Wolters Kluwer

# Thank You

## This PowerPoint document contains the images that you requested.

# TABLE 1

[Promoting Excellence and Reflective Learning in Simulation (PEARLS): Development and Rationale for a Blended Approach to Health Care Simulation Debriefing]

Eppich, Walter; Cheng, Adam

Simulation in Healthcare10(2):106-115, April 2015.

doi: 10.1097/SIH.0000000000000072

*Setting the scene (may also occur before the first scenario debriefing, may abbreviate or omit for subsequent debriefings):*
"I'll spend about XX minutes debriefing the case with you. First, I'll be interested to hear how you are feeling now that that case is over; second, I'd like someone to describe what the case was about to make sure we are all on the same page. Then, we'll explore the aspects of the case that worked well for you and those you would manage differently and why. I'll be keen to hear what was going through your mind at various points in time. We'll end by summarizing some take-home points and how to apply them in your clinical practice."

Reaction
- "How are you feeling?"

*Potential follow-up question:*
- "Other reactions?" or "How are the rest of you feeling?"

Description
- "Can someone summarize the case from a medical point of view so that we are all on the same page?"; "From your perspective, what were the main issues you had to deal with?"

*Potential follow up questions:*
- "What happened next?"; "What things did you do for the patient?"

Analysis

*Signal the transition to the analysis of the case and frame the discussion:*
- "Now that we are clear about what happened, let's talk more about that case. I think there were aspects you managed effectively and others that seemed more challenging. I would like to explore each of these with you."

| *Learner self-assessment (eg, plus-delta)* | *Directive feedback and teaching* | *Focused facilitation* |
|---|---|---|
| "What aspects of the case do you think you managed well and why?" | Provide the relevant knowledge or tips to perform the action correctly. | *(eg, alternatives—pros and cons; self-guided team correction; advocacy-inquiry)* |
| "What aspects of the case would you want to change and why?" | • "I noticed you *[behavior]*. Next time, you may want to … *[suggested behavior]*… because *[provide rationale]*." | • Specifically state what you would like to talk about ("I would like to spend a few minutes talking about XXX.") |
| *Close performance gaps selectively using directive feedback and teaching or focused facilitation* | | *Elicit underlying rationale for actions: see SDC 2, http://links.lww.com/SIH/A175 for advocacy-inquiry approach* |

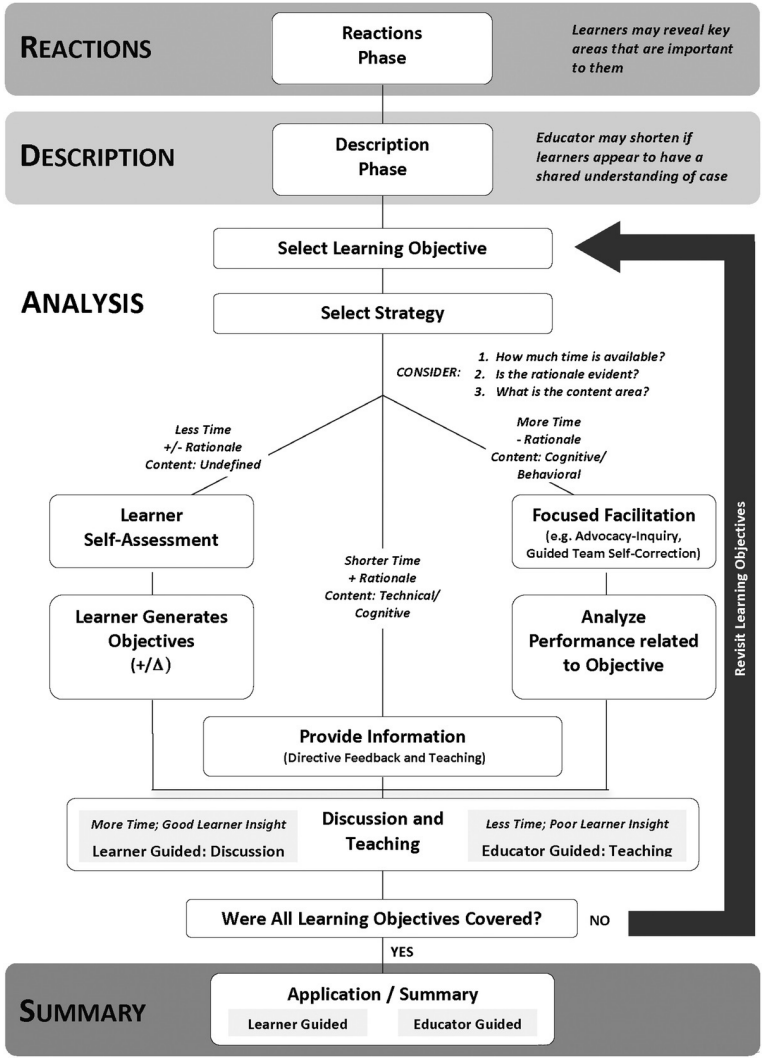
Are there any outstanding issues before we start to close?

