

IMOET National Meeting
Tuesday 30th September 2014
Dublin Castle

Standardisation of multidisciplinary obstetric emergency training nationally.

Teamwork and Obstetric Emergencies

Dr Niamh Hayes

ATM Return:

- Aim: Get cash!



Simple task...

- Cash return first?
- Card return first?



ATM Return: Cash return first:

- Aim: Get cash!



ATM Return: Cash return first:

- Aim: Get cash!



ATM Return: Card return first:

- Aim: Get cash!



> 10,000 transactions p.a. leave cash behind

> €1,000,000 p.a.

... single bank R.O.I.

ATM Return: Card return first:

- Aim: Get cash!



Simple cognitive error...

- Person capable of performing task safely
- Has done so many times in the past
- Faces significant personal consequences for error

Complexity of medical crisis?

Outline

- Context
- Definition
- Principles
- Metrics
- Resources
- Summary

Context: Scope of the problem

44,000 - 98,000 deaths p.a.

IOM "To Err is Human" 1999

Context: Scope of the problem

600 - 1300 deaths p.a.

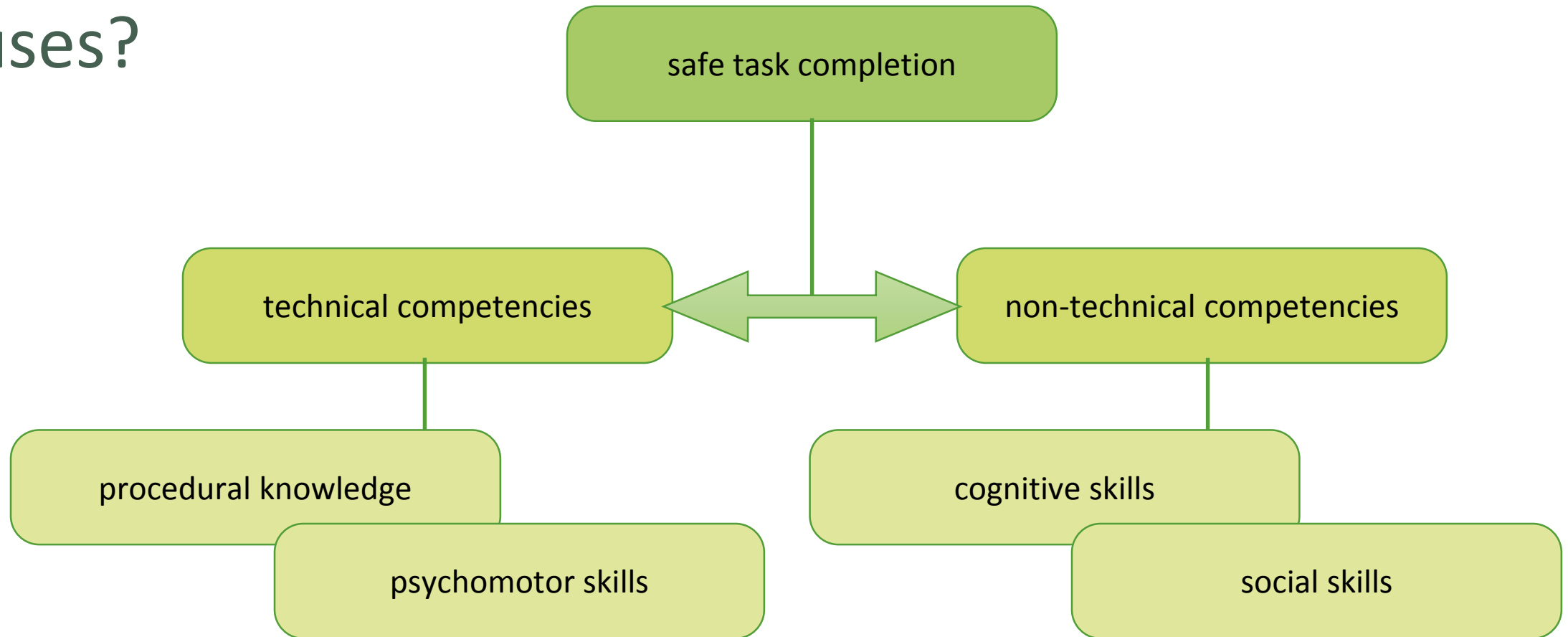
IOM “To Err is Human” RoI?

Context: Scope of the problem

442 deaths 1999

Commercial aviation fatalities worldwide 1999

Causes?



Causes?

- Non-technical failures

cockpit resource management

Causes?

- Non-technical failures

crew resource management

Causes?

