

PEARLS Scripted Debriefing Tool – Quickstart Guide

Walter Eppich, MD, MEd, Adam Cheng, MD

PEARLS Debriefing Framework

REACTION

- “How did that feel?”

DESCRIPTION

- “Can someone summarize what the case was about from a medical point of view? What were the main issues you had to deal with?”

ANALYSIS

Pick one of the three methods below

Learner Self-Assessment (e.g. Plus-Delta)

“What aspects of the case do you think you managed well?”

“What aspects of the case would want to change?”

Directive feedback and teaching

I noticed you ***[insert performance gap here]***.
Next time, you may want to ... ***[close gap]***...because ***[provide rationale]***

Focused Facilitation (e.g. Advocacy-Inquiry)

Elicit underlying rationale for actions: see page 2 for approach

Are there any outstanding issues we haven't discussed yet before we start to close?

APPLICATION/SUMMARIZING

- *Learner Driven*: “I like to close the debriefing by having each you state one two take-aways that will help you in the future”.

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Advocacy-inquiry: pairing your point of view with a question to get trainees' perspective

ADVOCACY - INQUIRY			
STEP 1: EXPLORE PERFORMANCE GAPS	Observation about a performance gap	Express your point of view about the observed performance gap	Ask about the perspective
	I noticed that... <i>I heard you say...</i>	Appreciation I liked that... Appreciation or concern I was thinking... Concern I felt uncomfortable because... I was worried/concerned...	How do you see it? I wonder what your thoughts were at the time? What was going through your mind?
STEP 2: UNDERSTAND RATIONALE AND CLOSE PERFORMANCE GAPS	Clarify understanding of the trainee's rationale for action	Explore the rationale and close the performance gap	Help learners generalize
	So what I'm hearing is that <i>[insrt performance gap]</i> was related to <i>[insert frame here]</i>	Teach to close performance gap when learning need is clear	What strategies do you see going forward that would be helpful here? How will this impact your performance next time?

Postevent Debriefing Hot

Core Elements (marked with *) Must be completed

Subject ID

Automatically Populated

How many hours after conclusion of event?*

Debrief Faciliator*

- RN
- MD
- PA
- NP
- Other
(Lead facilitator discipline)

Number in attendance: Nurses *

Number in attendance: Physicians*

Number in attendance: NP and/or PA*

Number in attendance: Administrators *

Number in attendance: RT*

Number in attendance: Students (nursing, medical, etc.)*

Number in attendance: Other

(specify (#); specify (#)....)

Duration of Debriefing*

(HH:MM (25 minutes = 00:25))

What Went Well? *

[Free Text]

What could have been improved upon in this patient's care? *

[Free Text]

Were there any delays in therapy? If so, provide a description of the delay. *

[Free Text]

How could this event have been predicted or prevented? *

[Free Text]

PEDIATRIC/NEONATAL CODE BLUE and RAPID RESPONSE 5 minute TEAM DEBRIEFING GUIDE

Goal: Debrief completed after all emergency responses. Also debrief situations that 1) are outside the norm or offer an opportunity to identify system improvements. Any staff member may call for a debriefing. **Hospitalist** leads on acute care units; **PICU/CV Attending** leads in ICU's

Date/time: _____ Patient name and MRN _____

Code Blue: Neonatal Pediatric Adult OR Rapid Response Call ECMO Call VAD call Pediatric Stroke call

Thinking about team performance in this emergency event:

Identify what went easily (check all that apply):

- Communications were closed-loop, clear and heard; reports were in SBAR format
- Everyone knew what the emergency was (shared mental model)
- Team Leader was identified; leadership was clear; TL did not perform a task
- R-series ETCO2 and CPR feedback used to determine compression effectiveness and Return of Spontaneous Circulation (ROSC) by CPR Monitor

Comments: _____

Identify what was challenging?

- Communication issues
- Members on the team were not aware of what was going on (No Situational Awareness)
- There was no clear leadership (ONE Clear team Leader)
- No Crowd Control provided by Event manager and/or Charge Nurse
- Deviations from PALS /ACLS/ NRP algorithms (Explain)
- Compressor was not replaced every 2 minutes, No CPR Monitor Role
- Delay in obtaining access (Explain)
- Barriers that made it challenging (Explain what team thinks can be done to decrease barriers?)

Comments: _____

Thinking about this pediatric/neonatal emergency, identify system issues that need improvement (Check all that apply)

- Operator or Pager Issues
- Equipment issues
- Medications issues
- Crowd Control Issues
- Delays in transporting the patient (within the hospital)
- Push back to make the RRT call
- If RRT could have been called earlier

Comments: _____

Code Roles in an emergency

- Event Manager assigned code roles; Ensured key members have armbands on upper arms; Assisted with Crowd Control; Collected armbands to be returned to Defibrillator paddles; brought immediate together to conduct this "hot" debrief
- Primary RN stayed at bedside, performed ABC's; available for communication
- Recorder documented and prompted TL on algorithm
- CPR Monitor placed pads, prompted TL on 2 min. rhythm checks, Zoll CPR feedback; ETCO2; rotated compressors
- Team Leader checked and signed Code Record and participated in debrief
- Pharmacist announced arrival; given a table to work; established who was TL; provided the weight and algorithm being followed and offered Broselow Tape if no weight available
- Hospitalist at code cart and manage defibrillator; applying pads immediately; notifying TL when shock required

Briefly describe: _____

CONFIDENTIAL: This is a quality improvement form that is confidential and protected under CA Civil Code 1157. Not for distribution. **DO NOT SCAN INTO MEDICAL RECORD.**

Please enclose this form with Code Record in an envelope and address to Code Committee Mail Code 5893 LK 4-1-14

PICU RESUSCITATION FORM

Pt Name () Date () MRN () <input type="checkbox"/> 9C <input type="checkbox"/> 9N <input type="checkbox"/> 9T <input type="checkbox"/> 11C Code Start Time: () AM / PM Code End Time: () AM / PM Code Outcome: <input type="checkbox"/> Alive <input type="checkbox"/> Dead <input type="checkbox"/> ECMO Parental Request to Cease Resuscitation? <input type="checkbox"/> Y <input type="checkbox"/> N	Attending ICU MD Present: <input type="checkbox"/> Y-Fully <input type="checkbox"/> Y-Partially <input type="checkbox"/> N RN:Pt Staffing Ratio: <input type="checkbox"/> 1:1 <input type="checkbox"/> 1:2 How many people in room (maximum): <input type="checkbox"/> 0-5 <input type="checkbox"/> 6-10 <input type="checkbox"/> 11-15 <input type="checkbox"/> >15
--	--

RH YTHM	<input type="checkbox"/> Asystole <input type="checkbox"/> PEA <input type="checkbox"/> VT <input type="checkbox"/> VF <input type="checkbox"/> Sinus Tach <input type="checkbox"/> JET <input type="checkbox"/> Sinus Brady <input type="checkbox"/> NSR <input type="checkbox"/> A fib/flutter <input type="checkbox"/> SVT <input type="checkbox"/> Other _____	SHOCKABLE RHYTHM? <input type="checkbox"/> Y <input type="checkbox"/> N Time shockable rhythm detected: () AM / PM Type of electricity: <input type="checkbox"/> Defibrillation <input type="checkbox"/> Cardioversion Time of first shock: () AM / PM Multiple shocks: <input type="checkbox"/> Y <input type="checkbox"/> N
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AIRW AY/BREATHING	TOOLS USED DURING CODE <input type="checkbox"/> Bag/ mask <input type="checkbox"/> Oral airway <input type="checkbox"/> Bag/ ETT <input type="checkbox"/> Quant ETCO2	INTUBATION? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Already Intubated Meds given: () Complications: <input type="checkbox"/> Multiple DL <input type="checkbox"/> Airway bleeding <input type="checkbox"/> Pneumothorax <input type="checkbox"/> >20% drop in O ₂ saturation <input type="checkbox"/> Intubated by anesthesia Appropriate PPV rate: <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Inconsistent
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CIR CULATION	<input type="checkbox"/> Fluid bolus <input type="checkbox"/> Electrolyte bolus <input type="checkbox"/> Cardiac med bolus	COMPRESSIONS? <input type="checkbox"/> Y <input type="checkbox"/> N Duration: () min Good quality: <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Inconsistent Unnecessary pauses: <input type="checkbox"/> Y <input type="checkbox"/> N Vasc access w/i 2 min? <input type="checkbox"/> Y <input type="checkbox"/> N
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Privileged information for Quality Improvement. Not to be placed in patient charts.

Debriefing performed: <input type="checkbox"/> Y <input type="checkbox"/> N	if no, reason: <input type="checkbox"/> RN busy <input type="checkbox"/> No interest in debriefing <input type="checkbox"/> MD busy <input type="checkbox"/> Resuscitation w/o problem <input type="checkbox"/> Other _____
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Introduction: We're here to learn from this event to improve ourselves as clinicians. We'd like to discuss what guided our actions during the event, with the goal of improving patient care, not assigning blame.