Application/summary
- *Learner guided:* "I like to close the debriefing by having each you state one two take-aways that will help you in the future."
- *Educator guided:* "In summary, the key learning points from this case were …"

SIMULATION IN HEALTHCARE

PEARLS Debriefing Script

# FIGURE 1





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PEARLS debriefing framework.

# TABLE 2

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| Variable/indication for use* | Educational Strategy During Debriefing | | |
|---|---|---|---|
| | **Provide information** *(eg, directive feedback and/ or teaching)* | **Foster learner self-assessment** *(eg, plus-delta)* | **Facilitate a focused discussion** *(eg, advocacy-inquiry; guided team self-correction; alternatives—pros and cons)* |
| Variables to assess for each particular aspect of performance | | | |
| Time available | Short | Short/moderate | Moderate/long |
| Performance domain | Cognitive/technical | Cognitive/technical | Cognitive/behavioral (eg, teamwork, communication, clinical decision making) |
| Is the underlying rationale for performance gap evident? | Yes | Yes/no | No |
| Variables to assess before the debriefing | | | |
| Participants—level of insight | Low/moderate/high insight | Low/moderate/high insight | Moderate/high insight |
| Participants—level of clinical and simulation experience | Little clinical and simulation experience | Low/moderate/high clinical and simulation experience | Moderate/high clinical and simulation experience |
| Educator debriefing experience | Less experience required, easy to implement | Less experience required, easy to implement | More experience required, may be more difficult to implement |

*There is no prescribed combination of variables that best indicates the use of one strategy versus another. The more variables present for a specific strategy, the stronger is the likelihood it would be suitable for use. Because these are suggested and not absolute indications for use, educators still have the freedom to use selected educational strategies in circumstances falling outside of these recommendations. However, in our experience, the use of educational strategies in alignment with suggested indications are more likely to lead to fruitful learning and discussion.



Suggested Indications for 3 Educational Strategies Used During Debriefing

# TABLE 3

| Learning Objective* | Variable/Indication for Use† | | | Method of Debriefing |
|---|---|---|---|---|
| | Performance Domain | Rationale Evident? | Time? | |
| 1. | ○ Cognitive | | ○ Short | ○ Directive feedback |
| | ○ Technical | ○ Yes | ○ Moderate | ○ Learner self-assessment |
| | ○ Behavioral | ○ No | ○ Long | ○ Focused facilitation |
| 2. | ○ Cognitive | | ○ Short | ○ Directive feedback |
| | ○ Technical | ○ Yes | ○ Moderate | ○ Learner self-assessment |
| | ○ Behavioral | ○ No | ○ Long | ○ Focused facilitation |
| 3. | ○ Cognitive | | ○ Short | ○ Directive feedback |
| | ○ Technical | ○ Yes | ○ Moderate | ○ Learner self-assessment |
| | ○ Behavioral | ○ No | ○ Long | ○ Focused facilitation |
| 4. | ○ Cognitive | | ○ Short | ○ Directive feedback |
| | ○ Technical | ○ Yes | ○ Moderate | ○ Learner self-assessment |
| | ○ Behavioral | ○ No | ○ Long | ○ Focused facilitation |
| 5. | ○ Cognitive | | ○ Short | ○ Directive feedback |
| | ○ Technical | ○ Yes | ○ Moderate | ○ Learner self-assessment |
| | ○ Behavioral | ○ No | ○ Long | ○ Focused facilitation |

*Learning objectives include those that are predefined by the educator and also those that are brought forth by the learners during the debriefing.
†Other variables not specific to learning objectives, such as (1) learner level of insight, (2) learner degree of clinical/simulation experience, and (3) educator debriefing experience should be considered when selecting most appropriate method of debriefing.



