOMIC PATHOLOGY

### 5.1 Committee Description

The mission of the Anatomic Pathology Working WG is to develop and review implementation guides of HL7 standards and to enhance existing HL7 standards to support anatomic pathology use cases. It will work within HL7 as well as with external organisations to facilitate information interoperability in anatomic pathology, such as:

1. Tracking of anatomic pathology specimens
2. Structuring and coding of anatomic reports
3. Integrating and consolidating anatomic pathology data and other data into the medical record (e.g. integrated composite reports)
4. Ensuring consistency of anatomic pathology data and corresponding image association (includes both radiology and pathology imaging)
5. Reviewing previously defined terms that differ between organisations (e.g. What is a “specimen”)
6. Developing/reviewing value sets as needed (e.g. DICOM Specimen Embedding Media)
7. Collecting and sharing data from bio-repositories/tissue banks

### 5.2 Committee Progress at this Meeting

A report on the development of the Anatomic Pathology Structured Report was provided by Crystal Daniel. This is a joint initiative of HL7 and IHE. This work includes:

- 21 CDA templates
- 488 observations & procedure templates

Canada has been preparing work in the same area and the reporting group were not aware of this work. Details of the Canadian model will be sent to the Pathlex team.

This work currently uses ‘local codes’ until they ensure the concepts are added in the code systems. There is a separate value set for each histological type within each template. This question has been addressed in the past. The organ and histology will drive the requirements for the content. And this also adds complexity to the user interface. The report identified issues related to automatic mapping of Pathlex to SNOMED CT using UMLS in collaboration with the NLM. This mapping process identified a number of specific issue including:

- They did not consider post-coordination
- They have mapped some of Pathlex (interface terminology) to SNOMED CT
- The question on whether Pathlex be an extension of SNOMED CT was raised
- Potentially the number of OIDS that are needed, the maintenance burden will be large
- Coding strength has not been captured in the templates and might vary throughout
- Optional pieces include effective date, ending date and versioning of the value set
- In CDA they are only using extensional definitions and there are discussions about considering intensional value sets.

This project has been tabled pending the IHE decision on selection of binding methods.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Anatomic Pathology	<b>Action:</b> Consider whether active Australian oversight of this work is required	IT-014, NeHTA

## 6 ARCHITECTURAL REVIEW BOARD (ARB)

### 6.1 Committee Description

The Architecture Review Board has been resourcing the Service-aware Interoperability Framework (SAIF) for several years as a key building block for HL7 realising an Enterprise Architecture to guide the development of HL7 artefacts. SAIF is also a core interoperability approach for many external organisations, providing a common method of structuring specifications such that they can be used collaboratively in different solution settings.

At the Sydney WGM, the ARB agreed to create an initial version of the SAIF Book available for informative ballot at the HL7 Orlando meeting in May 2011. There are many HL7 projects piloting SAIF and beginning to exercise the content of the SAIF work and will result in a more consistent process for independent HL7 artefacts to be externally orchestrated in different solution contexts.

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/arb/index.cfm>

### 6.2 Committee Progress at this Meeting

Discussions with ARB and SOA identified the need for a language to implement the SAIF artefacts. The SAIF Book passed informative ballot with several hundred comments received. Many of these comments were processed at the WGM and will result in a better and more usable SAIF product.

In particular this focussed on the Behavioural and Information frameworks that form the core content guide within SAIF. SAIF is specifically intended for use both within and beyond HL7 and thus these frameworks are independent of existing HL7 models. There is a fine balance required to allow for enough flexibility by those using SAIF to link in their own specific Behavioural and Information modelling approaches but restrictive enough to ensure a level of consistency across various organisations defining interoperable specifications. There is also a concern that HL7 does not create a new set of detailed, unique modelling approaches that ignore existing approaches already available. It was agreed at the WGM that SAIF support multiple canonical modelling approaches and thus SAIF defines constraints for SAIF implementation guides.

During the meeting it was agreed that a modified SAIF book will be submitted for normative ballot at the September HL7 WGM meeting in San Diego. A key change to the normative document will be the creation of a new chapter extracting content from the existing Enterprise Compliance and Conformance Framework (ECCF) and Behavioural Framework. This chapter will define the core SAIF model including the specification matrix that has been an important part of the ECCF content

as well as guidance on working with sets of specifications and their relationship to e-health solutions. This would then leave the ECCF to concentrate on conformity assessment and traceability. It is also assumed a set of conformity assessment criteria would be defined by which SAIF implementation guides can be evaluated.

Cerner and Mitre have continued to progress hData through HL7 with significant involvement with the ARB and SOA group. In addition, hData has been aligned with the OMG as well to provide an additional avenue for standardisation. hData consists of both content and interface models with the latter being seen as good for the existing RLUS specification. The RLUS specification has been modified to map to RLUS and will now progress through HL7 and OMG adoption. The specification presents another option for peer-to-peer content sharing and as an implementation option for RLUS.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Architectural Review Board	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 7 CLINICAL CONTENT OBJECT WORKBENCH (CCOW)

### 7.1 Committee Description

With an emphasis on the point-of-use of applications, the mission of the HL7 CCOW Work Group is to define standards that enable the visual integration of healthcare applications. Applications are visually integrated when they work together in ways that the user can see in order to enhance the user's ability to incorporate information technology as part of the care delivery process.

There was no meeting of the workgroup in the January 2011 HL7 Sydney meeting.

### 7.2 Committee Progress at this Meeting

The following new potential projects were discussed at the meeting, in light of the changing technology platforms upon which applications are run:

1. Models for web applications that do not require the download/use of additional functionality (e.g. ActiveX or Java Applets)
2. Control of context sessions across multiple business organisations on a single platform
3. Creation of additional data exchange models, including JSON, SOAP, and/or REST
4. Support of CCOW on Tablets (and hand held devices)
5. Use of real-time locations services in CCOW.

From this list, two new proposed CCOW project proposals were developed to better facilitate the use and adoption of HL7 in light of the changing nature of software applications and capabilities.

- Lightweight CCOW. This is to revise the current reference model as it is no longer useful as it leverages the use of heavy application functionality (ActiveX, Java Applets) inside the browser. New approaches may provide a more secure approach and eliminate any required client-side components. The revision will develop a new reference model for browser-based applications that is integrated into the CCOW context leveraging contemporary web technologies. This work may require new interfaces and/or updates to the current CCOW specification to accommodate this new reference model.
- Multiple CCOW. The current CCOW standard does not address the scenario of multiple context environments on a single platform where there is a desire for no interaction between context environments. Hence a new project will update CCOW standard to allow multiple context sessions to co-exist on the same desktop without context sharing as controlled by context manager configuration settings.

Because of the critical need for trustworthy information in context, CCOW has developed a formal relationship with the HL7 Security Work Group. The joint efforts have produced three protection profiles that can be used in a security assessment or can be incorporated into a protection profile as part of a common criteria evaluation. The joint work also includes adding support for the use of SAML assertions during the authentication of users into the CCOW context.

In the joint working group with Security there was considerable discussion about the need for a more services orientation architecture (SOA) approach to integrating existing product standards in relation to authorisation via policy. However, whilst identity is an interoperability issue, authorisation is a functional matter and thus should not be part of the standards. This is of particular relevance in relation to location services.

In addition, the Security WG raised the consideration of adding authorisation to the CCOW model. To date at least one vendor has incorporated authorisation into a CCOW context and it was suggested that this could be included in the CCOW specification. There was a debate on the efficacy of the use of authorisation in CCOW and that it would be better handled at the application level. Thus, CCOW should be used for discretionary authentication changes to context rather than mandatory control over authorisation of applications in context. As has been the debate for several years now, the problem is the enforcement of an authorisation decision which can be avoided by dropping out of context.

Lastly, in regard to the new proposed projects it was decided that Security did not need to be joint sponsors but would advise as required to the CCOW workgroup. The discussions did however cite the potential conflicts between two CCOW installations in implementation. The USA Veterans Affairs / Department of Defence collaboration was discussed as an example. It was suggested that using absolute location indicators or configuration values might be a problem when two implementations are used on a single platform. Similarly, multiple session conflicts may be apparent with dual vendor implementations. Since we are seeing conflicts between sessions, this is an important issue and the CCOW WG will follow up with a project proposal "Removing multiple session conflicts."

## Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Clinical Content Object Workbench	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress.</b>	IT-014

## 8 CLINICAL DATA INTERCHANGE STANDARDS CONSORTIUM (CDSIC) / BIOMEDICAL RESEARCH INTEGRATION DOMAIN GROUP (BRIDG)

This subject area is a priority for Australia, but agenda's and discussions with leadership of this group indicated that it was unlikely there would be major initiatives coming through at this meeting. Due to agenda conflicts it was decided by the delegation that this item need not able to be attended by the designated delegate, other resources not available at the time of this meeting.

## 9 CLINICAL DECISION SUPPORT (CDS)

This subject area was not attended by an Australian delegate due to scheduling and resource availability.

## 10 CLINICAL GENOMICS

This subject area is not currently a relevant priority for Australia.

## 11 CLINICAL INTEROPERABILITY COUNCIL (CIC)

### 11.1 Committee Description

This Workgroup was set up to provide a way for the clinical community to interact with the standards development framework, processes and forums.

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/cic/index.cfm>

Wiki: <http://wiki.hl7.org/index.php?title=CIC>

This Council provides the standards development framework, organisational processes and forums to collaborate with the clinical community to define content, flow and other domain requirements necessary to the development of robust health data standards. The Council will provide mechanism for clinical domains to develop common approaches to standards-related activities and form consensus on issues of interest among multiple groups. This Council will be unique to Health Level Seven in that the focus is on the clinical content, not the technology of the standards.

## 11.2 Committee Progress at this Meeting

This subject area was not attended by an Australian delegate due to scheduling and resource availability.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Clinical Interoperability Council	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 12 CLINICAL STATEMENT

### 12.1 Committee Description

The clinical statement is a common pattern of HL7 V3 (a DMIM) which is used by the Patient Care, Structured Documents and Orders and Observations Committees to express rich clinical content. It has been developed over 3 years and allows nearly any clinical statement to be encoded in its rich, recursive structure. At present it has passed ballot as a DSTU but did not have a specific 'home' within HL7. This led to the formation of the Clinical Statement Work Group at the January 2009 WGM with representation from the technical and clinical content committees. Its workspace can be found at:

[http://wiki.hl7.org/index.php?title=Clinical\\_Statement\\_Workgroup](http://wiki.hl7.org/index.php?title=Clinical_Statement_Workgroup)

### 12.2 Committee Progress at this Meeting

The workgroup was occupied with resolving ballot comments from the Clinical Statement specification included in the last ballot cycle. The results of the ballot resolution will be available on the wiki above.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Clinical Statement	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 13 COMMUNITY BASED COLLABORATIVE CARE

The update from the Community Based Collaborative Care group can be found in Section 44.3 Security Working Group.

## 14 CONFORMANCE TESTING (ARRA AND NIST)

This subject area was not attended by an Australian delegate due to scheduling and resource availability.

## 15 DETAILED CLINICAL MODELS (DCM)

### 15.1 Committee Description

<http://www.hl7.org/special/committees/projman/searchableProjectIndex.cfm?action=edit&ProjectNumber=320>

Wiki: [http://wiki.hl7.org/index.php?title=Detailed\\_Clinical\\_Models](http://wiki.hl7.org/index.php?title=Detailed_Clinical_Models)

### 15.2 Committee Progress at this Meeting

Patient Care (PC) WG Orlando meeting continued to progress Detailed Clinical Models (DCM) ballot reconciliations on a number of DCMs – Braden Scale, Heart Rate, Body Height, Body Weight. The reconciliation process was progressed amidst criticism on the lack of methodology to guide the ballot and comments reconciliation processes. Due to the time constraint, approximately one quarter (1.5 hours) of a meeting day was dedicated to the ballot reconciliation and the rest would have to be processed through conference calls.

A planned joint meeting with MnM was convened in determining what information model types could be included in the DCM space. It was agreed that the artefacts could include:

- Conceptual - which can be considered as analysis information models that focus on capturing requirements. They need to be clinically accurate and understandable, cross domain, terminology agnostic, platform and technology agnostic.
- Logical - model not being bound to any implementation technology/platform
- Implementable models - can be platform specific, i.e. bound to specific implementation platform, including HL7. They can also be terminology specific, i.e. bound to specific terminology, e.g. SNOMED-CT, LOINC.

From the SAIF perspective, DCM can be considered conceptual, and cross domain; hence it is an analysis information model. Patient Care should not confuse this with DAM which is a much broader model, capturing business needs, processes and actors, among others.

Data elements, with types, relationships and code binding can be represented in UML or Archetypes. To achieve safe interoperability any specification must be effectively bound to a specific terminology. The MnM and Vocabulary work on Core Principles provides guidance in this area.

For the DCMs that have been under ballot consideration, it is unclear into which of the model types (conceptual, logical, implementable – terminology specific, implementable – platform specific) each of the different DCMs fall. The ‘owners’ of the DCM under ballot and their proponents were unable to provide a clear answer. They were recommended to consider the question carefully and return a definitive answer as soon as possible.

There appears to be continual confusion about what constitutes DCM development methodology. A small number of people (e.g. the ‘owners’ of the DCMs under current ballot) appear to consider ‘UML representation’ is the methodology. Australia argues strongly that the methodology should cover the entire space of requirement gathering, analysis, modelling/representation in a standardised modelling language (‘UML’ being one of the many) and validation. These

methodological components must be clearly identified and adequately defined in the methodology paper.

Kevin Coonan will write a discussion paper on models in DCM space. William Goossen and Kevin are to determine which type of models (of the 5 DCMs) in the DCM space are being balloted.

In summary PC is advised to look at the HL7 approach to vocabulary, explain design patterns, prevent permutational explosions (i.e. the reason for DCM existence instead of R-MIM collections). The methodology will be provided and discussed at the next face to face meeting which will also consider, better naming of components related to the DAM and work from the maximum dataset and explain how that is constrained.

## Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Detailed Clinical Models	<b>Action: The active discussions and developments in this area require ongoing consideration and engagement from Australia in order to influence our requirements into the emerging standards.</b>	IT-014

## 16 EDUCATION AND MARKETING

### 16.1 Committee Description

The Education and Marketing committees met jointly during the meeting and have been reported together here. The Education Committee is responsible for ensuring the quality and availability of education and learning deliverables provided by HL7 and about HL7, internationally, and to nurture a community of HL7 educators to enable this. It encourages affiliate educational development consistent with realms' needs and requirements. Particularly relevant to Australia is that the Education Committee manages the education program Work Group meetings, but not educational activities and events of the Affiliates.

The HL7 Marketing Committees primary responsibility is to develop a promotion and marketing strategy for increasing the visibility of HL7 and advancing HL7 Standards globally.

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/marketing/minutes.cfm>

Wiki: [http://wiki.hl7.org/index.php?title=Marketing Committee](http://wiki.hl7.org/index.php?title=Marketing_Committee)

Documents: <http://www.hl7.org/Special/committees/education/index.cfm>

Wiki: [http://wiki.hl7.org/index.php?title=Education Committee](http://wiki.hl7.org/index.php?title=Education_Committee) (used infrequently)

The HL7 International Education Committee manages and governs the educational offerings of HL7 International, in particular the education programs at the Work Group meetings and the "Education Summits" in the USA.

