RSI/REBOA/ECMO/WINCH RESCUE OF MOA...
HANDOVER FROM E.M.S. TO E.D.

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Injury 2013

[Logos of Auckland Rescue Helicopter Trust and Auckland District Health Board]
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
IMISTAMBO

Identification of patient (name and age)

Mechanism of Injury (trauma) or Medical complaint

Injuries (trauma) or information related to the medical complaint

Signs and Symptoms (what you found)

Treatment and Trends (what you did and how patient responded)

Allergies (to medication)

Medication (prescribed to patient)

Background (previous medical history)

Other information (miscellaneous, e.g. living environment)
I MIST AMBO

- Identification
- Mechanism/Medical complaint
- Injuries/Information about complaint
- Signs
- Treatment
- Pause: allow for cross-check
I MIST AMBO

- Allergies
- Medications
- Background
- Other 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
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
<table>
<thead>
<tr>
<th>PRE-TRANSPORT CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Laryngeal Mask</strong></td>
</tr>
<tr>
<td>Cuff..........................Inflated □</td>
</tr>
<tr>
<td>Ventilation..................Satisfactory □</td>
</tr>
<tr>
<td><strong>Sedation/Paralytics</strong></td>
</tr>
<tr>
<td>Analgesia.......................Given □ or Not Indicated □</td>
</tr>
<tr>
<td>Sedation.........................Given □ or Not Indicated □</td>
</tr>
<tr>
<td>Paralytics.......................Given □ or Not Indicated □</td>
</tr>
<tr>
<td>Bite block (OPA)....................Inserted □</td>
</tr>
<tr>
<td><strong>BREATHING</strong></td>
</tr>
<tr>
<td>Trauma: DOES CHEST NEED DECOMPRESSION?</td>
</tr>
<tr>
<td>YES □ NO □</td>
</tr>
<tr>
<td>Ventilator........................Connected □</td>
</tr>
<tr>
<td>Oxygen..........................Connected □</td>
</tr>
<tr>
<td>FiO2..........................Set for Sats &gt;94% □</td>
</tr>
<tr>
<td>Mode............................Selected &amp; Set □</td>
</tr>
<tr>
<td><strong>CIRCULATION</strong></td>
</tr>
<tr>
<td>External Haemorrhage..............Controlled □</td>
</tr>
<tr>
<td>Non-participating staff...............Excused □</td>
</tr>
<tr>
<td><strong>PRE-EMPT TRANSPORT REQUIREMENTS</strong></td>
</tr>
<tr>
<td><strong>STAFF</strong></td>
</tr>
<tr>
<td>Medical/Nursing/Orderly/PCA......Assigned □</td>
</tr>
<tr>
<td><strong>EQUIPMENT</strong></td>
</tr>
<tr>
<td>Transport Monitor................Attached □</td>
</tr>
<tr>
<td>BVM/Mask/O2 supply................On trolley □</td>
</tr>
<tr>
<td><strong>DRUGS</strong></td>
</tr>
<tr>
<td>Drugs/Infusions/Pumps..............Prepared □</td>
</tr>
<tr>
<td><strong>DISPOSITION</strong></td>
</tr>
<tr>
<td>Radiology/CT........................Ready □</td>
</tr>
<tr>
<td>ICU...................................Accepted □</td>
</tr>
<tr>
<td>Operating Theatre...............Accepted □</td>
</tr>
</tbody>
</table>
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.
ACKNOWLEDGEMENTS

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