Simulation in Suicide-Specific Clinical Training: Guidelines for Programs

2024







Acknowledgments

These guidelines were prepared for the Suicide Prevention Resource Center (SPRC) under a subcontract with the Anne and Henry Zarrow School of Social Work at the University of Oklahoma.

Jonathan Kratz, MSW, LCSW, was the primary investigator for this document.

SPRC is supported by a grant from the U.S. Department of Health and Human Services (HHS), Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Mental Health Services (CMHS), under Grant No. 1H79SM083028. The views, opinions, and content expressed in this product do not necessarily reflect the views, opinions, or policies of CMHS, SAMHSA, or HHS.

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Suggested Citation

Suicide Prevention Resource Center. (2024). *Simulation in suicide-specific clinical training: Guidelines for programs*. https://sprc.org/online-library/simulation-toolkit

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In 2014, the National Action Alliance for Suicide Prevention established training guidelines for increasing suicide prevention, intervention, and postvention capacity in the clinical workforce. Recommendations included the use of a variety of teaching methodologies ranging from didactic instruction to mentorship and supervision in real-world settings. Among the recommendations was the use of simulation-based learning as a strategy for building clinical skills in trainees. Simulation training provides learners with a low-risk environment to practice and develop skills on standardized clients (SCs) (i.e., standardized patients [SPs]). This creates a safe space for learners to apply knowledge learned in training. Simulation also allows instructors to observe and provide direct feedback to learners as they practice clinical skills.

Suicide-specific trainings are effective in reducing stress in mental health providers and improving client outcomes (Mann, Michel, & Auerbach, 2021). Simulation-based learning can bolster traditional training programs and improve competence and confidence in the workforce (Lee & Kourgiantakis, 2021). By allowing trainees to practice suicide intervention skills in the safety of a lab setting, learners can hone their skills through hands-on experiences without the risk of harming a real-world client.

1.1 How to Use These Guidelines

These guidelines provide a high-level overview for universities and clinical training directors ("programs") of the development and implementation of simulation-based suicide clinical skills training. The guidelines explore multiple facets of the use of simulation in suicide skills training, including the benefits of incorporating simulation-based learning, considerations for resource allocation, development of simulation scenarios, training of SCs, and recommendations for implementation and facilitation of simulation-based learning experiences. The content of this document should be adapted to the financial and organizational context of specific programs. These guidelines are written to include useful information for programs that do not have existing simulation-based learning systems as well as those that have access to existing simulation labs.

Programs without existing simulation-based learning systems: All sections of this document will be relevant to programs considering the feasibility of launching simulation-based learning efforts. These programs may find Section 4 to be particularly useful as they explore the logistical dynamics of virtual versus physical simulation labs, simulation software needs, and common challenges in managing SC pools.

Programs with existing simulation-based learning systems: Sections 2 and 3 may be useful as programs consider the benefits of leveraging their lab systems in simulation-based trainings for suicide-specific clinical skills development. These programs should pay particular attention to Sections 4.4.6 and 4.6 and consider the unique challenges that can emerge when implementing simulation-based learning focused on suicide interventions. Programs are encouraged to note the potential for adverse reactions among learners and SCs tasked with completing suicide-specific simulations.

1.2 Scope of the Guidelines

The scope of these guidelines is limited to the integration of suicide-specific simulation-based learning into existing training programs. Programs should appraise the training needs of their students and staff ("learners") as they consider the benefits of integrating simulation-based learning into existing training processes. These guidelines do not provide a comprehensive curricular guide for suicide skills training.

An example of a simulation integrated into a larger educational unit using the Collaborative Assessment and Management of Suicidality (CAMS) framework is provided in section 5 (Jobes, 2016; Kratz et al., 2020). Programs are encouraged to conceptualize simulation-based learning as just one element of a larger training process that includes readings, didactic instruction, and role-play. Programs that do not have existing suicide-specific training processes are encouraged to identify and implement best practices before exploring options for simulation-based enhancement of their educational efforts. A listing of best practices for suicide interventions is available on the Suicide Prevention Resource Center's Best Practices Registry (bpr.sprc.org).

2.1 Brief History of Simulation Pedagogy

The inclusion of simulations in instructional models dates to the early 1900s, with low-technology mannequins like "Mrs. Chase," which allowed nursing students to practice on adult-sized models (Herman, 1981). Erich Jantsch's 1947 publication reflects the first documented use of SCs to create realistic practice scenarios through role-play (Palaganas, Epps, & Reamer, 2014). Throughout the 1950s and 1960s, simulations continued to evolve for instructional use in sociology, psychology, the behavioral sciences, and organizational theory (2014). Simulation learning was heavily integrated into medical education after a 1999 report conducted by the Institute of Medicine concluded that provider errors were resulting in nearly 100,000 deaths per year in the United States (AI-Elg, 2010). Today, simulation software, high-tech computerized mannequins, and SCs are used in a wide variety of fields, with the shared goal of creating a low-risk environment to practice for high-stakes events.

Exemplified by its incorporation into high-risk fields, simulation-based learning provides learners with the opportunity to practice new, often complex, skills before entering real-world situations (Al-Elg, 2010). Learners can also practice invasive and complex procedures, for which opportunities for supervised practice with real-life clients might be rare (2010). When mistakes are made during simulation-based learning, errors escalate,

so a learner can reflect on bad outcomes; by contrast, in a clinical setting, a supervisor would intervene to correct the mistake and prevent harm (2010). This safe practice environment encourages learning by building confidence and reducing anxiety, first during the simulation, and later, out in the field (Aebersold, 2018).

SIMULATION-BASED LEARNING builds muscle memory and confidence.



In addition to providing a risk-free practice environment, simulation allows learners to practice their skills multiple times before entering the field. Simulations promote the repetition of physical tasks, like surgery or flight, to help trainees build muscle memory for those important tasks in real life (Papanikolaou et al., 2019). This repetition of skills increases retention and accuracy (Al-Elq, 2010). In fields that do not require physical task rehearsal, learners can benefit from using simulation to practice mental exercises. Opportunities to practice therapeutic skills or lead difficult conversations reinforce the evidence-based practices that learners are taught in the classroom (Aebersold, 2018). Moreover, simulation-based learning can provide instructors with a reliable educational assessment of the learner's competency before they are sent into the field (Jones, Passos-Neto, & Freitas Melro Braghiroli, 2015).

