

Debriefing with Good Judgment: Combining Rigorous Feedback with Genuine Inquiry

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Reflection on one's own practice is a crucial step in the experiential learning process. It helps trainees develop and integrate insights from direct experience into later action [1,2]. Subsequent to participating in a simulated case, debriefing or after-action review provides a way for clinicians using medical simulation to do this reflection. There is convergence in the debriefing literature on some of the important goals and processes of such debriefing. The goals are to allow trainees to explain, analyze, and synthesize information and emotional states to improve performance in similar situations in the future. The process for achieving these goals usually follows a series of steps, such as processing reactions, analyzing the situation, generalizing to everyday experience, and shaping future action by lessons learned [3–11].

How to create a debriefing environment in which trainees feel both challenged and psychologically safe enough [12] to engage in rigorous reflection

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is generally left unspecified. Sharing critical judgments is an essential part of learning in simulation and debriefing. Yet, instructors often avoid giving voice to critical thoughts and feelings because they do not want to seem confrontational and they worry that criticism might lead to hurt feelings or defensiveness on the part of the trainee. Voicing critical judgment poses a dilemma for many instructors (eg, “How can I deliver a critical message and share my expertise while avoiding negative emotions, preserving social face and maintaining my relationship with the trainee?”). This article offers an approach to debriefing that addresses this dilemma.

By “rigorous reflection” we mean a debriefing process that brings to the surface and helps resolve the clinical and behavioral dilemmas and areas of confusion raised by the simulation experience. Drawing on a 35-year research program on improving professional effectiveness in the business world through “reflective practice” [11–17], this article articulates a model of debriefing for medical simulation exercises. The research program from which the approach is adapted has studied and helped thousands of practicing business executives and managers improve their personal and interpersonal effectiveness through the discipline of reflective practice.¹ The debriefing model adapted from this work has three primary components. The first component is a conceptual framework, drawn from research in cognitive science and on reflective practice, that guides the instructor on how to illuminate the mental models that were salient in guiding trainees’ actions during the simulation. The second is an underlying debriefing stance that unites the apparently contradictory values of curiosity about and respect for the trainee and the value of clear evaluative judgments about trainee performance. The third component is a way of talking (combining advocacy and inquiry) that enacts the underlying stance.

The basis of this article is the literature in the field of reflective practice and the authors’ experience with exercising the debriefing with good judgment approach. All of the authors use this approach regularly and four have together conducted approximately 2000 debriefings using this method. Over the last 2 years they have trained nearly 300 medical educators to use this approach. Most medical educators are able reliably to demonstrate competence after approximately 2 days of lecture and practice; expertise seems to require considerably longer to develop. Of the approximately 20 teaching faculty who regularly use simulation as an educational technique at the authors’ simulation center, approximately half use the debriefing with good judgment approach. The other half has not yet been trained in its use. Faculty who are comfortable with the technique find their skills quite stable and robust in the face of a great variety of trainees.

¹ “Reflective practice” is a term coined by the late MIT professor Donald Schön, to describe the discipline of examining the values, assumptions, and knowledge-base that drives one’s own professional practice [11,12,19,20].

Reflective practice: method and theory

Reflective practice is a method used to scrutinize one's own professional work practices and the taken-for-granted assumptions that underlie them. It is often accomplished in a collaborative setting [16]: in this case, the relevant setting is the simulation debriefing wherein colleagues and trainees are helped to develop crisis resource management, clinical, and reflective practice skills. Researchers at Harvard University and the Massachusetts Institute of Technology developed the method as part of their investigation of how to support students in their professional schools and also to help experienced professionals to develop self-correcting versus self-sealing practice habits [18]. They found that reflective practitioners, who learned to scrutinize their taken-for-granted assumptions and mental routines, were able to self-correct and improve their professional skills. Those without skill in this self-scrutiny, however, tended to seal out or ignore disconfirming data and maintained ineffective habits of practice [11,12,14,19,20].

