Diagnostic reports and My Health Record
The Royal College of Pathologists of Australasia
Pathology Update Melbourne, 22 February 2019

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My Health Record - Diagnostic reports

1. Australian Digital Health Agency & My Health Record
2. Diagnostic design
3. Consumer can withdraw consent
4. Seven day delay
5. Benefits
6. Participation by diagnostic providers
7. Sensitive tests
8. Consumer guidance
9. Terminology, consistency and next steps
10. Questions
A healthy pregnancy usually includes 15-20 separate encounters with health care services.

Death rates for remote Australians are 40% higher for coronary heart disease.

223,000 admitted to hospital due to adverse drug event costing $1.2 billion.

14% of pathology tests are ordered due to lack of access to patients history.

Content shared with My Health Record means reduced risk of lost information.

Digital tools make it easier to access services remotely.

Medicines information available via My Health Record reduces safety risk.

People and their clinicians will be able to see results of previous tests.
National Digital Health Strategy – roadmap for delivery

Co-designed with all states and territories and agreed by COAG Health Council

1. **MY HEALTH RECORD**
   - Health information that is available whenever and wherever it is needed

2. **SECURE MESSAGING**
   - Health information that can be exchanged securely

3. **INTEROPERABILITY AND DATA QUALITY**
   - High-quality data with a commonly understood meaning that can be used with confidence

4. **MEDICINES SAFETY**
   - Better availability and access to prescriptions and medicines information

5. **ENHANCED MODELS OF CARE**
   - Digitally enabled models of care that improve accessibility, quality, safety and efficiency

6. **WORKFORCE AND EDUCATION**
   - A workforce confidently using digital health technologies to deliver health and care

7. **DRIVING INNOVATION**
   - A thriving digital health industry delivering world-class innovation
My Health Record legislation highlights

- Law enforcement agencies need a court or similar order to access a record
- Access by insurers and employers is prohibited
- Parents removed as authorised representatives when a child turns 14
- Strengthened protections for people at risk of family and domestic violence
- A person’s record will be permanently deleted if they opt out
My Health Record – latest national statistics

- **23 million (90.1%)** consumers have a record (as at 22 Feb 2019)
- **15,460** healthcare provider organisations registered
- **11.5 million** clinical documents uploaded
- **32 million** medication prescription and dispense records uploaded
My Health Record – connections

1. MY HEALTH RECORD
2. SECURE MESSAGING
3. INTEROPERABILITY AND DATA QUALITY
4. MEDICINES SAFETY
5. ENHANCED MODELS OF CARE
6. WORKFORCE AND EDUCATION
7. DRIVING INNOVATION

QLD
Path DI
Pharm GPs
Pvt Hosp Pub Hosp

NSW
Path DI
Pharm GPs
Pvt Hosp Pub Hosp

VIC
Path DI
Pharm GPs
Pvt Hosp Pub Hosp

ACT
Path DI
Pharm GPs
Pvt Hosp Pub Hosp

TAS
Path DI
Pharm GPs
Pvt Hosp Pub Hosp

WA
Path DI
Pharm GPs
Pvt Hosp Pub Hosp

NT
Path DI
Pharm GPs
Pvt Hosp Pub Hosp

On Target
At risk / high dependencies
Behind Target

My Health Record
Diagnostic report design

Result of 2014 consultations with Royal College of Pathologists Australasia, Royal Australian College of New Zealand College of Radiologists, Australian Medical Association, Consumer Health Forum, Royal Australian College of General Practitioners and other peak bodies

• Diagnostic report (pathology and diagnostic imaging) will be uploaded as PDF
• Consumer can withdraw consent at the time of the request or time of test
• Seven day delay before patient can view uploaded report
Standing consent

The My Health Record operates on the principle of **standing consent**.

Healthcare providers do not need to explicitly obtain permission from the patient before accessing or uploading information to their My Health Record.

However controls need to be in place to prevent information (such as a diagnostics report) being sent to the My Health Record if the patient tells their provider that they don’t want it sent.
Requests and consent

2014 – Diagnostic Imaging Design “The consumer can withdraw consent at the time of request or at the time of imaging”.