Simulation-based learning also has a positive impact on student motivation, exam scores, and perceived confidence (Hung et al., 2021). A 2016 meta-analysis found that high-fidelity simulation was an effective instructional method for undergraduate nursing students that improved specific skills, such as medication safety, hygiene, and communication with clients (Doolen et al., 2016). Cant and Cooper (2017) conducted a systematic review that demonstrated significant learner improvements in confidence, critical thinking, and theoretical knowledge application in programs that integrated simulation-based learning in their trainings. Watters and colleagues (2015) found that healthcare professionals improved their communication, teamwork, leadership skills, and overall self-efficacy when trained using simulation to facilitate interprofessional education.

2.2 Simulation for Suicide Prevention, Intervention, and Postvention Training

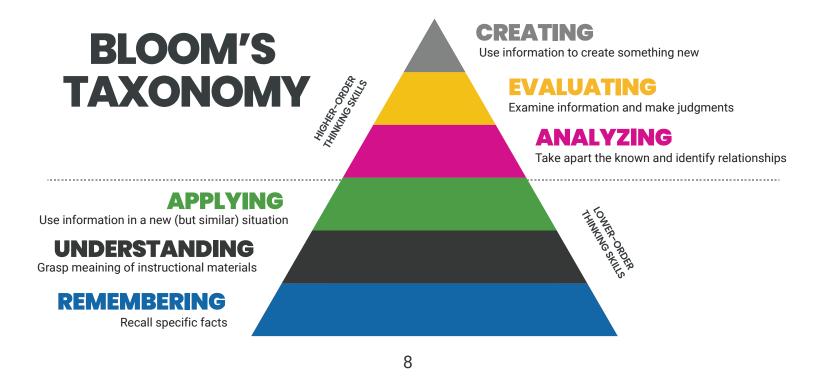
Clinical education related to suicide prevention, intervention, and postvention stands to gain in all the ways that simulation learning has enhanced other fields. Just like in flight or surgery, using simulation in suicide-specific clinical education enables providers to practice intervention strategies without real-world risks. Simulation-based learning provides learners with a space to practice speaking candidly about suicidal ideation, access to means, and safety planning (Bal et al., 2016). It allows the provider to rehearse intervention skills and increase their comfort with talking about difficult issues such as thoughts of death. It also allows providers to practice relational skills and experience empathy for the pain and suffering of clients in vulnerable states.

Training programs that include simulation in the teaching of evidence-based suicide prevention skills are more effective than those that use didactic training alone (Cross et al., 2011). When simulation with SCs was part of a brief community gatekeeper training program, participants' suicide intervention skills increased significantly between pre-and post-tests, especially compared to participants whose training had not included simulation (Cross et al., 2011). Simulation in suicide prevention training also creates opportunities for instructors to assess learners' competence in suicide prevention skills before they enter professional work (Kalafat & Elias, 1995).

3.0 Simulation as a Pedagogical Tool

Simulation exists along a spectrum of pedagogical strategies between knowledge acquisition and supervised practice. Most clinical instruction models acknowledge the limits of lectures, video examples, and readings in the development of skills needed for clinical practice (Chernikova et al., 2020). Once learners have foundational knowledge for a skill, their next educational need is to *practice the skill*.

Adult education is often conceptualized using <u>Bloom's taxonomy</u>, in which learning is sequentially achieved through five interconnected tasks: remembering, understanding, applying, analyzing, evaluating, and creating (Bloom, 1956). Each of these tasks is dependent on its predecessor: learners need to remember so they can understand, understand so they can apply, apply so they can analyze, and analyze so they can evaluate and iterate. Simulation-based learning can be a powerful bridge between the lower and higher levels of Bloom's taxonomy as learners take steps to develop clinical competence in the safety of a simulated setting (Felix & Simon, 2022; Shabatura, 2022).



Some programs may wonder if peer-to-peer role-play can serve as a low-cost substitute for simulation-based learning. Instructors often use structured role-play as a strategy for initial skill practice using groups of peers in a classroom setting (Bosse et al., 2015). This gives learners a way to try new skills with minimal risk. It also allows learners to practice simple feedback loops using peer or instructor observation and debriefing. As an instructional technique, role-play is an affordable approach that can be easily incorporated into learning.

There are also some significant limitations to role-play in clinical skill development. The most significant is the fidelity of the client presentation. Learners may have limited experience and exposure to the targeted client problem, and very few learners will be trained SCs. This can lead to client presentations that are reductive and potentially offensive. This nonrepresentational dynamic can lead to a farcical environment that limits the opportunity for advanced skill practice.

In simulation, the learner and SC are given a scenario and engage as strangers. SCs receive extensive training to credibly embody a client scenario with realistic, complex presentations beyond what is possible in peer-to-peer role-plays. Many simulation-based training programs use technology to create recordings of learner experiences that can be annotated by instructors and used for video review in debriefing sessions (Sheen et al., 2021). Simulation enhances and augments the overall goals of role-plays by supplying a context for skill practice that garners more buy-in from learners, increases the fidelity of the experience, and supplies pathways for deeper reflection and analysis. Importantly, it supplies an added pathway for skill practice in high-stakes and difficult client presentations before learners begin to implement these skills in real treatment settings (Bosse et al., 2015).

3.1 Developing Learning Outcomes for Simulation-Based Instruction

As programs consider the utility of simulation-based learning, it is important to clearly contextualize simulation in relation to desired educational outcomes. As described in 3.0, simulation can be incorporated into larger training efforts as a formative process for developing clinical skills (Bogo et al., 2014). In contrast, some programs may look to use simulation as a summative process. This approach involves the use of simulation to evaluate learning outcomes and measure competence. Both strategies have potential utility in the instruction of suicide-specific clinical skills, and they are not mutually exclusive.

Table 1: Comparing Formative and Summative Processess

INDICATORS	FORMATIVE	SUMMATIVE
Goal	To improve	To prove
Purpose	To enhance learning	To evaluate performance
Relation to instruction	Occurs during instruction	Occurs after instruction
Frequency	Occurs continuously, daily	Occurs at a particular point in time
Role	Guide skill development in learners Monitorteaching/instruction based on student performance	Predict and evaluate learners' performance Award grades Determine competence

3.2 Formative Process

Formative assessment promotes the integration of simulation into a larger educational effort. It is often an opportunity for learners to practice a new skill for the first time. As a formative tool, simulation provides an opportunity for learners to experience a complete clinical feedback loop. Simulation is sandwiched between didactic instruction and debriefing in which learners gain new knowledge about a specific clinical skill, practice that skill through a simulation experience, and process their efforts through a guided debriefing. This feedback loop provides an opportunity for learners to consider their cognitive and affective reactions during the simulation and advance their skills by identifying areas for improvement (Bogo et al., 2014).

