PITUSUPDATE

Newsletter of the RCPA Pathology Information Terminology and Units Standardisation Project

Welcome to the fourth issue of PITUS Update. We will bring you regular updates on the progress of the Pathology Information Terminology and Units Standardisation (PITUS) project through this newsletter.

Terminology and information standards on RCPA's website

The RCPA Board of Directors approved the updated versions of the Australian Pathology Units and Terminology Standard and guidelines, and associated reference sets and information models, as policy at their meeting on 19 November 2014.

The documents are available at the RCPA website.

The Pathology Information, Terminology and Units Standardisation (PITUS-14) project team would like to thank the 70 pathologists, GPs, other clinicians, scientists and informaticians who contributed to PITUS-14 and were responsible for its body of work.

Improvements include:

- A revised Australian Pathology Units and Terminology Standards and Guidelines incorporating
  - Rendering of numeric results, units, previous results and flagging; and reference intervals;
  - Requesting terminology reference set covering specialised testing (261 terms added);
- Information models and datasets for Gastric Cancer, Thyroid Cytology, and Salmonella Infection;
- Harmonised adult reference intervals for 11 chemical pathology analytes and paediatric reference intervals for 9 chemical pathology analytes.

Latest news on the PITUS Project — PITUS-15-16

The College is committed to working with all stakeholders in the development of informatics standards for safer and better pathology requesting and reporting, and in facilitating the uptake of these standards by pathology practices and their customers. The standardisation work fits with a number of requirements for the renamed MyHealth Record administered by the Department of Health. We are pleased to acknowledge that the Department has provided funding for the PITUS-15-16 project.

Work has been underway since June 2011 on the clinical aspects of these standards through projects and consultation led by the College. A plan is in place over the next 18 months to progress and improve standards development and publishing and to aid implementation and testing for beneficial standardisation of pathology requesting and reporting. The project will continue to involve the collective efforts of many key stakeholders with deep knowledge of their disciplines and work places, to facilitate this valuable body of work.

Pathology reports are now distributed more widely within the health system and because of this, reports will often be aggregated from different pathology providers. There are variations in aspects of the rendering of these reports between different laboratories and from the same laboratories because of different customer preferences. Currently, variations can and do arise from different pathology providers having different reporting policies, and/or the same provider issuing different styles of reports to different customers. All of this variation adds to the possibility of errors occurring when reading a pathology report which may have an impact on patient safety.

Research has highlighted that most pathology related errors occur in the pre-analytical and post-analytical phases[1,2] and so interoperability between systems for both requesting and reporting pathology offers the most opportunities for quality and safety improvement[3].

There is a risk of misinterpretation of a pathology report by the reader if the reporting terminology and units differ. However, even when the reporting terminology and units are the same, there are also circumstances where differences in test methods and/or reference intervals make the comparison of test results inappropriate. All this has led to serious concerns for patient safety. Combined with the growing desire to make more use of pathology within clinical decision support there has been a drive to standardise units and terminology.

Conformance testing, compliance and accreditation (CCA) are ways to assure the integrity of the data shared between the sending (Laboratories) and receiving (Doctors, Institutions, Registries, MyHealth Record, etc.) organisations and their computer systems and that these are understood to have the same meaning.

There remain barriers to interoperability between computer systems, so the implementation of compliance and accreditation will be a key focus for PITUS-15-16 project. This part of the project will assist with facilitating the implementation of the MyHealth Record by pathology providers.

PITUS-15-16 Project Governance

The PITUS-15-16 project will use the same governance as for previous projects and similar processes will be adopted to establish consensus. There is however a

change to the working groups reflecting the new work plan. Most who have participated in the past have agreed to contribute again.

Steering Committee

Chaired by A/Prof Michael Legg

The Steering Committee includes representatives from the key stakeholder groups and has linkages to many others. The chairs of each of the working groups are also members. The Steering committee is responsible for co-ordination and oversight of the project, and for promoting all activities of PITUS-15-16 through conference and other event participation, newsletters, journal articles and networks.

The Steering Committee held its first meeting on 29 July 2015. A detailed project plan was reviewed and agreed with tasks allocated to the Steering Committee and 6 working groups. The working groups will commence working on their plans and deliverables in August 2015.

The 6 working groups are:

wg1 Standards development and publishing

Chaired by A/Prof Michael Legg

Working Group 1 will establish an efficient and safe electronic publishing of standards, models and terminology with NEHTA and HL7.au. This group will also develop an Implementation Guide for standardised HL7v2 messaging with HL7.au.

wg2 Safety in pathology reporting

Chaired by A/Prof Graham Jones

Working Group 2 will work closely with the AACB to review chemical tests for combination safety and develop harmonised reference intervals.

This group will also develop an implementation checklist for best practice in the use of clinical information systems for the requesting of pathology, records management and follow-up of pathology reports.

wg3 Request and report terminology

Chaired by Dr Lawrie Bott

Working Group 3 will assist with publishing terminology used for requesting and reporting pathology. To aid in the expansion and refinement of the request reference set, the College has completed a comparison of the list of requesting tests covered by the RCPA Manual and LabTests online. The gaps identified will be mapped to SNOMED-CT-AU terminology. Additionally this working group will review requesting and reporting terminology feedback from current implementations and the PITUS-14 public comment.

wg4 Request Modelling

Chaired by Prof Leslie Burnett

Working Group 4 has members from the RCPA Genetic Advisory Committee and genetics and genomics laboratories who will develop an information model and associated terminology for requesting genetic tests.

wg5 Report Modelling

Chaired by A/Prof David Ellis

Working Group 5 will develop draft standards for safe atomic reporting to registries (e.g. MyHealth Record, cancer registries) including the investigation of the use of the new HL7 Standard FHIR.

This group will progress the implementation of these reporting standards and information models by partnering with registries (e.g. Cancer registry). The significant body of work undertaken by the Structured Cancer Reporting groups will be leveraged for this.

wg6 Informatics quality assurance

Chaired by A/Prof Michael Legg

In consultation with RCPA Quality Assurance Program (RCPA QAP), Working Group 6 will develop and trial a quality assurance protocol that can be used by accrediting bodies to assist with compliance.

This will include exploring a means to assure the electronic delivery of standardised requests and reports by parallel testing of the electronic requesting and reporting of EQA results for a limited number of tests and associated message conformance testing.

The aim for the Informatics EQA Prototype Project is for RCPA QAP to build and test a system allowing electronic requesting and reporting laboratory analysis for an existing EQA program, and additionally to subject the messages providing data for the EQA program involved in the process to testing and scrutiny.

References

[1.] Lerner, J, et al ECRI Institute's Top 10 Patient safety concerns for Healthcare organisations;

[2.] Khoury M, Burnett L, Mackay MA. Error rates in Australian chemical pathology laboratories. Med J Aust 1996; 165:128–30.

[3.] Legg M. Standardisation of test requesting and reporting for the electronic health record Clinica Chimica Acta Vol 432, 15 May 2014, Pages 148–156