RSI/REBOA/ECMO/WINCH RESCUE OF MOA…

HANDOVER FROM E.M.S. TO E.D.

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Injury 2013

AUCKLAND RESCUE HELICOPTER TRUST

DISCLOSURE

- Senior Medical Officer in Emergency Medicine at the Auckland District Health Board.
- HEMS Medical Director at the Auckland Rescue Helicopter Trust.
- No conflicts of interest.

OUTLINE

- **Why:** Transitions in care identified as higher risk communication processes.
- **How:** To trap and mitigate this threat, standardized models of handover are developed and implemented
- **What:** Handover tools
  - 'I MIST AMBO'
  - SBAR
  - Use of Whiteboards

HANDOVER

BACKGROUND

- Safety and quality
  - Communication failure is a root cause of many incidents
  - Less than half of information given by EMS is retained by ED (EMJ 2007)
- Theory: Co-orientation
  - Development of a shared mental model
- Evolution:
  - IOM: 'To Err is Human' (USA 1999)
  - The Garling Report (NSW, Australia 2008)
  - NSW Ambulance/Emergency Department Handover Project (2010)

TRANSITION OF CARE

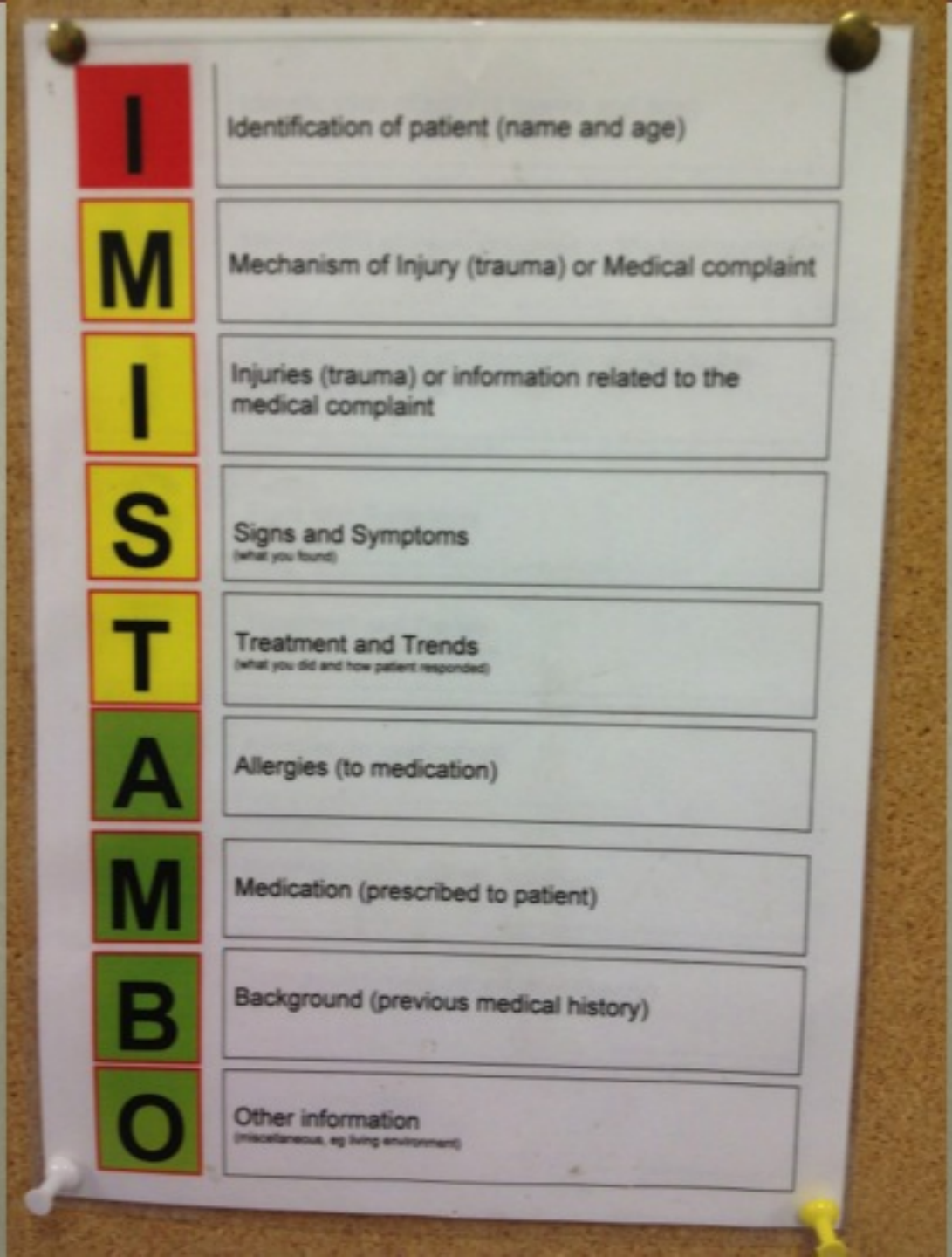
- Handover is:
  - Complex
  - Often repeated
  - Suffers from role ambiguity
- Safe transitions require transfer of information and responsibility
- They also allow for problem recognition, analysis and ‘sensemaking’