2016 – Pathology Business Group agreed form of words “Do not send reports to My Health Record”.

2017 – Pathology Technical Working Group [membership nominees of Australian Pathology and Public Pathology Australia] indicated preference that words and checkbox would be printed on request forms by practice software (limiting need for re-printing stationery to A5, tear off pads).
Requesting systems and request forms have been updated

Why the change?
- There needs to be a mechanism for the requesting provider or patient to indicate if the resulting report(s) should not be uploaded to the patient’s My Health Record.
- Changes are being made to practice management / clinical information systems (CIS) to support the existing request workflow.

What’s the change?
- CIS diagnostic imaging and pathology request pages are being updated to include a statement “Do not send reports to My Health Record” and a checkbox (default is unchecked).
- The paper request forms printed from the clinical information system will print the statement “Do not send reports to My Health Record” and will print the value of the checkbox from the ordering page. Note that clinician or patient can manually check the box if necessary.
- Any electronic order originating from the request will include.
e-Request process

2017 - HL7 standard updated to include My Health Record consent flag.

HL7 Australia’s standard for indication of consent (aka My Health Record consent) in diagnostic order messages

https://confluence.hl7australia.com/display/OO/Indication+of+Consent+-+HL7+Version+2.4
Clinical information system updates

2017-18 – Agency incentivised CIS vendors to include “Do not send...” on requesting screens, printed on request forms (14 product versions) and included in e-request (BP/MD/MO Explorer only)

Guidance to requesters and consumers

Requesting doctor can check “Do not send…” in requesting software or on request form.

Patient can tell the requesting doctor to check or write “Do not send…” on the request form or tell the collection centre staff.
Examples of form changes

Consent statement that will be printed on the forms

Do not send reports to My Health Record

Dr Joseph McMahon
3/85 Lord Street
Port Macquarie 2444
Ph: 02 6583 2400
Fax: 02 6584 1015

Provider No.: 0481382L
### “Do not send” to My Health Record

#### Diagnostic imaging

<table>
<thead>
<tr>
<th>Practice</th>
<th>Reports/Orders (%) or Patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice A</td>
<td>398/96,116 (0.41%) or 211/75,507 (0.28%)</td>
</tr>
<tr>
<td>Practice B</td>
<td>62 patients out of 3961 (1.6%)</td>
</tr>
</tbody>
</table>

#### Pathology

<table>
<thead>
<tr>
<th>Lab</th>
<th>Orders (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab A</td>
<td>434/108,345 (0.4%)</td>
</tr>
<tr>
<td>Lab B</td>
<td>0.345%</td>
</tr>
<tr>
<td>Lab C</td>
<td>1196/171,132 (0.7%)</td>
</tr>
</tbody>
</table>
Requesting/consent issues

- Requester may check “Do not send” against patient preference.
- If diagnostic provider “unchecks” - potential conflict with requester.
- Some labs/radiology practices consent patients for each examination and include “My Health Record” consent in that process.
- Patients see “Do not send...and check box” on request form and are not sure what that means.
- Some feedback that the words “Do not send ...and check box” are too small on the request form.
- Request forms vary in layout so “Do not send...” can overprint.
What happens if lab uploads against patient indication?

- Lab can remove a report on patient’s behalf
- Patient can remove the record themselves in the My Health Record consumer portal
- Patient can contact My Health Record Help line: 1800 723 471
Seven day delay

A pathology report is uploaded to the My Health Record by the pathology provider as soon as it is verified.

The results are not made visible to the patient in the My Health Record system for seven [calendar] days.

The patient can see that a report has been uploaded immediately.

The delay enables the requesting doctor time to review the results, and to discuss the results with their patient.

Current systems and processes where patients have access directly and immediately to pathology results from the healthcare provider or the pathology labs will continue to be in place.
Report issues

• Requesting clinicians and patients cannot upload diagnostic reports to My Health Record (a myth).

• Requesting doctors might include a result in a shared health summary, letter or discharge summary.

• If a report is subsequently amended, the seven day delay will be reapplied to the amended report.

