Improvement in Handover

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Handover

1. Scale of the Problem
2. Definitions
3. Why do things go wrong?
4. Clinical Human Factors
5. Opportunities
6. Plan for today
Context

1. Scale of the problem
   Information & care transfers are everywhere...

2. Challenges
   Traditional Medical models
Root Causes of Sentinel Events

- Communication
- Assessment
- Physical Environment
- Information Management
- Operative Care
- Care Planning
- Continuum of Care
- Medication Use
- Special Interventions
- Anesthesia Care

TOTAL
Handover is...

Safe transfer of Information + Responsibility

From one team to another
The Baton change metaphor sums up what improvement practice and training can accomplish.

Medical Handover is **Far** more complex
- is **Far** less standardised
- is within a **Far** more safety critical industry
  but we train our clinicians in handover **Far** less...

Where is the Research and Evidence?

How do we measure the process?
Tri Modal Types

**Geographical**

One location to another  
E.g. Home to hospital

**Chronological**

Shift change  
E.g. Early to late shift in the same department

**Silo**

Specialty to specialty referral  
E.g. Ambulance to ED
Tri modal Methods

Verbal

Pure verbal handover results in 67% of information being lost after the first handover. 97% is lost by the fifth handover

Written

Groups taking notes retained 87% of the important data, with 85.5% retained after the fifth handover

Computerised

A computerised handover tool supporting Verbal / Written

The preferred system is probably is at least bimodal.

The optimal one being tri modal comprising of all of the above.
Tri modal Goals

**Safe**

To reduce the commonest reason for Adverse Events

**Effective & Efficient**

Right person, right place, **first** time

**Reliable**

Standardised, Reproducible, Resilient
Analysis Handover Failures

- No Standardisation
- No Required quality
- Fallibility
- No Data
- Fallibility
- No Data
- Large Hierarchies
- Distractions
- No Policy
- Unclear roles
- Leadership
- Teamwork
- Unclear plan
- Who owns Handover?
- What about Culture?

- Traditional Medical model
- System frailty
- Poor learning
- Training
- clinical skills
Clinical Human Factors

Optimise or Impair Human Performance

1. Personnel
2. System
3. Devices
4. Environment
Personnel

Situational Awareness

Communication

Staffing Adequacy

Dampened Hierarchy

Acceptance of Human Limitations
Systems

Processes / Pathways / Policies

Aligned goals

Formal Structured handover meeting

Sterile Cockpit

Standardised Procedures / Geography

Well trained staff
Devices

Engineering (Handover Tools)

Equipment (PDAs, Wi Fi, Computer interfaces)

Multimodal Handover / Communication Templates

Measurement
Environment

Layout

Geography

Line of Sight

Noise / Distractions

Time Pressures
Opportunities

To Engineer a Resilient & Safer system
  – Injection of Human Factors and Systems thinking

Integration of different health care providers

Improved communication is critical
  – IT, written, verbal, non verbal, hierarchies, teams

Summative, visible effect everywhere
Questions

1. What is the evidence?
2. What is the big picture?
3. What is local experience?
4. What are the Risk Themes?
5. How can we think proactively about these?
Today’s program

**AM** (10:15 – 12:30)

10:15  ECHO study overview  (Dr. M.Sujan)
10:30  National picture, barriers  (Prof. M.W.Cooke)
      Coffee (11:15-11:30)
11:30  Improvement Experiences  (Dr P.Chrispin/ Dr A.Rose)
12:10  Risk Themes for PM (All)
      Lunch (12:30-13:30)

**PM** (13:30 – 16:00)

13:30  Group work & Discussion of Risk Themes (All)
      - What are promising interventions / solutions?
14:00  Shuffle (All)
      Coffee (14:30-14:50)
14:50  Groups Feedback (All)
15:20  Plenary: Themes and Directions