Recent initiatives include the very successful e-learning program

([www.hl7.org/events/elearning.cfm](http://www.hl7.org/events/elearning.cfm)) that is run globally. This program originated in Argentina, and is now available in India and Romania. Australians have participated in this program which can lead to certification.

The Marketing Committee created and maintains the HL7 Marketing Plan. This includes the development, updating and maintaining of marketing themes and materials for members, users and external stakeholders. The major focus of which is currently the Ambassador's program.

## 16.2 Committee Progress at this Meeting

### MARKETING

Ambassador program webinars have been going for nearly 12 months and the experience has been positive. There were 6 programs last year, including Introductions to HL7, V2, V3, CDA, Genomics. The marketing representatives work with the speaker and a press release is prepared and sent to media sources. The Webinar versions have had 2 – 300 people signed up with about 2/3 actually attending. This year the first webinar was held in April on 'Meaningful Use' and there were 218 people participating. These are usually held at noon Eastern USA time. Despite the strong US focus of the presentations they do have some excellent general content which would be of interest to new comers and decision makers who need to understand the business proposition and operation of HL7 standards. Heather Grain requested that consideration be given to holding select sessions at times which would allow Australian's to participate. The intention is also to record them to allow us to participate.

Next month Bob Dolan is doing a green CDA presentation. Another 6 – 8 speakers are being approached for presentations this year. Each presentation goes for 1 hour and is free.

Topic discussions included the need for material at all levels. A catalogue of recorded webinars will be developed. The marketing group should be more aware of the e-learning and tutorial offerings so that they can be linked and the relationship drawn in an effort to improve attendance and harmonisation.

### UNIVERSITY PROGRAM

The marketing group indicated that the university program is something that education is expected to lead. How do we make HL7 work relevant and visible enough from an academic point of view so that academics are more willing to become involved?

Heather Grain suggested that there is a need to define roles and competencies against which HL7 can assess conformance, and employers can identify needs for job specifications. There is a direct relationship between quantifiable quality education and skill confirmation and the willingness of employers to require such competence and for educational providers being prepared to invest in developing delivery strategies.

As a trial the Vocabulary Work Group will review their existing tutorials and identify roles and competencies and will provide this information as a straw man to the Education Work Group at the next meeting.

## JOURNAL PROJECT

HL7 wishes to establish an academic journal. There is a need to establish an editor and to develop the material and get registration in Medline and PubMed. The objective of this work is to develop a common mechanism for scholarly recognition for the HL7 community.

## LEARNING

An eLearning course which introduces HL7 has been operating for 2 years. It is organised through HL7 Argentina and is available in English and more recently Spanish. Originally the e-learning courses had a maximum of 200 attendees per group as the assignments required considerable tutor oversight and input. This has now been updated using automated marking components of 'Moodle' (modified to meet this need). The advantage is that the student has instant feedback. They send the assignment and get the feedback immediately. The feedback provides links to relevant parts of the standard or workbooks. The tutor also has less work to do. For the last 3 assignments for the current group this has been tested and there is now an estimate of 500 students being able to be managed by the existing number of tutors. This is expected to reduce the waiting list and it is hoped that we can handle the expected student requests.

Achievements:

- Additional places will be available in the eLearning program
- New program available in German
- New program in Italian beginning next month
- New Zealand begins pilot program at the end of this month.

HL7 Australia should consider what eLearning we would like to offer. Heather Grain has considerable experience and access to Moodle systems including student policy and academic board governance and would be willing to support developments for HL7 Australia.

## STRATEGIC PLAN

The strategic plan was requested by the HL7 Board to develop an approach to world-wide HL7 educational activities. A critical measure of success for this project is publication of an actionable education plan that is well understood, endorsed and adopted by all of HL7 International. The plan must include quantitative and qualitative performance measures, baseline and target performance measurement values, and a defined process for on-going monitoring of educational programs world-wide.

By July 2011 a strategic roadmap, milestones and resource plan will be identified, and by September 2011 consensus building, finalisation of the strategy and hopefully adoption.

Heather Grain identified the need to understand and incorporate into the strategy the link between roles and skills and the opportunities and responsibility to ensure quality education and

to certify programs, individuals and deliverer's of education. Clear direction on IP of educational materials for use by members is required in order to encourage uptake.

## SUMMITS AND WORKSHOPS

The US have education summits twice a year. Recently these are have largely covered 'Meaningful Use'. There were changes in the delivery process. They were divided into smaller sections with active learning exercises included. It was suggested that this be extended and that every tutor has materials available earlier for review and include more of this active learning approach.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Webinars available	Develop a method within Australia of circulating availability of webinars (particularly when the time zones suit better, or the material is recorded). <b>Action: HG to inform HL7 Australia and SA of upcoming events and opportunities.</b>	HL7 Australia and SA to distribute information on relevant webinars.
Development of roles and competencies	Australia needs to define the HL7 related jobs where we have significant needs and to identify what we consider the appropriate competencies so that we can influence the priority developments at HL7 international and consider the development of an educational strategy for HL7 in Australia. <b>Action: HL7 Australia and NeHTA/AHIEC consider this issue.</b>	HL7 Australia and AHIEC / NeHTA
Education Strategy	Identify if there is a need for an Australian Education strategy. <b>Action: HL7 Australia to consider and potentially develop an education strategy – this could be incorporated into a broader standards education strategy which has been a priority for IT-014 for some time but which has no funding.</b>	Standards Australia HL7, NeHTA, JSCHIS
Australian workshops	Possibly covered by an Education Strategy, regular workshops, designed to deliver quantifiable skills (not only to inform) be considered for operation in Australia. This requires understanding of the skill gaps in the community and engagement of relevant educational approach ensuring suitable pedagogy and outcome identification and assessment. <b>Action: Consider development of a skill focused education workshop series.</b>	HL7 Australia, AHIEC

## 17 ELECTRONIC HEALTH RECORDS (EHR)

### 17.1 Committee Description

The goal of the Electronic Health Record (EHR) Fresh Look Task Force is to support the HL7 mission of developing standards for EHR interoperability. The Fresh Look Task Force will contribute to this goal by creating and promoting appropriate and necessary standards which include:

- Functional Requirements for Electronic Health Records (EHR) and systems (EHRS),
- Functional Requirements for Personal Health Records (PHR) and systems (PHRS),
- Definition of a high-level framework to support the interoperability requirements and life cycles, and
- Identification of existing and emerging information requirements and other HL7 artefacts.

## 17.2 Committee Progress at this Meeting

Though there were many discussions within this group, they have all been reported through joint meetings with other working groups, including Service Oriented Architecture, MnM, and Collaborative Care.

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/ehr/index.cfm>

Wiki: <http://wiki.hl7.org/index.php?title=EHR>

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
EHR	Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress.	IT-014

## 18 ELECTRONIC SERVICES

### 18.1 Committee Description

The Electronic Services Fresh Look Task Force is appointed by the Technical Steering Committee (TSC) to oversee and prioritize HL7 headquarters' electronic services with a mission of optimizing all forms of electronic interaction with HL7.org.

Electronic services comprise interactions with HL7.org either via the internet or e-mail that includes, but are not limited to:

- Hosting a web site [<http://www.hl7.org>] that provides useful information to the public while serving the needs of the HL7 members
- Maintaining list servers to facilitate member interaction
- Providing and supporting electronic balloting including the availability of electronic ballot materials.

Electronic Services has oversight on:

- The HL7 Web Site - The Electronic Services Fresh Look Task Force oversees the entire HL7 web environment
- Other Electronic Services - Other services overseen by the Electronic Services Fresh Look Task Force (and included in their prioritized project plan) include HL7 list servers, electronic balloting and electronic publishing of HL7 ballot materials.

## 18.2 Committee Progress at this Meeting

The Electronic Services WG is currently developing a survey on usage of the HL7 website, to be administered prior to the September 2011 WGM. This was finalised during the WGM.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Standards websites	<p>There are a number of standards related websites of relevance to the Australian market – e.g. NeHTA, Standards Australia’s eHealth site, HL7 Australia, HL7, AIHW data standards pages, etc. Well marked cross links would be useful, to ensure interested parties are aware of the other relevant sources</p> <p><b>Action: Consider adding appropriate links on current websites.</b></p>	Standards Roundtable

## 19 EMERGENCY CARE

This subject area was not attended by an Australian delegate due to scheduling and resource availability.

## 20 FOUNDATION AND TECHNOLOGY STEERING DIVISION

### 20.1 Committee Description

The Foundation & Technology Steering Division focuses on providing the fundamental tools and building blocks that other Fresh Look Task Forces should use to build the standards, and upon the technology infrastructure that implementers of HL7 standards must manage. The members of this Committee are the co-chairs of the working groups which operate within this Division.

### 20.2 Committee Progress at this Meeting

There have been difficulties with these meetings, partly due to lack of planning and partly due to the time allotted. It was clear from discussion that each committee is dealing with their relationship to the steering division in different ways.

### PROJECT AND BALLOT METRICS

The ballot status and project report mechanism were explained so that those in leadership positions can more effectively manage the governance and progress of work items. These documents are available under the report heading for each individual Fresh Look Task Force. The Vocabulary Fresh Look Task Force was the best performing group within the Steering Division. This group includes Australian leadership.

## Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Foundation and Technology Steering Division	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 21 GENERATION OF ANAESTHETICS STANDARDS

This subject area though relevant was not attended by Australian delegates. After review of the proposed agenda, which was not available until immediately before the meeting and which did not indicate major initiatives at this meeting, this meeting was not attended. It was impossible for the delegated representative, or other representatives, to attend due to scheduling clashes at this meeting.

## 22 HL7/CEN/ISO

This is not a committee; rather it is a session at the meeting that supports harmonisation of activities. There has not been an ISO meeting since the last HL7 meeting. An update of the current state of the projects was given on each of the topics below:

- ISO/TC 215 WG4 - recommended forward ISO 21091 “Health informatics: Directory Services , healthcare providers, subjects of care and other entities” to ISO Central for second ballot
- NWIP ballot “Health informatics: data protection in trans-border flows of personal health information
- Revision of ISO 21549-1 Health cards 8 part standard all needed revision (as after 5 years)
- TS 25238 “Classification of Safety risks from healthcare software” should be revised but would be withdrawn if a new one from patient devices is adopted
- TS 22600 (3 parts) “Health informatics - Privilege management and access control
- Standards Knowledge Management Tool, including glossary.

## 23 HEALTH CARE DEVICES

### 23.1 Committee Description

The Health Care Devices working group facilitates the integration of health care device information at the enterprise level by:

- Establishing standardized version 2.x and version 3 content to support health care device interoperability at the enterprise level
- Harmonising device data models between HL7 and other organisations including ISO/IEEE 11073
- Harmonising and coordinating device terminology usage within HL7 components
- Support revision and harmonisation of the Clinical and Laboratory Standards Institute (CLSI) Point of Care Test (POCT) and laboratory automation standards

- General coordination and harmonisation between HL7 and other national and international organisations involved in health care device informatics and interoperability.

### 23.2 Committee Progress at this Meeting

The Rosetta Terminology, which captures ISO 11073 terminology and co-constraints used by 20+ vendors in IHE Patient Care Devices (PCD) domain, was discussed. This terminology has been used for NIST semantic conformance testing over the last 2 years. It is used in the HL7 V2 message (OBX-3) as the terminology for the observation identifier and for measurement units (OBX-7). The Rosetta terminology coverage is comprehensive – 579 terms, 218 of which are new. All major device vendors have mapped to or use this terminology directly.

Co-constraints include:

- Units of measure (IEEE 11073 and UCOM)
- Enumerated values
- Measurement sites
- Vendor Virtual Medical Device (VMD)/CHAN containment (also includes vendor descriptions)
- Code sets (enumerated values) for some types of measurements
- Specific Work Groups for domains – e.g. currently Ventilator, gas measurement, breath by breath annotation, waveform attributes (PCD WCM WG), Device Management (PCD MEM) – device\_id, status, location (use existing terms)

NIST has designed, and supports, a database for managing these terms which is currently maintained as XML files available on IHE PCD RTM website. IEEE has a process for approving edits.

There is a process initiated with Clem McDonald (Regenstrief Institute) to map the overlap concepts in LOINC. It is planned to start a map of common (overlap) terms to SNOMED-CT with IHTSDO.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Terminology	<b>Action: IT-014-06-05 (Diagnostics Messaging) to examine Rosetta approach to units of measurement.</b>	Standards Australia IT-014-06-05
Health Devices	<b>Assign shadow committee at Standards Australia IT-014-06-05</b>	Standards Australia IT-014-06-05

## 24 IMPLEMENTATION/CONFORMANCE

Covered under ARB and Vocabulary, with which this group met concurrently. Other sessions were not covered due to inadequate resources to meet concurrent meeting schedule.

## 25 IMPLEMENTABLE TECHNOLOGY SPECIFICATIONS (ITS)

### 25.1 Committee Description

The ITS Fresh Look Task Force is focused on development and maintenance of concrete specifications that describe how to implement v3 related specifications. In addition, the group has become a clearing house to consider technology/implementation related problems.

### 25.2 Committee Work History

The initial focus of the committee was on the main specifications required to support v3:

- XML serialisations for RIM and data types, from which the ISO data types came
- CDA XML formats
- Maintaining the v3 schemas
- Transport specifications – how to exchange v3 messages using ebXML, web services, etc.

This work has mainly moved into maintenance, and the committee is now focusing on a new set of implementation approaches trying to achieve simpler uptake of v3 specification including hData, uITS, and greenCDA.

### 25.3 Committee Progress at this Meeting

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/xml/index.cfm>

Wiki: [http://wiki.hl7.org/index.php?title=ITS\\_WG](http://wiki.hl7.org/index.php?title=ITS_WG)

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
ITS	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 26 INFRASTRUCTURE AND MESSAGING

This subject area though relevant was not attended. The designated delegate was committed to other committees at the time of this meeting making it impossible to attend.

## 27 INTERNATIONAL COUNCIL

### 27.1 Committee Description

Previously called the Affiliates Council, this meeting considers international advances and issues of the HL7 organisations around the world.

The International Council provides a forum for the HL7 International Affiliates (like HL7 Australia), and other interested HL7 members to discuss and communicate issues regarding the international development, adoption, application and implementation of the HL7 standard.

The International Council recommends to the Board of Directors actions and policies on behalf of the International Affiliates and advises the Technical Steering Committee and Board of Directors on matters relating to areas of standardisation that are relevant to the International Affiliates.

### 27.2 Committee Work History

This group is increasingly being given the opportunity to influence HL7 processes, and attendance at the meeting is steadily growing. The conflict of this approach to the traditional US centric requirements of the organisation are acknowledged.

### 27.3 Committee Progress at this Meeting

Council Overview, Minutes & Documents:

[www.HL7.org/Special/committees/international/index.cfm](http://www.HL7.org/Special/committees/international/index.cfm)

## BOARD REPORT

The meeting was opened with a board report by Michael van Campen who gave a comprehensive review of the very successful Sydney HL7 meeting in January 2011. The progress of the Affiliates Agreement Task Force and the Business Model Task Force was presented. These groups would be conducting further discussions in Orlando. The main issue was still the intellectual property (IP) licences and agreement on how this should be addressed both in the US and for the affiliates. It was reported that the revenue is currently 14% over the budget forecast.