Choose 1-4 focus areas and complete GAS cycle for each:

TEAMWORK	MEDICAL MANAGEMENT	ENVIRONMENT
<input type="checkbox"/> Closed loop communication <input type="checkbox"/> Clear messages <input type="checkbox"/> Clear roles <input type="checkbox"/> Knowing one's limitations <input type="checkbox"/> Knowledge-sharing <input type="checkbox"/> Re-evaluation <input type="checkbox"/> Summarizing <input type="checkbox"/> Mutual respect	<input type="checkbox"/> Adherence to PALS algorithms <input type="checkbox"/> Effective ventilation <input type="checkbox"/> High quality chest compressions <input type="checkbox"/> Limited breaks between compressions <input type="checkbox"/> Rhythm identified and managed appropriately <input type="checkbox"/> Defibrillation without delay	<input type="checkbox"/> Medication availability <input type="checkbox"/> Equipment available/functioning <input type="checkbox"/> Noise interference <input type="checkbox"/> Crowd control

GAS Cycle:		Focus area: <input type="text"/>	Focus area: <input type="text"/>
GATHER <i>Team Observations</i> <ul style="list-style-type: none"> Can you describe your perspective? How did you think our code went? What did the team do well? What could we have improved? <i>Leader Observations</i> <ul style="list-style-type: none"> I noticed that... I observed that... I saw that... 	DESCRIPTION OF ISSUES		
		ANALYZE <i>Done Well</i> <ul style="list-style-type: none"> How were we able to... Why do you think we were able to... Tell me a little more about... <i>Needs Improvement</i> <ul style="list-style-type: none"> Why do you think ____ occurred? How could we improve... What was your thinking while... What prevented us from.... 	
SUMMARIZE <i>Team Summary</i> <ul style="list-style-type: none"> What are the main things we learned? Can we summarize the key points? What are the main take-home points? <i>Leader Summary</i> <ul style="list-style-type: none"> Let's summarize what we learned... Here is what I think we learned... The main take-home messages are... 	PROPOSALS		

DEMOGRAPHICS	Debrief Leader Name: <input type="text"/>		Debrief Leader Role: MD RN RT NP		Debrief Recorder Name: <input type="text"/>	
	Number of Attendees: <input type="checkbox"/> PICU Fellow <input type="checkbox"/> Med student <input type="checkbox"/> PICU Attending <input type="checkbox"/> Administrator <input type="checkbox"/> ICU RN <input type="checkbox"/> Housedoc/NP <input type="checkbox"/> Resident <input type="checkbox"/> Other _____ <input type="checkbox"/> RT <input type="checkbox"/> SW					

OVERVIEW	Estimated time spent debriefing: <input type="text"/> min
	Were there any delays in therapy? <input type="checkbox"/> Y <input type="checkbox"/> N If Y, describe: _____
	Could the event have been prevented? <input type="checkbox"/> Y <input type="checkbox"/> N If Y, how: _____
	What went well? _____
What could have been improved? _____	

Post-Resuscitative Care Review

This information is privileged and confidential - Peer Review Work Product

Advice for Team Debriefing:

1. Try to find a quiet, isolated place. Anyone present during the event may lead the debriefing. Debriefing leader should start by thanking team members for being present.
2. State: "The purpose of debriefing is to improve the quality of medical care by CHOP providers; it is not a blaming session. Everyone's participation is welcome and encouraged."
3. State: "We will briefly review the patient's summary and then we can discuss what went well and what could have gone better. Please feel free to ask any questions."
4. State: "All information discussed during the debriefing is confidential."
5. Please limit debriefing to 10 minutes.

Fill out this section BEFORE the debriefing Team discusses whether to do a debrief	Fill out this section DURING the debriefing (Person completing form is <u>not</u> the person leading debriefing)																																																								
<p>1. Patient MRN: <input style="width: 100%;" type="text"/></p> <p>2. Date (MM/DD/YY): <input style="width: 100%;" type="text"/></p> <p>3. Location in Hospital: <input style="width: 100%;" type="text"/></p> <p>4. Clinician Team Leader: <input style="width: 100%;" type="text"/></p> <p>5. Recording Nurse: <input style="width: 100%;" type="text"/></p> <p>6. If debriefing did not occur please state reason(s) why:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td><input type="checkbox"/></td><td>Time constraints</td></tr> <tr><td><input type="checkbox"/></td><td>Team dispersion</td></tr> <tr><td><input type="checkbox"/></td><td>Team change</td></tr> <tr><td><input type="checkbox"/></td><td>Team declined</td></tr> <tr><td><input type="checkbox"/></td><td>Other pt care issues</td></tr> </table> <p>7. Event Type:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td><input type="checkbox"/></td><td>Medical (ED/Floor/ICU)</td></tr> <tr><td><input type="checkbox"/></td><td>Surgical (OR)</td></tr> <tr><td><input type="checkbox"/></td><td>Trauma</td></tr> </table> <p>8. Circumstances: (select all that apply)</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td><input type="checkbox"/></td><td>Resuscitation event</td></tr> <tr><td><input type="checkbox"/></td><td>Respiratory event</td></tr> <tr><td><input type="checkbox"/></td><td>Surgical event</td></tr> <tr><td><input type="checkbox"/></td><td>Psychosocial event</td></tr> <tr><td><input type="checkbox"/></td><td>Other:</td></tr> </table> <p>9. Debriefing Leader Role: (circle one) RN MD SW other: _____</p> <p>10. Debriefing Documenter Role: (circle one) RN MD SW other: _____</p> <p>11. Multidisciplinary Debriefing? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<input type="checkbox"/>	Time constraints	<input type="checkbox"/>	Team dispersion	<input type="checkbox"/>	Team change	<input type="checkbox"/>	Team declined	<input type="checkbox"/>	Other pt care issues	<input type="checkbox"/>	Medical (ED/Floor/ICU)	<input type="checkbox"/>	Surgical (OR)	<input type="checkbox"/>	Trauma	<input type="checkbox"/>	Resuscitation event	<input type="checkbox"/>	Respiratory event	<input type="checkbox"/>	Surgical event	<input type="checkbox"/>	Psychosocial event	<input type="checkbox"/>	Other:	<p>1. Debriefing Start Time: <input style="width: 100px;" type="text"/></p> <p>2. What went well during our care for the patient? Why? Please select all that apply and add comments as necessary.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td><input type="checkbox"/></td><td>Clinical care (ex. airway, access, CPR)</td></tr> <tr><td><input type="checkbox"/></td><td>Team work</td></tr> <tr><td><input type="checkbox"/></td><td>Communication</td></tr> <tr><td><input type="checkbox"/></td><td>Leadership</td></tr> <tr><td><input type="checkbox"/></td><td>Other (please specify):</td></tr> </table> <p>3. What could have improved during our care for the patient? What are potential solutions? Please select all that apply and add comments as necessary.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td><input type="checkbox"/></td><td>Clinical care (ex. airway, access, CPR)</td></tr> <tr><td><input type="checkbox"/></td><td>Team work</td></tr> <tr><td><input type="checkbox"/></td><td>Communication</td></tr> <tr><td><input type="checkbox"/></td><td>Leadership</td></tr> <tr><td><input type="checkbox"/></td><td>Other (please specify):</td></tr> </table> <p>4. If a post-arrest care huddle was performed, were the following issues addressed? Please select all that apply and add comments as necessary.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td><input type="checkbox"/></td><td>Hypotension</td></tr> <tr><td><input type="checkbox"/></td><td>Fever</td></tr> <tr><td><input type="checkbox"/></td><td>Seizures</td></tr> <tr><td><input type="checkbox"/></td><td>Cardiac Arrest Resource Group Notification (pager 78280)</td></tr> <tr><td><input type="checkbox"/></td><td>Not applicable</td></tr> </table> <p>5. Debriefing End Time: <input style="width: 100px;" type="text"/></p> <p style="font-size: small; margin-top: 10px;">* Confidential document pursuant to the MCare Act and the Pennsylvania Peer Review Protection Act, 63 P.S. 425.1 et. seq. and HCQI Act, 1986. Form adapted from Resuscitation. 2013 Jul;84(7):946-51 * If anyone requests referral for free counseling, please call Employee Assistance Program at (888) 321-4433 or go online to www.pennbehavioralhealth.org. Updated 8/5/15</p>	<input type="checkbox"/>	Clinical care (ex. airway, access, CPR)	<input type="checkbox"/>	Team work	<input type="checkbox"/>	Communication	<input type="checkbox"/>	Leadership	<input type="checkbox"/>	Other (please specify):	<input type="checkbox"/>	Clinical care (ex. airway, access, CPR)	<input type="checkbox"/>	Team work	<input type="checkbox"/>	Communication	<input type="checkbox"/>	Leadership	<input type="checkbox"/>	Other (please specify):	<input type="checkbox"/>	Hypotension	<input type="checkbox"/>	Fever	<input type="checkbox"/>	Seizures	<input type="checkbox"/>	Cardiac Arrest Resource Group Notification (pager 78280)	<input type="checkbox"/>	Not applicable
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<input type="checkbox"/>	Not applicable																																																								

Pediatric Code W Debrief Form

A. PATIENT INFORMATION **Date**
Name: **MR#**

Location: _____

B. ACTIVATION:

1. Activated by floor team, announced via overhead and pagers? Y N
 If **no**, please describe issues: _____

C. RESPONSE

Delay in Code Team arrival (> 5 Minutes) Y N

Is the Code Team Leader identified and in charge? Y N

Were all team members fulfilling their assigned roles? Y N
 If **no** to any of the above, please explain: _____

D. Equipment

Any malfunctioning or missing equipment? Y N
 If **yes**, what was wrong or missing? _____

E. NRP/PALS PROTOCOLS

Were protocols followed appropriately? (Comments): _____

Was End Tidal CO₂ monitored and documented? Y N

Were compression depth and rate monitored and documented? Y N

Was ventilation rate monitored and documented? Y N

F. DOCUMENTATION (S= satisfactory D= deficient)

Personnel _____ Patient Status/Vitals _____
 Medications _____ Other interventions _____

Were defibrillator pads used? Y N
 If no, why not? _____

Was data captured to card? Y N

G. Medication Variations:

If any, please explain: _____

H. OUTCOME

Outcome of arrest: Alive _____ Expired _____
 Patient disposition: _____

If there were any issues not addressed above, please describe:

What intervention(s), if any, could have been performed prior to event to avoid patient's decline in status?

WHAT WENT WELL DURING EVENT	AREAS NOTED FOR IMPROVEMENT

Attendance:

DO NOT SCAN OR PUT INTO PATIENT CHART

Debriefing In Situ Conversation in Emergency Room Now (DISCERN) Form

ALL patients need this section completed - NURSE must decide with the doctor whether a debrief is necessary for EVERY

Fill out this section only if debriefing occurs

Fill out this section during the debriefing (Person writing not the person leading debriefing)

Place Patient Sticker Here

1. Date (MM/DD/YY)

2. Physician Team Leader

3. 1° Nurse filling this out:

4. If team leader & 1° nurse together decide not to do a debriefing, state reasoning: (check one box to the right)

Too many urgent patient care issues to make time

Did not feel it was needed.