3.3 Summative Assessment

Summative assessment is usually deployed at the end of a training program with minimal debriefing. This deployment of simulation allows programs to evaluate learning outcomes and can be used for assigning grades and gatekeeping specific clinical roles (2014). The goal of summative assessment is to measure competence and evaluate the performance of the learner. Given the nature of a summative assessment, programs should be mindful of the stress this creates for learners and the potential for a Hawthorne Effect in which the observational structure of the simulation results in clinical behaviors that are not reflective of the participant's skills (Harrell, Gladwin, & Hoag, 2013). This phenomenon is often seen in behaviors that are more adherent than normal but can also manifest in the other direction through behaviors that are less adherent.

3.4 Learning Priorities and Logistics

The range of clinical skills needed for competent practice in suicide prevention, intervention, and postvention can feel overwhelming to many learners. Likewise, programs themselves may become overwhelmed as they seek to provide meaningful simulation-based experiences to address all the different skills needed for competent practice. It can benefit both the program and the learner if simulation-based training efforts are focused on specific sub-skills and processes. Depending on the program and learner context, simulations will range in complexity and ambition.

Programs that integrate simulation-based learning must continually balance the educational needs of their learners with time and resource constraints. It can be impractical to provide lengthy simulation encounters to large numbers of learners. A strategy that can alleviate some of these issues is leveraging the artifice of simulation-based learning to provide focused skill practice experiences. For example, a program that seeks to improve learner skills in the outpatient management of suicidality may forgo a comprehensive engagement, assessment, and treatment planning simulation (90-120 minutes per learner) in favor of a more focused experience on safety planning (20-25 minutes per learner). In this example, the learners could be shown a completed suicide assessment form to provide the needed context to launch and complete a safety plan with their SC.

Even if programs have ample funding to support lengthy simulation encounters, it is important to consider the needs of the learners. With learners who have minimal experience working with people experiencing suicidal behaviors, it is important to link simulation expectations to clear didactic instruction and specific behavioral skills. If possible, learners should practice skills in role-play settings before experiencing a formative simulation. Although programs may be tempted to launch simulation experiences with a full screening process (25-30 minutes per learner), some learners may benefit from targeted skill practice, such as informed consent processes (5 minutes per learner) or suicide screening practice (5-10 minutes per learner).

Learners with emerging competency may benefit from focused work on advanced processes like means restriction counseling and safety planning. A major challenge when using simulation to practice advanced skills is the need for context in those processes. For example, a simulation that aims to help learners practice lethal means counseling will not be highly effective if the learners are not aware of the nature of the client's suffering, suicidal ideation, and behaviors. These details can be incorporated in the "door note" so learners have the needed context for performing their task (more on this in 4.5.1), but even that does not fully address the challenges of ad hoc skill practice. In particular, the importance of relational dynamics in advanced skill practice can lead many programs to provide lengthy simulations so that learners will have the relational context needed to practice the targeted skill. This can be financially and logistically challenging depending on available resources.

Suggested time per learner to complete different tasks in simulation can be found in Table 2. The actual time per task may vary depending on the specific client scenario and the modalities used by learners. Generally, modalities that are more standardized and direct (e.g., C-SSRS) require less time to complete than those that place more emphasis on relational and client-centered tasks (e.g., CAMS). The more tasks learners are asked to practice in simulation, the longer the simulation encounters will be.

For example, if a program seeks to provide simulation-based learning focused on the skill of engagement and screening for suicidality, learners may be tasked with completing an informed consent process, developing empathy for the client's pain and suffering, completing a hierarchical screening process, and referring the client for further assessment and treatment. In this example, each learner would need about 25-30 minutes in the lab with their SC to complete these tasks. If a program had 50 learners, this would require the lab to provide nearly 1,500 minutes of simulation experiences. Depending on the number of available SCs and scheduling complexities with learners, this hypothetical simulation could become untenable.



Table 2: Suggested Simulation Times for Skill Practice

GENERAL SKILL	SIMULATION SUB-TASK	SUGGESTED TIME FOR LEARNER SIMULATION
Engagement and Screening for Suicide	Informed Consent Process	5 Minutes
	Empathy for Pain/Suffering	5-10 Minutes
	Direct Suicide Screen	5-10 Minutes
	Hierarchical Screen	5-10 Minutes
	Referral for Assessment	10-15 Minutes
	Transition to Assessment	10-15 Minutes
Suicide Assessment	Pain and Suffering	15-20 Minutes
	Differential Diagnosis	15-20 Minutes
	Reasons for Living/Dying	10-15 Minutes
	Means Assessment	10-15 Minutes
	Suicide History	10-15 Minutes
	Risk Analysis	10-15 Minutes
Treatment Planning	Pain and Suffering	15-20 Minutes
	Differential Diagnosis	20-25 Minutes
	Reasons for Living/Dying	20-30 Minutes
	Means Assessment	10-15 Minutes
	Suicide History	10-15 Minutes

4.0 Key Elements of Simulation

There are a variety of important elements for programs to consider prior to the deployment of simulation-based instruction (Table 3). These elements include decisions about the format of the simulation lab (physical or virtual), simulation software, SC strategies (volunteer or employment based), standardized cases/scenarios, feedback/debriefing, and rubric review.

Table 3: Core Simulation Lab Components

INDICATORS	FORMATIVE
Physical Simulation Lab	A facility with rooms, sometimes including home environments
Virtual Simulation Lab	Resources and facilities to host telehealth-style simulation rooms
Simulation Software	The software system allows for the annotation of videos for learner and trainer review
Standardized Clients	Trained actor who will embody the client from the scenario
Standardized Cases/Scenarios	Standardized cases/scenarios that include a case title and overview/purpose, uses for the case/scenario, set up details, SC history, and student instructions
Feedback/Debrief	Process in which learners receive feedback from a variety of sources (SCs, trainers, peers) on a variety of levels (individual, small group, or large group debriefing)
Rubric Review	The software system allows for multiple users (learner/self), peer, trainer, and SC) to supply feedback using a standardized rubric of learner performance during the simulation

4.1 Physical Simulation Lab

One of the biggest barriers faced by organizations interested in simulation-based learning is access to physical lab space and equipment (Blanford, 2016). Clinical simulations typically use small rooms equipped with office chairs like a traditional therapy office. Some programs use larger spaces with traditional home layouts to provide a realistic re-creation of community-based practice environments. These spaces are often equipped with a one-way mirror for direct observation by instructors and peers. Most modern lab spaces will also equip each room with discreet cameras and microphones to record learner encounters. Labs with video and audio recording ability can often provide instructors with a live feed of ongoing simulations and the ability to quickly rotate observation of multiple concurrent simulation sessions. Well-resourced simulation programs will also provide classroom space for staging, orientation, and debriefing. This space can be used as a waiting area for learners when a simulation is being offered in multiple rounds.