## TOOLING AND CHIEF TECHNICAL OFFICER REPORT

John Quinn gave a report on the finance situation and that there may be the possibility of external engagement to progress tooling and to support development of RIM.

Discussions on Joint Initiative Council (JIC) sponsored work items included discussion on difficulties in harmonising voting between HL7 and ISO. John Quinn noted however that this is a new process and that the JIC is seeking to improve the process. IDMP progress through ballot at ISO has been successful, but there are many comments from the ISO ballot which will take some time to be addressed. Revised documents have been made available for the ISO meeting in the week after this meeting.

GS1 activities include:

- Identification of medicinal products
- Automatic identification data capture in healthcare for complex devices - national requirements for reimbursement of drugs, UDI, requirements. Seeking local collaboration but it is pressing slowly. GS1 healthcare conference 4 – 6 October 2011 in Amsterdam will have HL7 as one of the key topics.
- Health informatics – requirements for international machine-readable coding of medicinal product package identifiers: scope states the requirements on machine-readable coding for the identification and labelling of medicinal product packages (bar coding for medicinal products). Calls on this topic have begun.

### OMG ACTIVITIES WITH IHTSDO

OMG will have the final vote on Clinical Terminology Services 2 in June after which there will still be opportunities to put on the final touches. This work considers how terminology implementation is provided to support querying of data over time. It also considers accurate representation in a clinical record of concepts where the way of representing those concepts changes over time (new concepts come and other concepts are retired). The work is generic.

Provider directories – at present this is a normative HL7 standard and OMG are actively seeking participants interested in implementing this work. There are two national bodies interested including the USA.

SOA workgroup has also been asked to contribute.

### AFFILIATE AGREEMENT TASK FORCE

Affiliate Agreements are the contractual mechanisms that describe the nature of the relationship between HL7 International and Affiliates, and confers relevant rights and obligations in areas such as HL7 licensing and the use of trademarks; access to educational material; realm localisations; certification; etc. The Agreements are usually for a two year duration. However, the Affiliates voiced strong concerns about proposed new Agreements at the January WGM in Sydney, particularly around areas such as the management of intellectual property and associated license distribution arrangements. Accordingly:

- Interim - one year extensions of the previous Agreements were signed
- An Affiliate Agreement Task Force was established to propose new Agreements to the HL7 Board. David Rowlands (Australia) is part of this Task Force.

The Agreements are a crucial instrument, substantially affecting the way HL7 licensing and localisation is undertaken and potentially affecting HL7's flow on arrangements with Standards Australia.

Between the January and May WGMs, David Rowlands, Chair HL7 Australia, re-drafted an Agreement as a basis for the Task Force's considerations, and monthly international teleconferences were held to discuss contentious issues. A face-to face meeting was arranged for the May WGM.



Topic	Issue/Action/Recommendations	Recommended for action by
PCEHR Access	Consider the relationship and opportunities of the PCEHR to support health information needs in times of major disaster. It is appropriate to consider this before such a need arises.  <b>Action: NeHTA to consider.</b>	NeHTA, DoHA, AGs
The Business Model Task Force	As per previous recommendations, the development of the HL7 business model needs close scrutiny and input from HL7 Australia to ensure that Australia is not disadvantaged by the intellectual property (IP) rights and the pricing proposals.  <b>Action: Review and extensive input into the proposed business model.</b>	IT-014, Standards Australia, HL7 Australia
New Affiliate Agreement	In alignment with any new business model for HL7, the new affiliate agreement must closely meet the needs of the Australian use of HL7 in the national e-health initiative. As per previous recommendations.  <b>Action: Australia must have significant input into the new affiliate agreement specifically to ensure localisations are incorporated appropriately for Australia.</b>	HL7 Australia, Standards Australia

## 28 HL7 ROUND THE WORLD UPDATES

### Argentina

HL7 Argentina has a heavy educational focus. Its 2011 activities are expected to include:

- Major conference participation at the Argentinean Congress of Health Informatics, and the INFOLAC 2011 to be held in Mexico in May. The former will have an HL7 Track: Tutorials & Experiences; while the latter will focus on a CDA Tutorial/Workshop, jointly with HL7 Colombia.
- University collaboration. HL7 Argentina has developed a 3-day course, comprising of an Introduction to HL7 Version 2 and CDA R2. Each unit contains 3 hours of theory and 6 hours of practical work. This year there are 50 undergraduate students at the Universidad del Centro undertaking this 'Medical Informatics' optional subject.

HL7 Argentina has also been liaising with the Argentinian Government, which intends to use HL7 V2.x XML for a project involving personnel and organisations registries for the SIISA project (Argentina Integrated Healthcare System). The SIISA project is a registry for healthcare personnel and healthcare organisations. This registry will operate through all Mercosur countries (Argentina, Brazil, Paraguay, Chile and Uruguay). More information is available at: [http://msal.gov.ar/htm/site/pdf/cofesa-2010/acta-02-10/anexos/Anexo-3\\_SIISA.pdf](http://msal.gov.ar/htm/site/pdf/cofesa-2010/acta-02-10/anexos/Anexo-3_SIISA.pdf)

### Australia

David Rowlands and Richard Dixon-Hughes (Chair and Treasurer of HL7 Australia respectively) reported on the outcomes of the January 2011 Working Group Meeting (WGM), held in Sydney. The Sydney WGM was considered a resounding success, with 321 participants, 829 tutorial

attendances and 49 out of 60 Working Group meetings. Many of the 11 Working Groups that did not meet (namely Anatomic Pathology, Anaesthesiology, Arden Syntax, Attachments, Child Health, CCOW, Financial Management, Government Projects, Health Care Devices, Imaging Integration and RCRIM) were primarily U.S. focused.

The participants were drawn from 26 countries and 21 HL7 International Affiliates were officially represented. 177 of the participants were from 9 countries in the greater Asia-Pacific region, including 132 from Australia and 21 from New Zealand.

David Rowlands presented on the current status of HL7 Australia and gave an overview of Australia's PCEHR program. HL7 Australia currently has 2 benefactor members, 43 organisational members and 36 individual members. Activities since the January WGM have included planning for educational events during 2011 (potentially a road show for State health departments; an educational forum in July; and an HL7 Australia Conference in November). Additionally, HL7 Australia has been redeveloping its agreements with Standards Australia and been involved in national standards development work planning. Heather Grain presented a brief overview of the draft 2011-12 Australian Standards development priorities.

## **Austria**

HL7 Austria currently has 47 members and focuses on educational and localisation activities. It held its annual member meeting and conference in Vienna in March with 60 participants and 8 speakers and will commence an 'HL7 eLearning Course' in May with 30 participants.

## **Canada**

There are over 550 members in the Standards Collaborative (SC), of which 348 are HL7 Canada members. The SC is the combined standards organisation for HL7 Canada, ISO, IHTSDO and now IHE Canada (added at the beginning of 2011). Priorities of the SC include a continued focus on terminology; continuing to work with implementers and adjust pan-Canadian specifications as appropriate; and assisting jurisdictional efforts to develop specifications for Discharge Summaries, eReferrals, Consult Reports and Assessment Reports based on the Clinical Document Architecture (CDA) using a V3 messaging transport.

Canadian HL7 V3 implementations include:

- Claims – Chiropractors and Physiotherapists in Ontario (3+ years prior)
- Pharmacy claims in Newfoundland, PEI
- Client and Provider registries in almost every jurisdiction in Canada
- Diagnostic Imaging - BC/Yukon, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia, PEI, Newfoundland
- Laboratories - BC, Ontario (v2), Quebec, Nova Scotia
- Pharmacy (dispensing) - Newfoundland, PEI, Alberta, Saskatchewan, BC (v2), Quebec. A project underway in Ontario will also include ePrescribing.
- CDA / Shared Health Record / Discharge Summary & eReferrals - Ontario, Nova Scotia
- Immunization - PEI, Newfoundland.

The SC's Spring 2011 Partnership Conference will be held in June in Toronto, in conjunction with Canada's major eHealth Conference. Nine domain-based SC Working Groups will meet in-person over 3 days at the bi-annual Partnership Conferences deliberating messaging, terminology and related health informatics standards. These meetings generally attract over 200 stakeholders.

## Chile

HL7 Chile is now achieving more effective collaboration with the Health Ministry and the Health Group of the Chilean Association of Information Technology and is conducting joint work in the standards arena, particularly through the National Health Standards Committee.

HL7 Chile is marketing and providing education and training, particularly through the eLearning program and launching of a Certification and Training Program. Additionally, it has launched a new web site and social media with new services for members and participants ([www.hl7chile.cl](http://www.hl7chile.cl)). Progress is also being made in the OID register associated with the National Integrated Healthcare System.

Other educational events in 2011 include:

- A workshop on standards for e-Health Executives (June, Santiago)
- A workshop HL7 - Snomed Interoperability (8 July, Santiago)

## Colombia

Recent HL7 Colombia conference presentations have included IHIC 2011 (May, Orlando Florida, on 'The Unified File Format for HL7 Electronic Documents – DUFF' and 'An Approach to Support Semantic Mapping of E-R Models to HL7 Information Models'); IMIA INFOLAC 2011 (May, Mexico); Colaboración Latinoamericana en HL7, (Chile, Colombia, Argentina); and a virtual presentation to the PAHO Work Group on eHealth.

Presentations to business and Universities have included ANDI – The National Business Association of Colombia; RENATA Colombia – CLARA (Latin American Advanced Networks Cooperation – an International organisation whose aim is to connect Latin America's academic computer networks); and Project ImagenMantis - a CDA Implementation Guide for General Dentistry.

HL7 Colombia has also conducted a course on Interoperability in Public Health in the Masters Program on Biomedical Informatics at UPCH (Lima, March).

The National Government continues to be interested in the standardisation of a National EHR. Law 1438 -2011 defines that the EHR will be mandatory before 31 December 2013 and there is interest in using HL7 CDA r2 to define a national EHR for Colombia. HL7 Colombia has attended associated meetings with the Ministry of Health and will present 'A Reference Architecture for Integrated EHR in Colombia' at EFMI MIE in Oslo, Norway, in 2011.

Collaboration with other Latin American HL7 Affiliates has continued. HL7 Colombia and HL7 Brazil have collaborated on the international project 'Regional Protocols of Public Policies in Telehealth' coordinated by the Federal Minas Gerais University in Belo Horizonte, Brazil. There has been communication with, and interest from, affiliates in Peru, Venezuela, Panama and Ecuador in this area.

## France

Dossier Médical Partagé (DMP) is now operational and deployment is widening. It is based on international specifications including:

- HL7 CDA and IHE XDS forming IHE International Content profiles (IHE PCC) with French national extensions
- Content profiles (CDA Level 3): lab reports, anatomic pathology reports, hospital discharge reports, multidisciplinary oncology reports, birth certificates and cardiology-specific profiles (pacemakers, anticoagulants).

For further information see <http://esante.gouv.fr/>

France is the European leader for the epSOS Semantic Interoperability project and is setting the basis for implementation in 27 countries. epSOS (Smart Open Services for European Patients) is the main European eHealth interoperability project co-funded by the European Commission and its partners. It focuses on improving medical treatment of citizens while abroad by providing health professionals with the necessary patient data.

Considerable work is being undertaken on terminologies, including French translations of LOINC, UCUM and certain HL7 Value Sets. A CTS2 implementation Beta-test version was presented at WoHIT in May 2011. The presentation included terminologies which are bound to content templates and context of use within the implementation of the national specifications, as well as mappings with French terminologies, for example LOINC and NABM.

## Germany

Since the January WGM there has been extension of the German eHealth Interoperability Forum (standards collaboration), which now comprises HL7 Germany, IHE Germany, DIN, GMDS and VHitG/BvitG (eGesundheit.nrw). HL7 Germany participated in the conHIT Conference (April, Berlin) and will be conducting a joint HL7-IHE Annual Plenary Meeting in October in Goettingen.

A project of the German Ministry for Education and Research on the development of certifiable intelligent components for future integrated operating theaters has commenced and Implementation Guides are being developed for Diagnosis Guides (ICD-10; TNM classification); Nursing Summary; Pathology Report; and Cancer Registry. There is continuation of translation efforts and of German support for ISO OID Registry standards in cooperation with ITU/IEC.

In addition, a research and development project for patient-centered EHRs is underway, using CDA and RLUS for prototyping with a focus on secondary use in clinical trials/studies. They are also participating in the JIC project for patient identification together with GS1.

## **Greece**

HL7 Greece's major initiative is the Joint Work Group (WG) on Digital Health. This started in March 2010 with equitable participation of the HIT and Health Professional communities in Greece via the Athens Medical Society (33,000 doctors). It follows a multidisciplinary approach focusing on establishing a common language and on promoting awareness, education and training. WG activities have included:

- A questionnaire on eHealth/ICT literacy for doctors
- Support for the epSOS project in Greece
- Translation of epSOS terms (about 500 terms from HL7, LOINC, SNOMED CT, etc.)
- Participation in ELOT expert group on eHealth, including certification of epSOS translations
- Educational activities including a joint HL7 ambassador program for the Greek language, & HL7 University, and creation of promotional video on standards for eHealth
- Development of a website for the WG
- Articles, newsletters, participation in conferences and workshops
- A proposal on an eHealth interoperability roadmap to the Ministry of Health
- Establishment of specific subject teams.

## **India**

HL7 India is actively involved with the introduction of HL7 Standards through the Ministry of Health and Family Welfare and is mentoring the formation of HL7 Bangladesh. It certified 234 professionals in 2010: 175 in V2.6; 49 in V3; and 10 in CDA.

In 2011, activities include trying to get formal affiliation from the Bureau of Indian Standards as an SDO and exploring hosting an IHIC in 2012 or 2013. HL7 India will continue to enhance membership and candidates for certification, including exploring online certification.

## **Italy**

HL7 Italy's localisation program includes Implementation Guides for:

- CDA R2 "Patient Summary" (ballot open)
- Patient Administration (Patient Topic v3) (published)
- Orders and Scheduling (v2) (in progress)

It also includes 'white papers' on:

- SOA Architecture in Healthcare (in progress)
- Technical Rules for digital signatures in CDA R2 (published)
- Social Services (in progress)
- Telemedicine (in progress)

HL7 Italy held an 'Open Day', presenting on HL7 Italy's activities, HL7's newer directions (SOA, SAIF etc.) and HL7 experiences in Italy, as well as conducting Working Group meetings. There were around 90 participants but the day was over-subscribed, with some people having to be turned away due to lack of space.

## **Japan**

The recent Japanese earthquake and tsunami exposed major needs for health services and health information. Most doctors said: "Past medical histories would have helped". However, lack of electricity and networks led to reliance on paper.

Recent activities have included testing of Ministry designated standards, including HL7 v2.5 for labs and CDA referral document and working on a sentinel Japanese project Pharmacovigilance based on HL7 storage.

## **Norway**

HL7 Norway is a relatively new Affiliate, approved in April 2010. It's focus is still on establishing the new organisation infrastructure, including setting up budget and financials, administration, wiki and website. It has 15 member organisations.

To date HL7 Norway has:

- Established a technical steering committee and a Work Group for patient administration
- Published a national V3 implementation guide for a national auxiliary number service, which allows individuals that don't have a public identifier to be uniquely identified across the health sector
- Worked on change proposals to Encounter Manager
- Organised training in CDA and Pharmacy.