The theory underlying reflective practice draws on cognitive science, social psychology, and anthropology. The central idea is that people make sense of external stimuli through internal cognitive frames, internal images of external reality [20–25]. Terms for these images are myriad: “frames of reference,” “schemata,” and “mental models,” to name a few. People do not passively perceive an objective reality, but engage in sensemaking by which they actively filter, create, and apply meaning to their environment [26–28]. For example, a diagnosis becomes a frame for subsequent actions, as do assumptions, such as, “It’s not a good idea to discuss mistakes here, or “I must have a bag-mask apparatus to ventilate this patient.” Fig. 1 shows the relationships among frames, actions, and simulation results.

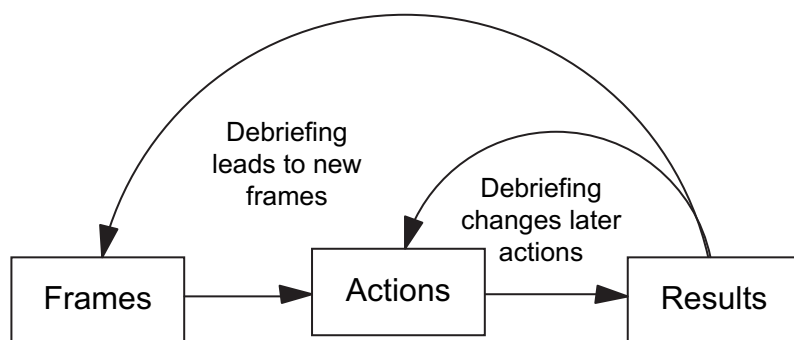


Fig. 1. Frames are invisible, but inferable; they are in the mind of trainees and of instructors. Actions (including speech) are observable. Most results (eg, vital signs, order or chaos) are also observable.

These frames, in turn, shape the actions people take. Both clinical frames and social or interpersonal frames can play crucial roles in medical decision making. A trauma physician facing a patient with a ventilation problem, for example, takes one set of actions if they frame the symptoms as a physical obstruction of the airway and another if their diagnosis is reactive airway disease. A nurse who holds the frame that reporting an error leads to punishment reports errors at a very different rate than one who believes the report is used to improve work processes [29]. Or, in an example used throughout this article, consider an anesthesiologist who is called to manage an unresponsive patient in a setting where a bag-mask apparatus is not readily available. They hold the frame that they can only resuscitate using the device with which they are most familiar, a bag mask, and delay treatment while the patient descends into hypoxemia and arrest. The model suggests that people's actions, including those of this anesthesiologist, are an inevitable result of how they frame the situation they face.

Importantly, even mistakes are usually the result of intentionally rational actions [23,27,30]. That is, the actions make perfect sense given how the person was framing the situation at that moment. Continuing the example of the anesthesiologist, the instructor may be surprised that instead of considering passive oxygenation or delivering a mouth-to-mask "rescue breath," the anesthesiologist trainee searched relentlessly for a bag-mask apparatus while the patient desaturated. These actions make perfect sense, however, when the instructor understands that the trainee held the belief that basic life support cannot be achieved without a bag-mask device, mouth-to-mouth was out of the question, and passive oxygenation is something that he has never learned. It is the instructor's job during a debriefing to help the trainee bring these frames to the surface; analyze their impact on actions; and craft new frames (eg, if I do not find a bag-mask apparatus quickly, I have other options for ventilating) and actions (giving mouth-to-mask breaths, or apply oxygen and mechanically optimize the airway opening). In practice, the instructor asks questions during the debriefing to elicit these frames.

"Results," in the reflective practice model, are seen to be prompted by the actions the trainee takes. Results are states (eg, the patient's cardiac rhythm, whether the trainee ended up knowing the cause of the clinical problem, or whether there was chaos or order in the clinical environment). The instructor and the trainee usually have an implicit idea of what the desired results were. For example, the patient remains stable and does not go into cardiac arrest, the trainee and others know why the patient arrested in the first place, or the resuscitation ran smoothly. Learning occurs when instructor and trainee explore the frames-actions-results causal sequence in reverse. The instructor then explores with the trainee what frames and linked actions led to the actual results and then, as depicted in the feedback arrows in Fig. 1, collaborates with the trainee in developing alternative frames and actions for the future [16].