Other reason: _____

5. Resuscitation Type (check all that apply)

Respiratory

Medical (includes seizure)

Trauma

Pulseless

6. Interventions (check all that apply)

Intubation

Defibrillation

Code 3 Trauma Activation

CPR

7. Time Resusc Ended

(Either "time of death" or "time left EC", whichever was 1st)

8. Patient outcome Alive Expired

1. Members Present ("X" box if present during debriefing)

Charge Nurse

1° /Documenting Nurse

Physician Team Leader

PEM Fellow

Resident

Secondary Nurse

Respiratory Therapist

Pharmacist

PCA

Other: _____

Other: _____

Other: _____

2. Debriefing Physician. Team Leader Name

3. Debriefing Documenter Name (NOT same as #2 above; can be RN or Dr)

1. Time Debriefing Started: _____

2. What went well during our care for the patient? _____

2. What could have gone better during our care for the patient (offer potential solutions if able)? _____

Was the Physician Team Leader (PTL) the **only** doctor calling out medication orders? YES NO

Was **anyone** confused at any time during the resuscitation about who was the PTL? YES NO

4. Time Debriefing Ended _____

Advice for Running A Team Debriefing

1. Pick a quiet or isolated space if possible - start by thanking members for being present & encouraging all members to participate.
2. State: "The purpose of debriefing is for education, quality improvement, and emotional processing; it is not intended to be a blaming session."
3. State: "These debriefings usually take several minutes and if you have urgent issues to attend to, you are welcome to leave at any time."
4. Outline agenda: "I will briefly the patient's summary and then we as an entire team can discuss what went well and what could have gone better."
5. Proceed as team leader or documenter with a brief summary of the patient's course (<1 minute) and then proceed to the group discussion.

DEBRIEFING FORM
FILL OUT LEFT SECTION BEFORE PATIENT LEAVES EC

Team Dynamics Debriefing Tool

Instructions

- Use the table below to guide your debriefing
- Observe and record elements of team dynamics
- Identify 2 or 3 elements of team dynamics to discuss per debriefing session

ACTION	GATHER	ANALYZE	SUMMARIZE
<p>Closed-Loop communication</p> <ul style="list-style-type: none"> • Orders acknowledged and confirmed when given • Orders announced when executed <p>Clear Messages</p> <ul style="list-style-type: none"> • Team members speak clearly • Orders are questioned when doubt exists <p>Clear Roles</p> <ul style="list-style-type: none"> • All team members have appropriate roles • Roles are reallocated when appropriate <p>Knowing One's Limitations</p> <ul style="list-style-type: none"> • Calls for assistance • Seeks advice when appropriate <p>Knowledge Sharing</p> <ul style="list-style-type: none"> • Sharing information between team members • Asks for ideas and suggestions <p>Constructive Intervention</p> <ul style="list-style-type: none"> • Identifies priorities • Questions colleagues who make mistakes <p>Reevaluation and summarizing</p> <ul style="list-style-type: none"> • Reevaluates patient • Summarizes patient condition and treatment plan <p>Mutual Respect</p> <ul style="list-style-type: none"> • Speaks in a professional, friendly tone of voice • Provides positive feedback 	<p>Student Observations</p> <ul style="list-style-type: none"> • Can you describe the events from your perspective? • How did you think your treatments went? • Can you review the events of the scenario? (<i>directed to the recorder</i>) • What could you have improved? • What did the team do well? 	<p>Done well</p> <ul style="list-style-type: none"> • How were you able to [<i>insert action here</i>] • Why do you think you were able to [<i>insert action here</i>] • Tell me a little more about how you [<i>insert action here</i>] 	<p>Student-led summary</p> <ul style="list-style-type: none"> • What are the main things you learned? • Can someone summarize the key points made? • What are the main take home messages?
<p>Knowing One's Limitations</p> <ul style="list-style-type: none"> • Calls for assistance • Seeks advice when appropriate <p>Knowledge Sharing</p> <ul style="list-style-type: none"> • Sharing information between team members • Asks for ideas and suggestions <p>Constructive Intervention</p> <ul style="list-style-type: none"> • Identifies priorities • Questions colleagues who make mistakes <p>Reevaluation and summarizing</p> <ul style="list-style-type: none"> • Reevaluates patient • Summarizes patient condition and treatment plan <p>Mutual Respect</p> <ul style="list-style-type: none"> • Speaks in a professional, friendly tone of voice • Provides positive feedback 	<p>Instructor observations</p> <ul style="list-style-type: none"> • I noticed that [<i>insert action here</i>] • I observed that [<i>insert action here</i>] • I saw that [<i>insert action here</i>] 	<p>Needs Improvement</p> <ul style="list-style-type: none"> • Why do you think [<i>insert action here</i>] occurred? • How do you think [<i>insert action here</i>] could have been improved? • What was your thinking while [<i>insert action here</i>] • What prevented you from [<i>insert action here</i>] 	<p>Instructor-led summary</p> <ul style="list-style-type: none"> • Let's summarize what we learned... • Here is what I think we learned.... • The main take home messages are....

DO NOT PUT THIS SHEET INTO THE PATIENT'S CHART

Debriefing In Situ Conversation in Emergency Room Now (DISCERN) Form

INSTRUCTIONS for Debriefing Nurse to facilitate debriefing:

1. Fill out Pre-Debriefing questions #1 - #7 while waiting for other team members to arrive.
2. Once ready to start, state: "Debriefing is for quality improvement, educational, and emotional processing purposes. It is not a blaming session. Everyone is encouraged to participate. Anything you say here is legally protected from discoverability and will not be used to evaluate your performance. The team leader will start by reviewing our primary objective in this patient's care & then we as a team can answer some questions together."

PRE-DEBRIEFING

1. Place patient sticker (preferred)
or
MRN #: _____
or
LastName, FirstName: _____, _____

2. Today's date: _____

3. Members present ("x" if present):

- | | |
|--|--|
| <input type="checkbox"/> Charge Nurse (Unit) | <input type="checkbox"/> Doctor: Physician team leader |
| <input type="checkbox"/> Charge Nurse (Code) | <input type="checkbox"/> 2nd Doctor (Name): _____ |
| <input type="checkbox"/> Nurse: Left | <input type="checkbox"/> ED Tech |
| <input type="checkbox"/> Nurse: Medication | <input type="checkbox"/> Social Worker |
| <input type="checkbox"/> Nurse: Right | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Resident | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Resp Therapist | <input type="checkbox"/> Other: |

4. Patient type: Med-alert Med Alert-PICU (invite ICU:8038)

5. Our team performed: Intubation CPR No CPR & No intubation

6. MD Lead Last Name: _____ (Role: Facilitate debrief)

Debriefing RN Last Name: _____ (Role: Lead & document debrief)

7. Debriefing Location: Code Bay / Crisis Room (preferred location)

Other --> _____

DEBRIEFING

1 Start Time: _____

"Will the team leader please state our primary objective for this patient's care?"

2. What went well to help us achieve our objective for this patient's care?

3. Were we able to establish vascular access in the 1st 2 minutes? NO YES IV/IV-Already-placed

4. How could we have decreased the time to establish access? (Skip if "IV/IO already placed" above)

5. Did the patient have CPR, SEIZURE, and/or INTUBATION in the ED?

YES? --> Proceed to #6 questions on **back** side of this form before proceeding to #7 below

NO? --> Proceed to #7 below

7. Was the patient summary verbalized in the first 5 minutes of care? NO YES

8. Was the patient summary verbalized at least once more after the 1st 5 minutes of care? NO YES

9. Were there any medication or equipment delays? NO YES--> _____

10. How could we have done anything else better in this patient's care?

11. If anyone would like to talk more about today's event, please contact the chaplain or social worker

12. End Time: _____

Do not put sheet into patient's chart, instead:

SZ --> "Completed Debriefing Forms" box between code bays. **UMC** --> box outside Paris' office

DISCERN Debriefing Form

(BACK Side - Start on opposite side)

Complete each section(s) of question #6 only if the stated activity(ies) occurred in the ED
(Then turn back over and proceed to #7)

CPR	occurred in ED:	6A. Did we get the AED pads on the patient in the first 2 minutes after starting CPR?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
		6B. How could we have decreased the time to placing defibrillator pads on the patient?	_____	
		6C. Did any of our pauses in compressions between CPR cycles last more than 10 seconds?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
		6D. How could we have decreased the duration of pauses in compressions between CPR cycles?	_____	
		6E. Did we get an epinephrine bolus into the patient in the first 5 minutes of the arrest?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
		6F. How could we have decreased the time to 1 st epinephrine bolus? _____	_____	

INTUBATION	occurred in ED:	6G. How many intubation attempts did we perform (1 attempt = 1 <u>blade</u> insertion into mouth)?	<input type="checkbox"/> 1	<input type="checkbox"/> ≥ 2
		6H. How could our team have prepared or performed the intubation better?	_____	
		6I. Were there any desaturations to less than 90% during the intubation (from RSI meds given to tube secured)?	<input type="checkbox"/> NO	<input type="checkbox"/> YES
		6J. How could we have optimized the patient's oxygenation or ventilation better?	_____	
		6K. Did we use End Tidal CO2 continuous monitoring after endotracheal tube insertion to confirm placement?	<input type="checkbox"/> NO	<input type="checkbox"/> YES

SEIZURE	occurred in ED:	6L. Approximately how long was the patient seizing in the ED before the 1st anti-epileptic drug was given?	<input type="text"/> minutes
		6M. How could we have decreased the time to administration of the anti-epileptic therapies?	_____
		_____	_____

Hot Debrief

Event Debriefed: Yes No

Event Time: __:__ __/__/__ Debrief Time: __:__ __/__/__

Attendees (Circle): MD RN RTs SW Administration Other:_____

[How about medical students? Other specialties (Anesthesia? Surgery?) I think we should clarify what administration means because it likely varies by institution. Also, do we want to collect how many of each of these providers are present for future reporting?]

Debrief Leader (position): _____

Core elements:

What went well?