Physical labs can require significant resources for facility management, technological support, and schedule management. For this reason, most physical labs are designed to be used for a wide array of learning activities beyond the specific clinical skills discussed in this document. Some organizations may have access to existing medical simulation lab spaces that can be adapted. Training programs that intend to develop dedicated lab space for suicide clinical skills training may consider other areas in which simulation-based training may be useful to help justify the financial investment.

Programs can also explore the cost-effective implementation of physical lab space through the creative use of existing facilities and resources. Organizations can temporarily designate an office or classroom for simulation-based learning and the recording can be simplified by using a laptop or smartphone to capture the encounter. Some educational settings use a theater-style simulation to allow for skill practice in the same space where didactic instruction takes place (Lee & Kourgiantakis, 2021; Robles et al., 2019). Theater-style simulations integrate an SC encounter in the classroom by allowing individual students to practice a clinical skill while their colleagues observe. This creative approach can reduce expenses associated with recording equipment, video file management systems, and dedicated simulation space.

4.2 Virtual Simulation Lab

With the increased use of telehealth in clinical practice, many training programs have sought to use online video communication software to facilitate simulation-based learning experiences (Martin et al., 2022). This approach can be attractive as it reduces

the financial burden associated with physical simulation lab facilities. Many programs have increased their use of software like Zoom and Microsoft Teams in training their staff. These platforms are familiar to most learners and can be easily adapted for simulation using breakout rooms and built-in call recording.



When appraising this option, programs should consider the fact that it is not always as cost-effective as it may initially appear. Telehealth-based simulations require access to video communication platforms, simulation video recording and hosting software, and high bandwidth internet access for the learner, SC, and simulation staff.

4.3 Simulation Software

Software designed to manage the recording, distribution, and annotation of simulation sessions is a crucial resource for simulation-based learning programs. Key features include learner and instructor account creation, scheduling systems, video capture and storage, and annotation tools. These features are critical throughout the simulation learning process and have significant roles during planning, implementation, and review of simulation learning experiences. Well-resourced programs may record dozens of simulation encounters concurrently and instructors may find it useful if the software can provide a live feed from each simulation encounter to allow for virtual rotation for live observation and concurrent feedback and annotation.

Learning Space[™] (https://www.caehealthcare.com/learningspace/) is an example of web-based simulation software. This software platform supplies high-definition recording and streaming capabilities that learners and instructors can access from anywhere via a web browser. The platform also includes robust annotation features that can be used by instructors during live observation or during asynchronous video review. The annotation features include a visual timeline of the simulation encounter where instructors can flag and comment on specific timestamps. Instructors can also create an array of pre-written feedback comments that can be quickly added to the timeline at the click of a button. By using these annotation features, instructors can give learners rich and specific feedback for use in live and asynchronous debriefing processes. Other options with similar feature sets include SimulationIQ[™]</sup>

(https://www.healthysimulation.com/ems-simulationiq/) and SimStation™ (https://www.healthysimulation.com/medical-simulation/vendors/simstation-solution/).

4.4 Skilled and Trained SCs

Perhaps the most notable difference between simulation-based learning and role-play is the training that SCs receive prior to entering the simulation. The Association of Standardized Patient Educators (ASPE) released standards of best practices for SPs (i.e., SCs) in 2017. This lengthy document provides SPs and entities employing and training SPs with standards for simulation learning and SP training (Lewis et al., 2017). A program's use of SPs can include a variety of approaches depending on available resources. These can range from SP pools mainly staffed by volunteers to employment-based SP systems.

4.4.1 Volunteer-Based SCs

Volunteer-based systems typically use senior or emeritus staff to supply SC encounters for learners. These individuals often have years of experience working with clients at risk of suicide; senior and emeritus staff experience can be leveraged to provide a credible simulated encounter. Using volunteers as SCs can significantly reduce the cost of offering simulation-based learning programs (Murphy, Imam, & MacIntyre, 2015).

There are also some significant disadvantages to using volunteer-based SC pools. Volunteers often receive less training than employment-based SCs and programs may find it more challenging to coach a volunteer when there are concerns regarding their performance. This can result in inaccurate client portrayals, which can negatively affect the quality of the learner's experience. Volunteers who play the role of a client at risk of suicide may also experience emotional distress, which can lead to anxiety, depression, and other mental health issues (Hanson et al., 2002; Murphy, Imam, & MacIntyre, 2015). Programs may struggle to support adverse reactions in volunteers as they are often not covered by a program's liability and health insurance. Overall, using volunteers as SCs in a suicide simulation requires careful consideration of the potential risks and the implementation of proper safeguards to mitigate these risks.

Volunteer-based SCs can provide credible simulated encounters for learners.

4.4.2 Employment-Based SCs

By contrast, there are many benefits to using paid SCs. Paid SCs are trained to provide consistent and reliable performances, which can help ensure that each simulation is conducted in a standardized and controlled manner. Paid SCs are typically more reliable than volunteers because they are contractually compelled to show up on time and perform consistently. Paid SCs are typically covered by a program's liability insurance, which can help protect the institution and learners. A study comparing paid SCs and volunteer SCs demonstrated that learners preferred paid SCs because they were able to portray the client scenario more credibly (Willson et al., 2021).

Overall, while volunteer SCs can be a valuable resource in some settings, paid SCs can ensure a more reliable, consistent, and professional learning experience. Regardless of which approach a program uses, it is important to consider the emotional and physical toll a simulation experience can take on SCs. This is especially important with suicide-related simulation experiences. The SCs in these simulations are tasked with presenting as a person in a painful emotional and cognitive space and programs should be prepared to support SCs who experience distress and other adverse reactions.