Debriefing stance: moving from judgmental debriefing to debriefing with good judgment

Although it may be obvious how discovering trainees' frames can enhance debriefing in medical simulation, the importance of identifying and revealing the instructor's frames is less obvious. Crucial to the process of a rigorous debriefing that is both nonthreatening and direct is instructors' learning to identify and examine their own frames related to the simulation they observed. Without an understanding of their own frames, instructors are handicapped in their ability to help illuminate a trainee's frames. The reasons for this are twofold. First, the instructors must be able to draw from their own experience the frames and actions they themselves might have deployed in a similar situation and to disclose these to the participant. Second, instructors have to be willing to test the validity of their own frames about the trainee's performance with trainees. To explain how this works, the authors start by describing and contrasting instructors' underlying frames when they are using judgmental, nonjudgmental, and debriefing with good judgment approaches (Table 1).

The judgmental approach to debriefing

Imagine or recall the instructor whose voice, dripping with disdain, inquires of a group of students, "Can anyone tell me what went wrong here?" or "Can anyone tell me Pat's big mistake?" The judgmental approach, whether laced with harsh criticism or more gently applied, places truth solely in the possession of the instructor, error in the hands of the trainee, and presumes that there is an essential failure in the thinking or actions of the trainee. In the last 15 years, the discourse in medical journals suggests that many clinicians concerned about reducing medical error and improving patient safety have sought to move health care away from the "shame and blame" approach captured in this style of questioning [31,32]. A judgmental approach to debriefing, especially one that includes harsh criticism, can have serious costs: humiliation, dampened motivation, reluctance to raise questions about later areas of confusion, or exit of talented trainees from the specialty or clinical practice altogether. But the shame and blame approach has an important virtue: the trainee is rarely left in doubt about what the instructor believes are the salient issues.

The nonjudgmental approach to debriefing

Some instructors shy away from a shame and blame approach to expressing their critical feelings and move toward a nonjudgmental approach. The central dilemma facing instructors who want to move away from this judgmental approach is how to deliver a critical message while avoiding negative emotions and defensiveness, preserving social face, and maintaining trust

Table 1
 Contrasting judgmental, nonjudgmental, and good judgment approaches to debriefing

	Judgmental	Nonjudgmental	Debriefing with Good Judgment
The effective instructor	Gets the trainee to change	Gets the trainee to change	Creates a context for learning (and change)
Primary focus of debriefing	External: the actions or inactions of the other person	External: the actions or inactions of the other person	Internal: the meanings and assumptions of both instructor and trainee
How the trainee is seen	A mistake maker; a doer of actions	A mistake maker; a doer of actions	A meaning maker whose actions are the consequence of specific assumptions and knowledge
Who has the truth of the situation?	The instructor	The instructor	Possibly neither, either, or both
Who does not understand?	The trainee; "I (the instructor) will set you straight"	The trainee; "I (the instructor) will find the kindest way of filling you in on how to do this right."	The instructor: "I see what you are doing or not doing, and given my view, I don't get it"; or "Given my view, it seems problematic; what am I missing here?" Genuine report of puzzlement and inquiry into how the trainee's actions can make sense.

