

Debriefing for Clinical Learning

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Background

[Debriefing](#) is a directed, intentional conversation that can be used for knowledge or skill attainment, or to answer questions about threats to patient safety and patient care based on a recent event or a hypothetical situation.¹ Debriefing is an important strategy for learning about and making improvements in individual, team, and system performance. It is one of the central learning tools in simulation training, occurring after learners participate in the simulation experience, and is recommended after significant clinical events such as a code, adverse patient event, or medical error.² Debriefing can be used in a therapeutic intervention, an empirical investigation, or to facilitate education.

When a person asks, “What happened?” they are initiating the process of debriefing. Its goals are to discuss the actions and thought processes involved in a particular clinical situation, encourage reflection, and incorporate improvement into future performance. Examples include a one-on-one discussion with a healthcare professional who made a medical error or discussing the actions and outcomes of a code blue event with the personnel who were present. Of note, debriefing is not the same as a [Root Cause Analysis](#) (RCA), although it may be part of an RCA in that challenges or barriers identified through debriefing can lead to follow-up in committees or meetings. The case of Nurse JA (see box below) will be used throughout this primer to illustrate implementation of clinical debriefing.

What happened last night?

Nurse JA is the clinical nurse supervisor on a trauma unit. She has been tasked with following up on a code blue event that occurred the night before. The patient had been found on the floor by Environmental Services (EVS) staff, in a non-patient care area of the hospital, and may have been under the influence of street drugs. Multiple departments responded and there was disagreement about the treatments and interventions. The outcome was not ideal and there was apparently a lot of shouting and some blaming. JA

has a list of personnel who were present and wants to find out what happened, why it happened, and how to prevent a similar event from happening ever again. She wonders if a debrief would be helpful...

Historically, debriefing evolved from post-mission analysis of military or police actions and grew to include use in critical incidents thought likely to provoke stress.³ Evidence supporting the use of debriefing as a core component of simulation education was first established in the aviation industry, then extrapolated to [anesthesiology](#), and later more broadly applied to education of health professionals.⁴ Debriefing has now been widely adopted in the simulation and education fields and is thought by some to be the most important aspect of an experience, necessary to clarify misconceptions, improve recall, and formulate any post-exercise rectification(s) such as systems improvements or addressing staff knowledge gaps.²

Research specific to clinical events debriefing provides support for debriefing as a means to improve team performance as well as [resuscitation](#) and other [emergency response outcomes](#).^{5,6} Although [real-time or near real-time](#) clinical event debriefing can be challenging to implement, it has been identified as an important aspect of effective clinical education, quality improvement, and systems learning.⁷

Methodologies & Tools

Multiple debriefing frameworks, scripts, and tools are available to assist leaders with planning and implementing debriefings. When used with simulation, debriefing often involves expert facilitators with significant experience in [reflective inquiry strategies](#) or a [synthesis of leader and learner inquiry strategies](#). AHRQ has long incorporated clinical event debriefing into the [TeamSTEPPS](#) team training program. Techniques of debriefing vary, but usually include an emotional release component, a review of the facts and objective data, inquiry into the mindsets of those present, and clarification of takeaway points and/or indications for follow-up. Methodologies for debriefing vary widely. Common methodologies for debriefing include:

- Plus-delta: a straight-forward approach that asks learners to consider what went well and what they would do differently next time⁸
- [Promoting Excellence And Reflective Learning in Simulation](#) (PEARLS): a framework and accompanying tools that integrate learner self-assessment, guided discussion, and feedback/teaching⁹
- [3D Model](#): a framework that includes open-ended questions focused on defusing, discovering and deepening, and is designed to facilitate reflection and learning¹⁰
- 7-step After-Action Review from the US Army: a method focused on identifying lessons learned and applying those lessons to future situations¹¹

For those interested in developing skills in debriefing, training courses are available in several of the methodologies listed above and there are several [best practices](#) to consider. For the purposes of this primer, we will describe the easiest and most common debriefing method, plus-delta (see box below).

