Communication as a High-Stakes Clinical Skill: “Just-in-Time” Simulation and Vicarious Observational Learning to Promote Patient- and Family-Centered Care and to Improve Trainee Skill

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Abstract

Patient–provider communication is a hallmark of high-quality care and patient safety; however, the pace and increasingly complex challenges that face overextended teams strain even the most dedicated clinicians. The COVID-19 pandemic has further disrupted communication between clinicians and their patients and families. The dependence on phone communication and the physical barriers of protective gear limit nonverbal communication and diminish clinicians’ ability to recognize and respond to emotion. Developing new approaches to teach communication skills to trainees who are often responsible for communicating with patients and their families is challenging, especially during a pandemic or other

crisis. “Just-in-time” simulation—simulation-based training immediately before an intervention—provides the scaffolding and support trainees need for conducting difficult conversations, and it enhances patients’ and families’ experiences. Using a realistic scenario, the author illustrates key steps for effectively using just-in-time simulation-based communication training: assessing the learner’s understanding of the situation; determining what aspects of the encounter may prove most challenging; providing a script as a cognitive aid; refreshing or teaching a specific skill; preparing learners emotionally through reflection and mental rehearsal; coaching on the approach, pace, and tone for a delivery

that conveys empathy and meaning; and providing specific, honest, and curious feedback to close a performance gap. Additionally, the author acknowledges that clinical conditions sometimes require learning by observing rather than doing and has thus provided guidance for making the most of vicarious observational learning: identify potential challenges in the encounter and explicitly connect them to trainee learning goals, explain why a more advanced member of the team is conducting the conversation, ask the trainee to observe and prepare feedback, choose the location carefully, identify everyone’s role at the beginning of the conversation, debrief, share reactions, and thank the trainee for their feedback and observations.

During the SARS-CoV-2 (COVID-19) crisis, hospital leaders have provided timely direction on necessary clinical policies and procedures. Guidance around patient communication, however, lags behind. Indeed, clinicians, overwhelmed by the scope and unfamiliarity of the pandemic, have often found themselves unable to practice patient-centered care. Communication with family members is often limited to phone or, at best, video conversations, depriving clinicians of the nonverbal communication that is so fundamental to conveying empathy and building trust with patients and their families.^{1,2} Masks obscure facial expressions, and human contact is impeded by personal protective

equipment and the fear of viral spread. As such, clinicians are not able to give a reassuring look or touch, and the opportunity just to be present together in silent solidarity is diminished. Meanwhile, patients and families are at the limit of their own coping skills—feeling anxious, isolated, and vulnerable. Most critically ill patients are intubated, and those who are not are often breathless or lie prone, which prevents them from talking comfortably, if at all. In this unusually challenging setting, trainees are often the ones in academic medical centers who are responsible for patient and family communication. Communicating clearly and with empathy and compassion is a critical skill that deserves the same level of educational commitment as other high-stakes procedures.

Responding to Emotion Is More Important Than Ever

The loss of in-person interactions, the restriction of critical communication to phone calls or telehealth, and the delegation of communication tasks to others may shift the emphasis of

conversations with patients’ family members or loved ones to simply delivering clinical updates and decision plans, rather than sharing the experience of the illness, explaining the care provided, and finding opportunities to connect and support. Even under normal (nonpandemic) circumstances, some clinicians respond to emotion-laden questions with data and facts, missing the opportunity to recognize a human experience and to offer empathic validation and patient silence.^{3,4} This reaction matters because responding to emotion with empathy lowers anxiety levels and allows families and clinicians alike richer and more authentic insights into what is most important.^{5–7} Attending to emotion enhances clinicians’ abilities to manage difficult conversations, while allowing them to convey compassion and build trust.^{3,8–12} Especially during these emotionally heightened times, clinical faculty must model how to speak empathically with a patient, provide opportunities for trainees to practice leading these critical conversations, and give formative feedback after the conversations occur.¹³

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How “Just-in-Time” Simulation and Feedback for Communication Skills Training Looks in Action

“Just-in-time” training is defined as training conducted immediately before a potential intervention.¹⁴ I believe a just-in-time teaching approach, using simulation, can support empathic and clinically rigorous communication. The case presented below demonstrates how rehearsing a conversation with a trainee via role play teaches communication skills for a specific encounter when those skills are needed most.