- Non-technical failures

crisis resource management

Definition

- Crisis resource management:

“The ability to translate medical knowledge to real world actions in the setting of an emergency”

Principles of CRM



Adapted from: Rall and Gaba, Miller's Anesthesia 7th Edition

*Teamwork elements from ACLS provider manual 2010, PROMPT provider manual

Principles of CRM

EFFECTIVE
COMMUNICATION

CLOSED-LOOP
COMMUNICATION

Strategy of verification to make sure that the message sent was received and interpreted as intended

Principles of CRM

NATIONAL
CLINICAL
EFFECTIVENESS
COMMITTEE

Tús Áirde do
Shábháilteacht 1st Other
Patient Safety First

National Early Warning Score

National Clinical Guideline No. 1

EFFECTIVE
COMMUNICATION



From HSE.ie and App Store (accessed 15th September 2014)

Principles of CRM

**National guideline for communication (handover)
in maternity services in Ireland**

**NATIONAL
CLINICAL
EFFECTIVENESS
COMMITTEE**

Tús Áite do
Shábháilteacht 1 Othar
Patient Safety 1 First



295 pages!!!

Principles of CRM

- Clear role/task allocation
 - Know limitations and ask for help early
 - Mutual support/cross checking
-
- Objective evidence (point of care testing)
 - Human resources
 - Cognitive aids (algorithms)

LEADERSHIP AND
FOLLOWERSHIP

USE ALL
AVAILABLE
RESOURCES

Principles of CRM

What?

So what?

What now?



Information gathering?

Understanding?

Anticipation?

SITUATIONAL
AWARENESS

Principles of CRM

MUTUAL RESPECT

- “Power distance” (hierarchy)
- Treat input from other team members legitimately

SHARED DECISION MAKING

- “hint and hope” ...
- SBAR?
- Critical language: CUS

Principles of CRM



Adapted from: Rall and Gaba, Miller's Anesthesia 7th Edition

*Teamwork elements from ACLS provider manual 2010, PROMPT provider manual

Metrics

- Domain/context-specific training interventions
- Good face validity...
- Evidence for construct validity (translational science)?



Metrics: Evidence for success?

Southmead Hospital, Bristol (UK)

- | | |
|---|--|
| <ul style="list-style-type: none">• <i>Infrastructural changes (protocols, props...)</i>• <i>Regular in-house drills for all staff</i> | <ul style="list-style-type: none">• <i>51% reduction in Apgar⁵ <7</i>• <i>50% reduction in HIE</i>• <i>75% reduction in Erb's palsy after shoulder dystocia</i>• <i>40% reduction in median DDI for cord prolapse</i> |
|---|--|

Draycott T et al. Does trianing in obstetric emergencies improve neonatal outcome? BJOG 2006;113:177-82

Draycott T et al. Improving neonatal outcome through practical shoulder dystocia training. Obstet Gynecol 2008;112:14-20

Siassakos D et al. Retrospective cohort study of DDI with umbilical cord prolapse: the effect of team training. BJOG 2009;116:1089-96

Metrics: Evidence for success?

BDIMC, Boston (US)

- | | |
|--|---|
| <ul style="list-style-type: none">• <i>Teamwork course for all staff</i>• <i>Debriefings, improved handover</i>• <i>Protocol development</i>• <i>Selected clinical drills</i> | <ul style="list-style-type: none">• <i>23% reduction in adverse obs events</i>• <i>62% reduction in malpractice claims</i>• <i>Labour staff > positive attitude to safety</i> |
|--|---|

Pratt S. Impact of CRM-based team training on obstetric outcomes and clinicians' safety attitudes. Jt Comm J Qual Patient Saf 2007;33:720-5

Metrics: Evidence for success?

Liverpool Women's Hospital (UK)

- | | |
|---|---|
| <ul style="list-style-type: none">• <i>Integrated risk management</i>• <i>Patient involvement</i>• <i>Regular team briefings and drills</i>• <i>Infrastructural improvements</i> | <ul style="list-style-type: none">• <i>11% reduction in AE with suboptimal care</i>• <i>50% reduction in Apgar⁵ <4</i>• <i>50% reduction in cord pH <7</i>• <i>86% reduction in Erb's palsy</i> |
|---|---|

Scholefield H. Embedding quality improvement and patient safety at Liverpool Women's NHS Foundation Trust. *Best Pract Res Clin Obstet Gynecol* 2007;21:593-607

Metrics: Evidence for success?

Rigshospitalet, Copenhagen (DK)

- | | |
|---|--|
| <ul style="list-style-type: none">• <i>Clinical drills</i>• <i>Streamlined protocols</i>• <i>Eclampsia and haemorrhage boxes</i> | <ul style="list-style-type: none">• <i>Improved staff confidence scores & 45% reduction in midwifery staff sick leave</i> |
|---|--|

Sorensen JL. The implementation and evaluation of a mandatory multi-professional obstetric skills training program. *Acta Obstet Gynecol Scand.* 2009;88(10):1107-17

Metrics: Evidence for success?