How could have been improved in this patient’s care?

Systems issues identified?

Were there any pauses in chest compressions of more than 5 seconds?

(If yes) How could we avoid these compression pauses in the future?

Common Elements

- Team Leader identified and in control
- Orderly scene – this needs to be better defined.
- Closed loop communication/ clear communication
- PALS protocols followed
- Equipment issues
- Knowledge of cart/defibrillator
- Timeframes (until compressions, Zoll pads, etc) – this likely refers more to cold debriefing as

it might be hard to collect the timeframe data in a hot debrief.

Other Issues Identified:

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SPECIAL FEATURE

Post-event debriefings during neonatal care: why are we not doing them, and how can we start?

T Sawyer^{1,2}, D Loren¹ and LP Halamek^{3,4}

Post-event debriefings are a foundational behavior of high performing teams. Despite the inherent value of post-event debriefings, the frequency with which they are used in neonatal care is extremely low. If post-event debriefings are so beneficial, why aren't they conducted more frequently? The reasons are many, but solutions are available. In this report, we provide practical advice on conducting post-event debriefing in neonatal care. In addition, we examine the perceived barriers to conducting post-event debriefings, and offer strategies to overcome them. Finally, we consider opportunities to foster a culture change within neonatal care which integrates debriefing as standard daily work. By establishing a safety culture in neonatal care that encourages and facilitates effective post-event debriefings, patient safety can be enhanced and clinical outcomes can be improved.

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INTRODUCTION

Post-event debriefings in healthcare are defined as a 'discussion of actions and thought processes after an event to promote reflective learning and improve clinical performance'.¹ Post-event debriefings have also been described as a 'facilitated or guided reflection in the cycle of experiential learning'.² We define post-event debriefings as a facilitated discussion of a clinical event focused on learning and performance improvement. Essential elements of post-event debriefings include active self-learning, a primary intent for improvement, reflection on specific events (not general performance) and the inclusion of input from multiple team members.³ Post-event debriefings differ from meetings aimed at assisting staff in managing emotionally taxing incidents; a process known as 'critical incident stress management'.^{4,5}

Post-event debriefings are a foundational behavior of high performing teams. A recent meta-analysis found that organizations can improve individual and team performance by up to 25% by conducting effective debriefings.³ In simulation-based studies, debriefing has been associated with enhancements in team performance, and improvements in both technical and behavioral skills.^{6–14} In clinical medicine, post-event debriefings have been shown to increase overall performance, reduce the frequency of equipment-related problems, and improve communication and teamwork.^{15–18} The American Heart Association (AHA) endorses debriefing as a strategy to improve cardiopulmonary resuscitation quality.¹⁹ However, despite the wealth of evidence supporting routine post-event debriefing, a recent multicenter safety audit found that only 19% of 84 neonatal intensive care units (NICUs) participating in the Vermont Oxford Network Days Delivery Room Resuscitation Audit conducted post-event debriefings, and only 5% had established policies regarding debriefing.²⁰

If post-event debriefing are so beneficial, why aren't they conducted more frequently? In this report we provide practical advice on how to conduct post-event debriefings in neonatal care.

We also explore the perceived barriers to conducting post-event debriefings, and offer strategies for overcoming them. Finally, we consider opportunities to foster a culture change within neonatal care which integrates debriefing as standard daily work. This report provides the guidance necessary to facilitate more frequent post-event debriefings, and thereby enhance patient safety and improve neonatal care.

CONDUCTING A POST-EVENT DEBRIEFING

As described by Kessler *et al.*, any guidance on post-event debriefing must include not only the 'how' of debriefing, but also the 'who,' 'what,' 'when' and 'where'.²¹ These foundational pillars are all essential to effective post-event debriefing, and addressing each is necessary to foster the development of a safety culture which allows debriefing to become a standard practice.

Who

To improve team performance, all members of the team should participate in the post-event debriefing.²² Common neonatal care team members include nurses, physicians, nurse practitioners, respiratory therapists and pharmacists. Each of these team members possesses a unique perspective, and each perspective is important to understanding the individual and team strengths and weaknesses. Input from all team members during the debriefing enhances the ability of the neonatal care team to improve future performance.

One individual on the team should be designated as the leader, or facilitator, of the debriefing. This individual both guides and participates in the discussion. As implied by the term 'facilitator', the debriefing leader should facilitate, not dominate, the conversation. This is accomplished primarily by asking open-ended questions and practicing self-restraint in answering the questions. Any member of the team can serve as the facilitator.

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Establishing a unit policy outlining which team member will act as the facilitator is helpful to clarify roles and avoid confusion; one common practice is to assign the senior physician or senior nurse to be the facilitator.^{21,23,24} Pre-assigning a specific team member to be the facilitator also helps to ensure that debriefings occur consistently.

What

The neonatal care environment offers frequent opportunities where post-event debriefings can be conducted. These include neonatal resuscitations (both in the delivery room and NICU); invasive procedures; near misses and adverse events; high-acuity admissions; emergent transfers; and challenging parent/family interactions. These events challenge the cognitive, technical and behavioral skills of the healthcare professionals involved and – regardless of the quality of the team's performance – deserve mindful, team-based review accomplished through post-event debriefings. Learning how to replicate successful team performance is just as important as understanding how to avoid repeating suboptimal performance.

When

Finding the optimal time to reconvene a team involved in a clinical event is one of the most challenging aspects of post-event debrief. The interprofessional team present at a clinical event will have competing demands on their time as they continue fulfilling their clinical responsibilities after the event. Geographic separation of team members after the event may add an additional barrier to post-event debriefing. Debriefings can be conducted either immediately after the event ('hot' debriefing), or at a time remote from the event ('cold' debriefing); benefits and drawbacks for both types of debriefing exist.²¹ Of these two options, most experts recommend the hot debriefing for the following reasons:²²

- All members of the team are already physically present.
- The risk of recall bias is minimized.
- It creates the potential to quickly address issues identified during the debriefing.

Immediate post-event debriefings may uncover significant care system vulnerabilities that demand greater exploration, and require engagement of unit leadership. In these situations, the initial hot debriefing should focus on team performance, while the subsequent cold debriefing can focus on system function and process improvement. The cold debriefing may be part of a root cause analysis, with a goal to identify and eliminate latent safety risks.

Where

Choosing the location of a post-event debriefing is guided by a careful balance between convenience and confidentiality. Debriefings of clinical events can be conducted in either patient care or non-patient care areas. The utility of debriefing in a patient care area lies in the fact that the members of the team involved in the event are already physically gathered in that location. However, this advantage is outweighed by several problematic issues. Patient care areas are dynamic environments where clinical care can easily distract team members, making it difficult to achieve an effective debriefing. In addition, the close proximity to other patients can also result in frequent interruptions of the debriefing to deliver care to those patients. Another major limitation to debriefing in a patient care area is the inability to guarantee the confidentiality of the discussion. Based on these issues, we recommend that debriefings occur in a non-clinical area, such as a conference room or break room, which separates the debriefing

event from clinical care, and also ensures the confidentiality of the discussion.

How

Post-event debriefings are most effective when structured and facilitated.^{3,22} Figure 1 provides an example of a post-event debriefing structure and conversational prompts to aid in effective facilitation. This structure is based on 'Gather, Analyze, Summarize' approach to debriefing endorsed by the AHA and incorporated in its life support courses, and includes the 10 Key Behavioral Skills of neonatal resuscitation.^{25–27} As noted in Figure 1, the facilitator begins with an opening statement and establishment of a shared mental model of what happened during the event (Gather), and then examines team performance (Analyze). During the analysis phase, actual team performance is compared with ideal team performance using the 'plus-delta' technique, which focuses on what went well (plus), and what did not go well (delta). The debriefing ends with a summarization of what will be done differently in the future, and identification of issues that require further follow-up (Summarize). By asking open-ended questions, and limiting statements of his/her own opinions, the facilitator guides but avoids dominating the discussion. If the team agrees that a certain aspect of performance went well the circumstances that enabled a high level of performance should be explored. Similarly, when suboptimal performance is identified an examination of the underlying causes should take place. Keeping track of the 'pluses' and the 'deltas', and the strategies that sustain and improve them, is common practice in military post-event debriefings.^{28,29}

To optimize the debriefing experience, those being debriefed must feel empowered to speak frankly and offer their unfiltered observations, opinions and suggestions.²² Such an atmosphere of psychological safety, where team members feel secure in critically analyzing their own performance, is best achieved when the debriefing proceeds in a non-punitive fashion, and all members of the team understand that patient care is a collaborative, rather than an individual undertaking. As such, it is the responsibility of the team to support the performance of the individual through the use of skills such as situational awareness and cross-monitoring.²² Through continually reframing the discussion of suboptimal performance and errors in the context of team responsibility, the facilitator can help the team members understand their interdependence and help achieve superior team performance.²²

To foster psychological safety, debriefing practices should conform to the medicolegal environment of the healthcare system in which they take place. Risk management leaders within the healthcare system have specific knowledge of relevant case law and state level statutes regarding debriefing. This can guide the inclusion of possible quality assurance protection preamble statements that may need to be stated out loud before a debriefing occurs to maintain legal protection for the conversation. Additional measures, such as having team members sign a form acknowledging the protected status of the conversation under quality improvement, can also be employed. Maintaining medicolegal protection of team debriefing is fundamental to ensure all team members feel comfortable speaking candidly. Risk management can also provide guidance on the management of written records from post-event debriefings. As a general rule, post-event debriefings notes or forms are not placed in the patients' medical record.²⁴

A key aspect of an effective clinical debriefing is keeping the conversation brief. A skilled facilitator does this by focusing on a few critical performance issues, keeping the team on task, and avoiding tangential conversations.²² Focusing on high-value issues such as adherence to guidelines, technical, equipment or procedural issues, and 2 to 3 behavioral skills, as outlined in