Planned activities include the establishment of a CDA Working Group in May 2011, a Pharmacy Working Group and a Laboratory Work Group, both with planned kick offs for Autumn 2011.

Nationally, there have been changes in the governance of standardisation in Norway. The national standardisation body has been put under direct governmental control and there is discussion on which standards to use.

## Pakistan

HL7 Pakistan commenced only in October 2010 but has achieved much in a short time. V3 training is being conducted with participants sourced from Islamabad, Lahore and Karachi. The first RIM Certification Exam in Pakistan will be conducted in May 2011, for 18 participants.

A one day HL7 Awareness Workshop will be held in June, with participants invited from Government agencies, vendors, healthcare providers and academia. It will be sponsored by the ICT R&D Fund, Ministry of IT, and Pakistan.

Planned activities include:

- HL7 training nationwide and certification opportunities in Karachi and Lahore
- Extensions to HL7 CDA and HL7 V2.x
- Joining Open Health Tools
- Open source release of a Relational to RIM Mapper Tool – RSM
- Development of a Laboratories Implementation Guide

## Singapore

HL7 Singapore has had a website re-launch and established a LinkedIn site. Singapore held a series of networking events and has a stable committee. However, it is struggling to find an effective business model.

Standards releases through the national program from 2010-2012 include the following.

Standards	Focus
Singapore Logical Information Model	Info Model
Singapore Logical XML - Constrained	NEHR Interface format
Singapore Logical XML or HL7 2.3.1 ( with structured OBX segments)	Exchange format
SNOMED CT	Diagnosis, Allergic Reaction, non drug Allergens, Procedures, Radiology orders
SNOMED CT	Lab orders, Problems and symptoms
SNOMED CT	Smart Lab reports, Reason for visit, ED diagnosis
Singapore Drug Dictionary(SDD)	Drugs and Allergens
MOH Data Dictionary	Demographic and Admin data

LOINC

Lab Results

## Spain

HL7 Spain has 67 corporate members, 46 healthcare providers, 16 involved in health administration and 5 academic. It has worked with the Spanish Ministry of Health in hosting a European Health Interoperability Meeting (EHIM, Barcelona, 2010) and establishing a Medical Record Technical Committee to implement the Electronic Medical Record at a national level.

HL7 Spain certified 107 professionals in 2010 (213 since 2005) and has a continuous program of training and certification scheduled for 2011. It is collaborating on an HL7 Spanish e-Learning Course and a series of courses at the following educational institutions:

- Barcelona Polytechnic University - RIM Automatic Filtering Research; HL7 Practitioner's Guide to UML & SCRUM; and Security Domain Analysis Model
- Valencia Polytechnic University - CDA & Archetypes Editor
- Basque Country University - CDA & Terminfo
- Salamanca University - Interoperability Scenarios.

HL7 Spain has also formed an alliance with IHE Spain in development of the following:

- Personal Health Record Functional Guide
- Electronic Prescription Invoicing Guide
- Spirometry CDA Implementation Guide
- DMAG's Secure EHR Editor (see below description)
- LinkEHR CDA & Archetype Editor (see below description)

DMAG is the Distributed Multimedia Applications Group of the Universitat Politècnica de Catalunya (UPC), an HL7 Spain member. Its Secure EHR Editor uses the ISO/IEC MPEG-21 standard for defining and protecting EHRs (ISO 13606); HL7 CDA; MPEG-21 Part 2: DIDL (Digital Item Declaration Language); and MPEG-21 Part 4: IPMP (Intellectual Property Management and Protection) components. It aims at protection of patients' privacy, guaranteeing confidentiality and integrity of patients' data at any level of granularity in the EHR. Patients can define their privacy policies and ensure they are enforced. Privacy policies are defined using OASIS eXtensible Access Control Markup Language (XACML).

LinkEHR Editor is a tool developed by the Valencia Polytechnic University as a Reference Model-independent archetype editor. The objective is to study if CEN/ISO 13606 archetypes can be an alternative for defining CDA templates. HL7 CDA XML Schema can be imported into the tool and CDA archetypes built, guided by that Schema. For further information see <http://www.linkehr.com>

## Switzerland

HL7 Switzerland currently has 59 corporate and 23 personal members. It has been working on xEPR specifications using CDA R 2 and supporting documents were published at the end of Jan 2011. Additionally, a stalled project on care provision is being re-launched.

Other developments include:

- IHE Suisse will be hosting the Connectathon Europe 2012 in Bern, Switzerland
- A meeting with the Government was held in May to form a committee which decides on recommendations for standards. Participating organisations will include IHE-Suisse, HL7 Switzerland and SNV (the standards organisation which represents Switzerland in ISO).

## Taiwan

HL7 Taiwan's recent activities have included an EMR Work Group Symposium, CDA R2 and LOINC Educational Workshops. Upcoming activities include continuing education, CDA R2 Certifications and the 10th Asia-Pacific HL7 Conference (Taiwan, August).

## The Netherlands

There have been significant recent developments in the Netherlands, with supporting legislation for Health Information Exchange (HIE) voted down and the Ministry instructed by the Senate to participate no longer. NICTIZ is currently drafting alternate scenarios for the future (due June 2011).

However, vendors continue to support chosen standards (HL7 is the foundation of the current HIE). IHE is helping to extend the HIE into Laboratories and Radiology and NICTIZ's knowledge and expertise are to be sustained.

HL7 Netherlands' standards development activities include:

- Closer collaboration with IHE, especially coordination in the Pharmacy domain
- Renewal of NEN 7504:2011 – a V2 Implementation Guide
- Reconciliation of changes from NICTIZ and others to the V3 Core Component Implementation Guide
- Developments in Care Provision Models in Patient Care; and Intolerances, Allergies and Adverse Reactions

Other activities include:

- A National Health Architecture Conference, joint with IHE, NAF and NICTIZ
- Outreach to educational institutions, joint with IHE and the HIT Vendor Association
- HL7 University
- v2, v3, EHR, and v3 implementations
- Conduct of an international RIMBAA (RIM based application architecture) meeting in Amsterdam.

## United Kingdom

HL7 U.K. has around 170 members, 90 organisational and 80 personnel. This is a reduction in membership, the precise amount of reduction was not indicated but it appears to be slowing. Reduced revenue has meant reduced activity.

Current projects include:

- The Department of Health ITK (Interoperability ToolKit). This is a Joint activity with IHE-UK and makes use of v2.x, v3 & CDA. Further information is available at: [www.hl7.org.uk/marketing/itk/itk.asp](http://www.hl7.org.uk/marketing/itk/itk.asp).
- CDA Simplification. This is linked to ITK but there is wider interest and is looking at Green CDA. The full specification of CDA XML addresses universal requirements for exchange and management of structured clinical documents. The greenCDA concept explores one method of working with an implementation-specific XML while maintaining the full utility of CDA, asserting as a primary principle that any simplification must also deliver valid, normative CDA (plain CDA).

Educational activities include Universities Engagement. Teaching is on-going at 7 Universities and training courses for v2 and v3 are run by a commercial partner. Three road shows are planned for May and June in major UK cities, promoting HL7 and its standards; use Cases presented by users of HL7 and significant ITK content.

## United States of America

The recent PCAST report (<http://www.whitehouse.gov/administration/eop/ostp/pcast/docsreports>) aims to:

1. Accelerate progress toward a robust exchange of health information
2. Establish a new exchange architecture with a universal exchange language (UEL) and interlinked search capabilities coupled with strong privacy and security safeguards. The exchange architecture will enable clinicians and patients to assemble a patient's data across organisational boundaries and facilitate population health.
3. Establish an evolutionary transition path from existing installations to the new exchange architecture.

Standards activities underway include analysing the standards implications of the PCAST recommendations and preparing for Meaningful Use Stage 2, identifying gaps in standards and triaging standards work.

## Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
IHE	A number of Affiliates noted close collaborations, including formal collaborations in some jurisdictions such as Canada, between HL7, other standards bodies and IHE.  <b>Action: Consider opportunities in Australia.</b>	NeHTA
National response for natural disasters	In light of the comments made by the Japanese delegation after the natural disaster in 2011 and the requirements for post-disaster health information, consideration of these requirements and Australia's capabilities in this area both now and in the proposed national e-health system should be made.  <b>Action: Ensure that post-disaster requirements are captured in current and proposed national e-health plans</b>	IT-014, NEHTA, DoHA, AGs

## 29 MODELLING AND METHODOLOGY (MNM)

### 29.1 Committee Description

MnM has overall responsibility for the methodology used to develop future HL7 standards and also acts as a clearing house for inter-committee design issues.

### 29.2 Committee Work History

The main work of the committee, v3 methodology, is in maintenance mode at this time. The committee spends most of its time responding to issues and requests from other committees and as such, the work of the committee is somewhat disjointed, but covers:

- Resolving hot topics ([http://wiki.hl7.org/index.php?title=Category:MnM\\_Open\\_Hot\\_Topic](http://wiki.hl7.org/index.php?title=Category:MnM_Open_Hot_Topic))
- Collaborating with Tooling and Publications on the future of v3 internal tooling
- Working with Vocabulary committee and Implementation on aspects of new vocabulary development
- Formally describing existing methodology in the 'Core Principles of V3 Models' document
- Working with Architecture Board to enable the SAIF based architectural update (see under ArB).

### 29.3 Committee Progress at this Meeting

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/mnm/index.cfm>

Wiki: [http://wiki.hl7.org/index.php?title=Modelling\\_and\\_Methodology](http://wiki.hl7.org/index.php?title=Modelling_and_Methodology)

#### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
MnM	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 30 PATIENT ADMINISTRATION WORK GROUP (PA)

### 30.1 Committee Description

The Patient Administration (PA) Work Group's remit is the interoperability among clinical and non-clinical systems regarding patient encounters and administrative registries. It provides standards for:

- Demographic and administrative data used to describe patients, persons, service delivery locations and patient encounters [scheduled and/or actual], including healthcare providers, places, organisations and their relationships in the context of healthcare encounters
- Administrative data to describe resources, their availability (for example, represented by schedules or by status), and regulatory topics such as licensing and credentialing information about individuals, animals, organisations and devices directly or indirectly involved in the delivery of healthcare services
- Standards for dynamic behaviours involved in requests and their fulfilment of additions and modifications to registries such as patients, persons, service delivery locations, healthcare providers, places and organisations
- Scheduling of appointments for services, encounters and associated resources. These processes include the functions of requesting, booking, notification, and modification pertaining to appointments and resources.
- Ownership of the "Scheduling" domain that offers a generic set of messages and behaviours to implement any number of scheduling scenarios.

### 30.2 Committee Work History

The Patient Administration Work Group is one of the longest-existing committees in HL7. It undertook major work to lay the foundations of V2.x patient administration messages (HL7 V2.x Chapter 3). As the HL7 standards are essentially patient-centric, PA has always been a core committee for the HL7 standards work.

Planned Work:

- Jan 2011: Personnel Management R2 DSTU ballot
- May 2011: Patient Administration V3 R2 Normative ballot
- Jan 2012: Scheduling R2 DSTU ballot
- Jan 2013: Scheduling R2 Normative ballot

### 30.3 Committee Progress at this Meeting

Committee Overview, Minutes & Documents: [www.HL7.org/Special/committees/pafm/index.cfm](http://www.HL7.org/Special/committees/pafm/index.cfm)

Committee Wiki: [http://wiki.HL7.org/index.php?title=Patient\\_Administration](http://wiki.HL7.org/index.php?title=Patient_Administration)

The Interdependent Registries project is a roadmap to SOA standards for identifying patients and providers. DSTU Ballot for this project was undertaken in the last cycle and public comment was reconciled at this meeting. Comment resolution will be published on the Wiki. It is likely that comments can be resolved satisfactorily and that this service functional model (SFM) will pass ballot.

There is early work on thorough collaboration between the Patient Care Work Group and SOA in the area of care coordination.

Core activities for this Work Group include:

1. Program management – working items managed by sub-groups
2. SAIF realisation implementation with MnM
3. Ambassadorial activities with other Committees acting as SOA facilitator.

Other sessions by this Committee were unable to be attended.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Interdependent Registries - Provider and patient Registries	<b>Action: Disseminate DSTU when published for information of NeHTA, Medicare and Jurisdictions implementing Provider registries</b>	Standards Australia

## 31 PATIENT CARE WORK GROUP

### 31.1 Committee Description

The goal of Patient Care Work Group is to define the requirements and solutions to support the needs for communicating information regarding the creation, management, execution and the quality of care provision.

The Patient Care Technical Committee (TC) was formed as a Special Interest Group (SIG) in 1993. A small group of individuals were brought together with the objective of assessing the current HL7 specification and bringing forward recommendations for extensions to support a variety of activities related to direct patient care. Over a series of meetings and discussions the conclusion was reached that the current HL7 model did not adequately support the needs of the patient care community, particularly in the areas of patient goals, problems, care plans/critical paths, assessments, and histories and physicals. The group developed a set of new segments and messages, and the decision was made in the fall of 1995 to establish Patient Care as a Technical Committee. A new chapter (twelve) was produced and approved as part of HL7 Version 2.3.

Today The Patient Care Fresh Look Task Force defines the requirements and solutions for communicating information regarding the creation, management, execution and the quality of care provision.

### 31.2 Committee Work History

During the past decade, Patient Care has become more involved in v3 messaging and the static and dynamic modeling that can be used and reused in different HL7 formats. For instance, the core of patient care work is the Care Provision D-MIM, deploying the clinical statements and dynamic model, which was established as Draft Standard for trial use in 2007.

The last twelve months has seen Patient Care heavily involved in working on the Detailed Clinical Models approach to clinical content.

### 31.3 Committee Progress at this Meeting

Committee Overview, Minutes & Documents:

[www.hl7.org/Special/committees/patientcare/index.cfm](http://www.hl7.org/Special/committees/patientcare/index.cfm)

Committee Wiki: [http://wiki.hl7.org/index.php?title=Patient\\_Care\\_WG](http://wiki.hl7.org/index.php?title=Patient_Care_WG)

#### DETAILED CLINICAL MODELS (DCM)

The Patient Care Working Group meeting continued to progress DCM ballot reconciliations on a number of DCMs, including Braden Scale, Heart Rate, Body Height, and Body Weight. The reconciliation process was progressed amidst criticism on the lack of methodology to guide the ballot and comments reconciliation processes. Due to the time constraint, approximately one quarter (1.5 hours) of a meeting day was dedicated to the ballot reconciliation and the rest would have to be processed through conference calls.

A planned joint meeting with MnM occurred to determine what information model types could be included in the DCM space. It was agreed that the artefacts could include:

- Conceptual: analysis information models that focus on capturing requirements. They need to be clinically accurate and understandable, cross domain, terminology, platform and technology agnostic.
- Logical: model not being bound to any implementation technology/platform

- Implementable models: can be platform specific, i.e. bound to specific implementation platform, including HL7. They can also be terminology specific, i.e. bound to specific terminology, e.g. SNOMED-CT, LOINC. From SAIF perspective, DCM can be considered conceptual, cross domain and hence it is an analysis information model. Patient Care should not confuse this with DAM which is a much broader model, capturing business needs, processes and actors, among others.
- Data elements, with types, relationships and code binding can be represented in UML. Alternatives are archetypes.
- An interoperable specification must be bound to a specific terminology.