Evidence = association (not causation)

Institution-level incentives
to training and safety
culture

Relevant, in-house training

Non-threatening training
and assessment for entire
workforce

Self-directed infrastructural
changes (local solutions)

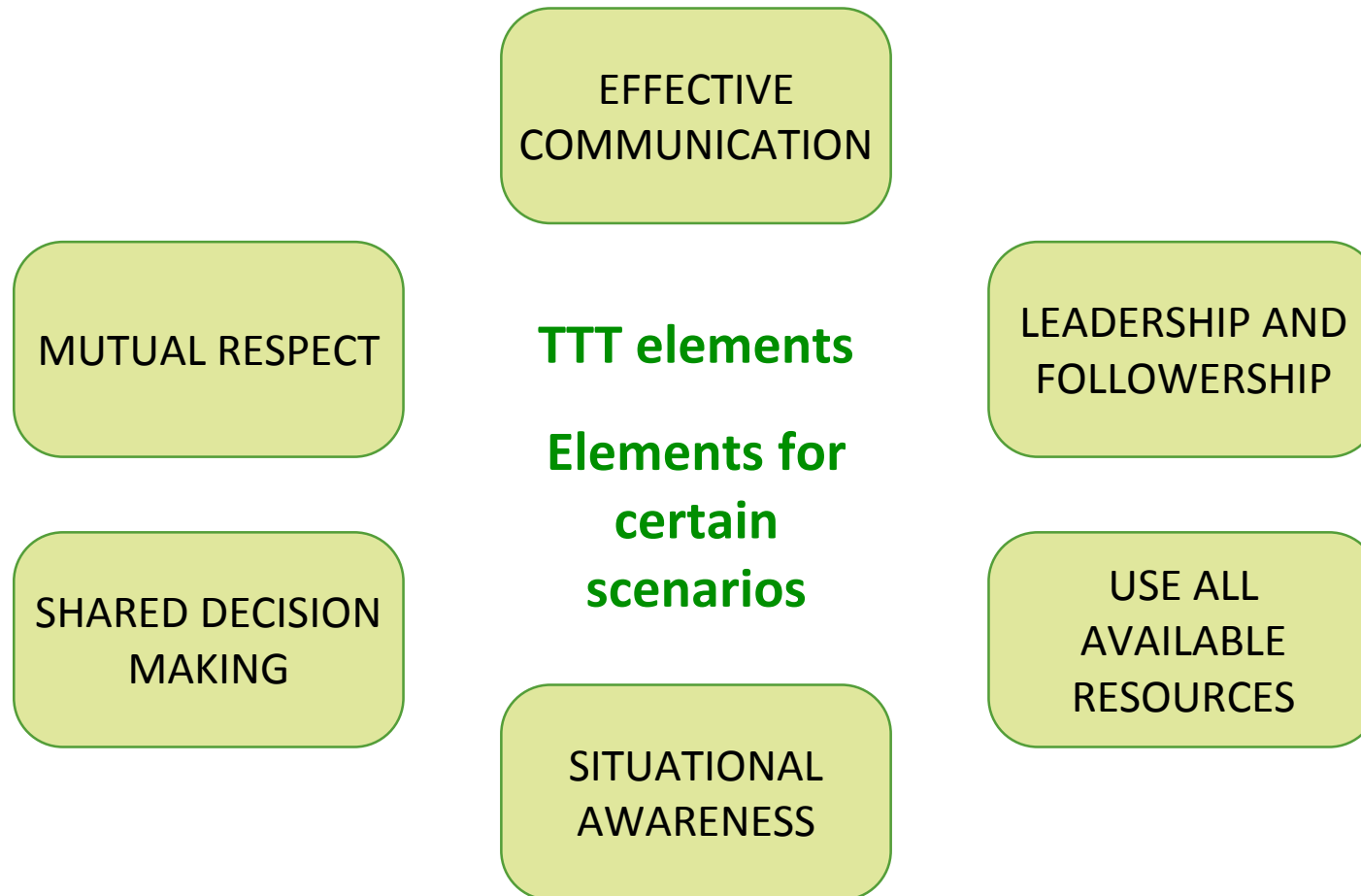
Realistic training tools (high
fidelity)

Multiprofessional clinical
and teamwork training

Resources?

<i>Guideline</i>	<i>Personnell</i>	<i>Other</i>	<i>Metrics</i>
<i>O & G Ireland</i>	<i>Obstetric</i>	<i>Manikins</i>	<i>Face validity satisfaction scores</i>
<i>COMPASS training manual (HSE)</i>	<i>Midwifery</i>	<i>Birthing Simulator</i>	<i>Others?</i>
<i>NEWS guideline (appendix 6, HSE)</i>	<i>Anaesthesia</i>	<i>Resus Manikin</i>	<i>Unit dependent?</i>
<i>ISBAR app (iTunes & android)</i>	<i>+++</i>		

Practical skills & drills elements



Looking forward

- If you do only one thing when you return to your unit,

use ISBAR