Basic stance toward self and trainee	<p>“I’m right” or “You’re wrong.”</p> <p>“I’m setting you straight”</p> <p>“I’m teaching you”</p>	<p>“I’m right” or “You’re wrong” but, “I don’t want you to get defensive so how do I tell you the bad news and get you to change in a nice way?”</p> <p>“I’m setting you straight”</p> <p>“I’m teaching you”</p>	<p>Respect for self (I have a take on what happened in this simulation; that does lead me to think there were some problems but...)</p> <p>Respect for trainee (you are also a smart, well-trained practitioner, trying to do the right thing, who has your own view on the simulation) so...</p> <p>I am going to approach this as a genuine puzzle; not paralysis or indecision, but holding my own view tentatively. I seek clarity by honest inquiry (we both may learn something or change our minds); “Help me understand why you...?”</p>
Typical message	<p>“Here’s how you messed up.”</p>	<p>“What do you think you could have done better?”</p>	<p>“I noticed X. I was concerned about that because Y. I wonder how you saw it?”</p>

Adapted from Kegan R, Lahey LL. How the way we talk can change the way we work. San Francisco (CA): Jossey-Bass; 2001. p. 134–5; with permission.

and psychological safety.² Instructors using a nonjudgmental approach often resolve the dilemma by using protective social strategies, such as the sandwich approach in which a compliment is followed by a criticism, which is, in turn, followed by another compliment; filtering out critical insights; or by avoiding the problem topic altogether [33,34]. Another common way for instructors to avoid the judgmental approach is to choose silence and express no critical thoughts or feelings. When people choose silence or nonjudgmental approaches that obscure their expert critique, important insights or feelings related to the trainee's performance remain murky or unexpressed. This deprives the trainee clinicians, and their organizations, of information that could improve how they work [35]. Avoiding critical thoughts and feelings also limits debriefings to safe-appearing, nonthreatening topics and leaves crucial areas of learning untouched [23].

Many instructors, ourselves included, have used a Socratic approach in which leading questions are asked and a kind tone of voice is used to guide the trainee to the critical insight the instructor holds but is reluctant to state explicitly. In his critique of this approach, Argyris [23] has termed it "easing in." The authors have found that when the instructor holds a critical judgment, open-ended or Socratic questions that camouflage the judgment may backfire. The trainee may become confused by the question or (justifiably) suspicious about the instructor's unexplained motives.

Although the nonjudgmental approach has the advantage of being non-blaming, and avoids some of the hurt and humiliation generated by the judgmental approach, it has serious weaknesses. Despite a desire to seem nonjudgmental, hints of one's views often leak by subtle cues, such as facial expression, tenor, cadence, and body language. Furthermore and most importantly, it is not nonjudgmental. Although the surface tone of nonjudgmental debriefing may be softer than the judgmental approach, as illustrated in Table 1, the underlying assumptions are the same: I'm right; I have the complete picture; my job is to hand off the correct knowledge or behavior to you, the trainee. Whereas the judgmental approach often humiliates directly, the nonjudgmental approach conveys nonverbally that mistakes are not discussible, or possibly shameful [36,37], undermining the very values (mistakes are puzzles to be learned from rather than crimes to be covered up) instructors aim to endorse with the nonjudgmental approach.

² Psychological safety is a person's sense that the immediate environment is safe for interpersonal risk taking; that trying out new ways of talking or acting will not be ridiculed; that mistakes will be worked on together as a source of learning instead of being treated as a crime to be punished or covered up [10,23].

Debriefing with good judgment approach

The debriefing with good judgment approach shifts the focus of debriefing in several ways.³ First, it focuses on creating a psychologically safe context that enables adult learners (including the instructor) to move toward key learning objectives, determined either unilaterally by the instructor or collaboratively with the trainee. Second, the focus of the debriefing widens to include not only the trainee's actions, but also the meaning-making systems of the trainee (ie, their frames, assumptions, and knowledge). Third, the instructor's sense-making system about the simulation also becomes part of the debriefing terrain and open to question (see [Table 1](#)). The instructor has an expert's view of the situation that he or she shares to initiate dialog with the trainee, but it may not be the only valid view. Instructors' stating their main concerns in a debriefing is especially important in the domain of health care simulation where being indirect about crucial errors can perpetuate clinical mistakes and undermine patient safety when the trainee returns to the real clinical environment.⁴ In this approach, in contrast to the nonjudgmental approach, the instructor shares critical or appreciative insights about the simulation explicitly. Then these insights are tested and explored with trainees step-by-step as illustrated in the next section and in [Box 1](#). This "good judgment" approach is one that values the expert opinion of the instructors, while at the same time valuing the unique perspective of each trainee. The idea is to learn what frames drive trainee behaviors so that both their failures and successes can be understood as an ingenious, inevitable, and logical solution to the problem as perceived within their frames. This