For the DCMs that have been under ballot consideration, it is unclear which of the model types (conceptual; logical; implementable, terminology specific; implementable, platform specific) each of the DCMs fall under. The 'owners' of the DCM under ballot and their proponents were unable to provide a clear answer. They were recommended to consider the question carefully and return a definitive answer as soon as possible.

There appears to be continual confusion about what constitutes DCM development methodology. A small number of people (e.g. the 'owners' of the DCMs under current ballot) appear to consider 'UML representation' as the methodology. Australia argues strongly that the methodology should cover the entire space of requirement gathering, analysis, modelling/representation in a standardised modelling language ('UML' being one of the many) and validation. These methodology components must be clearly identified and adequately defined in the methodology paper.

In summary PC is advised to look at HL7 approach to vocabulary, explain design patterns, prevent per mutational explosions (i.e. the reason for DCM existence instead of R-MIM collections), methodology (provided next WGM), better naming in relationship with DAM and work from the maximum dataset and explain how to constrain.

#### CARE PROVISION D-MIM AND CARE STATEMENT

The Care Provision D-MIM was formalised in May 2006. The 'care statement/care entry' component was based on an early version of Clinical Statement Pattern (CSP). It is considered that a review of the Care Provision D-MIM is necessary and to consider whether updates to the D-MIM are required.

At a joint meeting with Orders and Observations, it was recommended that the clinical components of Care Provision be separated into two categories:

- Clinical contents, such as assessment scales, general and specific clinical observations (such as vital signs, allergy/intolerance, etc), and;
- Infrastructure, such as concern list/tracking, statement collector, care entity, and care plan, etc.

Two other areas of consideration including:

- Whether the latest version of CSP is adequate in meeting patient care requirements. If it is considered to be adequate, then the 'care statement' in the Patient Care Provision D-MIM can be replaced with the latest CSP.
- Analysis of requirements to determine whether 'participation' components in CSP are adequate for Patient Care and submit additional 'participation' requirements to OO for consideration where appropriate/required.

## CARE PLAN

A project on this topic was initiated after the January 2011 Sydney WGM meeting. Weekend conference calls were conducted two weeks after this meeting and continued till the week before this meeting.

A full quarter of this meeting was dedicated to discussion on this topic. Due to the extensive interest of participants around the world, a conference call was organised allowing participants from Australia and UK to dial in and engage in discussions.

An overview of work completed prior to this meeting included:

- The adoption of HDF and DAM processes
- Storyboard collection and development
- High level process models for care plan initiation and use in collaborative care environments
- Dynamic versus static care plans and their characteristics, the nesting of sub-care plan(s) within master care plan, etc.

The project team and delegates agreed that the work should continue in this area as it is essential for collaborative care and transition of care. The US Office of National Coordinator has a care plan project under the 'Transition of Care Initiative'. The group agreed to continue weekly/biweekly conference calls to progress this project further. Call facilities have been requested to commence on Wednesday 9 June at 5pm US Eastern time.

## Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Patient Care Work Group	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 32 ALLERGY, INTOLERANCE AND ADVERSE REACTION TOPIC

This topic has been flagged as of significant interest to a number of groups from within outside HL7 communities, e.g. Patient Care, Clinical Decision Support, Patient Safety, RCRIM/Clinical Trail, potentially Pharmacy, VA etc.

### 32.1 Committee Progress at this Meeting

During the meeting Tom de Jong conducted a walkthrough of the existing Allergy and Intolerance model published by Patient Care. The exercise enabled attendees to gain much better understanding of the existing model. Vigorous discussions followed.

It was agreed that this topic was of high significance and a project should be initiated to investigate in detail the requirements from various domains and stakeholders, evaluate the existing model against these requirements to determine the adequacy of the existing model and to initiate revision of the model when the evaluation outcome determines the necessity to do so.

It was emphasised by the attendees that the objective of the project was not to re-invent the model but to improve it where necessary.

A weekly conference call schedule has been set up. The first conference call is to commence on Wednesday 8 June at 5pm US Eastern time.

#### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Allergy, Intolerance and Adverse Reaction	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress.</b>	IT-014

## 33 PATIENT CARE PROJECT ON DCM METHODOLOGY

Progress on this topic at this meeting is covered under the Detailed Clinical Models section.

## 34 PATIENT SAFETY WORKING GROUP

### 34.1 Committee Description

The Patient Safety Work Group supports the HL7 mission to create and promote its standards by creating a standard message structure for patient safety that facilitates the reporting and investigation of patient safety incidents. This includes but is not limited to Incident Report, Adverse Drug Event Report, Pre and Post Marketing Pharmacovigilance. Patient Safety also has a unique role in HL7 to work with other committees to ensure messages do not adversely affect patient safety and that they appropriately support decision support mechanisms to stop preventable incidents occurring.

### 34.2 Committee Work History

The Patient Safety Work Group is a relatively new committee starting as a Special Interest Group (SIG) to the parent committee Regulated Clinical Research Information Management (RCRIM) in 2004. It also has a close relationship with the Public Health Emergency Response WG with whom it shares responsibilities for the public health reporting domain.

The program of work to date has been largely driven by the work program of the European Medicines Agency (EMA) which faces a number of unique interoperability challenges due to the

cross border responsibilities it has with member states of the EU. The FDA agency from the United States is also a very active contributor to the group. To date there appears to have been little involvement from members of the relevant Australian agencies such as the Australian Commission on Safety and Quality in Health Care (ACSQHC) and TGA.

Other than the groups input to the Common Product Model, Structured Product Labelling and Operational Case Safety Report (OCSR) co-ordinated by the Pharmacy and RCRIM WG, the main item of work produced by the Patient Safety group has been the Individual Case Safety Report (ICSR).

### **34.3 Committee Progress at this Meeting**

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/patientsafety/index.cfm>

Wiki: [http://wiki.hl7.org/index.php?title=Patient\\_Safety\\_Special\\_Interest\\_Group](http://wiki.hl7.org/index.php?title=Patient_Safety_Special_Interest_Group) (not actively used)

## **35 PHARMACY**

### **35.1 Committee Description**

This group helps to assure that the HL7 messages and models concerning medication related information including prescribing, dispensing, and administering medication, address all of the requirements of the many stakeholders and variations in different countries.

### **35.2 Committee Work History**

The committee has been working in the ballot reconciliation in order to further develop an international standard for pharmacy messaging.

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/medication/index.cfm>

### **35.3 Committee Progress at this Meeting**

IHE community pharmacy profiles have been released after public comments in 2010. It was tested at the last European Connectathon and is now in pilot stage under epSOS in a number of EU countries.

IHE Pharmacy group/epSOS presented work on XDW (cross enterprise document workflow). It was explained that XDW development was triggered by need to solve problems of workflow management in using CDA for community based prescription-dispense activities.

XDW was considered an effective way to add workflow management to static documents.

XDW profile is currently open for public comment for a period of 4 weeks, ending on 8 April.

The HL7 Pharmacy WG and OO raised questions on why messaging was not used to update status, i.e. manage state and state changes. The response was that in community prescribing and dispensing, the activities would be cross enterprise and it was considered that cross-enterprise workflow management by messages would be difficult within an organisation. There would be structure/infrastructure to find a message easily (cross enterprise) although this could not be easily accomplished i.e. locate a message pertinent to state management. This reasoning was rejected by HL7 Pharmacy and OO.

When XDW is used, there is still a need to use message.

XDW is useful under the following circumstances:

- The message used to transport prescription/dispense record CDA does not contain workflow/state management metadata; and
- The eTP repository cannot/does not persist workflow/state management metadata.

If the message contains metadata and that repository can handle both message and document, which is expected, then there is no compelling reason to implement XDW.

The OO co-chair at the meeting presented a message-based workflow management interaction model developed for Lab orders. He recommended that a similar approach could be applied to IHE pharmacy workflow management. Both HL7 Pharmacy WG and OO suggested the use of messaging infrastructure for workflow / state management and document for contents management.

IHE Pharmacy and HL7 groups agreed to follow up conference calls to discuss these issues with IHE pharmacy and to explore pros and cons of both approaches further.

The two groups, IHE Pharmacy and HL7 communities, engaged in conference call discussions after the meeting and arrived at the following agreements:

- XDW is not intended to document workflow and the intended prescription or dispense statuses that can be queried and acted upon. Rather it is intended to describe the states the order and dispense statuses have gone through at a specific point in time.
- How to initiate and fully manage prescription/dispensing workflow is beyond the scope of XDW.

Therefore, HL7 argued that managing upcoming workflow steps should not be done through a documents (i.e. XDW) approach, nor should they require a central workflow manager, although such approach is not precluded. It is recommended that a mix of messages, metadata and documents are to be used. The appropriate mix is yet to be determined by further discussions.

## Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Pharmacy	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 36 PROCESS IMPROVEMENT COMMITTEE (PIC)

### 36.1 Committee Description

"PIC" is a Board-appointed committee that collects member input, concerns and complaints on the HL7 International processes. It feeds into various areas, including the committee 'Decision Making Practices' (DMP) documents and the GOM.

### 36.2 Committee Work History

PIC was established to improve the HL7 International committee and balloting processes. In particular, it created the "Decisions Making Practices" document that outlines the formal working of each committee, who can either adopt the general DMP or modify it to suit their needs.

PIC has also recently recommended that committees appoint "interim Co-chairs" when it is unsure if the regular co-chairs cannot attend the WGM which has helped solve the problem of Fresh Look Task Forces not attending non-US meetings due to the inability of co-chairs to travel.

### 36.3 Committee Progress at this Meeting

Committee Overview, Minutes & Documents: [www.HL7.org/Special/committees/pi/index.cfm](http://www.HL7.org/Special/committees/pi/index.cfm)

## Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Process Improvement Committee	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 37 PUBLIC HEALTH EMERGENCY RESPONSE

This subject area was not attended by an Australian delegate due to scheduling and resource availability.

## 38 RIM BASED APPLICATION ARCHITECTURE WORK GROUP (RIMBAA)

### 38.1 Committee Description

The mission of the RIM Based Application Architecture (RIMBAA) Fresh Look Task Force is to facilitate the adoption and implementation of the HL7 version 3 RIM. The focus lies particularly on the use of the RIM for application and database design; and to a lesser degree on the implementation of serializations for the purpose of interoperability (e.g. messages, services, documents).

### 38.2 COMMITTEE PROGRESS AT THIS MEETING

<http://www.hl7.org/Special/committees/java/index.cfm>

Wiki: <http://wiki.hl7.org/index.php?title=RIMBAA>

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
RIM Based Application Architecture Work Group	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 39 SECURITY WORKING GROUP

### 39.1 Committee Description

This group supports the HL7 mission to create and promote its standards by publishing standards for trustworthy communication among all applications and services in HL7's scope. The Security WG also will lead the convergence and harmonisation of standards for identity and access management among healthcare standards development organisations.

### 39.2 Committee Work History

The Security WG has produced a number of key artefacts over the last 2 years that form the ongoing architectural foundation of the ongoing Security work in HL7. Three key items are:

- Security Domain Analysis Model
- Security Ontology
- Security Risk Assessment Framework

A number of the work items within the WG are based on industry standards that come externally from the Security Realm and it is generally accepted that it is ideal for HL7 to adopt recognised Security standards rather than create unless there is a specific health industry context that needs to be applied.

Currently the Security WG is the owner of the PASS (Privacy, Access and Security Services) project that it is developing with input from the SOA WG and is a SAIF Alpha project. There are several streams of work within PASS and currently only the Audit services have been successfully balloted and therefore are a HL7 DSTU. This Audit services project was heavily informed by the IHE DICOM specification which contained the Audit functions which were adopted in the SFM.

### 39.3 Committee Progress at this Meeting

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/secure/index.cfm>

Wiki: <http://wiki.hl7.org/index.php?title=Security>

#### ONTOLOGY FRAMEWORK

An update on the current status of the Security and Privacy Ontology was presented to all joint working group meetings. In brief this now identifies the concepts in HITSC security and privacy documentation, including standardising names, precise textual definitions, to promote interoperability and a basis for e-policies and e-consents to be able to support effective implementations. The web ontology language, OWL, was chosen due to W3C recommendations and is a de facto standard, and provides a Description Logic with the Semantic Web application. The ontology covers the security and privacy domains as they pertain to healthcare IT. Initial work focuses on to Role Based Access Control (RBAC) as defined by the HL7 RBAC Permission Catalogue. The ontology will make an unambiguous and internally consistent vocabulary available to external SDOs and organisations such as OASIS, ANSI-INCITS and FHIMS, which can assist their implementation of domain specific standards.

The ontology uses OWL2 with Protege (4.1 beta) by Stanford Biomedical Informatics Research Center. (It uses a logical checking tool called Hermit). The high level concepts for security and privacy models 'SecurityAndPrivacy.owl' are based on HL7 standard specifications. Further information can be found in the Informative Ballot (May 2011):

[http://wiki.hl7.org/index.php?title=Security and Privacy Ontology](http://wiki.hl7.org/index.php?title=Security_and_Privacy_Ontology) . It makes use of sub-ontologies to enhance the parent ontology. Progress to date is a draft ballot and peer review collected. There is planned expansion to include other privacy elements. It is being initially draft balloted at this meeting, and full ballot in September 2011. The current informative ballot comments were considered and reconciled.

There are still some definitions to be added in linking this to SNOMED-CT and transitioning the ontology into SNOMED. This leads to the consideration of other higher ontologies defining domains that include non ICT concept but need to bind this ontology to other processes such as clinical concepts.

## RISK ASSESSMENT COOKBOOK

The risk assessment process in the HL7 Security Cookbook (Risk Assessment Cookbook) provides practical application of the security framework. This has, since last year, been piloted and education resources developed. This has been taken to the TSC and then referred to project services and then onto SAIF group and finally the artefacts' group. The Risk Assessment proposal is to include risk assessment into the standards process (through SAIF- Quality, SAIF - Artefacts and Project Services) and for it to be recognised as an essential part of all standards development - John Moehrke will be consulting with the relevant groups to integrate the Cookbook into the processes.

Discussion occurred on whether it was necessary to create an automated tool in the standards development phase – useful in the implementation phase. There is still concern that it is heavy for common messages (i.e. not sensitive and does not create new privacy concerns). More information is available at:

[http://wiki.hl7.org/index.php?title=Cookbook\\_for\\_Security\\_Considerations](http://wiki.hl7.org/index.php?title=Cookbook_for_Security_Considerations).

There have been discussions with Patient Safety to assist writers in HL7 and referred them to the Risk Assessment Cookbook as a guide. Further, hData wishes to use the Cookbook process and have the Security WG review the outcomes and provide feedback. It was confirmed that there would be a tutorial at the HL7 San Diego meeting.

## COUNTRY UPDATES

Australia: a description of the National eHealth Security and Access Framework and the current status of the project were provided.

Japan was thankful for the support from HL7 after the tragedy in 2011.

Germany's progress is that the EHR is now completely distributed and self-organisation driven. Therefore the government has minimal influence on its progress. The architecture of the EHR framework is that it contains pointers only so all information resides with point of origination. Ownership of services is proving to be an issue, with some 400 decision making organisations, hence the consent model is difficult to develop and implement. New e-health cards for patients will be rolled out this year with partial implantation of all services. Germany will not have a centrally based EHR but interrelated entities and based on Canadian Infoway implementation.

