Communication in Crisis: Learning Verbal Dexterity

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Disclosure

- None financial
  - But association with CRI/RCPSC/CBS

- None of ideas indigenous to me/medicine
  - Borrowed from aviation/CRM

- References available at:
  - Brindley and Reynolds *J Crit Care* 2011
Disclosures CTD

- Focus on **verbal** communication
  - c/t non verbal; paraverbal

- **Invest** in communication!

- Learn your **CRM**, folks!

- Support your local **sim** program
Most important in patient safety?

A. Factual Knowledge?
B. Procedural dexterity?
C. Communication skills?
Human Errors in Medicine

- **Human factors > 80%**
- **Communication > 70%**

St Pierre et al. *Crisis Management in Acute Care Settings*. 2008
Sutcliffe KM. *Acad Emerg Med* 2004
Khan FA et al. *Anesthesia* 2001
Etc, Etc, Etc
Critical Care’s most important organ

Median glosso-epiglottic fold

Vallecula

Epiglottis

Tubercle of epiglottis

Vocal fold

Ventricular fold

Think Artificial.org

Cuneiform cartilage

Corniculate cartilage

Trachea
Too much plane for one man to fly

Simulation: not “why” but “how”.
Brindley J Crit Care 2009
## Errors with multiple tasks

<table>
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<th># Steps</th>
<th>Probability entire process correct</th>
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<tr>
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<tr>
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LL Leape 1994; IHI. Preventing errors: the role of complexity. Pronovost PJ
“All truth passes through three stages:

• First, it is ridiculed.
• Second, it is violently opposed.
• Third, it is accepted as being self-evident.”

'Arthur Schopenhauer' 1788-1860
Examples from aviation...

Aviate; navigate; communicate

Senior 747 pilot begins taxiing
Communication from the tower is vague
Copilots don’t think he has not been cleared

Everyone too intimidated to say anything
Pilot too impatient to wait

Two planes collide—hundreds die
Conclusion: “Didn’t take the time to become a team”
"What does it mean to be a modern hero?"

US Airways 1549: "Miracle on the Hudson"
“Sully”

- “Captain America”
- “Hudson River Hero”
- “Le Nouveau Heros de l’Amerique”
- “El Heroe de Nueva York”

The Pilot Not Flying

fewer planes crash when copilot flies
Verbal Dexterity

- Black box silence is common
- Fewer planes crash when co-pilot flies

Leadership means communicating

- Communicate: share, join, unit, make understanding common
- Present a shared mental model
- Coordinate tasks
- Control flow of information
- Stabilize emotions

Interruptions now addressed in SOPs
THE CHECKLIST MANIFESTO • HOW TO GET THINGS RIGHT

ATUL GAWANDE

BESTSELLING AUTHOR OF BETTER AND COMPLICATIONS
“remember to fly the airplane”
So how do we do it?

Despite Eric's best efforts, no-one guessed 'Bangkok'
Learning “verbal dexterity”

“Meant is not said

Said is not heard

Heard is not understood

Understood is not done”

“Avoid mitigating language”

“5 levels of advocacy”

“Repeat back method”

SBAR

“Close the loop”

“Verbal dexterity”

Brindley and Reynolds J Crit Care 2011

Rall and Gaba 2007
Crisis Resource Management

Communication

Communication loops (challenge-response)

3 Cs

Clarity

Cite names

Close the loop

(? Crowd control)

(task-directed; automated, reinforcing)

Gaba et al 1994

Brindley, Lord, Hudson JCC 2007
Korean Airlines...
“Excellence in flight”
Avoid vague/"mitigating" language

- “John, please intubate the trachea”
- NOT...“Perhaps it’s time to intubate”

- “Dr Smith, get me a surgeon”
- NOT...“maybe we need a surgeon

Adapted from Gladwell M Outliers 2008
Transmitter VS Receiver
Dependent Language

Image from: www.i-capitaladvisors.com
How do we communicate:

- **Verbal**: text (what you say)
- **Paraverbal**: Tone/pitch/pacing (uncertainty/hesitance)
- **Non verbal**: Eye contact; face; posture
- **Other**: Past history; authority gradient

Callen 1991
St Pierre
Kanki and Palmer 1993
Encoding/Decoding

- What the hell happened!!!
- What the hell happened?
- Shrug; shrug; extend hands
- Frown; frown; clench hands
“Reframing”

patient-focused not ego-focused

“I don’t know what’s going on?”