• Note that cumulative reports may include results for dates earlier than when the patient’s My Health Record is created.
Myth busting

• Labs are not required to delay upload for seven days.

• Final (not interim) reports are sent to my health record at the same time as reports are issued to requesting clinicians.

• The My Health Record system manages the seven day delay period for consumers to see the content of the report.
Some clinicians concerned patients see reports before next visit

Draft guidance

• There may be occasions when a requesting clinician has not communicated with a patient before reports become available for their view in the My Health Record system. This should not be a reason for a clinicians to adopt a general policy that reports should not be sent to the My Health Record.

• It is recommended that a healthcare provider should only indicate that a report not be shared with the My Health Record system if their patient requests this action, or if the healthcare provider determines that allowing the information to be uploaded may cause a serious threat to the life, health or safety of an individual.

• Best practice - in the event a clinician elects to indicate “do not send reports to My Health Record”, the reason for this decision should be documented in the clinical information system or patient record on each occasion.
What is being introduced in diagnostic sector?

- Pathology and radiology reports will still be sent directly to requesting doctors via the usual process.
- Diagnostic reports will now also be automatically uploaded directly to My Health Record.
- The reports appear as published by the lab/practice logos etc.
- Patients and any healthcare professional involved in their care will be able to access the reports wherever and whenever they are needed.
Benefits: Healthcare Identifiers Service

- Access to the HI Service will improve identification of patients and reduce duplicate patient registrations in your systems.
- This is particularly beneficial for practices that service both public hospitals and community patients.
- A number of organisations have or are using the HI Service to improve their patient index and merge records.
Benefits: Information in My Health Record

- Providers are able to **access previous Medicare items** which helps determine whether a patient has had exams with rebate frequency caps.
- **Access clinical information** from other providers including discharge summaries, pathology, radiology, medications and health summary information.
  - e.g. access to renal function tests may inform choice of contrast for imaging studies
- Reports are available to doctors other than the original referrer e.g. patient changes location, admissions to hospital.
- Supports reduction in unnecessary duplicate testing.
Benefits in literature – shared health records

2015 British Columbia study on lab results: *Our study supports the emerging literature on personal health records as enhancing the quality of physician-patient interactions, with little to no change in administrative burden.*

Direct Release of Test Results to Patients Increases Patient Engagement and Utilization of Care

Francesca Pillemer,1,* Rebecca Anhang Price,1 Suzanne Paone,3 G. Daniel Martich,2,3 Steve Albert,2 Leila Haidari,2 Glenn Updike,3 Robert Rudin,1 Darren Liu,6 and Ateev Mehrotra1,4,5

Helena Kuivaniemi, Editor

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4919031/
“Patients welcome direct access to test results and that they improve clinic visits, but... currently presented in ways that make them meaningless to most patients”

https://www.bmj.com/content/350/bmj.h673.full
"Simply providing access via portals is insufficient; additional strategies are needed to help patients interpret and manage their online test results."

Opportunities based on limited evidence to date

• Continued engagement by providers with terminology standardisation, consistent look and feel of PDF reports being progressed as part of the RCPA PITUS initiatives will assist consumers (and clinicians).

• We can build on Lab Tests Online AU to support patient understanding of their online results.

• Labs can include links to LTO in their reports.

Note The My Health Record consumer portal provides a link to LTO

https://www.labtestsonline.org.au/
Steps to participation with My Health Record

Lab provider needs to:

- Have access to “conformant software” to enable connection with My Health Record, manage patient identity Individual Health Identifier (IHI).
- Register at least one Healthcare Provider Identifier Individual (HPI-I).
- Register as a Healthcare Provider Identifier - Organisation (HPI-O).
- Adopt a My Health Record Security and Access Policy - see link.
- Update your team about My Health Record.
Conformant software - pathology

Available to labs at Feb 2019:

- Medical Objects
- Medinexus
- LinkFinity [Infinity Path]
- ACT Health
- NSW Health
- Healthcare Identifier and PCEHR System (HIPS)*
  Used by many public labs plus Sonic, SDS, ACL, Mater, VCS.