Finland has a centralised health information system.

Europe: EU launching epSOS (European patients Smart Open Services). Issues – multilingual environment and ontology for 22 languages translation. They are working primarily on e-prescription and discharge summaries.

United Kingdom is trialling revokable consent, where the patient is able to see the record and can define how long it is available. This is building on an XDS registry (consent register). Multiple consent registry is separate to the medical documents registry. The XDS metadata and engine is used to sort out access permissions. The status of other security related projects was minimal since last HL7 meeting. A brief discussion was held regarding the Architecture Interoperability Framework (AIF) lead by Bernd Blobel. pHealth – Person-Centred Care is becoming a mainstream project but the issue that is currently trying to be addressed is catering for the erosion of trust, which becomes apparent when addressing all issues with electronic connections and control.

## PRIVACY POLICY AROUND THE WORLD

A specific session was set up to discuss the privacy policy issues being faced by each country. This was initiated by the CBCC group who invited the Australian delegation to lead the discussion and provide a presentation. Dr Trish Williams presented a session on the Personally Controlled Electronic Health Record (PCEHR) proposal in Australia and the privacy legislative environment. The issues highlighted included the diversity and separation of legislative requirements of the States and Territories. The discussion focussed on identity proofing (ID Proofing) and control of data. The countries represented provided a brief summary as below:

ID Proofing:

- European Privacy Background- EU uses single identity card for everything
- Germany – does not see single identification as desirable
- Public Key Infrastructure (PKI) cards in Australia are used to identify to health services, but not used with the Medicare card number which is used for cross reference identification
- Japan – trialling health PKI card and wants a national identity card
- Spain – national identity smart card PKI
- Netherlands – health card associated with National IT for Healthcare a tool to connect all healthcare providers
- USA – does not allow a national number, such a concept is politically unsustainable in the USA. There is a proposition to have a level 3 identity credential approach using existing identifiers. (Identity Credential AM) [863 NIST levels – authentication] NSTIC. Use of federated identification and therefore able to use any credential (card).

Control of Data:

- Germany – patient controlled by providing ‘pointer’ to data. Decoding key given by patient - patient can provide real-time access to healthcare provider. Override available for emergencies and in public interest cases
- Australia – access control by healthcare provider and organisation. Cannot be done by State
- Japan – information has to go through patient (hospital not allowed to contact other providers directly)
- Spain – patient consent distinct between private and public systems. Public consent means you consent to move any information within the public system. Private is local only. Pilot in EHR in Catalonia.
- Netherlands is implicit consent and a need to opt-out

There followed the review and development of a proposal for a Security WG driven privacy policy survey for all HL7 member countries. Suggestion questions were put forward and expanded upon for each country present. These included such items as:

- If a patient allows data to be withheld, does the clinician know? (Binding information).
- If a patient relays data from one provider to another and in the course of that relay modifies the data, would it be accepted (assuming the receiving provider was aware of the change e.g. seal broken) PHR
- Has DRM been considered as a technology capable of flexibly setting managed policies on healthcare information?
- How is data segmented for privacy purposes?
- What about patient carried emergency data?
- How can the patient best express their privacy consents so that they can be accurately implemented in a security system?
- In other words how can the security system be assured that the intent of the patient (in non-standard format) has been correctly captured as understood by the patient?
- If a healthcare provider wants data to be withheld, does the patient know?
- Right to forget?

It was decided that further questions and a full survey is to be developed and distributed to each country so that the current status could inform any recommendations the Security WG would provide.

## BIOBANK

Bernd Blobel gave a presentation on BioBank. 'BMB Projekt'. This project was included in the agenda for the workgroup and has specific but as yet not clearly understood requirements for secondary use of data and patient samples. Bio Bank is a physical collection of samples of volunteers for testing and trials, Research and Development, cell engineering, and care processes. Projects related to public health and genetics and specific disease investigation. It comprises of the massive storage of physical specimens and information. The identified issues are:

- Need definition of period of use, uses, accesses and the predefinition of uses is not possible and therefore privacy and consent is an issue.
- Connection to identity (genetics)
- Interpretation to disease of specimen – for identification
- Generic fingerprint (relation between sample and the information cannot be broken)
- Problem in creating policy and deal with responsibilities and impact
- How to deal with new projects that require changes to originating samples/state envisaged for the project when difficulties arise
- How to deal with legal elements of access
- Some basic rules must be explicit and provable, must use anonymisation and pseudo-anonymisation if possible
- Separation of knowledge of identity and specimen management.

The workgroup acknowledged that this is a matter that will need to be discussed further in the coming months but is closely linked to the proposed privacy policy around the world survey.

## MEANINGFUL USE

It is increasingly apparent that there are significant overlap and synergies between the Security and CBCC workgroups in the area of Meaningful Use. Projects such as Meaningful Use (reported on at the meeting for the US context) are current priorities. The US requirements and standards for phase 2 in 2013 are being outlined and one component of this is privacy and security. The group considered the recommendations from the report which included that a Privacy and Security Tiger Team undertake an ongoing security risk assessment with the expectation that this will result in an expanded description and definition of the requirement for encryption of data at rest. The term Tiger Team is used to aggressively address a specific problem or issue. This is a new requirement for EHR. It further recommended an expansion of the certification process for EHR (2 factor certification of EHR, authentication of providers). This is particularly relevant for controlled substances (Schedule 2 drugs) which were previously only authorial on paper. It is envisaged that single factor authentic for users is established. The next Standards and Interoperability framework meeting is in DC June 14-15. <http://wiki.siframework.org/>

## CONFIDENTIALITY CODES

The CBCC Confidentiality Codes Project Scope Statement was a work item under discussion. The objective of which is to expand vocabulary to support and expand the current Confidentiality codes found in HL7 Terminology specification.

It is proposed that the WG will re-factor the confidentiality coding system. This work supports the NVCHS letter (2010), PCAST (2010) and the harmonisation of Security and Privacy Domain Analysis Model. Current scope is for 'without patient identifiers' but this needs to be expanded. The codes need to account for Government regulations to allow patients to specify a finer granularity on the sharing of their medical records. Further, the information confidentiality codes are context related (domain users, data sets and policy setting for that domain). If more than one domain are working together then a new domain is defined to cater for the policies (and translation) between them.

The project is related to fixing the confidentiality code sets and revising (re-factor) them as required. This work will be based on use-cases. It is dependent on 529 Security DAM, 646 Security & Privacy Ontology, 244 Privacy & Authorisation Terminology (Role based Access Control (RBAC)). The project will produce a Terminology Harmonisation Proposal and relate specifically to concept persistence.

## COMMUNITY BASED COLLABORATIVE CARE – SECURITY

The joint meeting covered a considerable amount of work areas. After an update by the Security WG on the stats of the OWL, there followed a discussion on global perspectives on consent. The PCAST report has highlighted the need for learning systems to be able to share patient data. The

report also suggests that this should be based on a segmentation approach. The Australian delegates explained the current situation and personally-controlled electronic health record (PCEHR) proposal. In Germany, the segregation of information; secondary use anonymisation; secondary use infrastructure – de-identification and re-identification services are managed by separate authorities. The issue of pseudonimisation was raised and that authorised access in secondary use of information is an issue that does not yet have a solution. It was decided that this was now such an important aspect of the work between the two working groups that an additional session would be used for an in-depth discussion.

CBCC-Security joint project updates were given and discussion of new work proposals within these were undertaken.

- Semantic Health Information Performance and Privacy Standard (SHIPPS) project
  - After an overview of the progression of the proposal, the SHIPPS project prompted a great deal of discussion regarding the coverage and breadth of the project. One of the major issues is that whilst the project's objective is to identify the metadata and data quality from the security perspective this is still too ill-defined and too broad. What was suggested was that data segmentation (for privacy protection) and real-time performance evaluation is required. The necessity to structure, refine and perform data cleansing to improve quality raises the privacy issues related to reporting of the quality and indeed the perceived rather than the real quality. The main security question raised was the additional privacy and consent requirements needed when using data for secondary use.
- Security Risk Assessment Cookbook
  - The use of the Cookbook and its wider application to all HL7 groups was discussed. What is required is more use of the Cookbook for pilot testing.
- National Quality Framework (NQF) comment and report
  - The NQF119 paper format measures are proposed to be transposed into e-measures. It is also envisaged that this will promote a more consistent use of the quality measures. This will require re-tooling (conversion from paper based to electronic) in order to validate the equality of the measures.

## **PASS (PRIVACY, ACCESS AND SECURITY SERVICES)**

The goal of PASS is to define a suite of services that will provide a simple interface for all privacy, access control, consent, identity management and other security services that are needed in a service-oriented health information architecture. PASS is a SAIF Alpha project and there are several streams of work. Currently only the Audit services have been successfully balloted and therefore is an HL7 DSTU (Draft Standard for Trial Use).

There is already implementation of the Audit work in the Open Health Tools (OHT) that leverages Misys tools from OpenATNA (which implements an Audit Record Repository of the IHE Audit Trail Node Authentication (ATNA) profile) and there are plans to have orchestrated solutions of PASS services with other service specifications available in OHT in the future.

The Audit services project was heavily informed by the IHE DICOM specification which contained the Audit functions which were adopted in the Service Functional Model (SFM). As such PASS is not part of the HSSP project and has not followed the OMG process to develop this specification.

An Authentication model is also being worked on using SAML 2.0. In the future an Access control and an identity resolution interface that will provide a common trust model between parties will also be developed. There are currently no plans for an Implementation Guide to orchestrate services with PASS services in HL7, however this is acknowledged in the long term as a necessary body of work to be conducted.

No progress was made at this meeting on this specification as the project leader in the security working group has not been available. The PASS project has been re-oriented to be an orchestration of existing services (this decision was taken at the last meeting in Sydney). This is the same approach as being followed for the Decision Support Service and existing non-health security and privacy services. This would be a 'white paper' – however this work has not progressed. A DAM (Domain Analysis Model) for security is to be mapped to services as part of the PASS process. It is possible this will be available for an informative ballot in September. The existing Draft Standard for Trial Use (DSTU) for an audit service will need to be refreshed as part of the Security Working Group's current modelling.

#### JOINT MEETING WITH SOA

The joint meeting updated each working group with the major aspects of current work items and an educational session on the current (mainly US) initiatives and impact of the recent US government NSTIC (National Strategy for Trusted Identities in Cyberspace) see <http://www.nist.gov/nstic>. The group presentations included an overview of the Security and Privacy Ontology and 'Enforcing patient privacy in healthcare'. The major issues that are of primary concern currently are:

- Tagging data to enforce security and privacy
- US PCAST report recommendations
- Attributes for tagging – attribute access control (provider roles, etc.)
- Attribute granularity for patient preferences - Privacy Enforcement Architecture
- Tagging in multiple existing data sets won't work (too difficult) but this can be done at the metadata level. This is an alternative to tagging actual data and applying it to metadata instead – so the original format (data) does not need to be tagged.
- The benefit is that as sensitivities change you do not have to touch the data – just the middle security/access control layer. The policies management service (using request status and information) makes the access decision and this gets passed back to the enforcement points. This then allows/disallows access to any data (clinical database, legacy application, demographics, HER etc.).

## PATIENT PRIVACY

Patient privacy in healthcare has a SOA approach at HL7, The 'President's council of Advisors on Science and Technology (PCAST) enforce patient privacy rules by using decision information tagged with patient privacy choices (e.g. HL7 confidentiality code, SNOMED-CT etc.)

This approach has been demonstrated by US Veteran's Affairs and shows use of attribute based access control covering roles and entity based access control. This has been done in HL7 using a sensitivity vocabulary to tag EHR objects in existing products. In SOA this is done by adding a metadata layer. This is performed using a Data Tagging service that is a common layer for clinical database, demographics service etc.

This approach uses standard clinical roles (ASTM, HL7), standard web service protocols (SAML, XACML), standard information models (HL7 security and privacy) and standard reference models (OASIS Cross-enterprise security and privacy control (XSPA). This is architecturally a PSM for PASS. This problem is not unique to healthcare but unusual in being patient controlled.

SOA and security need a SOA interface to policy management as well as enforcement. There is also a need for an audit log access mechanism.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
<b>National quality (measures) framework</b>	The NQF119 paper format measures are proposed to be transposed into e-measures. This will require re-tooling (conversion from paper based to electronic) in order to validate the equality of the measures.  <b>Action: Consideration of the uses, application and equivalency of this to the Australian e-health environment.</b>	IT-014
<b>Semantic Health Information Performance and Privacy Standard (SHIPPS)</b>	The SHIPPS project will be of use in the Australian environment in highlighting the issues in terms of the increasing use of data for secondary purposes and its relationship to data quality. This will be a significant issue once the PCEHR and related EHR system in Australia is active.  <b>Action: Progress and outcomes from the project need to be monitored and used to inform development work in data quality. These will also link back into the quality e-measures environment and work.</b>	NeHTA, IT-014
<b>Risk Assessment Cookbook</b>	The Risk Assessment Cookbook is being seen as an across the board tool for HL7 workgroups and as such its potential use and potential modification for the Australia context should be considered.  <b>Action: Review the Security Risk Assessment Cookbook for its application to Australia's development. Inform changes that could be incorporated for HL7 or EHR.</b>	NeHTA, IT-014
<b>Security and Privacy Ontology Ballot</b>	The full ballot for the Security and Privacy Ontology at HL7 will be available in the coming months.  <b>Action: Allocation of resources (from NeHTA) should be assigned to review this project as its adoption will affect all future work in this area of security and HL7.</b>	NeHTA

Topic	Issue/Action/Recommendations	Recommended for action by
<b>CBCC Confidentiality Codes Project</b>	Whilst still at the proposal development stage, the confidentiality code sets developed from this project need to be aligned with any potential use in HL7 formats for Australia.  <b>Action: Input to development of confidentiality code sets once project is accepted as a work item.</b>	NeHTA, IT-014

## 40 SERVICES ORIENTED ARCHITECTURE (SOA)

### 40.1 Committee Description

The Services Oriented Architecture (SOA) WG supports the HL7 mission to promote and create standards by identifying common architectural "services" and their behaviours and establishing an industry position on the form these services take. The SOA WG produces Service Functional Models (SFM's) which will be balloted HL7 standards declaring the functions and information appropriate to them.

These services will promote the interoperability of healthcare systems, including but not limited to EHR systems for inter-product, intra-organisation, inter-organisation, regional, and national efforts.

The SOA WG works jointly with the Object Management Group (OMG) Healthcare Domain Task Force through the Healthcare Services Specification Project (HSSP) to develop healthcare middleware standards addressing interoperability challenges. Under the HSSP the OMG take HL7 balloted SFM's and continue the standards development process by issuing RFP's to the industry to implement a SFM. As an outcome of this process the OMG is able to produce normative technical specifications for the SFM's that are bound to specific technologies, transport protocols and technical conformance criteria.

Not all SOA WG projects pass through the HSSP process, some groups may choose to develop technical specifications within HL7 or adopt existing industry standards that meet the SFM requirements and are already a widely adopted standard.