STANDARDIZED COMMUNICATION

- Template
- ‘Flexible standardization’
- Most important information first

INTERACTION

- Interruption-free zone
- ‘Hands off, eyes on’
  - 20 seconds
  - Minimize patient and equipment handling
  - Maintain eye contact
- Pause allows for active listening
  - Shared attention


I
Identification of patient (name and age)
M
Mechanism of Injury (trauma) or Medical complaint
I
Injuries (trauma) or information related to the medical complaint
S
Signs and Symptoms
(what you found)
T
Treatment and Trends
(what you did and how patient responded)
A
Allergies (to medication)
M
Medication (prescribed to patient)
B
Background (previous medical history)
O
Other information
(miscellaneous, eg living environment)

I MIST AMBO

- **I**dentification
- **M**echanism/Medical complaint
- **I**njuries/Information about complaint
- **S**igns
- **T**reatment
- Pause: allow for cross-check

I MIST AMBO

- **A**llergies
- **M**edications
- **B**ackground
- **O**ther issues

EVIDENCE OF BENEFIT

- Process outcomes:
  - More consistent flow of information
  - Takes less time
  - Less interruptions
  - Less repetition
  - Increased provider satisfaction
    - BMJ Safety and Quality (August 2012)
- Patient outcomes?

ACH IMPLEMENTATION

- Emergency Department staff role identification

WHITEBOARD


I
M
I
S
AIRWAY
RR
HR
BP
SCS
TEMP
O2 SATS
T
A
M
B
TEAM ROLES / NAMES
MEDICAL TEAM LEADER
NURSING TEAM LEADER
AIRWAY DR
AIRWAY NURSE
CIRCULATION DR
CIRCULATION NURSE
PROCEDURE DR
PROCEDURE NURSE
MEDICAL REGETRAR
CARDIOLOGY REGETRAR
TRAUMA REGETRAR
ORTHOPAEDIC REGETRAR
OTHER
PLAN
DISPOSITION
TIME

TEAMWORK


R2
NO CELL PHONES!
Visitors and staff members
Please step out of the bed space to make or receive calls.
MISTAKO
CARBON DIOXIDE FIRE EXTINGUISHER

INTER-PROFESSIONAL, INTER-AGENCY COLLABORATION

- Paramedics
  - St John Ambulance
  - Auckland Rescue Helicopter Trust
- Nurses
- Doctors:
  - Emergency Medicine
  - Trauma
  - Critical Care

CHALLENGES

- Culture eats (process) strategy for breakfast…
  - Change management
- 'Live within our means'
  - Safety versus efficiency
- ED Resuscitation Teams
  - Ad hoc team composition, serial arrivals
- What about SBAR? ISOBAR? The Bar ☺?
  - MIST offers greater content specificity

THE FUTURE

- Might the R40 also use this standard format?
  - External handover by radio from EMS to ED
- Transition of care from ED Resusc to Definitive Care
- Similar crisis:
  - Danger
  - Opportunity

PRE-TRANSPORT CHECKLIST

cm at teeth.....Documented ☐
Tube tie.....Secure ☐

Laryngeal Mask ☐
Cuff.....Inflated ☐
Ventilation.....Satisfactory ☐

Sedation/Paralytics
Analgesia.....Given ☐ or Not Indicated ☐
Sedation.....Given ☐ or Not Indicated ☐
Paralytics.....Given ☐ or Not Indicated ☐
Bite block (OPA).....Inserted ☐

BREATHING
Trauma:
DOES CHEST NEED DECOMPRESSION?
YES ☐ **NO** ☐

Ventilator.....Connected ☐
Oxygen.....Connected ☐
FiO2.....Set for Sats >94% ☐
Mode.....Selected & Set ☐

CIRCULATION
External Haemorrhage.....Controlled ☐

Non-participating staff.....Excused ☐

PRE-EMPT TRANSPORT REQUIREMENTS
STAFF
Medical/Nursing/Orderly/PCA.....Assigned ☐
EQUIPMENT
Transport Monitor.....Attached ☐
BVM/Mask/O2 supply.....On trolley ☐
DRUGS
Drugs/Infusions/Pumps.....Prepared ☐

DISPOSITION
Radiology/CT.....Ready ☐
ICU.....Accepted ☐
Operating Theatre.....Accepted ☐

SUMMARY

- While transitions in care may be a source of risk, they may also provide opportunity for 'rescue and recovery'
- Standardized communication tools exist
- Inter-professional and inter-agency training is required
- "Culture eats process for breakfast."

Thank you.

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