4.4.3 Identification and Recruitment of SCs

Recruitment and retention of individuals who can handle the unique environment of real-time simulation and clinical debriefings are major challenges for any program (Pascucci et al., 2014). Program budgets will often dictate the scope and traits of an SC pool. Some programs will use professional agencies like the Association of Standardized Patient Educators (ASPE) or develop internal systems for hiring full and part-time SCs. Many standardized clients are paid on an "as needed," per diem, or hourly rate (NLN Nursing Edge, 2017). Programs with less funding may choose to incorporate staff and volunteers as SCs. Regardless, programs should strive to recruit standardized clients who can realistically portray client scenarios with high fidelity.

4.4.4 Training SCs

Training SCs is an ongoing process in simulation programs. New SCs will need to be oriented to the goals, processes, and coordination of simulation-based learning and develop skills to portray roles, give feedback, and complete assessment instruments (Lewis et al., 2017). The onboarding of new SCs often includes reading simulation scenarios, meeting with instructors to better understand the learning goals, and practicing scenarios through role-play with other SCs. As SCs begin to supply simulated clinical encounters, the video recordings of those events can be used to assess the fidelity of the SCs' presentation and as a feedback tool for iterating and improving their performances (Kourgiantakis et al., 2020).

In simulation scenarios that include suicidality, the SCs will need training that covers the specific dynamics that are often seen in individuals experiencing suicidal behaviors (Joiner, 2005):

- Overview of common behavioral, cognitive, and emotional signs and symptoms associated with suicidality
- Examples of common conceptualizations for suicidality
- Insight into impulse-based suicidal behaviors (crisis conceptualization)
- Information on the impacts of substance use on suicidal behaviors (altered inhibition)
- General knowledge of mental health conditions connected to suicidality and guidance for portrayal of common conditions
- Insight into the environmental and interpersonal dynamics often seen in individuals experiencing suicidality (legal trouble, health problems, financial challenges, interpersonal disputes, etc.)
- Guidance on client presentation and affect
- Overview of dynamics related to client's willingness to engage a clinician (voluntary vs. compelled engagement)
- General guidance on how to respond to learner efforts (adherent and non-adherent)

4.4.5 Coaching for Performance Improvement

Programs will find that some SCs need support and guidance beyond what is provided in introductory and iterative training. The need for higher-level coaching is often revealed when there are significant problems with SC adherence to the scenario that affects a learner's experience (Healey et al., 2004). Coaching efforts will often focus on remediation with a focus on specific, behavioral improvements to the SC's presentation in future simulations (Wallace, 2007). It is vital to have a safe, collaborative environment for the SCs to be successful in developing their simulation skills. As the coaching begins, it is important to have hands-on practice with the SCs. Peer-based support and group feedback can also help SCs better understand what they can do differently to improve the credibility and fidelity of their client presentations. It may be useful to integrate "stop action breaks" in SC trainings in which cohorts are encouraged to stop and offer help to their peers as they notice issues with their client presentations during training (Healey et al., 2004). Video review can also be extremely helpful if programs have access to recordings of other SC encounters that represent the targeted improvements. Coaching

efforts are most effective when they are strengths-based and focus on feedback, encouragement, and collaboration (Wallace, 2007). SCs who are unsuccessful in improving their presentation after multiple coaching efforts may be a poor fit for the program's simulation goals.

4.4.6 Supporting the Emotional Well-Being of SCs

Suicide-based simulation scenarios can have effects on SCs. Programs are asking SCs to embody an incredibly vulnerable client. Some SCs will deeply connect with the pain and suffering of their scenario, and this can cause their work to be emotionally and physically taxing. Programs should be aware of the need for breaks and debriefing to ensure the SC's well-being. It is important to also recognize the impact of providing multiple simulation encounters in a single setting. SCs may struggle with consistency if they become emotionally exhausted and programs should consider capping the number of suicide-related simulations that an SC is assigned per session (Jarosinski & Webster, 2016).

Some SCs may experience reactions that are more profound. SCs may have a personal history with suicidality, and this can lead to significant distress and vulnerability. Programs are encouraged to foster open dialogue with SCs about these risks and provide support to SCs who experience adverse reactions to this work. Programs that exclusively offer suicide-based simulation experiences may need to consider that some SCs are not a good fit for this specific deployment of simulation-based pedagogy. Programs with broader simulation offerings may give SCs a choice of which simulation scenarios they provide. This can allow SCs to "opt out" if they feel they are unable to safely complete suicide-based simulations.

4.4.7 SCs and Learner Feedback

A frequent practice in clinical simulation training is to have the SC provide learner feedback after a simulation encounter has ended (Doolen, Giddings, Johnson, Guizado de Nathan, & O Badia, 2014). The SC will break character and engage in an intentional and structured debriefing. This feedback is critical for the learner, especially in formative simulation experiences.

It is normal for learners to experience a critical reflection of their efforts and SCs can enhance this process by offering feedback that affirms the strengths of the learner's effort while also helping them identify areas for improvement. Most SCs are not content experts, so it may be useful to limit the scope of their feedback to relational content (Bearman, Palermo, Allen & Williams, 2015). SCs can speak to the learner's use of empathy, collaboration, and acceptance during the encounter and allow instructors to provide feedback on technical and clinical skills later. The feedback portion of a simulation is often completed in five minutes or less and most programs will instruct SCs to maintain an evocative stance with the learner (Galal et al., 2018). SCs often start by asking the learner to reflect on aspects of the simulation that they think went well and then ask about areas where they think they could improve. This encourages learners to engage in self-reflection, which is a well-documented way to improve learning (Mulvogue et al., 2019). After receiving the learners' perspectives on the simulation, SCs take a few minutes to highlight things that were done well and note specific, modifiable behaviors to be improved upon, if necessary (Lewis et al., 2017).

4.5 Developing Case Scenarios for Simulation Training

Developing new case scenarios requires a process that should start months before planned use with learner groups. Programs are encouraged to develop scenarios with input and guidance from mental health professionals who have experience working with clients in suicidal crises. These experts can help ensure that the scenario accurately represents the dynamics with real clients. Given the disproportionate impact of suicide on certain populations, many scenarios will integrate dynamics related to gender identity, race, age, culture, religion, and sexual orientation (Bogo et al., 2014). This realism can greatly enhance the learner experience, but programs are also encouraged to be intentional in designing scenarios that avoid stigmatization or the perpetuation of harmful stereotypes about suicide, mental illness, and certain populations.