A core component of the SOA WG is the Services Functional Model (SFM) and an SFM template is available on the wiki (<http://hssp.wikispaces.com/sfm>). There is currently an active work project looking to refresh this SFM to incorporate more recent architectural changes to HL7. A full list of projects can be found on the HSSP wiki, however some key projects that have been initiated to date include:

- CTS2 (Common Terminology Services 2) -covered in Vocabulary section.
- DSS (Decision Support Service):
- HCPDS (Healthcare Community Services and Provider Directory Service)
- IXS (Identity Cross-Reference Service)
- PASS (Privacy, Access and Security Services) (covered in Security section)
- RLU (Retrieve, Locate and Update Service)
- SOA Services Ontology

## 40.2 Committee Progress at this Meeting

Committee Overview, Minutes & Documents:

<http://hssp.wikispaces.com/Agendas+and+Minutes>

Wiki: <http://hssp.wikispaces.com/>

### 40.2.1 The Practical Guide for SOA in Healthcare

This is a 3 volumes set - see <http://hssp.wikispaces.com/PracticalGuide>

Alignment of this document with HL7 SAIF is an ongoing work item which will be progressed out of session.

### 40.2.2 HSSP and RLUS related activities

#### IDENTITY CROSS REFERENCE SERVICE (IXS)

Identity Cross Reference service (IXS) (formerly known as the Entity Identification Service) is a set of service interfaces to uniquely identify various kinds of entities (e.g. people, patients, providers, devices etc.) within disparate IT systems either within a single enterprise or across a set of collaborating enterprises.

IXS is now a HL7 normative specification (available in the V3 catalogue) and OMG specification is in the FTF (Finalisation Task Force) stage, the main implementation is the Italian (European) epSOS project which architecturally is using IXS to wrapper an IHE PIX/PDQ implementation. There is also a MIRTH (open source) implementation which is being used by the NHIN. This work is able to be considered consistent with ISO 22220 Identification of Subjects of Care though some mapping of concepts would be required.

#### RLUS

The Retrieve, Location, and Updating Service (RLUS) provide a set of interfaces through which information systems can access and manage information. RLUS allows health data to be located, accessed and updated regardless of underlying data structures, security concerns, or delivery mechanisms.

Due to the broad nature of the RLUS specification with defined operations such as Get, List, Put etc., RLUS (like IXS and PASS) forms an important cornerstone of any future services work to be conducted by the SOA WG and HL7 as many 'domain' specific SFM's are likely to use (with binding to a domain semantic signifier) and/or extend the RLUS specification to realise their requirements. For example a current discussion in the Working Group is the application of RLUS to the Patient Administration WG directories project.

RLUS is awaiting HL7 normative ballot in September and is currently a beta specification under the OMG. The primary implementation of RLUS is run by INVITALIA. INVATALIA is the government agency for inward investment promotion and enterprise development in Italy and holds a similar position to NeHTA in Australia.

## HEALTHCARE AND COMMUNITY SERVICES PROVIDER DIRECTORY (HCPDS)

HCPDS provides a facility that will enable practitioners, via a set of parameters, to locate other practitioners, to assist in the continuum of care via a directory. The HCPDS was published as an HL7 standard in February 2010. This work is led by Max Walker of the Department of Health Victoria which are currently the only major implementation of the specification.

In Victoria the Department of Health (DH) and Department of Human Services (DHS) have invested in the Human Services Directory (HSD) with a view to creating a single repository as a source of reliable, current and relevant information for all users and providers of human services. It has been developed over the last six years in an ongoing process of stakeholder engagement, end user feedback, and forward planning.

OMG issued a Request for Proposal (RFP) for this in March. Initial submissions are due in September. It is understood that NeHTA has joined this initiative.

## SOA ONTOLOGY

The SOA Ontology group has not progressed and this is on hold. The purpose of the SOA Ontology is to provide sufficient information (visibility) to enable potential consumers to identify services that will meet their needs and capabilities and to expose the conditions required to establish a willingness to interact on the part of all participants.

The scope of this project is to develop a Health Interoperability Service Ontology encompassing the description and classification of healthcare-oriented SOA services into a single, formal vocabulary. The concepts identified in this ontology will be derived from several sources, including but not limited to the SAIF, the SOA WG Roadmap and service capabilities identified in the HL7 EHR Functional Model. The concepts in this ontology will be extended to bridge standard ontologies in associated domains such as enterprise architecture, clinical care, and biomedicine.

The project will:

- Identify where reference value sets are needed
- Collect and/or develop use cases to define the objectives of the Healthcare SOA Terminology work
- Assess existing SOA ontologies for applicability to meet the needs of the healthcare domain, and recommend the best-fit for HL7
- Enhance/extend, or create a taxonomy for healthcare SOA services in the event that an existing body-of-work is incomplete or insufficient.

Though seen as useful this project awaits clarification of vocabulary maintenance and content discussions with IHTSDO.

## SOA AND IHE

A paper is to be written in time for the 'SOA in Healthcare' Conference (scheduled for July 13-15 2011, in Herndon, Virginia, USA. This includes an initial discussion of issues and will aim for case studies but it may not be possible to find case studies other than in Italy. Ann Wrightson reported

that Wales are evaluating RLUS vs XDS but she is unable to be public about the evaluation. Steve Hufnagel reported that US Veteran's Affairs and the Department of Defence have a congressional mandate to build a joint EHR.

The EHR Reference Model has been incorporated into the SAIF implementation project and the SOA Practical Guide Part II. This work is currently in maintenance.

## PLATFORM INDEPENDENT MODEL (PIM) FOR CTS2

The Platform Independent Model (PIM) has been split into multiple related models (due to its large size). There is also work underway to generate a RESTful Platform Specific Model (PSM), PIM components include: Code System Version; Value Set Catalogue; Map catalogue; Map version; Concept domain catalogue and binding; and Statement (the interface between RDF rendering and structured XML).

RESTful architecture allows a CTS2 service to be comprised of multiple independent resources which can be implemented as required. REST can be implemented in SOAP, Java, HTTP etc. The principle is that the resource is important, not the implementation. Resources are exposed as URI paths. The implementation will be public open source. The Datastore is an open source XML database called Exist. The Mayo clinic has implemented both SOAP and REST PSMs. The REST PSM has implemented 90%+ of the PIM. RFT2 (SNOMED publication format) can be used as one of the supported terminologies.

## DECISION SUPPORT SYSTEM (DSS)

An accepted standard for CDS Service Functional Model would make it more attractive for service consumers to invest in the infrastructure required for using the DSS to meet its patient evaluation needs, as they would be able to use the same interface to interact with multiple service vendors. The CDS SFM will be published as HL7 Release 1 normative standard in September 2011. The Beta 2 release of CDS SFM has been published by OMG for trial adoption in December 2010. The HL7 ballot is now closed and some reconciliation occurred at this meeting. If there are no issues then it will be published in June 2011. Work on the functional requirements is occurring at ISO and that work will leverage what has been produced by HL7.

The HL7/OMG Decision Support Service (DSS) standard is available as a free, open-source DSS implementation (OpenCDS) alpha release. <http://www.omg.org/spec/CDSS/1.0/>

This alpha release includes sample implementations of clinical decision support rules based on NQF quality measures for Meaningful Use. A screenshot of its Web-based knowledge authoring environment is available at:

[https://sites.google.com/site/opencdpublic/screenshots/OpenCDS\\_EditorImage06\\_edited.png?attr=edirects=0](https://sites.google.com/site/opencdpublic/screenshots/OpenCDS_EditorImage06_edited.png?attr=edirects=0).

## Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
General	Action: There is a need to review the relationship between SOA specifications and other related profiles and standards. E.g. IXS and PIX/PDQ, RLUS, XDS and hData. The SOA committee is preparing a white paper on this subject.	IT-014 and NeHTA to review white paper when available
DSS	Action: Adoption and localisation of the DSS and CTS2 standards by the local standards community should commence.	IT-014
CTS2	Action: Planning needs to commence to implement this service in Australia possibly as a means to access AMT and localised SNOMED data lists.	NeHTA

## 41 STRUCTURED DOCUMENTS (SD)

### 41.1 Committee Description

The SD Working Group is responsible for design and implementation issues around documents, particularly CDA. The current release of CDA is R2, which is in the implementation phase, and a new release (R3) is under preparation.

### 41.2 Committee Work History

The focus of this work group is threefold:

- Balloting and Publication of Implementation Guides that represent consensus on how to use CDA. These implementation guides are mostly joint development with other HL7 Work Groups, or with external agencies including IHE and Professional bodies
- Work in CDA R2 implementation issues such as greenCDA, and Self-displaying CDA
- Developing CDA R3

### 41.3 Committee Progress at this Meeting

Committee Overview, Minutes & Documents:

<http://www.hl7.org/Special/committees/structure/index.cfm>

Wiki: [http://wiki.hl7.org/index.php?title=Structured\\_Documents](http://wiki.hl7.org/index.php?title=Structured_Documents)

## CDA R3

Grahame Grieve (Australia) presented information on the CDA Header conformance options. These included:

- Current CDA specification states software must parse and interpret the header. R3 => a greatly expanded header and the rules around how much of this software must use needs to be formalised.
- Bringing in CMETS to meet new requirements brought in a huge amount of potentially unnecessary specifications and hence complexity
- There is a need to focus on Clinical Safety requirements to decide what is mandatory and what is optional
- There is a need to separate receiver and sender responsibilities to help determine what is required to be processed in the header.

Grahame Grieve also presented ITS for CDA R3 issues.

ISO data types and CDA XML ITS R2 data types were nearly the same. The Committee agreed to make them formally the same.

A version of the ITS R2B has been created to address all community needs but the TSC would not allow this to be normative. ITS R2B is planned to be backwards compatible with ITS R1 but this will be difficult. So now the group has moved to the need for one stack to allow tooling to address ITS R1 and ITS R2 even though it will not be backwards compatible.

This will require pulling ITS R2B from ballot and redoing it with a new schema. Tooling will have backwards compatibility with a single tooling stack but the 'on-wire' format will not be backwards compatible.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Structured Documents	<b>Action: This work has the potential to impact PCEHR developments. Australia should continue to contribute and influence developments in this area.</b>	IT-014

## 44 TEMPLATES

### 44.1 Committee Description

This group supports the HL7 mission to create and promote its standards by creating the procedures for creation and management of HL7 Templates. An HL7 template is a registered expression of a set of constraints on a balloted RIM derived model.

The Templates Work Group will:

- Create normative standards for the definition of HL7 templates
- Define the procedures for administering a meta-data repository or template registry to serve as the home for templates defined by HL7 bodies, HL7 members and other parties
- Develop procedures and educational material to guide interested parties in the development and register HL7 templates.

The Work Group will have close, ongoing relationships with the following HL7 Work Groups:

- Vocabulary WG to ensure that template data structures make proper and consistent use of vocabulary domains
- Modeling and Methodology WG to ensure that the rules for creating templates are consistent with those for other HL7 artefacts.
- Attachments WG to ensure that the rules for creating templates are consistent with those used for claims attachments used within the HIPAA context
- Structured Documents WG to ensure that the rules for creating templates are consistent with the rules for creating HL7 structured documents.

#### 44.2 Committee Progress at this Meeting

A new project has been established to refresh the Templates Interchange specification which is currently a Draft Standard for Trial Use (DSTU). This is a project to allow interchange of templates between template repositories. The previous DSTU was not balloted in 2007 and has not been taken forward to a Standard in the required timeframe. Since 2007, ideas about the requirements for this work have matured and changed considerably. The TSC therefore approved this project at this meeting.

Changes likely to be implemented in this review include:

- Template interchange format needs to allow exchange of nested constraints
- The need to allow senders and receivers to adapt to changes in a managed way.

This new specification project for Template interchange is being supported by HL7 New Zealand and Canada Infoway but not yet NeHTA.

The scope will have primary focus on V3 but will explore how to apply templates to V2.

#### TEMPLATES REPOSITORY

The Lantana group have a repository which was used to manage the response to the consolidated CDA implementation guide. This tool is also a Template registry.

It is focussed on CDA but not the broader requirements for a template repository especially as it relates to vocabulary management. The Lantana product will be made Open Source and made

available to the HL7 community. There is a need to distinguish clearly in thinking and specifications between a template repository and a template registry.

The Template repository and registry requirements specification has been completed and will now be submitted for an informative ballot in September.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Template Interchange format project	<b>Action: NeHTA to consider engagement with this project so that an outcome consistent with Canada and New Zealand requirements can be reached.</b>	NeHTA
Template usage for conformance/compliance	<b>Action: Standards Australia Conformity Assessment Taskforce should include the International work on Templates into its work scope. Both Co-chairs of this Taskforce were at the HL7 meeting.</b>	Standards Australia, IT-014-01-01

## 45 TERMINFO PROJECT

### 45.1 Committee Description

Specification of a general approach to resolving issues related to the interface between HL7 information models and terminologies or code systems.

This project proved to be highly informative, but less than practical in its results

### 45.2 Committee Progress at this Meeting

Discussion with members from Canada where Terminfo implementation has been attempted indicated that vendors found it extremely difficult and costly to implement. The project is complete and discussions in this area revert to the Vocabulary WG where projects, including Core Principles, have overtaken many of the issues.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
TermInfo	Patient Care and other clinical system implementations should note that this work is seen to be useful and informative, but not practical to implement. Consider Australia's position on Vocabulary sections of Core Principles work. <b>Action: NeHTA to note.</b>	NeHTA

## 46 TOOLING

### 46.1 Committee Description

The mission of the Tooling Work Group is to oversee the tools that facilitate the development, adoption and use of HL7 standards, according to the requirements of the HL7 Board and membership needs.

### 46.2 Committee Progress at this Meeting

Business Case: the recent decision of public use of SNOMED CT and the older decisions that LOINC material be included in the HL7. One issue is how to get the information into HL7 tools. At the moment after harmonisation we are dependent upon manual entry of XML to the MIF. This is both labour intensive but also potentially error prone.

Tooling have identified the need to address the lack of tools to support the vocabulary process but have no budget. In Sydney the issue of expected budget came up. The question was raised about whether we had actually decided to use the IHTSDO workbench. The objective was to identify the full cost and implications. Though there is no pot of money we need to identify the costs to support decision making and priority setting. Investigation of the agreement between IHTSDO and HL7 indicates that if we are to change we must use IHTSDO tooling.

The biggest issue is that HL7's primary deliverable product is balloted standards. The industrial strength machinery that publishes those standards is a large set of code that reads XML and generates the ballot. That requires that the input to this process be XML and the model is expressible in XML. If we use something that doesn't use the MIF we have to redevelop our whole publishing process.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Tooling	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress</b>	IT-014

## 47 V2.X PUBLISHING COMMITTEE

This subject area was not attended by an Australian delegate due to lack of skills in this area.

### 47.1 Committee Description

'V2.x Publishing' is a Board-appointed committee that collates, coordinates, reviews, prepares and issues V2.x artefacts for publishing in hardcopy and/or electronic form. The V2.x Publishing

committee does not create normative content, but ensures that the HL7 V2.x Standards are published in a consistent and useable form and format.

The only documents that the V2.x Publishing committee creates are the V2.x Style Guides. V2.x Publishing committee is constituted from the V2.x Editors of each domain committee and is led by two elected co-chairs. Visitors are always welcome.

V2.x Publishing committee has guided the publication of the HL7 V2.x standards for many years. It has harmonised the appearance and style of the V2.x chapters and has moved forward the readability of the documents. It facilitates the publication the HL7 V2.x chapters in PDF, HTML, MS Word and database formats.

