Metro South Health (MSH)
Digital Hospital
DICOM – Education Workshop, September 2018
o PAH - November 2015 Core & March 2017 Medications, Anaesthetics and Research (1033 Beds) - Live

o Logan & Beaudesert Hospitals - December 2017 & January 2018 (459 + 40 Beds) – Live

o Redland Hospital and Wynnum Health - May 2018 (222 Beds) – Live

o QEII Hospital - June 2018 (218 Beds) – Live
What have we Implemented

Features of a digital hospital

- **Accurate patient identification** through wristbands with unique barcodes
- **Bedside monitoring devices** that automatically upload vital signs into the digital system
- **Integrated digital patient records** across all areas—medicine, surgery, emergency, maternity, pathology, radiology and outpatients
- **Medical grade wi-fi** throughout all areas of the hospital
- **Secure systems** through multi-factor authentication
- **Rich data and analytics** available for research and quality improvement
Digital Hospital Benefits 2017

A benefit is a measurable improvement resulting from a change that is perceived to be an advantage by a stakeholder.

The benefits associated with the digital hospital system at PAH have been achieved because the hospital’s clinical and non-clinical staff have embraced innovation in healthcare.

- **Early identification of deteriorating patients**
  - Rapid Response Team calls
  - AUG 2015 vs AUG 2017
  - 59%

- **Drug administration and monitoring**
  - Incidents linked to drug administration and monitoring
  - 1 APR-6 AUG 2016 vs 1 APR-6 AUG 2017
  - 14%

- **Drug Dispensing and Supply**
  - Incidents linked to drug dispensing and supply
  - 1 APR-6 AUG 2016 vs 1 APR-6 AUG 2017
  - 33%

- **Radiology results**
  - Formal endorsement of ED Radiology results
  - DEC 2014-MAY 2015 vs DEC 2016-MAY 2017
  - 93%

- **Readmissions**
  - Emergency readmissions within 28 days of discharge
  - JAN-JUN 2014 vs JAN-JUN 2017
  - 17%

- **Inpatient length of stay**
  - Average for all admissions
  - JUL-DEC 2014 vs JUL-DEC 2017
  - 6%

- **Drug costs per WAU**
  - Drug costs per weighted activity unit
  - JUL-DEC 2016 vs JUL-DEC 2017
  - 14%

- **Reported Hospital Acquired Stage 3 and 4 pressure injuries**
  - No. of patients with stage 3 and 4 pressure injuries per 1000 bed days
  - JUL-DEC 2014 vs JUL-DEC 2017
  - 56%

- **Infections**
  - Healthcare associated SAB per 10,000 bed days
  - JUL-DEC 2014 vs JUL-DEC 2017
  - 37%

- **Clinical form costs**
  - Including printing costs
  - MAR-MAY 2014 vs MAR-MAY 2017
  - 81%

Metro South Health
Our Critical Success Factors

- Absolute commitment by Board, Executive & Clinical Leaders
- Outcome focus – Patient safety – no harm, shared vision
- Clinical engagement & governance
- Critical mass of change champions through all areas
- Clinicians embedded in the project teams
- Medical grade Wi-Fi - “No holes”
- Adequate number of user-centric workstations
- Project and Site relationship – ‘working together’
- Contemporary, tailored training
- Communicate, Communicate, Communicate
Lessons Learnt

• Scope & Governance
• It is a clinical transformation project
  • Change process - focus on complex (high risk/ high impact) workflows
  • Embedded superusers for go live
  • Clinically lead change process
  • Local Workflow practices
• Device integration
• Infrastructure – electrical and IT
• Difference between releases and rollouts
Training Lessons Learnt

- Logistics – early planning
- Fund training attendees (be upfront)
- Acknowledge and accept business impact
- Reduction of non essential activities, workforce planning
- Build capability in workforce
- Consider computer literacy and different learning needs
- Governance and tracking
- Timely access to a practice domain
- Proficiencies managed by local education teams
- “Train early, Practice hard”
Supporting the Change

• Focus on high impact/ high risk workflow change

Key Activities & Engagement:
• Change champion sessions with available practice materials
• Device Labs,
• Downtime Business Continuity sessions
• Ongoing staff forums
• Defined workflow practice and delivery of key training prior to go live.
Go live Lessons

• Tailored readiness activities
• Patient Safety Watch (Site Assurance)
  • input in to the Go live governance
• Clinical Governance – daily bronze, silver, gold
• Tracking command center issues
• Close monitoring of conversion activities
• No patient harm or quality impacts were evidenced during the digital implementation in MSH
Digital Online Resources: Metro South Health Website

Metro South Digital

Metro South Health

Mobile App

Intranet Site
“Business As Usual”

Every weekday in Metro South Health...

- 6,500 patients’ medical records are viewed
- 150,000 charts are opened
- 25,000 drug alerts occur
- 60,000 medications are administered
- 8,000 lab tests are ordered
- 1,000 care plans ordered

(Data for July 2010)
MSH GOVERNANCE

MSH Executive Committee

MSH Digital Executive Committee (DEC)

Digital Health Advisory Group (DHAG)
Digital Technical Committee
MSH Data & Transformation Committee
Benefits Committee
Digital Training Advisory Committee (DTAC)

LOCAL SITE GOVERNANCE

PAH Digital Informatics Executive Committee
Logan & BDH Digital Hospital Committee
QEII Digital Hospital Committee
Redland & Wynnum Digital Hospital Committee

WORKING GROUPS & COMMITTEES

MSH Maternity Digital Workflow Committee
MSH Paediatric Digital Workflow Committee
MSH Surgery Digital Workflow Committee
MSH Radiology Digital Workflow Committee
MSH Care Delivery Digital Workflow Committee
MSH Anaesthetics Digital Workflow Committee
MSH Pathology Digital Workflow Committee
MSH Emergency Digital Workflow Committee
MSH Power Trials Digital Workflow Committee
MSH Core Digital Workflow Committee
MSH ESM Digital Workflow Committee
MSH Medications Management Committee

Adoption Services
Change Network

Digital Hospital Program Board (DHPB)
Program Control Group (PCG)
Clinical Advisory Group (CAG)
Interim Change Advisory Board (iCAB)

STATE WIDE GOVERNANCE

STATE WIDE SUBSPECIALTY WORKING GROUPS

- Maternity
- Radiology
- Pathology
- Core
- Paediatric
- Care Delivery
- Emergency
- ESM
- Surgery
- Medications Management
- Anaesthetics
- Power Trials

STATE WIDE SPECIALTY WORKING GROUPS

- ESM
Thank you!