³ We offer a brief rationale of why we arrived at this framework. When our center started 12 years ago we relied on a nonjudgmental approach. To maintain a positive relationship with trainees, we thought it necessary to withhold judgment and use open-ended and leading questions in the hopes that the participants would arrive at the conclusions we were reluctant to say. We began to become uncomfortable with the approach when we realized that we were not "walking our talk." That is, we were saying that mistakes were discussable and a source of learning, yet we found that we tended to cover them up or shy away from discussing them. This conflicted with our commitment and stated mission to make errors discussable and enhance patient safety. We thought to ourselves, "If we can't discuss errors here in a simulation center, how can we expect others in the medical world to do it?" We believed that if we were going to advocate for patient safety, then we had to find a way to discuss errors openly; by the same token, we had to find a way respectfully to insert our clinical and behavioral expertise into our debriefings. We migrated to a position of "debriefing with good judgment," which allowed us, it seemed, the best of all worlds: it fit with educational theory; it allowed our participants to make mistakes and believe that they were still worthwhile and intelligent; it allowed us to use our clinical and behavioral expertise; and it fostered deep learning among our participants and instructors.

⁴ In cases where the instructor has significant concerns about the trainee's clinical judgment or motives, concerns that might merit remedial training, counseling, or discipline, these are best treated in a follow-up. That is, if the instructor needs to convey that certain clinical approaches or social behaviors are not tolerated in the program, that message—a very important one—is a good topic for a postdebriefing conversation.

Box 1. Example of using advocacy-inquiry to elicit trainee's frames

Instructor says, "So, Damon, I noticed that you stepped away from the patient to find the bag-mask apparatus as the vital signs were deteriorating. I was thinking there possibly were alternative means to oxygenate the patient (advocacy). So I'm curious: how were you seeing the situation at that time? (inquiry)"

Damon replies,

"Actually yes, I knew what was going on, I had heard the saturation monitor decline earlier and I knew it was not going to get better on its own. I did not care what the actual reading was, which is why I figured I really needed ventilation equipment."

An instructor might then say, "Okay, that seems reasonable. I saw you looking all around the room for equipment, though, and that seemed to prevent you from trying any alternative approaches to oxygenating the patient (advocacy). Can you help me understand what you were considering at the time? (inquiry)"

When Damon replies, "Well, since breathing comes before circulation, I needed the manual resuscitator before doing anything else," the instructor is starting to surface the trainee's frame that he can only help a patient breathe if he has a bag-mask apparatus, and a valuable discussion point, linked specifically to the trainee's need, emerges. The instructor can now pursue such questions as: Does one always need a bag-mask apparatus to oxygenate a patient? What other options does one have? Will apneic oxygenation be sufficient in the short run? Will chest compressions provide adequate ventilation? What are the risks and benefits of mouth-to-mouth, mouth-to-mask, mouth-to-tube, or other rescue methods? If one is committed to manual ventilation, how does one manage personnel to get the proper equipment in the room expeditiously?

is where the instructor's stance is like that of an anthropologist, curious about different worldviews or frames and about the resulting actions.