JA decides that a debrief would be useful to determine the details of the event and to identify learning points for the staff and hospital system personnel involved. In the event of systems-level errors, she will

share them with the appropriate organizational committee(s).

Components of Debriefing

Although any case or situation may provide cause for a debrief, highly emotional resuscitations, those involving pediatric patients, or cases with bad outcomes are common triggers. Staff members may vocalize distress or may note emotional reactions in others. Recent literature suggests the utility of a charge nurse or shift leader simply 'checking in' on the personnel involved in a high-acuity case and asking if a debrief would be helpful.¹²

Those who should be present for debriefing and the degree to which the debriefing is structured will vary based on numerous factors. A small one-on-one session may be all that is necessary, or debriefing may require coordination of several departments' personnel, arranged in an auditorium, complete with microphones and amplifiers. Considerations for the type of debriefing to hold may include the seriousness of the event, the number of departments involved in the incident, the objectives of debriefing, the number and educational level of the participants, and the training of the debriefer.

When the necessity of a debrief is recognized, its [timing](#) and location should be determined. A 'hot debrief' occurs in real-time or shortly after the critical event; it may be held in an impromptu location such as a staff break room, an ambulance bay or in the room where the event itself took place. A '[cold debrief](#)' may occur later in the day or week and is often held in a different space than the clinical environment. The decision to debrief immediately versus in a delayed fashion is dependent on convenience, other clinical obligations, any preexisting policies, and the personnel present and/or involved. The location should be set up in such a way that participants are comfortable and can see and interact with each other. Steps should be taken to avoid a perception of hierarchy or one person "presenting" to the group.

JA realizes that she is upset about the code and wonders if it could have been prevented. She simply recognizes this personal emotion and makes a mental note to NOT have it impact her debriefing. She suspects that emotions in others may be running high as well. She resolves to provide plenty of time to allow others to share during the debrief but thinks that the debriefing should be delayed for a couple of days to allow people to calm down a little.

All forms of debriefing have a shared structure that involves setting the stage followed by three phases including description or reactions, analysis, and application.²

Setting the stage: To be effective, a debriefing must be conducted in a manner that supports learning.¹³ Thus, the purpose is not to identify error and assign blame, but to understand why actions and decisions made sense to those involved in the moment. Such a focus increases the probability that positive performance can be reinforced, and new ideas can be generated for changing performance that was incorrect or otherwise below the desired standard. Establishing [psychological safety](#) for participants is essential, regardless of the type of debriefing conducted.¹⁴

To build psychological safety, the expectations for participation should be discussed during this stage. During the debrief, less outspoken participants may need to be given a more overt opportunity, but no one

should be forced to share. Group norms of going around the circle giving each person the opportunity to share or use of a “talking stick” can be implemented. Measures should be taken to promote the comfort of those present as well as the equality of all participants regardless of organizational role. The moderator should monitor for discomfort or blaming and ensure that each person who wishes to speak has the opportunity. Depending on the severity of the incident, emotions may run high. The moderator should be prepared to guide the experience and provide breaks as necessary. It may be helpful to have a second moderator to take notes or serve as secondary support for stressed participants.

Description or reactions: The reaction phase includes clearing the air, reviewing the facts, and identifying the issues important to participants. During this phase, the facilitator needs to elicit perspectives from team members about how events unfolded in the clinical situation or simulation scenario and ask them to describe their reactions. Participants should be asked to identify the important issues to address, and the sequence of events should be clarified. Simply asking how or why, being mindful of mutual respect and careful not to jump to [judgment](#), is often the first step to debriefing. Debriefing can be either andragogical or pedagogical in delivery, but the simulation literature often suggests using a gentle, genuine inquiry methodology to first elicit the participants’ or learners’ understanding of what transpired.¹⁵ Discrepancies can thus be identified and, if necessary, a plan for remediation formulated.

Analysis: In this phase, the experience is further explored to enhance learning and new understanding is generated through discussion, deliberation, and teaching. Priorities should be co-developed for discussion with the participants, balancing participant priorities with any other critical safety concerns that were noted during the event. The goals of this phase are to explore participants’ rationale for observed behaviors, identify and close performance gaps by discussing pros and cons of chosen actions, and determine any modifiable systems issues that may have interfered with performance. Team members must be direct with each other during this phase, and moderators may need to actively facilitate team members sharing what they were thinking and how they were affected by the actions of others.