Programs should also consider their learning goals in developing scenarios. As shown in Table 2, there are many different practice tasks and skills that can be the focus of a

clinical simulation. Scenarios should be structured to provide an experience in which the desired skills can be practiced. For example, a simulation that aims to develop a learner's ability to complete a suicide screening process will be different from one designed for an Emergency Order of Detention (EOD) process.



It may also be useful for programs to anchor learning goals in specific, evidence-based frameworks. A simulation case that is designed to help learners practice suicide screening might consider the integration of evidence-based screening tools or processes to structure the encounter (e.g., Question, Persuade, and Refer [QPR], the Columbia Suicide Severity Rating Scale, or the Patient Health Questionnaire). These instruments can also be useful in training SCs and helping them prepare for the types of questions they will hear from learners.

The content of a simulation case is typically organized in three sections: guidance for the learner, guidance for the SC, and guidance for lab staff (Furman & Miller, 2020). The scenario sets the scene for the SC (who they are, what has happened to them, current symptoms, events leading up to clinical engagement, etc.) and gives the learner the context for the simulated encounter.

4.5.1 Scenario Elements for the Learner

Scenario elements for the learner are often structured as a "door note" that provides essential context and information about the SC. Scenario elements are brief and typically designed to be read in the minutes prior to launching a simulation experience (Lavingia, Bryan, & Asghar-Ali, 2021). Some essential elements that should be outlined in the door note include:

- The practice setting (hospital, office, community, etc.)
- Role of the clinician in the setting
- Basic demographic information about the SC
- A brief overview of the SC's complaint or reason for referral
- An outline of the agenda and scope of the simulated encounter
- The amount of time the learner will have with the SC

This document should reflect what a clinician would typically receive in a screening intake sheet in real-world practice. It is important to limit the amount and detail of information provided to the learner to preserve the dynamics of a common clinical engagement. Some programs may also include basic instructions related to the skills and/or models that learners are expected to practice in simulation. An example of a simulation door note can be found in Addendum #1.

4.5.2 Scenario Elements for the SC

SC elements are significantly more detailed than those directed at the learner. SC elements will include an overview of the educational purpose of the simulation, extensive history of the client scenario, overview of current symptoms, examples of cognitions, insights into emotional state, and examples of behavioral patterns. The scenario elements for SCs are usually integrated into a comprehensive training process in which SCs receive guidance directly from program instructors and practice the scenario in role-plays with other SCs to develop their character (Bogo et al., 2014). Crucial elements in SC scenarios include:

- General synopsis of the simulation scenario
- Reasons for referral to clinician
- Guidance about appearance and affect
- "If this, then that" guidance for responding to specific learner inquiries
- Medical history
- Present life
- Sexual history
- Personal and social history
- Results from recent physical exam
- Family history
- Overview of learning goals for scenario
- Guidance for debriefing

An example of a suicide-based simulation scenario for SCs can be found in Addendum #2.

4.5.3 SC Elements in Suicide-Specific Simulations

Scenarios that aim to provide learners with an opportunity to practice suicide-specific clinical skills should integrate some key elements into their SC guidance documents, including:

- History of suicidal ideation and attempts
- Suicide "drivers" and general conceptualization
 - Current mental health problems
 - Current interpersonal disputes or major changes/disruptions
 - Financial troubles
 - Employment difficulties
 - Current health problems
 - Stress
- Recent or current ideation
- Recent or current suicide plan (if any)
- Recent or current suicide attempt (if any)
- The presence of suicidal fantasy (fast-forward thinking)
- General sense of current risk of suicide (client self-assessment)
- Access to lethal means

The suicide-specific details for an SC scenario should be adjusted based on desired learning outcomes. For example, a simulation that is designed to help learners practice general assessment and safety planning skills might use an SC scenario with "current ideation, vague plan, no current attempt, interpersonal conceptualization, and low self-assessment of current suicide risk" (Joiner, 2005). By contrast, SC scenarios might feature more severe suicide-related symptoms for simulations designed for EOD processes, means restriction counseling, or intensive outpatient treatment plan development. Another dimension to consider is the client's willingness to share information with the learner. Some simulations may intentionally include clients who are reluctant to engage and share information about their mood, suicidality, and other risk factors like substance use. These various levels of suicide severity should also factor into SC guidance about affect, non-verbal presentation, and energy level during the simulation encounters.

4.5.4 Specific Populations and Diversity in SC Scenarios

Programs that look to integrate specific populations into their scenarios should take extra care in developing their simulations. As a rule, programs should try to use SCs who are personally connected to a group instead of tasking SCs with pretending to be a member of that community (Chianain et al., 2021). SCs who try to present themselves as being a different race, ethnicity, or religion, or having a different gender identity, may inadvertently embody harmful stereotypes during simulation that are, at best, distracting and, at worst, directly offensive to learners. This can be a big challenge in settings where there is limited diversity in the available SC pool (Angelina, Essakow, & Ju, 2022).

There is significant "use of self" in SC practice (Jarosinski & Webster, 2016). Although the presentation in a simulated encounter is acting, many SCs will draw from their personal life experiences to increase the fidelity of the encounter. For this reason, it may be useful for programs to conceptualize their scenarios in a manner that is neutral and allows each SC to integrate diversity and nuance from their personal identity. An example of this can be seen in the simulation scenario (Addendum #1 and #2) in which the SC guidance is gender neutral and the learner "door note" is structured so that it can be used with male-identifying, female-identifying, and non-binary variants of the case depending on what the SC brings to the encounter.

4.5.5 Guidance for Lab Staff

Guidance for lab staff in clinical simulations is much simpler than in medical simulations in which props, mannequins, and medical instruments are often integrated (Mah et al., 2009). These specific resources and setup procedures are mostly unnecessary unless the suicide skills simulation is integrated into a larger medical simulation. For most programs, the lab staff will need to ensure that there are comfortable chairs in all simulation spaces, access to copies of the "door note," copies of clinical forms learners will need during the encounter, and clipboards/pens for learners to use during the encounter (Addendum #3).

4.6 Preparing Learners

As programs implement suicide-related training, it is critical to consider the impact on learners who have lived experience and are suicide survivors. In most learner groups there will be participants who have lost a friend or family member to suicide (Black, Jeffreys, & Hartley, 1993). Some learners may have people in their life who are currently experiencing suicidal ideation. There will also be learners who have a personal history of suicidal ideation and attempts (Alexandrino-Silva et al., 2009). In some situations, there may be learners who are actively experiencing suicidality. These circumstances can lead to strong emotional responses in some learners. Even for learners who have little experience with suicide, the topic can be emotionally draining.