Transparent talk in debriefing: enacting the good judgment approach with advocacy-inquiry

The debriefing with good judgment frames outlined in [Table 1](#) are enacted by the style of speaking used by the instructor. Like all frames, mental models, or schemata, the values underlying the good judgment approach are invisible; the only way to see them is when they are transformed into

actions, and speaking is a powerful action for instructors. One particularly effective style of debriefing speech is to pair advocacy with inquiry. An advocacy is an assertion, observation, or statement, whereas an inquiry is a question. When pairing the two together, the instructor acts as a conversational scientist, stating in the advocacy his or her hypothesis, and then testing the hypothesis with an inquiry. For example, an instructor might say, “So, Damon, I noticed that you stepped away from the patient to find the bag-mask apparatus as the vital signs were deteriorating. I was thinking there possibly were alternatives means to oxygenate the patient (advocacy). So I’m curious: how were you seeing the situation at that time? (inquiry).” Here, the instructor is using advocacy plus inquiry to elicit the invisible frames that guided the trainee’s actions. This is the generic approach that instructors can use in any scenario: Step (1) notice a relevant result; step (2) observe what actions seemed to lead to the result; and step (3) use advocacy-inquiry to discover the frames that produced the results.

Compare this utterance with a judgmental version (“Damon, I can’t believe it took you 90 seconds to notice that he was desaturating!”) or a nonjudgmental “guess what I’m thinking” version (“So, Damon, what was this patient’s saturation when you went to look for the bag-mask apparatus?”) The judgmental version, although getting the instructor’s point across, precludes the instructor learning what frames or assumptions set Damon on a particular path of action; it also may humiliate Damon. The nonjudgmental version leaves Damon uncertain about what the instructor is thinking or why he is being asked this question; the result will likely be confusion or defensiveness. He may correctly detect that the instructor already knows the answer to the question and has a judgment that is lurking in the background. The advocacy-inquiry utterance clearly and directly stated the instructor’s perspective and concerns, and set out to bring to light the meaning-making process that had Damon focused on finding missing equipment.

The advocacy-inquiry version helps surface Damon’s frames. For example, consider the debriefing between Damon and his instructor illustrated in **Box 1**. This example, taken from one of the authors’ actual debriefings, shows how advocacy-inquiry spoken with an honest sense of curiosity helps trainees like Damon learn from simulations by digging deeper into the frames that drive their actions. It also helps the instructor learn about the trainees’ thought process and provides a lever for deeper teaching. To be clear, this technique is not about talking nicely. On the contrary, it places the instructors’ thoughts, judgments, and feelings front-and-center. The difference is that by treating the instructor’s views as requiring public testing (by saying their viewpoint in the advocacy and then inviting a different viewpoint with the inquiry), the instructor increases mutuality by opening his or her own views to challenge and making himself or herself vulnerable to learning. Additionally, by pairing this advocacy with true inquiry, the instructor increases mutuality by respecting the trainee enough to value his or her (the trainee’s) perspective, and this, in turn, improves learning.

Table 2
Example debriefing dialog to establish individual then group frames

Debriefing Dialog		
Debriefing Dialog	Trainees	Commentary
To the group: It looked to me like it was confusing. How did you feel?	Group: Several members agree.	Establish a problematic result (confusion, lack of role clarity).
So, it looked to me as though that confusion may have prevented you from effectively executing respiratory resuscitation and, then, later the ACLS algorithm. How did you all see it?	Group: Yes, the confusion was a problem .	Establish clinical consequences. This shows why lack of role clarity matters.
Diana, it looked to me like you might have been the leader. Did you feel that was your job?	Diana: Yes, I was the leader sort of, but we never said anything about it. And then later, it seemed that Suresh was more in charge.	Explore actions that may have lead to the resulting confusion.
I noticed that too. You looked like you were managing the event, but no one ever said anything.	Diana: Right.	
I was thinking that it would have helped for either you or someone in the group to state explicitly that you were the leader. I am wondering why that did not happen?	Diana: Well, I was not too sure of myself. I mean, the other people are pretty much equal to me and I did not want to seem bossy and unlikable. Also, I was unsure about whether I would do a good job and maybe I would look stupid.	Diana's frame is established (eg, If I am a peer with others it's awkward for me to step up as leader).

Anyone else have a thought?