Imagine this situation: Mr. W is a 74-year-old man with severe chronic lung disease who has been in the intensive care unit (ICU) for 2 days. He suffered 2 episodes of cardiac arrest at a rehabilitation facility and survived after cardiopulmonary resuscitation. He has improved rapidly and is currently awake, interactive, and requiring less support from the ventilator; however, he also has developed hypotension, is in acute renal failure, and has tested positive for COVID-19. As the ICU attending, I consult with Mr. W’s long-standing pulmonologist and reach a difficult conclusion regarding ongoing life support—namely that even if he recovers from the cardiac arrest, he is unlikely ever to make it home, which is his wife’s stated goal for him. The situation is further constrained by the fact that, as was the norm in early pandemic care, patients are unable to have visitors and, if critically ill, may die quickly and alone with no family members in attendance. The resident taking care of Mr. W offers, “I’ll call Mrs. W and discuss the situation with her.”

This conversation would be a challenging one for any clinician. The resident demonstrates understanding of the clinical situation and is eager to make the call. We discuss the challenges and agree to use simulation before the call, so the resident can practice delivering the difficult news.

“How are you going to discuss this with Mrs. W?” I ask.

The resident answers, “I’ll describe the situation and explain next steps.”

I clarify, “No, I’m not looking for a general description of what you plan to say, but, rather, the words you will actually say and how you will say them.”

Years of research on productive conversations in the organizational

behavior field have demonstrated that people’s espoused approaches to difficult conversations rarely match their actual conversations.¹⁵ Simulation is needed to observe and improve conversation skills.

An abbreviated description of this simulation and feedback might look as follows:

“Pretend I’m Mrs. W,” I say.

“Well, I’m calling you because Mr. W is better from his cardiac arrest, but his respiratory failure is still making him dependent on the ventilator, and he has renal failure, and he’s requiring pressors, so we need to talk about next steps.”

My concerns here are that the communication is too fast, includes too much jargon, and lacks critical trust-building and connection. Having patients on a ventilator in an ICU may have become normalized for trainees given their daily work; thus, they may inadvertently forget the family’s perspective and overestimate their understanding of clinical information. Of course, I cannot actually know this resident’s frame of mind or motivations without asking. Effective feedback requires focusing on just 1 or 2 key learning points, sharing an honest perspective using specific data to describe any performance gap, exploring with genuine curiosity to better understand what drove the trainee’s actions, and then teaching to meet that trainee’s needs.¹⁶

I apply this approach with the resident: “I think it’s important to use simple, clear language. I’m hearing you use words like *respiratory* and *renal failure*, *ventilator*, and *pressors*. I’m concerned that when you use words unfamiliar to people, it makes it hard for them to comprehend the message and to participate in the conversation. I’m curious what you think about the words you use.”

The resident reflects that he forgot to shift from the medical jargon of clinical care and felt rushed to accomplish the task of the phone call, which impaired his effort to connect and build trust.

In an effort to make Mr. W’s situation more relatable, I ask the resident to think about the experience of the person receiving this call: “Imagine this is someone’s grandfather in that bed, and a doctor is calling their grandmother to discuss the situation.”

Introducing a reminder of human connections and relationships helps the trainee anticipate and understand

the emotions inevitably present.¹⁷ Such contextualizing promotes the capacity to see a situation from another person’s point of view and make clinicians more empathic.¹⁷

As illustrated in the scenario above, key steps for effectively using just-in-time, simulation-based communication training include the following:

1. **Assess the trainee’s understanding** of both the clinical situation and the goals of the conversation and, as necessary, fill in the gaps.
2. **Determine which portion of the encounter may be most challenging** for the trainee, based on the clinical situation and on the trainee’s comfort and skill level. Many learners have difficulty identifying their own skills and challenges. Asking them to consider where they might get stuck, or where they have struggled in a prior conversation, may be revealing.^{13,18}
3. **Provide scripts** for responding to difficult questions or to describe clinical situations. Scripts are crucial cognitive aids that lower cognitive load, thereby allowing learners to focus on other aspects of the communication.^{19–21} An excellent free resource with scripts for a wide range of difficult conversations is available through VitalTalk.²² Scripts alone, however, are not enough; suggesting words to say may make a novice clinician more willing to engage, but is insufficient for an effective encounter.^{19,23,24}
4. **Refresh or teach focused communication skills** relevant to the needs of the learner and the situation. Identifying the most relevant skills, based on the learner’s goals and any anticipated challenges, facilitates learner-centered training and patient-centered care. Examples of specific skills include the following: sharing complex information clearly, making a connection, or identifying and responding to emotion to provide empathy and understand values.^{7,13,18,25–27} Notably, teaching should be limited to just 1 or 2 key strategies or skills to avoid overwhelming the learner.
5. **Prepare the trainee for the emotional aspects of the conversation** through reflection. Reflection promotes a more empathic approach to a challenging

and important encounter.²⁸ Even a brief reflection induces a shift from a task-oriented mindset in the trainee to one of patience and listening.^{7,17}

6. **Simulate the conversation and provide feedback** shortly before the interaction occurs to allow the learner to prepare, practice, reflect, and anticipate challenges.