Under development:

- Cirdan Ultra

Diagnostic connections

8 February 2019

Diagnostic Imaging Connections
- 43% 6
- 29% 106
- 34% 197
- 16% 69
- 16% 5

Pathology Lab Connections
- 70% 7
- 67% 32
- 22% 8
- 42% 41
- 46% 66
- 59% 55
- 56% 5

<table>
<thead>
<tr>
<th>Pathology</th>
<th>Public labs connected*</th>
<th>Private labs connected*</th>
<th>Connected* Labs</th>
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<tbody>
<tr>
<td>ACT</td>
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<td>1</td>
<td>3</td>
</tr>
<tr>
<td>NSW</td>
<td>34</td>
<td>32</td>
<td>66</td>
</tr>
<tr>
<td>NT</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>QLD</td>
<td>34</td>
<td>7</td>
<td>41</td>
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<tr>
<td>SA</td>
<td>0</td>
<td>8</td>
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</tr>
<tr>
<td>TAS</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>VIC</td>
<td>2</td>
<td>53</td>
<td>55</td>
</tr>
<tr>
<td>WA</td>
<td>26</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>111</td>
<td>217</td>
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</tbody>
</table>

*Connected does not necessarily mean uploading all workload
## Lab organisations participating

<table>
<thead>
<tr>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territory Pathology</td>
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</tr>
<tr>
<td>NSW Health Pathology</td>
<td>Mater Pathology (QLD)</td>
</tr>
<tr>
<td>ACT Pathology</td>
<td>VCS Pathology (VIC)</td>
</tr>
<tr>
<td>Pathology Queensland</td>
<td></td>
</tr>
<tr>
<td>Royal Hobart Hospital Pathology</td>
<td></td>
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<tr>
<td>Launceston General Hospital Pathology</td>
<td></td>
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<tr>
<td>Path West (WA)</td>
<td></td>
</tr>
<tr>
<td>Royal Children’s Hospital &amp; Royal Women’s Hospital Laboratory (VIC)</td>
<td></td>
</tr>
</tbody>
</table>
Weekly Diagnostic Report Upload
My Health Record

Radiology uploads  Pathology uploads  Combined Path and DI
Sensitive tests

Legal constraints:

• Pursuant to s (41) (4) of the My Health Records Act 2012 and subclause 9(3) of Schedule 1 to the Act, State and Territory laws must be prescribed in the My Health Regulation to qualify as exceptions.

• As at Feb 18 certain sections of the New South Wales, Queensland and ACT Public Health Acts are prescribed (but no practical constraints).

Provider policy:

• Some jurisdictions adopt internal positions around tests or patient categories where reports will not be uploaded. (No impact on private sector)

• Dependent on nature of commercial arrangements, for example a provider delayed upload to MHR to allow more time for referrer follow up.
“Do we upload mining drug screens?”
“Do we upload workplace checks?”
“We as a private pathology company do contracted public health work. What does that public body want not uploaded due to it being sensitive?”
“We heard we cannot upload reports on state politicians - is that true?

My Health Records Act 2012 - Sect 61
Collection, use and disclosure for providing healthcare
(1) A participant in the My Health Record system is authorised to collect, use and disclose health information included in a registered healthcare recipient's My Health Record if the collection, use or disclosure of the health information is:
   (a) for the purpose of providing healthcare to the registered healthcare recipient; and
   (b) in accordance with:
      (i) the access controls set by the registered healthcare recipient; or...
Consumer guidance - How to see pathology reports

Pathology and diagnostic imaging reports are in the ‘Clinical Documents’ section of your My Health Record.