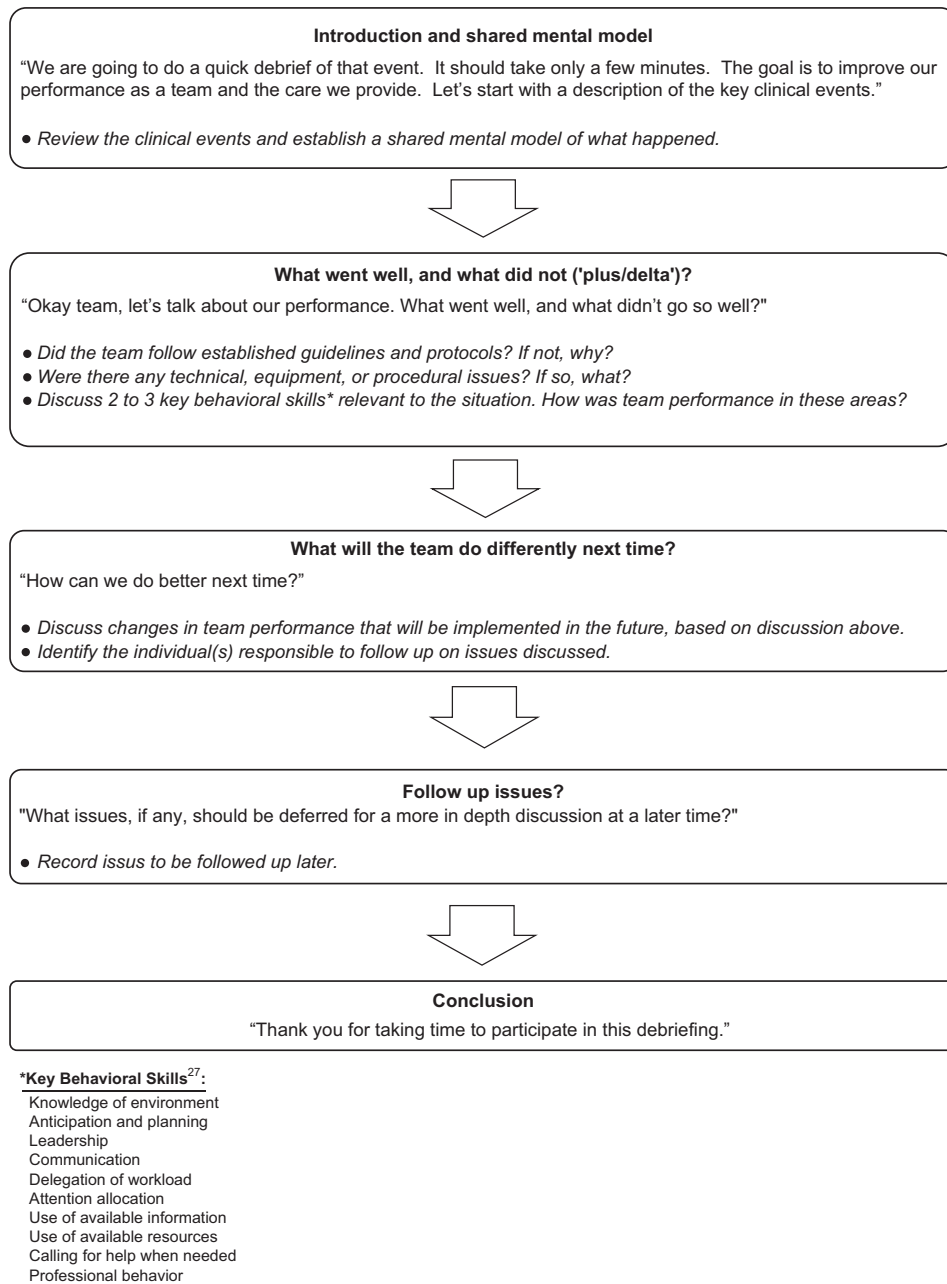


Figure 1. Suggested post-event debrief structure and conversational prompts for facilitator.

Figure 1, can help ensure the debriefing proceeds in an organized manner. Prolonged discussions of systems issues without an immediate solution should be avoided, as this is often counterproductive and can lead to frustration among those being debriefed. Instead, such issues should be acknowledged, recorded, and scheduled for discussion at a later time during a cold debriefing with unit leadership and administrative personnel who are able to effect the necessary change. Dutifully ensuring that these issues are then appropriately followed up, and the results communicated to the care team, are critical components of an effective post-event debriefing.

DEVELOPING A CULTURE THAT FOSTERS DEBRIEFING

Healthcare is not the only industry in which the risk to human life is high. Commercial aviation, spaceflight, mass transportation,

nuclear power and the military are all endeavors where overt or latent human and system weaknesses can lead to loss of life. What separates these other industries from healthcare is a safety culture that is less tolerant of conditions that place human lives at risk. When human and system weaknesses become manifest in these non-healthcare industries, the process for analysis often includes both an immediate debriefing focused on identifying issues that require prompt attention and remediation, followed by a subsequent more comprehensive review that involves experts both internal and external to the organization. Regardless of when the debriefing occurs, it is invariably focused on the facts of what happened during the event, rather than the feelings of the individuals involved in the event.³⁰ Should it become apparent that individuals have experienced psychological trauma resulting from the event, critical incident stress management can be conducted.^{4,5}

Table 1. Perceived barriers to post-event debriefing, and suggested solutions

Perceived barriers	Suggested solutions
Insufficient time	Limit debriefings to ≤ 10 min. Use a structured approach to keep the conversation on track (Figure 1). Table systems issues not immediately solvable for a later discussion with unit leadership, where a solution and action plan can be developed.
Lack of skilled facilitators	Seek out individuals who have training in post-event debriefing (for example, simulation educators). Conduct training in clinical debriefing for facilitators. Practice debriefing skills during regular simulation-based training sessions. Develop a policy on debriefing that outlines the roles, responsibilities and provides tools for facilitators.
Lack of an appropriate setting	Identify a room in the nursery or NICU as the 'debriefing room'. Ensure the room is available 24/7. Ensure debriefing conversation held in that room are kept confidential.
Threat of litigation	Involve hospital risk management to ensure concerns regarding confidentiality and discoverability are adequately addressed. Develop a policy for conducting debriefings as part of protected quality improvement efforts. Develop a procedure for disclosing medical errors identified through debriefing. Follow risk management guidance regarding the handling of written records from debriefings.

In these non-health-care related high-risk operating environments, debriefing is not restricted to only near miss and adverse events; rather, it is integral to daily activities and part of standard work. The National Aeronautics and Space Administration's Johnson Space Center (JSC) in Houston, TX, USA, is a perfect example of a culture that has embraced debriefing as a method to improve human and system performance. At JSC both simulated and real spaceflights are debriefed. Because of the collaborative nature of their work, these debriefings involve not only the astronauts who fly the spacecraft but also the flight controllers and flight directors who work in Mission Control. When crews return from space, one of their first responsibilities is to undergo extensive debriefings of every aspect of their mission. The astronauts themselves facilitate the debriefing, critically analyzing the details of the mission, without the need for prompting.³¹ Astronauts also routinely debrief with the simulation supervisors and others who trained them; these individuals want to know whether they adequately prepared the astronauts for their mission and what they need to change in order to do a better job of training the next crew.

How can healthcare develop a culture that actively fosters debriefing as a way of continuous objective assessment and performance improvement? An example of the type of leadership that is required to change healthcare culture is the Neonatal Resuscitation Program (NRP). The NRP is a training program established in 1987 to facilitate the acquisition of the cognitive, technical and behavioral skills necessary to successfully resuscitate neonates.³² Over the past decade the NRP has established debriefing as part of standard training, and created materials to aid healthcare professionals in developing skill in debriefing methodology.³² To highlight the importance of debriefing in clinical care, the 7th Edition NRP Flow Diagram for neonatal resuscitation specifically requires a team debriefing after all neonatal resuscitations.³³ To establish a local culture that fosters debriefing, as recommended by the NRP, nurseries and NICUs should provide:

- Explicit permission and active encouragement of debriefing during neonatal care.
- Staff training and simulation-based practice in debriefing.
- Procedural guides and policies on debriefing approved by risk management.
- Regular evaluation and quality assurance of debriefing activities.
- Private space in which debriefings can be conducted confidentially.

- A system to follow-up on issues identified during debriefings, and communication of these activities to staff.

These resources and activities will allow motivated neonatal care teams to overcome any real and imagined barriers to debriefing.

PERCEIVED BARRIERS TO DEBRIEFING, AND POTENTIAL SOLUTIONS

There are many perceived barriers to post-event debriefing during neonatal care. Sandhu *et al.* conducted a needs assessment of post-resuscitation debriefing in Canadian pediatric emergency rooms and found the three most commonly reported perceived barriers to be: (1) insufficient time to conduct debriefings, (2) lack of qualified/trained facilitators and (3) lack of an appropriate setting in which to conduct a confidential debriefing.²³ These perceived barriers are true for neonatal care as well. In addition to these three, in the US the threat of litigation is also a potential barrier to frank and open post-event debriefing. Developing policies and procedures to address these potential barriers is critical in establishing a culture in neonatal care that fosters debriefing, and the creation of an environment where debriefing can be conducted regularly and effectively. Some suggested solutions to these perceived barriers are provided in Table 1.

CONCLUSION

Despite the proven benefits of post-event debriefings, the frequency with which they are used in neonatal care is extremely low. A careful examination of the barriers in conducting debriefings indicates that while real, none are insurmountable. By employing specific strategies to overcome these barriers, human and system vulnerabilities in neonatal care can be identified, and plans for their remediation developed. Establishing a safety culture that encourages and facilitates effective post-event debriefings enhances patient safety and improves clinical outcomes, benefitting neonates, their families and the healthcare professionals who care for them.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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Debriefing in the Emergency Department After Clinical Events: A Practical Guide

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One vital aspect of emergency medicine management is communication after episodes of care to improve future performance through group reflection on the shared experience. This reflective activity in teams is known as debriefing, and despite supportive evidence highlighting its benefits, many practitioners experience barriers to implementing debriefing in the clinical setting. The aim of this article is to review the current evidence supporting postevent debriefing and discuss practical approaches to implementing debriefing in the emergency department. We will address the who, what, when, where, why, and how of debriefing and provide a practical guide for the clinician to facilitate debriefing in the clinical environment. [Ann Emerg Med. 2015;65:690-698.]