Just-in-time simulation and feedback is a brief, underused opportunity to offer an essential component of clinical training. Trainees rarely receive specific feedback about their communication skills,^{29–31} even though coaching can improve their communication efficacy. In my experience, coaching on the pace of delivery and tone, for instance, helps trainees learn to pause, allowing them to choose words that convey more meaning, to foster a feeling of empathy, and to let the patient or family member feel heard. Coaching includes modeling for the trainee, such as, in the case above, showing the resident how to speak with Mr. W's wife.

The resident tries again: "Based on what you told me about what is most important to Mr. W, it sounds like the priority is for him to go home, and not spend more time in hospitals or nursing homes.

[pause]

"I am so grateful you can share what is most important to him.

[pause]

"I'm worried that he is too sick to make it home..."

Rehearsing the words, practicing pausing after each point, and honoring the silence that conveys patience, attention, and support all allow trainees to experience the changes in their delivery and to consider how their message might be received differently as a result.

Critical Conversations Require Balancing Competing Priorities and Caring for Trainees

Clinician educators care for patients in the context of an ancient educational dilemma—prioritizing what is best for patients and families while also navigating the sometimes-competing interests of education and the pressure of time. Importantly, the patient and family are not the only ones who might suffer from prematurely encouraging or allowing a trainee to undertake an important

clinical task; having trainees deliver bad news before they are ready also places these learners at significant risk. A learner should not be expected to lead a difficult conversation without practice or observation, yet, according to one study that characterized experiences with difficult conversations, residents reported often delivering bad news for the first time alone and without feeling prepared.³²

In deciding when and how to delegate clinical tasks to trainees, matching the skill level of the learner and the anticipated difficulty level of the task is vital. If the clinical needs of the moment do not allow for discussion and simulation before the communication must occur—or if the conversation is too complex, fraught with conflict, or nuanced for the trainee to perform well—clinician educators can still make such an encounter educational by having the trainee observe the interaction with a patient or family member and debrief after the conversation, in a process of vicarious observational learning.³³

Effective Observational Learning Requires an Active, Structured Approach

Active, conscious, directed observing, rather than attempting to accrue knowledge passively by simply being present, promotes more efficient learning.^{34,35} Although observing an experienced clinician perform any procedure may be instructive, important factors distinguish effective vicarious observational learning from passive watching. In medicine, working alongside others is the default model of training, but the learning yield is enhanced by the intentionality of the teacher and the instructor's verbalizing of actions or "thinking out loud."^{34,35} Unsurprisingly, the features that trainees describe as hindering learning-through-observing include the environment or situation "being chaotic," an instructor "avoiding questions," and instruction that "lack[s] dialogue."³⁴

Observational learning tends to be most effective when the learners doubt their own competence and are eager to improve.³⁶ Identifying areas of deficiency requires accurate self-assessment; however, the least skilled learners are often the least aware of their own incompetence and may not know how to observe effectively to improve.^{36–38} This

paradox may lead trainees to undertake a complex conversation without asking for help. Additionally, not knowing which skills or strategies to watch for as an observer may preclude a trainee's effective observational learning.

Without identifying and practicing isolated skills, clinicians at all levels may sense that communicating well is somewhat magical, or that good communication is somehow innate, rather than the result of studying and practicing learnable skills. To optimize the observing experience, I suggest the following steps:

1. **Identify potential challenges in the conversation** and connect those challenges with specific skills. For example, learning that a prior family meeting has led to a lack of trust will help the learner focus on the strategies the clinician employs to build trust such as active listening and validation. Knowing that a patient's family members have expressed anger and hostility to one another may help the trainee attend to how the clinician redirects the family toward the shared goal of providing the best possible care for their loved one by naming the dynamic and engaging in conflict negotiation.
2. **Explain the rationale for having a more advanced member of the team conduct the conversation.** The explanation should cover the skills required and include concerns about risks to the patient or trainee. I have noticed that if I fail to clearly explain the rationale for leading a conversation, I risk discouraging the trainee, who may, in turn become less engaged in the patient's care, especially in the task of communicating with the family. Further, failing to explain could impair the teacher–learner relationship and damage the sense of support that effective learning requires.¹³
3. **Ask the trainee to be prepared to share observations and give feedback.** Directing learners to focus on their own learning goals or to note specific elements of the encounter (e.g., how to make a connection and build trust, when to pause and for how long, how to explain things clearly, how to respond to emotion) may help learners prepare for both the

encounter itself and the debrief after. The expectation that the learner will engage in active observation to offer specific feedback not only addresses the potential weakness of learners observing rather than doing but also may preclude the human tendency to pay less attention during an encounter if not actively involved.