To see these reports:
• Log in to your My Health Record through myGov.
• Select the record that you would like to view.
• Select the 'Documents' tab.
• Select 'Clinical Records', then select either:
  – Pathology Reports, or
  – Diagnostic Imaging Reports.
• Once you have selected the document type, you will see a list of documents. From here you can view documents, control access or remove them if you wish. You can also print your documents.
New pathology or diagnostic imaging reports

If you have a My Health Record
• Pathology or diagnostic imaging reports will still be sent directly to your GP or healthcare provider in the same way they currently are.
• Pathology and diagnostic imaging services may add this new pathology and/or diagnostic imaging report to your My Health Record.
• The new report will be immediately available to your doctor after it is uploaded to your record and any other healthcare professionals involved in providing your healthcare, who have access to your My Health Record.
• When a new pathology or diagnostic imaging report is added to your record, you will be able to see that it has been uploaded, however you won’t be able to view the contents in the report for seven days. This gives your healthcare provider time to review and discuss the new results with you.
• If you have any concerns about your pathology or diagnostic imaging test results, you should make an appointment with your doctor to discuss them.

If you don’t have a My Health Record
• Your pathology and diagnostic imaging results will be sent directly to your healthcare provider, e.g. your GP or specialist who ordered the test.
When reports are missing from your record

Services may not be connected to My Health Record

- If you can’t find your pathology or diagnostic imaging reports in your My Health Record, it may be because the pathology or diagnostic imaging service is not yet connected to the My Health Record system.

- More pathology or diagnostic imaging services will connect to the My Health Record system over the coming years. Once they are connected, they can add reports to your My Health Record.

- Find out which pathology and diagnostic imaging services currently use My Health Record
Control reports that go on your record

Once you have a My Health Record, pathology and diagnostic imaging reports may be uploaded to that record by default. You do not need to give consent every time.

If you do not want a report added to your My Health Record, you can do any of the following:

- Tell your doctor or the pathology or diagnostic imaging service
- Check the ‘Do not send reports to My Health Record’ box on the pathology and/or diagnostic imaging request form,
- Write ‘Do not send reports to My Health Record’ on the pathology and/or diagnostic imaging request form.

You can withdraw consent or ask that a report not be uploaded **any time before** the report is uploaded to your My Health Record.
Managing specific tests on a request form

If you select or write ‘do not send reports to My Health Record’ on your pathology and/or diagnostic imaging request form, it applies to all tests written on the specific form.

You cannot request one test be uploaded and another not be uploaded on the same request form. For example, if you have two blood tests on your request form and you request not to have the results sent to your My Health Record, it will apply to both tests.

If you would like to decide which tests go on your My Health Record, ask your doctor to write down your tests on separate request forms.

Notifying pathology and diagnostic labs on request forms

It’s important to note that when your GP or specialist requests a pathology and/or diagnostic imaging test it may be performed by different laboratories.

Labs will not keep track of your preferences for My Health Record. This means you will need to ask that your tests not be uploaded to your My Health Record every time you fill in your test request form.

Cumulative reports

Note sometimes labs combine multiple test results over time on a “cumulative” report. Indicating that you do not want a particular test uploaded each time you have that test performed will make sure that the result does not get included on a cumulative report.
Control access to documents

If you change your mind after the report has been uploaded, you can hide the report or remove it from your record at any time.

You can also set document access controls on your reports.

It is important to note that if you are trying to keep a particular condition from being disclosed in the My Health Record there are a number of ways it might be included in your record:

For example, if you do not want your My Health Record to disclose that you are being treated for Bi-Polar Disorder, the condition may also be disclosed in other documents including:

• Pharmaceutical Benefits Scheme record of claim for Lithium medication.
• Prescription record from your doctor.
• Dispensing record from your pharmacist.
• Your GP may disclose the condition in a Shared Health Summary or Event Summary
• Your psychiatrist may upload a specialist letter.
• Your hospital may upload a Discharge Summary.
Pathology reports

Pathology Reports and the
Personally Controlled Electronic Health Record (PCEHR)
Agreed High Level Solution Design
Wednesday 26 November 2014

21) In the initial PCEHR implementation pathology reports to be uploaded to PCEHR in PDF format. The development and implementation of standardised terminology, is required before pathology reports that include atomic data can be made available through the PCEHR.

22) The report for the purposes of the PCEHR is the PDF generated by the pathology provider which should be based on the report that the pathology provider produces for the requester of the pathology service. Overtime it would be desirable for the layout of pathology reports sent to the PCEHR to be standardised in line with recommendations of the professional body.
PDF Reports

- Were a new requirement for the pathology sector.
- For some providers, creating PDFs took significantly more effort / QA than anticipated.