Eliza: I would have felt much better if I knew Diana was in charge. I certainly did not want to do it and we needed someone to be in charge. But, I did not want to put Diana on the spot.

Beginning to understand Eliza's frame (eg, If asking someone to lead means putting them on the spot, I should not do it).

In my experience, I have occasionally heard someone running an event like this say, "I'll run this event, but you all have to help me." I am curious what you all would have thought if Diana had said something like that?

Ricardo: I would have been relieved and grateful to Diana. Someone has to run it! I guess I could have just confirmed that Diana was the leader.

Group beginning to reframe (eg, Even if I am a bit unsure what to do, it is better to speak up than say nothing).

Turning to Diana: Diana, do you have a thought on this?

Diana: Yes, I can see that is probably a good idea. Then I do not have to look too bossy and I have people on the team who know they have to help me.

Diana moves to a new frame (eg, It is okay to say I want to be the leader if I pair it with a request for help).

The debriefer's goal is that trainees understand the importance of role clarity and establishing an event manager for resuscitations. The example shows how the debriefer (1) helps to identify an important problem (establishing an event manager); (2) uncovers one student's frame; (3) explores other students' frames; (4) facilitates reframing; and (5) offers a new action to deal more effectively with establishing an event manager in the future.

Table 2 provides an example of how to apply the debriefing with good judgment approach. The table shows how the frames-actions-results conceptual model, the instructor's judgments, and advocacy-inquiry fit together to discover the frames that led to a respiratory arrest and chaos in a scenario requiring a cardiac resuscitation.

Summary

The debriefing with good judgment approach is designed to increase the chances that the trainee hears and processes what the instructor is saying without being defensive or trying to guess the instructor's critical judgment. The debriefing with good judgment appellation is not meant to imply that the judgmental or nonjudgmental approach do not have good judgment as their basis. The authors believe that all three approaches often start with some important evaluative insight held by the instructor. We chose the salutary name "debriefing with good judgment" to highlight the positive attributes of the approach. These are, providing trainees with a clear signal about the instructor's point of view while reducing the potential noise (misunderstandings or defensiveness) that too often is associated with the judgmental and nonjudgmental approaches. The judgmental approach poses a substantial risk of embarrassing or humiliating the student and the nonjudgmental approach may send confusing and mixed messages to the learner. Both approaches can obfuscate or reduce the clarity of the instructor's message and the trainee's frames.

The debriefing with good judgment approach has two constraints. The most important is that the model presumes that the trainee is operating with good will and is trying to do the right thing. In those rare cases where the trainee is willfully negligent or malevolent, the model does not work. In those circumstances, other techniques are superior (counseling, goal setting, discipline, and so forth). Second, instructors may find difficulty with this approach when dealing with trainees who come from cultures in which deferring to authority and elders is of paramount importance and inhibits their disclosing views that may seem to contradict those of the instructor. To support the method in this context, explicit preparation regarding the goals and norms of the simulation environment is required, and sometimes even that is not enough.

In debriefing the heat and drama of a high-fidelity clinical simulation, it is easy to focus primarily on trainees' actions. The debriefing with good judgment approach, however, highlights three additional areas of importance. First, it is vital that instructors ask questions like those of an anthropologist, which help bring to the surface and clarify the invisible sense-making process, the cognitive frames, and the emotions that governed the trainee's actions. Second, instructors work to become aware of, and explicitly narrate, their own invisible judgments and concerns about crucial elements of the

scenario. But instead of treating their own judgments or concerns as the single truth, they test their views against the trainees' view of the same issue. This does not mean that instructors relinquish their expertise, or disguise their judgments in a sandwich of niceties; rather, they state their view of the situation as a hypothesis and use that as a springboard to legitimize and explore the trainees' view. By understanding how trainees' frames, assumptions, and beliefs drive the actions they take, instructors can match their teaching objectives with problems that are most salient to the trainee. Finally, the debriefing with good judgment approach helps trainees and instructors learn of unintended consequences of common clinical and social frames and assumptions.

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