A **podcast** for this article is available at www.annemergmed.com.

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CASE STUDY

You are working in the emergency department (ED) and a mother rushes in screaming with her pale child. The child is taken to the resuscitation room, intubated, and transferred to intensive care. Your resident asks whether the team should debrief. You have debriefed in simulation but never after an actual resuscitation. You decide to conduct a debriefing. What does debriefing in the clinical setting entail and where should you and your team begin?

INTRODUCTION

Debriefing is a “facilitated or guided reflection in the cycle of experiential learning.”¹ Debriefing performance in the field was first promoted by military teams, but was soon co-opted by other high-stakes industries such as aviation and more recently medical teams.²⁻⁴ The purpose of debriefing in health care is to facilitate discussion of actions and thought processes, encourage reflection, and ultimately assimilate improved behaviors into practice.⁵

Debriefing is a powerful quality and educational tool that can potentially change team behavior and positively influence patient outcomes. In a meta-analysis of team-based debriefings after clinical events, there was improved effectiveness in teams that debriefed compared with those that did not.⁶ After clinical cardiopulmonary resuscitation events, debriefing programs have demonstrated improved rate of return of spontaneous circulation, neurologic outcomes, hands-off compression times, and time delay to first compression.⁷⁻¹⁰ Accordingly, the 2010 American

Heart Association resuscitation guidelines officially recommend the use of debriefing after resuscitations to improve clinical performance.¹¹

Despite the evidence, debriefing implementation in the ED is variable. Two surveys were conducted that queried ED providers (US pediatric emergency medicine fellows in one; Canadian emergency physicians and nurses in the other) to recall the frequency of debriefing after resuscitation events in their ED environments. The majority of respondents in both surveys indicated that they debriefed after less than or equal to 25% of ED resuscitations.^{12,13} The majority of health care providers recognized the importance of debriefing and desired a structured debriefing program; however, insufficient time, lack of trained facilitators, and lack of a debriefing setting were cited as barriers to implementation.¹²

A practical structure for debriefing after clinical events can capitalize on the rich learning opportunities unique to this often-chaotic environment. In this article, we conduct an ad hoc review of the current evidence supporting team debriefing in the ED and discuss practical approaches to implementing debriefing. We will provide a practical guide for the who, what, when, where, why, and how of debriefing in the ED (Table 1).¹⁴

WHY?

The function of debriefing is to identify areas of optimal and suboptimal performance and then determine ways to improve future team performance. The ultimate focus of debriefing should not be on blaming individuals but on

Table 1. Guide to creating a debriefing program in the ED.

Category	Strategy
Who	<p>Determine the facilitator Internal vs external team member Single vs multiple Trained vs untrained vs scripted guidelines Onsite vs remote</p> <p>Determine the participants Team members with or without external participants Trained vs untrained vs scripted guidelines</p>
What	<p>Decide what events will trigger debriefings Eg, trauma cases, intubations, poor outcomes, cardiac arrests</p>
When	<p>Determine timing Eg, hot (immediate) vs warm (delayed minutes to hours) vs cold (delayed days to weeks)</p> <p>Select criteria for a hybrid approach Eg, patient death with a warm debriefing and follow-up cold debriefing</p>
Where	<p>Select a location to debrief On site in the location where the event occurred On site in a location not where the event occurred Off site (not in the ED)</p>
Why	<p>Determine the objectives for debriefing Eg, improve future performance (individual, team, system), improve specific ED metrics, evaluate environment</p>
How	<p>Create a standardized format for all debriefings Overview of purpose, ground rules, and format</p> <p>Define a debriefing method Consider the use of a debriefing tool or script Consider the use of adjuncts (eg, video, quantitative data)</p>
Postdebriefing	<p>Determine documentation methods to capture debriefing content Determine who will address modifiable issues discussed in debriefings Determine how to close the loop with debriefing participants on actions taken Determine local resources available for staff for psychological distress</p>
Promoting debriefing	<p>Determine your multidisciplinary local debriefing champion(s) Determine a tracking method to track adherence to debriefing triggers Engage ED and hospital leadership to receive their support for debriefing Determine methods to spread debriefing throughout your hospital</p>

taking a look at all available facts and perspectives that will help improve processes and patient outcomes. The quality of future performance can potentially be improved by incorporating a number of quality improvement processes into the debriefing (Table 2).

For individuals and teams, recognizing and understanding the contributions to an error (ie, an abbreviated root-cause analysis) is a vital step toward correcting this behavior.¹⁵ Individuals and teams benefit from the group's reflection on knowledge, attitudes, skills, or teamwork behaviors exhibited

during a clinical event. Identifying barriers or facilitators of performance can provide feedback to administrators from frontline providers on latent safety threats. These administrators can then investigate methods to improve the process-level (eg, trauma protocol) or system-level (eg, restructure scheduling) activities in the ED. Structured debriefing should be distinguished from defusing, whose sole purpose is venting emotions to reduce tension. Debriefing takes the additional step of conceptualizing ways to improve future performance.¹⁶⁻¹⁸

WHAT?

What Clinical Events Should Trigger a Debriefing in the ED?

Simulation-based education typically includes a structured debriefing, with learning objectives based on the nature of the simulation.^{11,19-22} Conversely, in the ED, the nature and timing of critical events are unpredictable, making the trigger for debriefing a complex decision process.¹³ Standardization of which clinical events to debrief can enable team members to anticipate a debriefing, align departmental goals, and increase debriefing frequency.

Selection of the appropriate clinical events to debrief should be driven by local needs and priorities (Table 3). Most current evidence surrounds the high-yield effect of debriefing after cardiac arrest.^{5,7-9} However, other critical events, dysfunctional interpersonal interactions, or even common problems in noncritical patients provide opportunities to debrief for educational and quality improvement purposes. For example, debriefing cases of septic shock could allow team-based reflection on process metrics (eg, time to fluid administration and antibiotics), with the proximate goal of improving guideline compliance and ultimately sepsis outcomes. In a new debriefing program, one should select triggers that occur frequently enough to promote incorporation into the culture of the ED but not so common that it becomes an overwhelming time burden. Most important, events that are debriefed must be relevant to staff. Forming an interprofessional group of stakeholders to help determine the triggers for debriefing can help with buy-in.

What Content Should Be Discussed During a Debriefing to Best Enhance Clinical Care in the Future?

The focus of debriefings should be on individual, team, process, or system issues that, if modified, would benefit the next patient with a similar presentation. Specific content discussed during debriefings can include clinical management (eg, adherence to protocols or standards), technical skills (eg, chest compressions), teamwork, and

Table 2. Processes within clinical debriefing and expected targets for improvement.

Potential Processes Within Debriefing	Targets for Improvements				Examples
	Individual	Team	Process	System	
Self-improvement and self-assessment	✓				Physician identifies a knowledge gap (eg, wrong vasopressor choice)
Performance analysis of specific metric(s)	✓	✓	✓	✓	Time to intravenous fluids and antibiotics for all septic shock patients is reviewed by team
Root-cause analysis after a suboptimal outcome	✓	✓	✓	✓	After wrong dose of epinephrine is given, a debriefing is conducted solely to determine root cause of this action
Mental model sharing across disciplines	✓	✓	✓	✓	Joint debriefing after a major trauma is conducted so that both disciplines can agree about how it was handled and how it could be done differently
Examinations of efficiency, cost-effectiveness, lean analysis, human factors			✓	✓	After 4 chest tube kits are opened for a trauma patient, the team debriefs about how the kits are organized, where they should be located, and which parts can be reused
Environmental assessment for latent safety threats			✓	✓	After team reports that they could not find the proper size chest tubes, a question about finding proper supplies is added to each future clinical debriefing session

behavioral issues.^{5,7,8,21,23-25} In discussing the system, it is useful to reinforce good processes that lead to resiliency of a team’s performance. Metacognition is the act of reflecting on the cognitive tasks of an individual. Bringing discussion of metacognition into debriefing may be useful to help teams understand one another’s frames of thinking around medical management. It is important to be mindful of the information that team members will have available during a debriefing. Most programs will rely on the memory of participants to guide discussion. Teams may therefore be at risk of bringing inaccurate information into a debriefing (eg, attending physician: “Surgery was never contacted.”). One advantage of team debriefing, therefore, is to leverage the team’s collective knowledge for a more accurate account of events (eg, nurse: “Actually, we paged surgery twice, but they were in surgery.”).⁶ The use of objective data, such as code sheets or electronic health records, data captured by a defibrillator, or video review of clinical events, may serve as the basis of discussion and reflection during debriefing. For select cases (eg, cases of high-risk injury or preventable deaths), a detailed root-cause analysis may need to be conducted at a different time to permit a closer examination of causes than an abbreviated clinical debriefing may allow.

WHO?

Debriefing Participants

Who should participate in the debriefings? All team members who actively participated in the clinical event should be invited to participate in the debriefing.²⁶ In the study by Mullan et al,⁵ multiple team members were often present, including the physician leader (98%), primary nurse (95%), respiratory therapist (83%), secondary nurse

(83%), charge nurse (81%), and resident (70%); other members included pharmacists, social workers, translators, and patient advocates. Participation by all team members should be encouraged, but exceptions could be allowed for members who are emotionally unable to attend. Inviting others who were not engaged in the event enables more people to learn from the experience.⁸ This benefit may be outweighed by potential harms of a longer duration of debriefing or a more limited discussion of sensitive topics because of a decreased sense of psychological safety.²⁷ Although parents and patients could theoretically participate in the debriefing, their presence may also have a significant effect on the scope and content of

Table 3. Potential triggers for debriefing in the clinical setting.