Advantages

- Easily rendered in multiple CIS, browsers and apps.
- Can be printed easily.
- Can contain colour/images.
Pathology Reports

Pathology reports provide the outcome of pathology tests performed. If you wish to know more about your pathology test results and tests performed, please see Lab Tests Online.

Date From: 22-Aug-2016
Date To: 22-Aug-2018
Apply

Search Test Name
Group By: No Grouping

We are always looking to get customer feedback on how we can improve My Health Record. Please tell us about your experience with the new functionality so we can continue to improve! Follow this link and share your feedback.
Pathology Report
13-Jul-2018

Patient: [Redacted]
DOB: [Redacted]
Address: [Redacted]
Referring: [Redacted]
Hosp: [Redacted]
Ward: [Redacted]
Lab No: [Redacted]
Test No: [Redacted]

CONFIDENTIAL MEDICAL REPORT
This report is a medical document prepared for the requesting doctor. Please seek advice from your doctor about the contents and findings of this report, particularly before starting on any course of action.

B12 / Folate
B12 and Folate Assays
Vitamin B12

743.3 pmol/L (120-600)
Elevated vitamin B12 stores probably reflect nutritional supplementation. High levels of vitamin B12 can also occur in liver disease and myeloproliferative conditions, and in rare cases in people with diabetes or the obese. Please consult with your clinical picture, FBC, and biochemical findings.

Findings:
Moderate degenerative change is present at the 1st carpometacarpal joint with joint space narrowing and subchondral sclerosis. There is also moderate narrowing of the STH articulation. There is degenerative changes within the interphalangeal joints, most prominent at the distal interphalangeal joints of the index and middle fingers.

Comment: Moderately severe osteoarthritis involving the 1st carpometacarpal joint.
Reporting Doctor: [Redacted]
Cardiologists (Respiratory, Sleep, Echo)

Pulmonary Function Analysis

Patient ID: 3
Last Name: Smith
First Name: John
Date of birth: 2000-01-01
Height: 180 cm
Weight: 75 kg
Clinical Details: Smoking, Ex-smoker
Technician: Smith
Referring Doctor: Brown
Referring Clinic: Hospital

SPIROMETRY

Ref | Pre | Pre % Ref | Post | Post % Ref | Pre % Post
--- | --- | --- | --- | --- | ---
FEV1 (L) | 3.5 | 0.8 | 3.1 | 100 | 89
FEV1/FVC | 0.79 | 0.79 | 0.79 | 100 | 95
MMFR (L/s) | 3.5 | 3.5 | 3.5 | 100 | 100
MEFR (L/s) | 3.5 | 3.5 | 3.5 | 100 | 100

DIFFUSION

Ref | Pre | Pre % Ref | Post | Post % Ref | Pre % Post
--- | --- | --- | --- | --- | ---
DLO (millisecond/meter) | 0.72 | 0.72 | 0.72 | 100 | 95
MD (millisecond/meter) | 0.72 | 0.72 | 0.72 | 100 | 95
VA | 40 | 40 | 40 | 100 | 100
VR | 72 | 72 | 72 | 100 | 100

Technician notes: Patient performed all parts of test with a fair effort. Pre-Vindolin he seemed to perform the best. Post-Vindolin he showed more struggle maybe due to fatigue? We attempted 3 DCOLO as mouth pressure was under flap as patient seemed to have difficulty grasping onto mouth piece during the test. Patient does not currently take any medications for breathing.

Physician interpretation: Baseline ventilatory function is within normal limits. There is no significant response to inhaled bronchodilator on this occasion. Carbon monoxide transfer factor, not corrected for haemoglobin, is within normal limits. There are no previous results for comparison.