4. **Choose a location that is private and quiet**, if possible.
5. At the beginning of the conversation, **explain your role and that of the trainee** in sharing the responsibility for communication. In my experience, patients and family are calmed by understanding team members' roles, and I have noticed that the trainee is more likely to remain engaged if they are introduced by name and know they will have responsibility for future communication.
6. **Debrief after the conversation.** Start by asking the trainee for their observations and perspective. Ask the trainee what questions came up as they observed. Encourage them to share what seemed effective and ineffective and what specific skill, strategy, or phrase they might like to incorporate in a future difficult conversation.¹³
7. **Share your feelings about the encounter and invite the trainee to share theirs.** Physicians often have strong emotions in the process of caring for patients, and they benefit from reflecting on, discussing, and normalizing their feelings.³⁹ By disclosing their own feelings of an encounter and inviting others to share, clinical educators model self-awareness, support, and acceptance of physicians' human emotions.
8. **Thank the trainee** for being willing to share observations and suggestions. This expression of appreciation encourages speaking up and discourse, which promote a culture of collaboration and learning.⁴⁰

Observational and Experiential Learning Are Necessary and Complementary

Intentionally incorporating vicarious learning through observation into a

model of experiential learning has educational advantages at least in part because directly experiencing or leading a task entails a heavy cognitive demand. Research shows that, compared with experiential learning alone, combining direct experiential learning with observational learning increases the efficiency and effectiveness of mastering a complex task and improves individual and team performance in both experimental and work settings.⁴¹

Intentionally incorporating observation may also improve the retention of new knowledge. Being burdened with a task before developing the microskills required to effectively complete it increases cognitive load and may impair the learner's process of coding information into a framework necessary for retention.⁴¹ By avoiding the stress of direct task engagement, observing learners may be better able to perceive subtle cues that will help them to process and incorporate strategies and skills more efficiently, while direct learners may struggle due to greater task immersion, simultaneous demands, and cognitive overload.⁴¹

To help trainees retain skills and knowledge from observational learning, they must progress from observing to direct experiential learning by doing. Since learners tend to overestimate their own skills³⁶ and since doing is very different from describing or mentally rehearsing, simulation becomes very important for the process of learning and gaining insight into a complex skill such as managing difficult communication. Ultimately, developing expertise requires a cycle of practice incorporating reflection and high-quality feedback.⁴²

Even if the end goal is learning by doing, I believe observation is a skill worthy of development in its own right. Trainees who are attuned to notice specific actions and outcomes and who are accustomed to offering their perspectives and generating ideas in a team debriefing will develop the critical skills required for being a lifelong learner and teacher: learning through observation, identifying specific actions and understanding their consequences, reflecting as part of a team, solving problems collaboratively, and inviting and offering feedback.

Communication Is a Procedure That Must Be Learned and Honed With Feedback

There is a misconception that clinicians should know how to communicate without training, practice, feedback, and support. But I am convinced that managing a high-stakes communication encounter with a patient or family in the context of a critical, life-threatening illness is a skill that deserves the same guidance, educational opportunities, and debriefing as any other high-stakes procedure. A conversation regarding a dying patient has the potential to lead to protracted, futile life support interventions or to a comfort-focused death with dignity.^{43,44} An effective conversation often yields collaboration and connection with a family, as well as a deeper understanding of a patient's values and goals.⁴⁴⁻⁴⁶ A poorly executed conversation can have lasting traumatic effects on the patient, their loved ones, and the clinician.^{39,47,48}

Just-in-time teaching based on an actual case appeals to adult learners who generally prefer a problem-centered approach that is immediately relevant.⁴⁹ Although just-in-time teaching has been successfully used to improve medical trainees' skills in many areas,⁵⁰⁻⁵³ it has rarely been reported in the context of communication skills training.¹⁸ Simulation is widely used to build communication skills, and research indicates it has been effective for trainees learning to navigate various encounters, including delivering bad news and conducting family meetings,⁵⁴⁻⁶² but it has not been described in the context of actual patient care.

For difficult conversations—especially under the stresses of a pandemic—just-in-time simulation, as well as the structured vicarious observation approach, meets an immediate educational need, incorporates the conveying of empathy to an actual patient and family, addresses issues related to feasibility given a hectic training or clinical schedule, and avoids the use of external resources or funding. Through in situ practice and feedback, both just-in-time simulation and structured observation empower trainees, giving them skill, confidence, and emotional support when they need

it most. Both approaches elevate the art of communication to the level of a “must have” competency demanded by accrediting agencies, and by patients and their families.

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