Category	Examples
Presenting complaint	Respiratory distress
	Cardiac arrest
	Hypotension
	Unresponsiveness
Final diagnosis	Sudden infant death syndrome
	Cardiac tamponade
	Septic shock
	Stroke
Acuity level	Highest severity triage level (eg, level 1)
	Crash cart used
	Extremely abnormal vital signs (eg, any pulse rate >220 beats/min)
Disposition	Death
	Intensive care
	All transfers out of institution
Location of care	Trauma bay
	Medical resuscitation room
Complications, errors	Near-miss event
	Patient harm
Interpersonal	Upset/violent patients involving calls to security
	Arguments between clinical providers

communication from the group. Medicolegal implications of debriefing with family members are also uncertain.

Debriefing Facilitator

Who should facilitate the debriefing? Although team authority figures (eg, physician team leader, charge nurse) most commonly lead debriefings,^{5,12,28,29} their role as facilitator has the potential to inhibit or bias the discussion. Adding a co-debriefer may help mitigate this effect. Alternative facilitators could include other team members who were not leading the resuscitation. The nurse documenter is often a good choice to facilitate or cofacilitate because they can share knowledge of when medications were administered or other critical actions were performed. Having somebody from outside the ED serve as a facilitator is also an option, but this is generally limited because of logistic challenges.

Training of Facilitators

In a recent ED survey, a lack of trained or qualified debriefing facilitators was cited as the second most common barrier to debriefing.¹² Ideally, specific training in postevent debriefing would also incorporate education in human factors, patient safety, and quality improvement methodologies. Although integrated courses such as this do not exist, specific training in debriefing methodology for health care workers is available (although primarily focused on simulation-based debriefing).^{1,30,31} Most important is to cultivate the skill of debriefing through experiential learning. Using an evidence-based script is one way to standardize debriefing sessions while offering novice debriefers “on the job” experience.^{5,26} Social workers and psychologists may also be considered candidates for further training because they already possess formal training in facilitating discussions.³ Typically, a facilitator more familiar with clinical medicine (eg, physician, nurse) is the preferred choice.^{5,12,28,29} Another potential solution to the lack of trained facilitators is to teleconference in a remote facilitator. Although some simulation programs are embracing this method, challenges for postevent debriefing include patient privacy concerns, technology reliability, and lack of intimacy.³²

HOW?

Debriefing should include a friendly atmosphere, open-ended questions, honest dialogue, and identification of behaviors or perceptions that lead to improved outcomes.¹ Postevent debriefing literature is scant compared with the simulation literature. Although similar theories may apply to both, there are unique aspects to debriefing in each setting that are still being worked out.^{5,7,8,11,16,21,30,33,34} Careful selection of the appropriate debriefing method(s)

should be considered when implementing a clinical debriefing program in the ED. Like any skill, various debriefing methods will vary with regard to how much skill and practice is needed to attain mastery (personal communication, Adam Cheng, November 2014).

Debriefing Methods

The most commonly cited method for debriefing in the clinical environment is usually referred to as “plus-delta” and involves group-based reflection and assessment of what went well, what did not go well, and what participants need to change to improve care. The focus here is not simply on patient outcomes (eg, patient survived or died) but on the structures (eg, “The video laryngoscopy was broken”) and processes (eg, “We established intravenous line access fast”) that contributed to the outcomes.³⁵ The essence of this approach is to engage participants in an active assessment of performance and then use their observations as starting points for discussions on how to improve performance.^{1,5,36} Although this approach is easy to learn and implement, some pitfalls for the inexperienced debriefer to avoid may include tangential discussion (eg, generating lists of mistakes without dissecting the underlying rationale), turning the debriefing into a blame session, and leaving members out of discussion. Following a structured format can help debriefing participants and facilitators to avoid these pitfalls.⁵

Reflective learning is a strategy (used as part of the “advocacy-inquiry” and “cognitive autopsy” methods) that should be incorporated into debriefing to engage participants in a deeper discussion to uncover underlying rationales for decisions, behaviors, or actions.^{21,30,33,34,37} Once the rationale is uncovered, it is used for discussion, learning, and the formation of concrete “take-home” messages. These methods are highly effective in promoting rich discussion but may be challenging to learn and difficult to master (personal communication, Adam Cheng, November 2014). Blending various debriefing strategies can customize the right method for a given event. For example, a facilitator may home in on an error discussed during a plus-delta exercise (“We didn’t give the correct dose of epinephrine”), switch to reflective inquiry to discover why the incorrect thought process occurred (“We can all agree this was an issue, but why do you think that occurred”), and learn from the nurse that the dosing was based on pounds and not kilograms. Note that emphasis is not on the error but on discovering why it happened and preventing it for future cases.

Directive feedback is commonly used after simulation-based procedural skills training as a unidirectional approach (facilitator to participant) to address specific gaps in individual performance.³⁸ Facilitators, however, can run

the risk of not addressing the appropriate learning gap if they have not taken the time to uncover the underlying rationale behind specific behaviors. Directive feedback can often be perceived as harsh criticism, especially in a team-based debriefing format. A meta-analysis of debriefing styles revealed that team-based debriefing had the greatest effect when the debriefing focused on the team's performance rather than the individual.⁶

Debriefing Phases

Debriefing in any high-risk industry includes 3 general phases: description, analysis, and application to future events.³⁹ Although there is no single criterion standard for what phases should be part of a clinical debriefing, most sessions will generally include an overview of the purpose of the debriefing, the format and ground rules needed to establish a psychologically safe environment, discussion of content relevant to the objectives, review of actual actions, discussion of what went well and what did not, discussion of how to improve in the future, and a summary of take-home points.^{31,33}

Debriefing Tools and Scripts

Standardization is challenging for any clinical debriefing program. One potential solution is the use of debriefing tools or scripts to help guide facilitators and teams through a specific method of debriefing.^{12,20,21,24} Cheng et al²⁰ used a debriefing script for novice pediatric advanced life support facilitators in a simulation-based study to promote standardized discussion of key learning objectives, using the advocacy-inquiry method of debriefing, tailored to promote reflective learning.²³ Mullan et al⁵ described the implementation of the Debriefing In Situ Conversation in Emergency Room Now debriefing tool in the ED setting, which guides facilitators through a scripted plus-delta method of debriefing (Figure). Implementation of debriefing tools in the clinical environment should be paired with appropriate orientation for providers to ensure they are used appropriately.

Use of Adjuncts During Debriefing

Inherent risks of relying on participant memory include recall errors and potentially missing actionable items that

DO NOT SCAN OR PUT INTO PATIENT CHART - STAPLE TO CODE SHEET AND TURN INTO MEA'S FOLDER		
Texas Children's Hospital - Debriefing In Situ Conversation in Emergency Room Now (DISCERN) Form		
This info is privileged and confidential pursuant to TX Health & Safety Sections 161.031-033, TX Occupations Code Section 160.007 &/or TRCP 192.5		
ALL patients need this section completed - NURSE must decide with the doctor whether a debrief is necessary for EVERY resuscitation	Fill out this section only if debriefing occurs	Fill out this section during the debriefing (Person writing <u>not</u> the person leading debriefing) (Write on the back of form if there is not enough space)
Place Patient Sticker Here		
1. Date (MM/DD/YY) <input type="text"/> 2. Physician Team Leader <input type="text"/> 3. 1 st Nurse filling this out: <input type="text"/> 4. If team leader & 1 st nurse together decide not to do a debriefing, state reasoning: (check one box to the right) <input type="checkbox"/> Too many urgent patient care issues to make time <input type="checkbox"/> Did not feel it was needed. <input type="checkbox"/> Other reason: _____ (skip #4 if doing debrief) 5. Resuscitation Type (check all that apply) <input type="checkbox"/> Respiratory <input type="checkbox"/> Medical (includes seizure) <input type="checkbox"/> Trauma <input type="checkbox"/> Pulseless 6. Interventions (check all that apply) <input type="checkbox"/> Intubation <input type="checkbox"/> Defibrillation <input type="checkbox"/> Code 3 Trauma Activation <input type="checkbox"/> CPR 7. Time Resusc Ended <input type="text"/> (Either "time of death" or "time left EC", whichever was 1st) 8. Patient outcome <input type="checkbox"/> Alive <input type="checkbox"/> Expired	1. Members Present ("X" box if present during debriefing) <input type="checkbox"/> Chaplain <input type="checkbox"/> Charge Nurse <input type="checkbox"/> Child Life <input type="checkbox"/> Family Advocate <input type="checkbox"/> Pediatric Emerg Medicine Fellow <input type="checkbox"/> Pharmacist <input type="checkbox"/> Physician Team Leader <input type="checkbox"/> Primary /Documenting Nurse <input type="checkbox"/> Resident <input type="checkbox"/> Respiratory Therapist <input type="checkbox"/> Secondary Nurse <input type="checkbox"/> Other: <input type="checkbox"/> Other: 2. Debriefing Physician, Team Leader Name: <input type="text"/> 3. Debriefing Documenter Name (NOT same as #2 above; can be RN or Dr.) <input type="text"/>	1. Time Debriefing Started: <input type="text"/> 2. What went well during our care for the patient? _____ _____ _____ _____ _____ 2. What could have gone better during our care for the patient (ADD potential solutions if able)? _____ _____ _____ _____ _____ 3. Was the Physician Team Leader (PTL) the only doctor calling out medication orders? YES NO 4. Was anyone confused at any time during the resuscitation about who was the PTL? YES NO 5. Time Debriefing Ended <input type="text"/> 6. State: "If anyone wants counseling support, please see referral numbers at the bottom of this form"
<p align="center">Advice for Running A Team Debriefing</p> 1. Pick a quiet or isolated space if possible - start by thanking members for being present & encouraging all members to participate. 2. State: "The purpose of debriefing is for education, quality improvement, & emotional processing; it is not a blaming session. Everyone's participation is welcome & encouraged." 3. State: "These debriefings usually take several minutes and if you have urgent issues to attend to, you are welcome to leave at any time." 4. State: "I will briefly review the patient's summary and then we as an entire team can discuss what went well and what could have gone better. Please feel free to ask any questions." 5. Proceed as team leader with a brief summary of the patient's course (<1 minute) and then proceed to the group discussion. Documenter (not team leader) records on this form. * If anyone needs or requests referral for free counseling, call the appropriate institution at 832-824-3327 (TCH) or 713-500-3327 (BCM) Updated 2/3/2012		

DEBRIEFING FORM
FILL OUT LEFT SECTION BEFORE PATIENT LEAVES EC

Figure. Sample debriefing instrument: DISCERN.

might be identified from more accurate data-capturing methods.⁵ Therefore, the use of adjuncts during debriefing, such as video playback and quantitative performance data, has promise in improving outcomes in simulated and clinical contexts.^{25,33,40-42} Clinicians in ED, neonatology, and trauma care have implemented real-time video capture of resuscitation events in the clinical environment as part of local quality programs.⁴³⁻⁵¹ Nadler et al²⁵ demonstrated that including video recordings of neonatal resuscitations in debriefings improved teamwork in future neonatal resuscitations. The simulation literature is more mixed, with a meta-analysis demonstrating that video-assisted debriefing has negligible and nonsignificant effects on time-related skills.^{10,11,33,40-42} Last, debriefing with the addition of quantitative data in the form of transcripts of the clinical event or chest compression data adds an objective nature to the discussion.^{7,8} The benefits of adding technology adjuncts should be weighed against the expenses, time, and resources necessary to establish and maintain a program.²⁷

WHEN?