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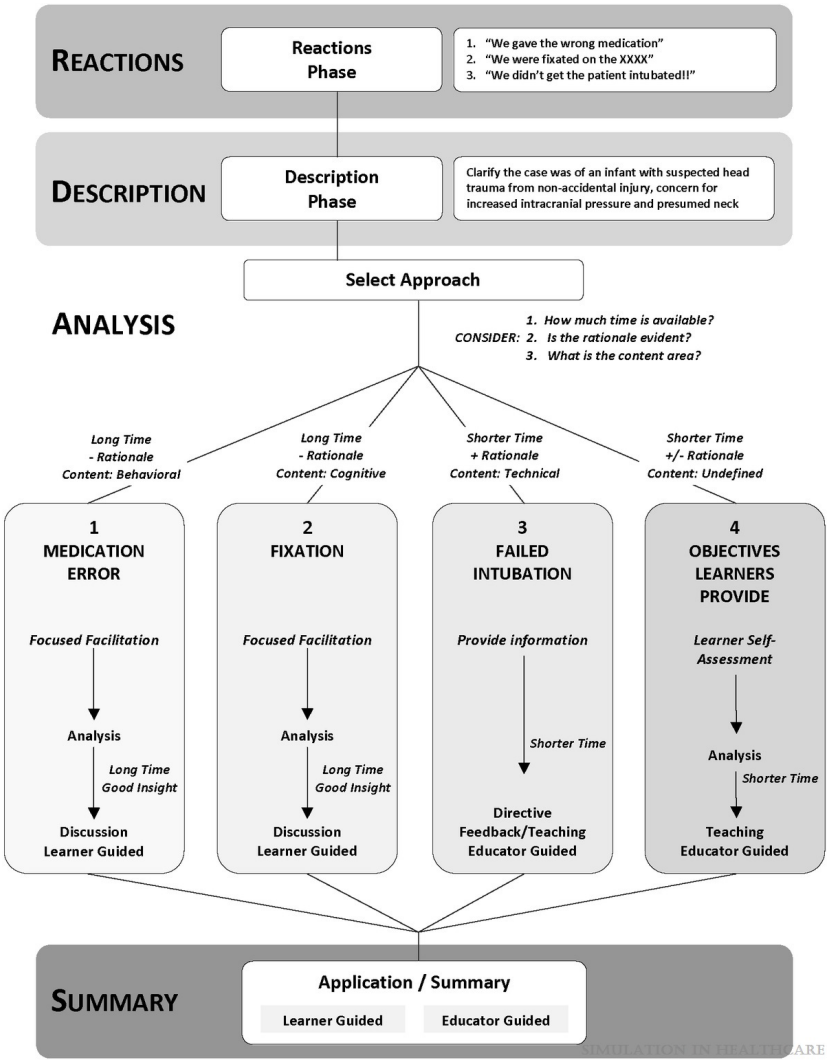
Decision Support Matrix for Educators

# FIGURE 2

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Application of the PEARLS debriefing framework to address various types of learning objectives. In this sample debriefing, the educator explores a hypothetical case of an infant with head trauma caused by nonaccidental injury. Performance gaps relate to a medication error, a fixation error, and failed intubation. Here, we see how an educator might select an educational strategy during the analysis phase of the debriefing based on key considerations with each objective/performance gap.

# TABLE 4

| |
|---|
| Step 1: Literature review to identify strategies used during a postsimulation debriefing |
| Step 2: Review of existing debriefing scripts (EXPRESS, AHA, SHARP, DISCERN) |
| Step 3: Development—integration of our own experience in debriefing and teaching simulation faculty development courses and workshops (3 mo) |
| a. PEARLS framework |
| b. PEARLS debriefing script: design, format, representative scripted language |
| Step 4: Pilot testing (24 mo) |
| a. Framework and debriefing script shared and pilot tested with simulation educators from the KidSIM program at Alberta Children's Hospital, the kidSTAR program at Ann and Robert Lurie Children's Hospital, and the Royal College of Physicians and Surgeons of Canada. Elements reviewed and trialed with the PAEDSIM collaborative in Europe. |
| b. Debriefing workshops at multiple simulation and education conferences in North America and Europe. |
| Step 5: Iterative revisions to framework and script based on educator and end-user feedback |
| Step 6: Integration of emerging literature as appropriate (6 mo) |



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Development Steps of PEARLS Debriefing Framework and Script