## **47.2 Committee Progress at this Meeting**

Committee Overview, Minutes & Documents:

[www.hl7.org/Special/committees/publishing/index.cfm](http://www.hl7.org/Special/committees/publishing/index.cfm)

Wiki:

[http://wiki.hl7.org/index.php?title=Publishing\\_Committee#HL7\\_V2.x\\_Publishing\\_Work\\_Group](http://wiki.hl7.org/index.php?title=Publishing_Committee#HL7_V2.x_Publishing_Work_Group)

## Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
V2.x Publishing Committee	<b>Action: There are no specific actions for Australia at this time other than to monitor and have oversight of progress.</b>	IT-014

## 48 VOCABULARY

### 48.1 Committee Description

The Vocabulary Fresh Look Task Force provides an organisation and repository for maintaining a coded vocabulary that, when used in conjunction with HL7 and related standards, will enable the exchange of clinical data and information so that sending and receiving systems have a shared, well defined, and unambiguous knowledge of the meaning of the data transferred. The purpose of the exchange of clinical data includes, but is not limited to: provision of clinical care, support of clinical and administrative research, execution of automated transaction oriented decision logic (medical logic modules), support of outcomes research, support of clinical trials, and to support data reporting to government and other authorized third parties.

To achieve this goal, they work cooperatively with all other groups that have an interest in coded vocabularies used in clinical computing. Some of the groups that they will seek to work closely with include: standards development organisations, creators and maintainers of vocabularies, government agencies and regulatory bodies, clinical professional specialty groups, vocabulary content providers, and vocabulary tool vendors.

The Vocabulary Work Group activities include:

- Document HL7 vocabulary design and maintain the documentation guidelines on the principles of vocabulary message content and structure over time – the Core Principles project defining the principles of how this should be done is a current major work item nearing completion
- Maintain OID Registry with approval for new OID requests – including current consideration of ISO OID registry metadata standardisation
- Maintain the V3 Vocab repository – Currently considering how IHTSDO and other organisations activities might manage more of the vocabulary registration processes, i.e. that HL7 will ‘use’ existing repositories where possible rather than maintain their own
- Maintain table 0396 (V2 content for registered coding systems) including new requests, changes to existing entries, publishing on the HL7 website
- Educate stakeholders via tutorials and improved documentation.

## 48.2 Committee History

Committee Overview, Minutes & Documents:

<http://www.hl7.org./Special/committees/Vocab/docs.cfm>

Wiki: <http://wiki.hl7.org/index.php?title=Vocabulary>

## 48.3 Committee Progress at this Meeting

### CORE PRINCIPLES

The Core Principles document is intended to provide important background information for implementers trying to implement Terminology whether in Messages, Documents or Service Payloads.

This document recently completed ballot and has only minor comments to be resolved. Many of these issues were resolved at the meeting, and those remaining will be resolved over 2 hour long fortnightly teleconferences over the next month or two, at which point the document will become normative.

### VOCABULARY FACILITATION AND QUESTIONS FROM DCM

Vocabulary facilitators are requesting specific tutorials be developed to assist them in developing appropriate terminology content for HL7 standards. It was agreed that this would be undertaken and included in the review of educational materials and products of the Vocabulary Work Group. This will be undertaken by Heather Grain with assistance from Ted Klein (the major author of most current Vocabulary tutorials).

Questions on binding were received from Clinical Interoperability Council (CIC). These questions were all covered by explaining the content of Core Principles. This highlighted the need to develop educational material on this topic also.

Heather Grain is to undertake a review of the whole scope of Vocabulary tutorials and with the Vocabulary Work Group prepare a plan for development and delivery of these materials.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Vocabulary Education	Development of an HL7 vocabulary education plan could be leveraged by Australia to develop materials defined as an Australian priority <b>Action: Consider Australian vocabulary education requirements.</b>	HL7 Australia and IT-014

## GLOSSARY PROJECT

HL7 are actively contributing to the glossary work. Information on the process for development of quality definitions and the proposed process for inter SDO glossary harmonisation was presented to the meeting. The proposed processes were supported by the Vocabulary WG.

John Gutai indicated that IHTSDO is seeking to harmonise glossary with HL7. The statement of the vocabulary committee was that ISO, HL7 and IHTSDO are seeking to have a single harmonised approach to terms and definitions. Identification of priority terms is seen as a way to progress and help the community most effectively.

### 48.3.1 IHTSDO Workbench review

The agreement between IHTSDO and HL7 was seen, for the first time by the Vocabulary WG. This document indicates clearly that HL7 is obliged to use IHTSDO tooling if it exists, and vice versa. This means that HL7 will need to work with IHTSDO to develop tooling through the workbench to maintain HL7 vocabulary content.

A review of US Veterans' Affairs IHTSDO evaluation was given. They are intending to go from trial to live use of the workbench to maintain their terminology in the future.

The benefits identified were:

- Open source, with communication of interested parties
- Customisable for business and workflow processes
- Synchronizable
- Path editing for a sandbox environment
- User role assignments
- Ability to integrate with collabnet online (where everything is stored in one place, on line).

The challenges identified were:

- Unable to fully evaluate the reviewer role in Workbench refset workflow. This has been fixed in new version.
- Unable to fully evaluate sharing extensions between users
- The Interface is not intuitive to modellers
  - Confusing subversion synchronization messages
  - Inconsistent confirmation of actions
    - Didn't get confirmation when action was taken from reviewer. This requires extension to the business process.
  - Busy interface.

Despite the challenges the overall result was very positive.

Additional information may be obtained from Catherine Hoang [Catherine.hoang2@va.gov](mailto:Catherine.hoang2@va.gov)

## ISO CONFORMANCE DOCUMENT

This document has been drafted and posted to Vocabulary list and it is now being posted on the conformance web site. We have up to the end of June (1 month from the ISO meeting) to provide comments. This is a technical report (not normative).

The work is at ISO and HL7 to provide comments as major stakeholders. Conformance may wish to produce a specific standard based upon this work.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
Vocabulary conformance	There is a need to ensure HL7 Australia, vendors and NeHTA review the ISO document on conformance and provide comments to the ballot <b>Action: Review document at ballot.</b>	NeHTA, IT-014-06 members, MSIA

## UPDATE OF V2 TERMINOLOGY MODEL

Update of V2 terminology model to reflect V3 rigor has been considered for some time. There are some simple enhancements and updates that are needed. Right now the V2 terminology model consists of tables.

If you look at the tables they have three flavours:

- a list of values that must be used
- user defined tables,
  - some of which have suggested values, and
  - some have no suggested values.

This is a direct map (almost) to version 3, where user defined tables with no suggested values are really a concept domain that needs to be bound for use. It is not a difficult leap from the V2 model to the V3 model.

The business case, is that conformance is drafting chapter 2 of version 2.8 for ballot in September and this includes vocabulary tables and offers the opportunity to resolve known issues and have the same representation, binding and conformance rules for both version 2 and version 3. This would reduce the need for different tools and skills. This brings the capabilities and rigor of V3 terminology practices into the V2 world.

Vocabulary need to provide input to:

- identify the equivalent components v2 = v3 and clarify when a code system change means that it is to be considered a new code system
- provide guidance about how to figure out consistently whether an item is a code system without manually doing so for all versions and all tables.

The core principles document will assist in development of appropriate binding syntax.

It is intended that the process be managed through the allocation of consecutive numbers for the new OIDS for the new type of OID. We should be able to use the link facilities in the OID system already and assess if there is a problem.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
V2 terminology model	Consider if the changes proposed (when finalised) impact Australian HL7 vocabulary – which they are expected to do. <b>Action: IT-014-06 to consider the potential impact of these changes and any workload required to manage these changes.</b>	IT-014-06

### SNOMED-CT IN HL7, RF2 AND POST-COORDINATION

John Gutai from IHTSDO gave a presentation on post-coordination issues related to SNOMED-CT. They are working with Mayo representatives to understand the representation of concepts, descriptions, relationships, using a consistent approach for parameters (like RF2). This is important to ensure that searches return consistent representations. We need the same approach as much as possible with the HL7 vocabulary work.

IHTSDO is seeking guidance for importing SNOMED CT using CTS2. This includes representing extensions and trying versions of extensions together. There is little guidance on how to import the data in the first place. Within CTS2 the international, NML and Kaiser releases would be described within three separate code systems. To query on the Kaiser release you still need to be able to return concepts from the international release but not the UK release.

There is a need to tie a release of a given version to a given extension. IHTSDO have a review team set up to review these issues (starting in June).

IHTSDO have made the RF2 metadata open source. HL7 International could use this format and distribute the content to IHTSDO non-members. The current HL7 distribution format has a design mechanism to represent terminology in those sections designed to represent the RIM so that a consistent format could be used. The RIM is object oriented (closed world) and SNOMED CT is Description Logic (open world).

### IHTSDO WORKBENCH

Reference set management – using intentional refset definitions to create members. Discussion occurred on the intentional nature of the result of the reference set management process. A new authoring interface will be available from July 2011 which provides better handling of role groups, automations and multiple simultaneous views.

QA support is included in the July 2011 release which provides definable rules to handle concept model and QA checks, with online reporting. These rules are user definable at international and national levels. Workflow support aspects provide support to allocation of staff to tasks. The tool will include Translation support (from July 2011), Mapping support (from 2012) and Extension management support (from 2012).

The tool can import RF1 but at the moment not RF2 format files. It is intended that the RF2 formats will be incorporated in the future.

Public use of SNOMED CT in HL7 products is being proposed to the Management Board of IHTSDO next week and hopefully will be approved.

Request submission update processes will be required by HL7. John Gutai discussed how requests would be received from a non-member country. This has also gone into the IHTSDO processes for consideration and resolution.

## HL7 NAMESPACE

If HL7 had its own namespace this would make things easier. This item will continue to be discussed.

When we come across a topic that vocabulary needs to work on that overlaps the IHTSDO workspace, a liaison group is being set up to manage this process. An action item for IHTSDO was requested – to support this liaison as bidirectional.

## INFORMATION MODEL INITIATIVES

This includes a common logical model which is described as using single syntax and is bound to reference terminology which has the ability to:

- Automatically translate to multiple physical formats for implementation (java, xml. etc.)
- Conversion to other logical formats if necessary
- Provide a central library of models with elected central governance and local governance levels
- All models in repository to be open source, models developed using priority use cases
- The need for reference implementation.

## COMMON TERMINOLOGY SERVICES 2 (CTS2)

The development of CTS2 began in 2006 in HL7. CTS2 was issued as a Service Functional Model (SFM) in May 2009. At this point it was handed over to OMG and preliminary submissions were received from Mayo Clinic and one from I4SM, each different in their approach. The May meeting used a UML model supporting ISL, while I4SM used Z and included more description logic.

Since then there has been collaboration of the two submissions into a harmonised final submission which is due on the 23<sup>rd</sup> of May. After this minimal changes can be made before the presentation to OMG during their Technical Meeting June 20 – 24.

If all is approved, then the beta specification will be released and a taskforce chartered to handle issues identified and to support identification.

## CTS2 SPECIFICATION LAYOUT

Platform independent model (PIM) - a very formal specification.

Compliance: semantic components which are resources made available represented by the service, and functional components required.

Semantic components include:

- Code system catalogue
- Code system version
- Entity descriptions
- Associations
- Value Set Catalogue and Map
- Concept domain catalogue and bindings.

Functional components:

- read
- query
- import/export - from different formats such as RF2
- incremental update (push/pull updates across federated nodes)
- history
- temporal (what the service looked like on a given date).

CTS2 includes information on copyright of the code system resource. Each resource has a short description – or synopsis: e.g. administrative gender: the gender of a person for administrative purposes (as opposed to clinical gender).

CTS2 has the notion that a code system loaded from two different sources is not necessarily comparable or the same. i.e. If loaded from RRF or from OWL they may not produce the same result. IHTSDO comment was that when using SNOMED CT the source should always be RF2.

The Vocabulary Work Group expect that CTS2 is due for a normative HL7 ballot in January 2012 but this will be dependent on resolution of the relationship of CTS2 to the MIF. Packaging and documentation to be completed by May 23 but then have 4 weeks for technical corrections etc.

See [http://informatics.mayo.edu/cts2/index.php/Main\\_Page](http://informatics.mayo.edu/cts2/index.php/Main_Page)

There are known areas not covered currently in CTS2. HL7, OMG and IHTSDO are working to resolve these issues.

### Actions for Australia

Topic	Issue/Action/Recommendations	Recommended for action by
CTS2	If adopted by OMG sites may 'sign up' as initial users, which will give the opportunity for them to influence initial stages and modifications. <b>Action: NeHTA to consider whether this would be useful to advance Australian needs in the process and the standard.</b>	NeHTA

**End of Report**

## APPENDIX A

### ACRONYMNS

ADDC	Affiliate Due Diligence committee
ARRA	American Recovery and Reinvestment Act
ArB	Architecture Review Board
AHIEC	The Australian Health Informatics Education Council
AIHW	Australian Institute of Health and Welfare
CDA	Clinical Document Architecture
CDISC	Clinical Data Interchange Standards Consortium
CDS	Clinical Decision Support Workgroup
CIC	Clinical Interoperability Council Workgroup
CBCC	Community Based Collaborative Care Workgroup
conHIT2011	European Health Informatics Conference 2011
DAM	Domain Analysis Model
DCM	Detailed Clinical Models
DICOM	Digital Imaging and Communication in Medicine
DTSU	Draft Standard for Trial Use
ECCF	Enterprise Compliance and Conformance Framework
ELGA	Austrian CDA Implementation Guide in Development
EFMI	European Federation of Medical Informatics
EHR	Electronic Health Record Workgroup
HITSP	Health Information Standards Panel
HL7	Health Level 7 International
(HL7) ELC	HL7 E-Learning Course
IHE	Integrating the Health Enterprise
IC	Implementation/Conformance Workgroup
InM	Infrastructure and Messaging Workgroup
ITS	Implementable Technology Specifications
IHTSDO	International Health Terminology Standards Development Organisation
IXS	Identity Cross-Reference Service

LOINC	Logical Observation Identifiers Names and Codes dataset
MDA	Model Driven Architecture
MIRTH	An open source cross-platform HL7 interface engine that enables bi-directional sending of HL7 messages between systems and applications over multiple transports available under the Mozilla Public License (MPL) 1.1 license – see <a href="http://www.mirthproject.org">www.mirthproject.org</a>
MnM	Modeling and Methodology Workgroup
MSIA	Medical Software Industry Association
NQF	National quality (measures) framework
NHIN	(The USA) National Health Information Network
NIST	National Institute of Standards and Testing
OID	Object Identifier
O&O	Orders and Observations Workgroup
OMG	Object Management Group
PA	Patient Administration Workgroup
PC	Patient Care Workgroup
PCEHR	Patient Controlled Electronic Health Record
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
RIM	Reference Information Model. In the HL7 context this usually refers to the HL7 V3 Reference Information Model
RM-ODP	Reference Model of Open Distributed Processing
SAIF	Services Aware Interoperability Framework
SDO	Standards Development Organisation
SHIPPS	Semantic Health Information Performance and Privacy Standard
SNOMED	Systematized Nomenclature of Medicine
SOA	Services Oriented Architecture
TSC	Technical Steering Committee
T3SD	Technical and Support Services Steering Division
vMR	Virtual Medical Record