Finding the time to debrief is often challenging. The timing of debriefing has been classified with temperature adjectives, termed “hot” (immediately after the event), “warm” (minutes to hours after an event), and “cold” (days to weeks after an event) debriefings.⁵² When feasible, some form of debriefing should be conducted as soon as possible after an event.²³ Advantages of hot and warm debriefings are that the entire team is usually available, a greater variety of clinical staff is typically involved, recall bias is minimized, and urgent issues can immediately be addressed. Potential disadvantages include limited time during a shift, limited space to debrief, and the emotional readiness of members to debrief. Cold debriefing can take advantage of the availability of quantitative data and follow-up patient information, as well as the ability to include nonparticipants in the debriefing. Disadvantages include the challenge of reassembling the entire team, the administrative resources needed to organize these sessions, and potential alterations in the quality of the discussion because of the larger group format.²⁷ Prescriptive durations for debriefing do not exist, but generally hot and warm debriefings last approximately 10 minutes, whereas cold debriefings typically take an hour or longer.^{6,27}

The goals of hot and cold debriefing are both to improve care delivery, but the processes and structure of each method will affect the capabilities to improve the system with each type of debriefing. Factors to help decide whether further cold debriefing should take the form of morbidity and mortality rounds, root-cause analysis, or other quality assurance processes may be derived from local protocols or

based on whether the debriefing team believed that the hot or warm debriefing did not provide enough time, quantitative data, or administrative representatives to address all of the pertinent issues encountered. A hybrid approach may be taken routinely for certain select events (eg, high-risk injuries or preventable deaths), with both a hot and cold debriefing occurring for the same event.

WHERE?

With most ED space already designated for 1 or more functions, finding an ideal location to debrief events can be challenging.^{27,53,54} The value of debriefing in the space where an event occurred will depend on the objectives of the debriefing. Debriefing in the actual space helps teams to evaluate factors that may otherwise be missed by debriefing in a separate space, including the setting, resources, and processes of an event.⁵⁵ Also, a team can practice technical skills with the same equipment from an event (eg, rapid infuser setup). Debriefing in the same location as the clinical event should be balanced with the need to prepare or use that location for the next patient. Alternatively, a separate location may allow tension to be defused, enhance privacy, limit distractions, and enhance participant comfort.¹ Some departments might consider an assigned room proximal to patient care that can be used for debriefing after clinical events. If technological adjuncts will be used as part of the debriefing, the debriefing location may be limited to a specific location with such capabilities. The question of where will also depend on when the debriefing occurs. Cold debriefings traditionally happen in a conference room separate from the clinical environment, whereas warm debriefings happen in either the location of the event or one nearby.^{5,8}

OTHER CONSIDERATIONS

Postdebriefing

Documentation of key findings and discussion points raised in a debriefing can help with follow-up and promote accountability in a clinical debriefing program.²⁶ Whatever recording method is used (eg, paper, video), it should coordinate with existing quality improvement processes. The recording methods should also be reviewed with the hospital’s medicolegal team to ensure that proper safeguards are in place to protect teams from medicolegal liabilities. Without such protections, teams might feel hesitant to share information about suboptimal care that could drive improvements in future care delivery.⁵ Furthermore, collaborating and coordinating with preexisting quality and patient safety processes can be integral to the long-term success of any program focused on patient improvement.

Designating a follow-up person for system issues that are identified during debriefings can be critical to building the trust in your ED that the concerns raised in debriefings are being adequately addressed. Ideally, this person will either have a role or work in concert with quality, patient safety, or risk management so that missions and goals are clearly aligned with existing hospital or other academic obligations. This person should prioritize issues identified from debriefings because some safety issues are more time sensitive (eg, missing vital equipment) than others. Realistically, several ED management staff will likely be necessary to address various issues from debriefings (eg, pharmacist for medications, respiratory therapist for equipment problems, medical director for clinical issues). Learning points and actions taken in response to clinical debriefings should be communicated in a structured manner to ensure that all relevant health care providers have the opportunity to learn from the clinical event and debriefing. Closing the loop with ED staff is an important feature to reinforce a culture of safety and let people know that their feedback leads to actual change and improvement. Some examples include hanging posters displaying improvement in metrics or sending a monthly e-mail summarizing specific changes resulting from debriefings.

Another important consideration is caring for the ED staff involved in the event. ED providers may experience psychological distress after a clinical event as a “second victim” or as a result of debriefing the event.^{56,57} Most hospitals have resources available for employees who experience distress at work. Debriefing facilitators should routinely make participants aware of the available resources for employees and be prepared to direct them to further professional help when necessary.⁵

Promoting Uptake of Debriefing Practices

Identifying and cultivating a champion is essential to beginning, sustaining, and growing an ED clinical debriefing program.⁵ The champion(s) should be charged with receiving advanced education in debriefing techniques, educating fellow ED providers in the art of debriefing, encouraging peers to comply with debriefing when predetermined event triggers arise, and providing tools (eg, standardized debriefing forms) for providers to use in practice.

For a debriefing program to succeed, a culture of safety for patients and staff must be reinforced.²⁶ Debriefing participants need assurance from leadership that their job is not in jeopardy for reporting suboptimal care occurrences in a debriefing. Participants also need to know that debriefings are not hostile blaming sessions. Although the general lessons learned from debriefings will be shared widely across the ED,

any sensitive discussion points in a debriefing should remain confidential to the debriefing group.

To promote hospital-wide support, debriefings should become standard practice for specific clinical events that are predetermined by each unit in the hospital. Hospital and division leadership must value debriefing, protect the time of its employees to perform this activity, and allocate time for debriefing champions to run the program. Standardizing the format, language, and processes of debriefing across a hospital will promote sustainability and make it easier to monitor and report on debriefing outcomes within a system. We encourage new and existing programs to use [Table 1](#) as a guide to integrating debriefing into the clinical environment.

Case Study Redux

After 15 minutes to attend to other urgent patient needs, you call a debriefing back in the code bay for the resuscitation team that just cared for the patient. Using a standardized debriefing form, you and the patient’s nurse co-debrief the team. The form includes a scripted statement of the purpose of the debriefing, guidelines for discussion, and an outline for framing the discussion. The team identifies areas of strength and describes specific actions that could be taken to improve future care. The form is passed on to the local debriefing champion, who works with leadership and responds to the team with feedback based on their input.

CONCLUSIONS

Although the clinical environment is more chaotic than a classroom setting, there are unique learning opportunities in the clinical setting. Structured debriefing can help teams to improve future clinical care and is an important tool for emergency physicians to have in their management toolbox to help them run a successful ED. This article serves as a practical guide to help practitioners start debriefing after clinical events and help stakeholders to initiate debriefing programs in their ED.

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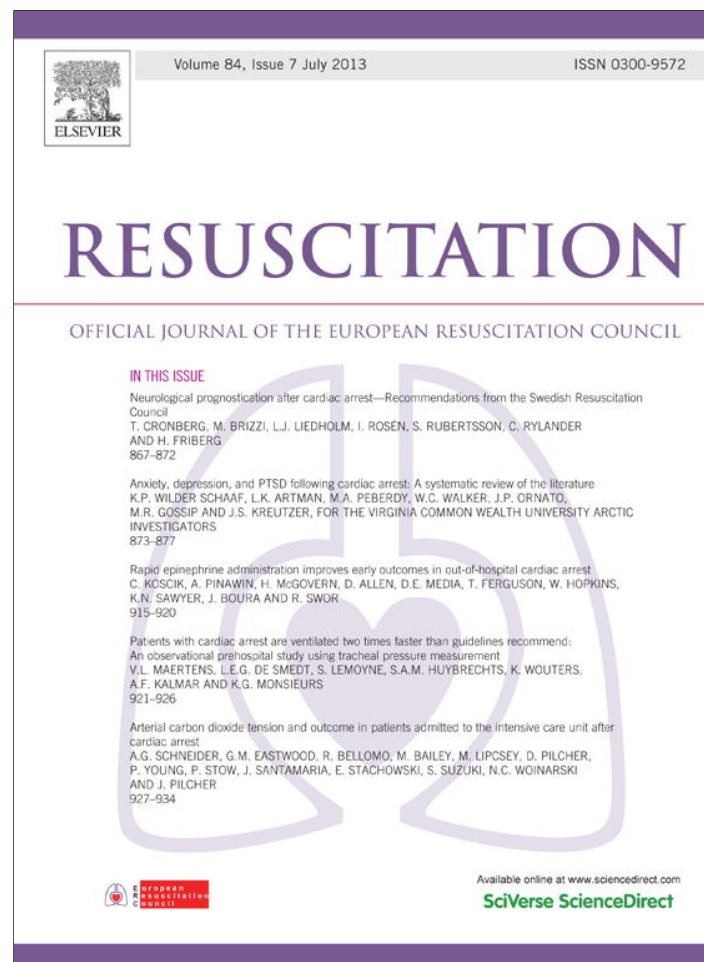
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