Given the above dynamics, it is normal for programs to encounter some resistance and avoidance from learners who are tasked with practicing clinical skills in a suicide-based simulation. In some cases, there may be strong emotional and adverse reactions to the simulation experience (Wasserman & Browne, 2021). Instructors need to constantly check learner reactions and be prepared to intervene if necessary. Programs are encouraged to create a plan for supporting learners who have adverse reactions. These plans should include advance notice and normalization of adverse responses, pathways for processing concerns with instructors, alternative activities for individuals who are unable to safely engage in the simulation, and referrals to counseling support (2021).

Programs must consider the range of responses to adverse reactions before suicide-based simulation training is assigned. For summative simulations, an adverse reaction may show a lack of preparedness and competency in a learner. This may be used to inform remediation efforts or workforce deployment decisions. It is also critical that programs consider the potential of a "reverse" Hawthorne Effect in simulation learning. In these situations, adverse reactions may be a side effect of being observed and not an accurate reflection of the learner's skill (Harrell, Gladwin, & Hoag, 2013).

In formative simulations, programs should be careful to differentiate between adverse reactions and general avoidance. It is normal for learners to feel anxious about practicing suicide-related clinical skills, especially for the first time. The cognitive and affective reactions of learners during a simulation are referenced during debriefing to increase the learner's insight into the kinds of reactions they might have when working with real clients.

It can be difficult to tell the difference between anxiety-based avoidance and more severe responses in learners (Bohannon, Clapsaddle, & McCollum, 2019). Responses will vary from learner to learner, so programs should foster open communication about these issues and provide many opportunities for learners to seek support and accommodations.

It is critical to consider the impact on learners who have lived experience and are suicide survivors.

4.7 Rubrics and Learner Feedback

The most significant learning in simulation-based programs occurs in the hours and days following a learner's efforts in a simulated encounter. This learning often begins with immediate feedback from the SC in the moments after the simulated encounter has ended. Instructors should consider the scope and depth of feedback appropriate for group-based debriefings following a simulation. They should also consider using video review with learners in the days and weeks following the simulation. A specific example of a feedback strategy and process can be found in 5.4-5.6.

Formal rubrics should be used to assess each learner's simulation effort (Roberts et al., 2017). Many clinical frameworks have existing rubrics that can be deployed or adapted for use in assessing learner simulation videos. These tools can provide a snapshot of the learner's competence and can be re-administered following future simulations to measure clinical growth and progress with skill development.

Programs that choose to create their own rubrics should ensure these instruments are anchored to the program's overall learning objectives. Some rubrics can be binary and measure specific learner behaviors. For example, a suicide screening simulation rubric may include binary measures like:

- Did the learner complete an informed consent process with their client? Yes/No
- Did the learner ask a clear and direct suicide screening question? Yes/No
- Did the learner inquire about previous suicide attempts? Yes/No

The Suicide Competency Assessment Form (SCAF) is a well-established competency rubric based on the Objective Simulation Clinical Examination (Cramer, Johnson, McLaughlin, Rausch, & Conroy, 2013). The SCAF provides a comprehensive list of clinical questions and behaviors that should be present in clinical work with clients who are experiencing suicidality. Programs should assess the fit of tools like the SCAF carefully to ensure that they align with the overall scope and structure of a specific simulation training.

Some programs may also consider moving beyond binary constructs and include elements in their rubrics that capture more nuanced data about the efficacy and quality of a learner's efforts. These elements are often captured through Likert scales and qualitative feedback. Programs should consider how to capture data related to technical skills and relational skills in each learner. Relational skills can be more challenging to assess as they speak to more nuanced dynamics like empathy, acceptance, hope, and collaboration. Some programs may consider the use of established relational skill rubrics to assess the learner's use of these skills (Gerdes, Segal, & Lietz, 2010).

5.0 Implementation of Simulation in Suicide Skills Training

The following is an overview of a simulation in a fully staffed physical simulation lab. The lab has trained five SCs for this simulation and the facility has five simulation rooms with video and audio recording capacity. Ten students in a graduate-level clinical skills course are tasked with providing a CAMS initial session to Danny Denton (Addendum 1 & 2). Each student is given 90 minutes to experience the formative simulation.

5.1 Staging and Orientation

A schedule is created for learners to complete the simulation in two rounds over approximately two and a half hours. All learners begin the simulation in a classroom next to the simulation rooms. The instructor provides an overview of the simulation schedule, the SC scenario, learner tasks for the simulation, debriefing instructions, and a trigger warning. Each learner will have 90 minutes to work with their SC. After their simulation time is up, learners will debrief with their SC for 5 minutes. SCs will have a 10-minute break between simulation sessions.

Learners who are not actively engaged in simulation remain in the staging room. Learners who have completed their simulation return to the staging room. Lab staff will monitor the staging room and discourage learners who have already completed the simulation from informally debriefing with those who have not completed their encounter. Informal debriefing can inadvertently heighten stress in learners who are awaiting their simulation encounter. An instructor-guided group debrief will be facilitated once all learners have completed their simulations.

Before going into their simulation rooms, SCs will meet in a separate space to prepare for the encounter. The instructor will meet with SCs to answer any lingering questions they have about the scenario. The instructor will have a monitor in a private space where they can watch all ongoing simulations by viewing a live stream from each room.

Lab staff will call out names and assign room numbers for learners in each round. After their name is called, learners will go to their assigned door and begin reading the scenario door note. Lab staff will begin the simulation recording and ensure that all SCs are in their assigned rooms. Once all learners have had a moment to read their door notes, lab staff will instruct all five learners to enter their assigned rooms at the same time.

5.2 Live Observation

Instructors should aim to view a portion of each learner's simulation. During live observation the instructor will monitor each simulation room for potential adverse learner reactions. Instructors will use annotation software to add comments to each simulation encounter and identify and note any strengths they observe. These will be highlighted during the group debriefing once all participants have completed the simulation.

5.3 Supporting Students With Adverse Reactions

If a learner experiences a strong adverse reaction to the simulation, the instructor will pause the SC encounter. Lab staff will stop the recording and have the SC leave the simulation room. The instructor will meet with the learner to provide support and options. Learners experiencing a strong reaction to the simulation are often not ready to debrief about the experience. Instructors should offer options for the learner, including:

- Taking a short break before resuming the simulation
- Terminating the simulation and rejoining colleagues for debriefing in the staging room
- Terminating the simulation and leaving the lab to attend to self-care
- Terminating the simulation and leaving the lab to seek supportive counseling

It is critical that the learner have agency in deciding how to continue. Some learners may feel embarrassed by their reaction, and they may be concerned about appearing tearful in front of their colleagues, or they may worry about peer concerns should they choose

to end the encounter and leave. Regardless of what the learner chooses to do, the instructor should avoid using the affected learner's videos in the group debrief.



