Digitised Medical Record & Scanning Workshop
Panel

- Ross Buchanan, Director, Health Information Services, Alfred Health, VIC
- Terri Fiorenza, Director, Client Data Management Unit, Northern Health, VIC
- Kara Pollard, Senior HIM, Metro South Health, QLD
- Lisa White, CPF Manager, Eastern Health, VIC
Lessons Learned
Benefits of DMR Systems

- Timely access
- Exchange of information
- Reduced OH&S incidents
- Reduced operational costs
- Foundation to transition to EHR
Realisable Benefits

- Reduce clerical staff by 20 – 50%
- Reduce clinical access times for information by 100%
- Reduce transporting records between campuses by 80%
- Reduce off site storage and retrieval costs by 50%
Realisable Benefits continued

- Return centrally located floor space by reducing the required file space
- Significantly reduce incidence of lost records by 80%
- Increased security and audit trails

Are these figures realistic? Can you provide these budget reductions?
Project Scope

- Clearly define the scope of the project
  - All areas that currently file in the medical record?
  - Does this criteria omit any areas?

Project Creep
Lessons Learned: Site Visits

- See the system in production environment
- Allows you to “change your headset”
- Learn from others’ experiences
- May repeat throughout project to re-evaluate as your knowledge increases
To Back Scan Records or Not?

- Provides a complete patient history
- Is typically the reason that scanning projects fall over

Success Story: Hunter New England

- Some offsite storage providers will back scan instead of retrieving records
eForms / Direct Entry Documents

- AS 2828.1 requirements apply to eForms
- Benefits of e-forms:
  - Real time access to information
  - Eliminates prepping and scanning
  - Improved legibility
  - Savings in printing and stationery
AS2828.2 Section 3.3
AS2828.2 Section 3.3

Discharge Summary

Admission Date:  
Admitting Consultant:  
Discharging Consultant:  
Intention to Readmit:  
Referring Doctor:  
Discharging Hospital: The Northern Hospital ph: 8405 8000

This discharge summary contains confidential information. If you are not the intended recipient then any use, disclosure or copying of the document(s) is unauthorised. Please contact the relevant health organisation as indicated above.

Principal Diagnosis

Has the patient been informed of their diagnosis?
- Yes
- No
- Reason

Secondary Diagnosis or Co-morbidities (additional conditions treated, investigated or diagnosed during this admission)
- Yes
- No
- Details
Digitising Systems

Virtual vs Physical server

- One physical server into several virtual servers
- More easily controlled
- Protection from hardware failure
- Improved performance
Scanning Hardware 101

Scanner selection is based on

- Anticipated volumes = # scanners required
- Dollars available
- Duplex
- Software /Vendor requirements
- Reputation of company
- Servicing of equipment / subcontractors
Clinical Hardware Needs

Inpatient
- Desktops or COWS

Outpatients
- Dual Screens

Ambulatory
- Mobile Devices
- iPads
- Android Tablets
AS2828.2 Section 4.7

Modified Coding Workstation
Bar Coding vs. Optical Character Recognition
EH Bar Coding Experience

Percent Forms Bar-coded
Target: 80% by September 2010
Target Achieved: June 2012!
Structure and Presentation in the DMR

- Record layout:
  - Tab structure
  - Event set hierarchy

- Document order

- Needs to involve:
  - Clinical / Administrative / HIS
(Test, Test2)
602251707 (GPID), Sex M, DOB: 12-Dec-1958

Patient Details
URNO(s): 602251707 (GPID) 0268745 (ANG)
Family Name: TEST
Given Name: TEST2
Other Names:
Date of Birth: 12-Dec-1958
Date of Death:
Sex: M
Address: 19 ARNOLD STREET BOX HILL
Post Code: 3128

Patients merged with this:
TEST, ANGLISS - 0358334 (ANG)
Aliases:
MR, TEST PATIENT CPF (ANG)
MR, TEST PATIENT CPF (GPID)