Echocardiogram

Name: John Smith
D.O.B: 1999-01-01
Date of study: 2018-01-01
Referring Doctor: Brown
Provider number: 123456
Copy To:
Reason for referral: Blackout while driving. 7 Cardiac cause.
ECG: Sinus rhythm, 65bpm
Height: 174 cm
Weight: 75 kg
AVA: 4.5

M-mode and 2D measurements

Mmode

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
<th>Range</th>
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<tbody>
<tr>
<td>Left atrium</td>
<td>4.5 cm</td>
<td>&lt;4.5 cm</td>
</tr>
<tr>
<td>Aortic root</td>
<td>3.2 cm</td>
<td>&lt;3.7 cm</td>
</tr>
<tr>
<td>IV Systolic</td>
<td>1.1 cm</td>
<td>&lt;1.1 cm</td>
</tr>
<tr>
<td>Post wall</td>
<td>1.0 cm</td>
<td>&lt;1.1 cm</td>
</tr>
<tr>
<td>Asc Aorta</td>
<td>2.7 cm</td>
<td>&lt;3.6 cm</td>
</tr>
</tbody>
</table>

Doppler measurements

<table>
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<tr>
<th>Measurement</th>
<th>Value</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVOT Vmax</td>
<td>1.1 m/s</td>
<td>1.0 m/s</td>
</tr>
<tr>
<td>Mean</td>
<td>0.7 m/s</td>
<td>0.5 m/s</td>
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<tr>
<td>Tricuspid Vmax</td>
<td>1.1 m/s</td>
<td>1.1 m/s</td>
</tr>
<tr>
<td>Mean</td>
<td>0.7 m/s</td>
<td>0.5 m/s</td>
</tr>
</tbody>
</table>


Right Ventricle: Normal right ventricular size and systolic function.

Left Atrium: Normal left atrial size (area = 18 cm²).

Right Atrium: Normal right atrial size (area = 14 cm²).

Tricuspid Valve: Structurally and functionally normal tricuspid valve.

Pulmonary Valve: Structurally and functionally normal pulmonic valve.

Tribuspid Valve: Structurally normal tricuspid valve. Trivial tricuspid regurgitation.

PA Pressure: Unable to estimate pulmonary artery pressure due to insufficient TR jet.

Aorta: Normal sized aortic root and ascending aorta.

RV: Normal size with unknown respriaphasic variation.

Conclusion:
1. Normal left ventricular size, wall thickness and systolic function.
2. Normal biventricular size.
3. No significant valvular lesion.

Reporting Cardiologist: Smith
Technologist: Brown
My Health Record clinical terminology for pathology reports

- FBC: Full Blood Count
- CBC: Complete Blood Count
- CBE: Complete Blood Examination
- FBE: Full Blood Examination

- State repositories (EMR)
- National repositories (EHR) “My Health Record”
- Pathology order entry systems
- State and national clinical analytics and research
Search implemented to assist finding reports

Adoption of standard requesting terms would improve consumer experience and this would flow through to clinical information systems
My Health Record clinical terminology for pathology reports

• RCPA has done exceptional work through its Pathology Information, Terminology and Units Standardisation (PITUS) project to provide a large set of both requesting and resulting terminology and is looking to further this work by investigating standardised report formats.

• These are essential long term goals we should all work towards.

• Yet before doctors can appreciate these standardisations they must be able to find their report of interest.

• This requires effort to be focused on the pathology requesting terminologies and panel names.
RCPA and standards

- **Standards for Pathology Informatics in Australia (SPIA), now version 3, 2017**
- Member of and participates in HL7 Australia standards development
- Works with SNOMED and HL7 via International Collaboration on Cancer Reporting
- Australasian structured cancer reporting is co-sponsored with Cancer Australia, NSW Cancer Institute and Australian Commission on Safety and Quality in Healthcare
- Active participation with Australian Digital Health Agency (particularly over the last 2 years linking pathology results to ADHA and MHR in private and public laboratories). Active subject matter experts working with the National Clinical Terminology Service.
- Participates in Society to Improve Diagnosis in Medicine and will present work related to SPIA at 2nd Australasian Diagnostic Error in Medicine Conference in April with colleagues from Macquarie University.
RCPA and standards 2

