


## Conducting the Orchestra – Practical Tips and Tricks for Leading Resuscitations

Adam Cheng, MD, FRCPC  
Division of Emergency Medicine, Alberta Children’s Hospital

  
Assessing Simulation in Pediatrics: Improving Resuscitation Education


## Disclosure

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- **Consultant**
  - Simulation Educator, Royal College of Physicians and Surgeons of Canada


  
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## Learning Objectives

- Understand the important elements of team dynamics when leading resuscitations
- Recognize common mistakes made by team leaders when managing resuscitation
- Recognize specific strategies to overcome common challenges for team leaders during resuscitations


  
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## Case 1 : Elaine Bromiley




  
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## Why wasn't a surgical airway attempted?



  
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## What makes an effective resuscitation team?



  
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### What makes a competent team?



Knowledge

Clinical Skills

Technical Skills

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### Why don't all teams succeed?



Knowledge


Clinical Skills

Technical Skills


Crisis Resource Management Skills

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### Crew Resource Management



- Aviation Industry
- Majority of crashes related to failures in
  - Leadership
  - Communication
  - Decision Making
  - Group Awareness




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### To Err is Human

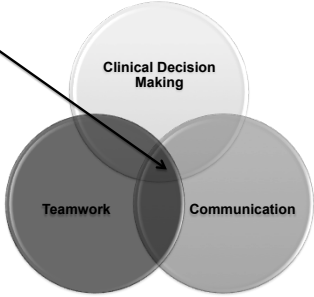



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### Patient Safety




**Patient Safety**





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### Crisis Resource Management



**Elements of CRM**

- Leadership and Role Clarity
- Resource Allocation
- Situational Awareness
  - Fixation Errors
  - Seeing the big picture
  - Sharing Mental Model
- Communication
  - Closed-loop
  - Common terminology


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**Case 2: SVT**




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**Leadership and Resource Allocation**




<p><b>Leadership / Role Clarity</b></p> <ul style="list-style-type: none"> <li>• Identify leader at all times</li> <li>• Delegation of roles</li> <li>• Revision of roles as required</li> <li>• Balance Workload</li> </ul>	<p><b>Resource Allocation</b></p> <ul style="list-style-type: none"> <li>• Knowledge of environment</li> <li>• Material resources</li> <li>• Human resources</li> <li>• Proper use/operation of equipment</li> </ul>
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**Resuscitation Pearl**





- **Leadership isn't always assumed ... identify yourself**
- **Delegate roles to competent individuals**  
– **VERIFY** and **ASSESS** competency intermittently




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**Case 3: Routine Intubation**


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SITUATIONAL AWARENESS

SOME LESSONS CAN ONLY BE LEARNED ONCE!

**Resuscitation Pearl**



- If possible, **STEP BACK**
- Stand in a spot where you can see everything (and touch the patient as needed)



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## Fixation Error

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## Fixation Errors

1. This and only this
2. Anything but this
3. Everything is OK

*Very resistant!*

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## Mental Model

<p><b>MENTAL MODEL</b></p> <ul style="list-style-type: none"> <li>▪ Reasoning</li> <li>▪ Differential Diagnosis / Most Likely Diagnosis</li> <li>▪ Plan of Management</li> </ul>	<p><b>ANTICIPATION</b></p> <ul style="list-style-type: none"> <li>• Thinking 2 steps ahead</li> <li>• Natural Progression of Disease</li> <li>• Complications</li> </ul>
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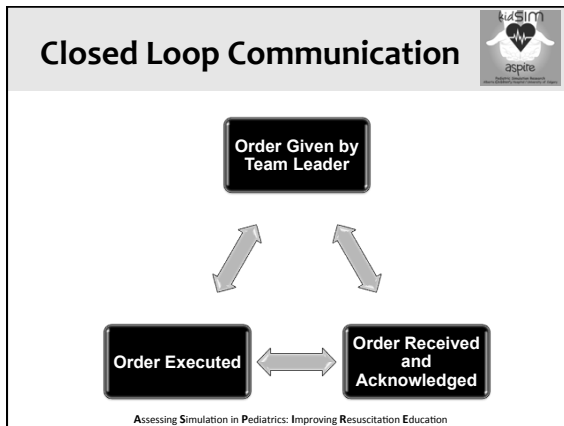
## Resuscitation Pearl

- **Share you mental model:**
  1. Patient condition changes
  2. You're stuck
  3. Break in action

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## Case 4: US Airways Flight 1549

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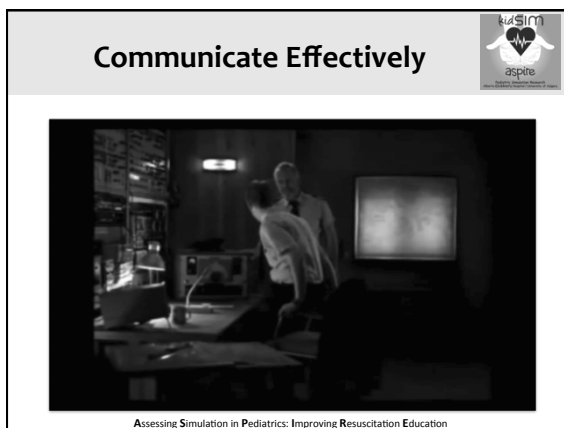
### Communicate Effectively

Meant is not said  
Said is not heard  
Heard is not understood  
Understood is not done

*Close the loop!*

This applies for both the sender and receiver!

Rall, M. ToPASS  
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### Resuscitation Pearl

- **Close the Loop**
  - Introduce concept at the beginning of each resuscitation
  - NEVER assume all team members are aware of this concept

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### “Halo Effect”


- Deference given due to reputation, experience or profession
- Team members fail to point out deficiencies due to position/status within team
- How do we **Flatten Out the Hierarchy?**

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## Flattening the Hierarchy




- **Team Leader:**
  - Asks for input
  - Shares mental model
  - Anticipates and plans




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## Educate Team Members




- **4 Step Approach**
  1. Share an observation
  2. State your concern / identify problem
  3. Offer a solution
  4. Obtain an agreement




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## Take Home Message



- **Good outcomes from resuscitation are as much about leadership and teamwork as they are about giving the right treatment**
  - Leadership
  - Communication
  - Resource Allocation
  - Situational Awareness



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