Description Date
AS2828.2 Section 5.1
Medical Record Structure

- Forms design
- Record Restriction / Hidden Records
Door Prize

 Courtesy of
Off-site Scanning

When scanning occurs off-site:

- Processes and security

- Decentralised or Centralised model
  - Hub and Spoke
  - Transport or scan
  - Creating a sustainable model
Change Management

- Process mapping
- HR involvement
- Organisational change
Alfred Health Scanning Process Flowchart

Cerner Provision Document Imaging (CPDI)
Kofax Ascent Capture

**PREPARATION OF NOTES**
- Attach Batch Header sheet
- Remove staples & exposed sticky tape
- Check labels to ensure correct Patient and Encounter
- Separate short forms from long forms
- Arrange like forms together in chronological order
- Tape down or photocopy cardiac rhythm strips

**SCANNING**
- Select relevant Batch Class e.g., Inpatient, Outpatient etc
- Enter Batch Name on Batch Header sheet
- Scan short forms, followed by long forms
- Clear multi-feed documents detected by scanner

**QUALITY CONTROL**
- Rotate forms which have been scanned in wrong orientation
- Insert missing pages
- Re-scan pages where necessary e.g., folded edges of document
- Re-scan pages with wrong patient labels

**VALIDATION**
- Identify Document Title if Form No or Document Bar-code is not recognised
- Identify & assign the correct Patient & Encounter information
- Enter date of document
- Enter additional information into Subject field if applicable

**ARCHIVING**
- Notes are archived according to Scan Date
- Stored on-site for 3 months then sent off-site

**AUDITING**
- Auditing is carried out daily on selected batches
- Sample is 10% and accuracy KPI is 98.5%
Scanning Video
Day-to-Day Management

- Ongoing support
  - Roaming trainers
  - Being there when Clinician’s need you
  - Identified help team

- Paper workflow and storage
  Perception of order/chaos in HIS
Scanning Strategies
What to do when you hit the wall
Compliance

- System Application
  - HL7
  - Victorian Electronic Records Strategy (VERS)
- AS 2828.2(Int)-2012
- Digitisation Standards:
  - Public Records of Victoria (PROV)
  - Digitisation Disposal Schedule (QLD)
  - Disposal Schedule (TAS)
Destruction Process

- Public Records Office Victoria (PROV)
  - Digitisation Activity Plan (DAP)
  - Archives New Zealand Digitisation Standard (ANZDS)
  - Usability Analysis Survey

- Northern Health experience

- Destroying Records
  - Austin Hospital, Victoria
  - Royal Hobart Hospital, Tasmania
Quality Assurance and Control

- Implementation of QA Procedures
  - Prepping
  - Scanning
  - Quality Checks of Scanned docs

- Management of Forms post go-live
Quality controls

- Regular audits
- Monthly audits
- Document type audits
- Security access audits
- User audit trails

Staffing required to complete audits
Key Performance Indicators

- Average pages scanned per hour
  - Target 280
- Quality audit of 10% pages per scanner
- 98% scanning accuracy
- Once a week Scanning Check
- Weekly Scanning Statistics
Key Performance Indicators

Scanning turnaround time of:

- discharges 24hrs *post receipt in HIS*
- outpatients 24hrs post receipt in HIS
- emergency 24hrs post receipt in HIS
- community 48hrs post receipt in HIS
- loose 48hrs post receipt in HIS
- referrals 24hrs post receipt in HIS
Staffing Skill Sets

- Project team
- HIS team
- Application support
Training Considerations

- Clinical staff
- HIS Functions
  - Prepping
  - Scanning

Consistency Aids: Scanning Spreadsheet

"PROMPT" Form Filing Guide

Document Catalogue
Training Challenges

- Methodology
  - Online
  - One on one or group sessions
- Staff availability
- Computer skill level
- Co-implementations
Post Implementation Review

- Part of project plan
- Northern Health experience
  - User survey
  - Enhancements, improvements & suggestions identified
You can please some of the people some of the time...

But you can’t please all of the people all of the time.
Available at:

http://infostore.saiglobal.com

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