- Representation at Therapeutic Goods Australia (TGA) regarding pathology software, messaging between systems, interoperability between electronic systems.
- Active participant in research projects being undertaken by the Australian Institute of Health Innovation, Centre for Health Systems and Safety Research, Diagnostics Informatics Group and through them have links to the NHMRC Centre of Excellence in Digital Health and Implementation Science in Oncology
- 1st National Mobile Health Applications Collaborative Workshop - 13 Feb 2019 Brisbane - agreement that a quality framework needs to be developed.
- Works with all pathology associations through the Pathology Associations Council.
## PITUS Project Priority Test List

**Purpose:** Determine the tests that pathology laboratories should implement to support Pathology Terminology Adoption Program (PTAP)

<table>
<thead>
<tr>
<th>Anatomical Pathology</th>
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<tbody>
<tr>
<td>Request - colorectal cancer</td>
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<td>Request - primary cutaneous melanoma</td>
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<tr>
<th>Chemical Pathology</th>
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<td>Lipids (252150008</td>
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<td>Electrolytes Urea Creatinine (444164000</td>
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<tr>
<th>Genetics</th>
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<tr>
<td>Chromosome studies (395113006</td>
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<tr>
<td>Haemochromatosis genotyping (401085002</td>
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<th>Haematology</th>
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<td>Full blood count (26604007</td>
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<td>International normalised ratio (440685005</td>
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<th>Immunopathology</th>
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<td>Immunoglobulin E total (41960005</td>
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<td>Protein electrophoresis (4903000</td>
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<tr>
<th>Microbiology (Bacteriology, Serology, Molecular)</th>
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<tr>
<td>MCS urine (401324008</td>
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<tr>
<td>Chlamydia trachomatis nucleic acid (398452009</td>
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<tr>
<td>Hepatitis B surface Ab (315130004</td>
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Selection criteria for short list

1. Functional
2. Regularly used or likely to be looked up by the patient/consumer. Test is of interest to the patient
3. Ideally covering different specialties of pathology to test the feasibility of agreement in each specialty requirement
4. Commonly used by as many labs as possible
5. Harmonisation or agreed reporting protocols where the industry has agreed to units or there is a keenness to harmonise
6. High clinical value that makes a difference to outcome
   • however can interpret in 2 ways – critical value vs wide impact – eg troponin vs diabetes
7. Usability with respect to user interface
8. Used by receiving systems for analysis e.g. My Health Record is meaningful to requesting GPs, supports finding test results
9. Is a member of the sentinel benchmark test
10. top Medicare items of interest
11. subject matter expert opinion
12. information provided by the Agency during the Pathology Informatics Seminar on 19 November 2018 regarding the top 50 pathology reports within the MyHR from public hospital data.
Recommended steps - 1

**Laboratories:**

1. Include standard SPIA SNOMED-CT-AU test descriptors in Path report/CDA to My Health Record.
2. Improve consistency of rendering/layout of results per SPIA
3. Add this to your pathology reports
   “For more information about pathology tests visit Tests Online Australasia at www.labtestsonline.org.au/about/about-this-site”
4. Improve content in LTO

**Advantages:**

- Better consistency for consumers/clinicians and easier to find information.
- Work to improve PDF also applies to results as appear in discharge summaries, event summaries and any other atomic test results.
- Both activities are consistent with move to atomic data.
- Increases consumer referrals to recommended guidance source.
Recommended steps - 2

1. Agency updates My Health Record pathology report specification in line with Discharge Summary - include LOINC code in CDA report and atomic data.
2. LOINC included in National Clinical Terminology Service.
3. Laboratories include LOINC test descriptors (SPIA preferred) in Path CDA report to support “finding” of information in CIS/My Health Record.

Advantages:

- Easier for CIS to find information.
- Support decision support algorithms to identify recent tests ordered – directly aligns with benefits to reduce unnecessary duplicate tests.
- Activities consistent with eventual move to atomic data.
Recommended steps - 3

1. Include both the atomic data (that currently goes to CIS) and PDF report in the CDA document to My Health Record.

Advantages:
• Clinical information systems will have access to data to improve decision support for doctors.
• Consumers will still be able to access PDF reports in My Health Record consumer portal.
Questions

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