Vs

“10 mins in, guys...what are we missing?”

“I’m angry about this”

Vs

“This is a bad situation..let’s get stuck in”
Communication: 
*a tale of two cultures*

- Chute and Weiner 1995
  - in aviation
    - Pilots (operational)
    - Cabin crew (service)
      - Therefore no need to interact!
Hierarchy

ASS KISSING
Because sometimes loyalty, innovation and hard work just aren't enough
Hierachy

- COLONEL
- MAJOR
- LT COLONEL
- 2ND LT
- 1ST LT
- CAPTAIN

- KITCHEN
- DRIVE-THRU
- COUNTER
- MANAGER
Authority Gradients

➤ Again, from aviation...

➤ Officers of diff. rank in helicopter
  • increased risk of crashes
    • Alkov RA Aviat Space Environ Med 1992

➤ Obediance vs conformity
So how do you speak up?

- P.A.C.E Robert Besco
  - **Probe**: for a better understanding;
  - **Alert**: others of the problem;
  - **Challenge**: the present strategy;
  - **Emergency**: warning of critical dangers.

Available at: http://www.crm-devel.org/resources/paper/PACE.PDF.
Going through the PACEs

• **Probe:** “Make a statement”
  - Make a hint
  - Keep it impersonal
  - “Are you aware that the BP has dropped?”

• **Alert:** “Add a suggestion”
  - Express concern
  - Suggest a shared strategy
  - “I’ll take the vitals, you get Dr X”

Adapted from Dr R Besco PACE/Gladwell Outliers/St Pierre et al/Brindley and Reynolds.
Going through the PACEs

- **Challenge**: “demand clarification”
  - Ask a question
  - “John, what was the ETCO₂”
    - (are you sure the ETT went thru vocal cords)

- **Emergency language**: “give instruction”
  - Clear the authority gradient changed
  - “Dr Smith, stop: this is dangerous”

- **Stage 5**: “No more Mr/Dr. Nice Guy”
  - “Dr Smith, I’m taking over; no more talking”

Adapted from Dr R Besco PACE/Gladwell Outliers/St Pierre et al/Dunn/Brindley and Reynolds.
5 step advocacy

- **Attention Getter:**
  - "Excuse me, Doctor".

- **State Your Concern:**
  - "The patient is increasingly hypotensive".

- **State The Problem As You See It:**
  - "I think we need to get help, now".

- **State a solution:**
  - "I'll phone ICU to arrange transfer".

- **Obtain Agreement:**
  - "Does that sound good?"

Communication strategies CTD

- **Step back method:**
  - "Stop chest compressions, while I reassess rhythm"
  - "10 mins in; still not pulse...what am I missing"

- **Repeat Back method:**
  - “Okay so that’s 1 mg epi”
  - “So, 2 PRBC, ABG for Hgb, then call you...?"
SBAR

**Situation:**
- This is Dr X calling from 5f3. I have a MET call

**Background:**
- The patient is apneic and comatose

**Assessment:**
- He's too unstable for ward and needs transfer

**Recommendation:**
- Bring to ICU for immediate intubation

www.ihi.org/IHI/Topics/PatientSafety/SafetyGeneral/Tools/SBARTechniqueforCommunicationASituationalBriefingModel.htm
Blindfolded Simulation

If it wasn't tricky enough

Golden hours
Absent visual clues
“Verbal dexterity” takes practice

Novel Critical Care Education. Brindley *CMAJ* 2006
Transition of Care

Dunn WF Chest
So how do we get better

"It's a simple model... but it works for me..."
Traditional Model of Error

Lack of (factual) knowledge → Bad Outcome

Lack of experience
“Swiss cheese model” of error

Brindley J Crit Care 2009

1) Lack of factual knowledge
2) Inadequate communication
3) Inadequate recognition
4) Inadequate early response
5) Improper resuscitation technique

Bad Outcome
“All truth passes through three stages:

- First, it is ridiculed.
- Second, it is violently opposed.
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'Arthur Schopenhauer' 1788-1860