Application or Summary: This phase of debriefing is designed to identify and summarize the main learning points, connect them with real-world thinking, and consider how they can be incorporated into future practice. Explicitly summarizing lessons learned from the scenario or clinical event may help team members to recall and apply these lessons in the future.

During the debrief, JA sets the stage and provides the participants a chance to share their reactions and recollection of the event. There are some tears and strong emotions expressed but she maintains a safe space. During the analysis phase, JA co-develops priorities with the group. They decide to focus on the patient and staff safety concerns and identify gaps in systems, teamwork, and knowledge that contributed to the event. JA decides to use plus-delta (see below) to help guide this discussion.

The **plus-delta** method is the most straightforward and intuitive format for debriefing. Its simplicity works well for clinical event debriefing, especially when combined with a checklist or structure that helps the team to ensure that they address other important principles such as teamwork. The plus-delta method defines successful actions and results (plus) and those needing improvement in some way (delta).⁸ Typically, three columns are created (see example below) on a device viewable by the group such as an erasable or paper

board. During the debriefing, the first column, labelled “Actions,” is progressively filled in with actions taken by individuals or teams. The second column is labeled “Plus” and includes descriptions of the positive or effective characteristics of the actions, and the third column lists opportunities for improvement of actions in the future (“Delta” for change). The advantage to using the plus-delta technique is that it is easiest to both master and implement with minimal training. Participants new to debriefing can also quickly and comfortably learn their role.

Plus-Delta Table (Example)

Actions	Plus	Delta
<ul style="list-style-type: none"> • EVS staff found unresponsive patient in off-unit supply storage area • EVS staff radioed supervisor who called operator to initiate code • Initial care provided by passersby, a CVICU MD and nursing student • 2-person CPR provided – no breathing barrier available • Code team arrived 6 minutes after first call made, delayed while trying to find area • CVICU MD and code team lead disagreed over treatment plan 	<ul style="list-style-type: none"> • Passing staff jumped into action to provide care • EVS staff called for help quickly • Clear leadership, delegation, and support from CVICU MD to RN student • High quality CPR provided • Return of spontaneous circulation – successful code in an unfamiliar environment 	<ul style="list-style-type: none"> • No map of supply areas was available; code team confused over location • No emergency supplies available to initial responders in supply area • AED was available in a patient waiting area nearby, but staff weren't aware of it and no signage was visible • No clear transition of code leadership contributed to arguments, conflicting instructions, and confusion • Needed to designate a code leader (participants expressed this was a recurring issue)

Special Considerations for Debriefing after Clinical Events

Clinical event debriefing can be challenging to implement due to uncertainty about when it will occur and the nature of the events to be debriefed; the time pressures of the clinical environment; and team members' variable facilitation skills and experience. Although the clinical time pressures are very real, experts agree that clinical event debriefing can be done quickly and still be effective.¹⁶

Current Context

Debriefing is a skill that requires practice and reflection and will improve as the debriefer gains experience. For those who will be conducting debriefings regularly, taking advantage of opportunities to expand knowledge through training courses or by partnering with experienced debriefers is recommended. For organizations that identify a need to focus on teamwork, collaboration, and communication, TeamSTEPPS is a [recognized method](#) to use for quality and safety improvement.

The debrief was a little awkward, JA reflects. A couple of the key departments did not send representatives and one member of the night staff was not available. Different recollections of the timing of certain actions were expressed, which caused some heated interchanges. However, JA had made sure that each person had the opportunity to speak at least once. And she has an idea for a class on code response off-unit including transitions of leadership and plans to talk to the Simulation Director about a communication simulation. She has a list of items to bring to the Quality and Safety committee for further follow-up including maps for the code team and better AED signage. After her initial reflection, JA identified things that went well during the debriefing, and a few things to do differently next time. She signs up for a debriefing training course and plans to practice debriefing in the Simulation Center.

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