

Technical Committee Meeting Diagnostic Imaging Standards



Mercure Hotel, George Street, Sydney
Thursday 14th August 2003

Introductions

Session Panel:

Dan Geddes – CCeH

Chris Lynton-Moll – CCeH

Mark Tie – Royal Australian & New Zealand
College of Radiologists

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Aim of Meeting

- This meeting is a follow up from the Radiology Messaging Workshop, held in Brisbane on 4th March 2003. This Technical Committee Meeting will build on this previous meeting to investigate the way forward. This meeting will work through options and strategies for adoption and roll out of Radiology messaging as well as commencing work on an Australian Standard for Radiology messaging.

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Agenda

- Status update**
- Message Specification Development**
 - Presentations by Work Group members
- Adoption of Radiology Messaging**
 - Steps towards an Australian Standard on Radiology Messaging
 - Strategies for adoption of Radiology Messaging
 - Mechanism for roll out of Radiology Messaging
- Demonstration**
 - Radiology request process
 - AHML www.ahml.com.au
- Recommendations**
- Close**

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West Vic Diagnostic Imaging Project



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West Vic Diagnostic Imaging Project

Project Participants

- West Vic Division of General Practice
- Ararat Medical Centre
- East Grampians Health Services – Radiology Department
- Collaborative Centre for eHealth

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Project Methodology


- Electronic referral form that is populated from GP desktop application with email and print function
- Electronic GP signature
- Email using encryption and HL7 messaging
- Acknowledgement of sent referrals
- Receive electronic results of imaging

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Project Methodology

- Use Argus as email client 
- Use HeSA PKI version 2 encryption
- Use HL7 v2.3.1 as the messaging standard

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HL7 Message Types

- RadiologyOrder ORM^O01
- Response to RadiologyOrder ORR^O01
- Unsolicited RadiologyResult – ORU^R01
- General Acknowledgement – ACK^R01

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Progress to date

- Installed Argus in GP surgery
- Installed Argus in Radiology Department
- Order messages to Radiology Department have been sent for four months.
- Radiology results to GP have been sent for one month.

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Presentations by Work Group Members

- Mark Tie
- Mike Rochow
- Dick Harding
- John Drouzas

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Comments from Dick Harding

- How we value OBX-3 & OBX-5
- Standardise possible orderable items in OBR-4
- Some basic structural data: a bit along the lines of DICOM-SR, but at a much higher level

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Comments from John Drouas

- 1. Patients can be examined by more than one radiographer / sonographer, (p.43) which from my experience occurs daily. For example, some patients are booked in for multiple exams, consisting of CT Chest & Chest X ray, or Ultrasound of the Shoulder & Shoulder Xray. If this occurs then 2-3 radiographers partake within the examination. Has this extra element within the radiographer Actor been accounted for within the specifications?
This is also a requirement within the IHE Integration Profiles, under the Scheduled Workflow Profile – acquiring images.

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Comments from John Drouas

- 2. Apart from the Private Insurance information, (p.39) should there be a separate element for the patients Medicare Care Number or is this incorporated with the Medical Fund Code/ Insurance Plan ID? etc.

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Comments from John Drouas

- 3. Should there be a data element describing whether the patient is on anticoagulants such as warfarin etc, or is a diabetic – diet, tablet, insulin. Information such as this can be invaluable to wards the patients over all treatment, especially when having interventional procedures and contrast media examinations.

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Comments from Mike Rochow

Feedback and comments on the following

- Feedback on West Vic Diagnostic Imaging Referral Project
- OACIS diagnostic imaging order entry (COM) and results project
- Other diagnostic imaging messaging
 - PACS
 - Voice recognition

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Comments from Mike Rochow

West Vic Project

- GP based – doesn't close the loop as tight as hospital based messaging
 - Little use of status codes to track status of order/episode/result
 - ORC-1, ORC-5, OBR-25, OBX-11
- Ordering Provider – PV1-8, ORC-12, OBR-16.
 - ORC/OBR are linked, but not PV1
 - Each can repeat. Should this be allowed? Whose the referrer for billing purposes? (particular MRI)
 - Can different exams in a group be ordered by different doctors?
- One exam per message – how is it grouped when ordering multiple exams? How is it reported?

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Comments from Mike Rochow

West Vic Project, cont'd

- Specific field usage
 - Requested date/time – Why OBR-27 (quantity/timing) instead of OBR-6 (requested date/time)
 - OBR-32 (principal result interpreter). Any relationship to OBX-16 (responsible interpreter)?
 - OBR-33 (assistant result interpreter). Used for Sonographer, what about registrar/consultant relationship? Isn't the Sonographer the technician who performed an US exam? Use OBR-34 (technician)?
 - OBR-34 (technician) – How to represent multiple technicians? OBR-33 and OBR-34 can repeat.
 - OBR-44 (procedure code) used for a modality. What about anatomical site, technique? (We also need to represent the hospital, worksite and financial site)

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Comments from Mike Rochow

OACIS Order Entry and Result Interfaces

- Closing the loop
 - limited use of ORR's. ORM provide feedback on exam progression (actions and display changes in place)
 - ORU's once result entered
 - Allow modifications and cancelling of orders
- Paperless – Electronic representation of request form
- One or many exams per message? Paradgm changes between orders and results.
- Extra information required (acute setting, diverse exam range,..... Etc)
 - For example, CBR-30 (transportation mode)
 - NTE's, AL1's
 - ZRD (where else can you put it?)

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Comments from Mike Rochow

OACIS Order Entry and Result Interfaces, cont'd

- Transition of filler order number (change from booking to episode number)
- Extended codeset for CBR-25 to provide constant status updates using ORM's
- Then there's the business rules.....

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Comments from Mike Rochow

Other issues (PACS and VR interfaces)

- Request or exam based message paradigm
- One or many ORC/OBR pairs per message
- VR – individual, group or linked reporting?
- Paradgm shift between ORM and ORU. One report often covers many exams. Do you send the same report multiple times for each exam, or send once for the episode and list the exams it covers?
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