5.4 SC and Learner Debrief

SCs will be instructed to follow a specific sequence of prompts in a five-minute feedback session with each learner:

- What do you think went well in your simulation?
- What might you do differently next time?

After the learner has had a moment to respond to each of these prompts, the SC should offer to share feedback with the learner. In this feedback, the SC will speak specifically about how the learner succeeded or struggled with empathetic and collaborative relational skills in the simulation. SCs are advised to avoid clinical feedback as learners will receive more nuanced feedback on their technical and relational skills during video review and instructor feedback later.

5.5 Instructor Debrief

Once all learners have completed their simulations, the instructor will lead the learners in a group-based debriefing. Like with the SC feedback, the instructor will go around and have each learner share a self-affirmation with the group. The instructor will offer some example sentence starters to help the learners identify their affirmations:

- I did a good job with...
- I felt that my efforts were successful when I...
- I felt confident when I...

After the learners have shared their self-affirmations, the instructor will also affirm the learners through a brief video review that highlights successful efforts and moments observed during live observation (5.2). If possible, the instructor should be prepared to share a 1 to 2-minute clip from each learner's simulation video. If the instructor was unable to find clips for all participants, they will intentionally use a subset of video clips to share (5 or less). Instructors may choose to do this if there are learners who appear to have substantial struggles in the simulation to avoid singling them out in front of their peers.

5.6 Video Annotation and Rubric-Based Feedback

In the days following the simulation, both the instructor and learners will leverage the videos from the simulation encounter to complete a more in-depth, asynchronous debriefing process. The CAMS framework has an existing rubric for clinical adherence that will be used to assess each learner's efforts in the simulation (CAMS Rating Scale; Jobes, 2016). Instructors should be thorough in their use of the rating scale and provide honest and clear feedback about the learner's use of the model. Simulation rubrics can be invaluable in helping programs measure each learner's competence and as a data point for measuring improvements in future simulations. Annotations on learner simulation videos should focus primarily on affirming strengths the learner demonstrated during the simulation. Instructors should look to highlight relational and attending skills (use of reflective listening, evidence of empathy, collaborative spirit, etc.). After the instructor has finished annotating the video and completed the rubric, they should take these overall assessments of the learner and identify a specific, behavioral "next step" for improvement and clinical growth. In some cases, a learner may have struggled with a significant percentage of the tasks in their simulation encounter. Listing all their mistakes can be overwhelming and unhelpful. Instead, instructors should consider the most consequential improvement for the learner to focus on as they iterate on their clinical skills. For example, an instructor may have noticed a pattern in which the learner subtly invalidated the SCs pain and suffering. In this example, the instructor may find a specific moment in the video as an example of this problematic pattern and highlight it with suggestions for improvement.

6.0 Conclusion

Simulation-based pedagogy is a powerful strategy for enhancing learners' skills before they practice in real world settings. The feasibility of simulation-based learning will vary depending on the context, resources, and needs of individual programs. We hope these guidelines will be useful as programs consider the integration of simulation-based learning into their trainings. Simulation-based learning can be a useful tool as programs seek to develop competency in their workforce and ultimately reduce the impact of suicide in the lives of clients and communities.

LEARNER INSTRUCTIONS

CAMS Simulation: The Case of Danny Denton

Situation:

Danny Denton is a 38-year-old client who has come to see their physician at the insistence of their employer. Danny has been missing a lot of work since they separated from their spouse of 16 years a few months ago. Danny was given the AsQ'em screening tool, which showed the presence of suicidal ideation. You are a mental health provider (MHP) embedded in the medical practice, and the physician asked you to meet with this client to complete a more comprehensive suicide risk assessment.

Directions:

In the 90 minutes with the client:

- Greet your client and enquire about what brings them in for treatment
- Engage in a conversation with them about their suicidal ideation
- Transition to CAMS Assessment
- Sections A, B, and C of the Suicide Status Form (SSF) should be collaboratively completed
- The interaction will be complete when you leave the room to make a copy of the assessment and treatment plan for the client
- Knock and reenter for debriefing

Following simulation, you will be given access to your video:

- Review your video
- Complete Section D of SSF-4

STANDARDIZED CLIENT (SC) INSTRUCTIONS CAMS Simulation: The Case of Danny Denton

Subject Matter:

Office visit - Decreased mood and poor functioning

Problem:

Client experiencing suicidality

Standardized Client Training Guide

(Suicidal ideation, interpersonal problems, depressed mood)

Case Synopsis:

You are Danny Denton, age 38. You have just finished meeting with your physician about some symptoms you've been suffering from after separating from your spouse of 16 years. The reported symptoms include depressed mood, reduced appetite, and insomnia. Your doctor asked you to complete a short screening tool called the AsQ'em. The screening tool indicated the presence of suicidal thoughts, and your doctor has asked that you meet with the clinic MHP for a more in-depth assessment.

As you begin your engagement with the MHP, you tend to volunteer statements such as:

- "I've ruined my life."
- "If only I could take back the things I've done and said."
- "I feel trapped."
- "My life is hopeless."
- "I don't have any good options."
- "I'm a loser."

Why you are seeing the doctor today:

You've called in to work several times over the past few weeks and your boss has insisted that you see your doctor.

How you appear during the encounter:

You are wearing wrinkled clothing and haven't been keeping up with your daily hygiene.

Beginning the encounter:

You are initially hesitant to speak to the MHP and are anxious with shaking hands and poor eye contact. Later you begin to become tearful and appear very sad. You tell the MHP that you moved into a temporary apartment after separating from your spouse a few months ago. Since this transition, you have not been attending church or socializing with your marathon training group. Your older brother has reached out to you on several occasions, but you are embarrassed for him to see you in your current state. You used to visit your mother in her retirement home every week but have stopped visiting her for the same reason.

General guidelines for the encounter:

You are initially quiet, but also seem anxious to finish the assessment. At first, you provide direct and short answers to questions, but gradually relax and open up to the MHP as they engage with you.

If specifically asked:

- You have been drinking 3-5 shots of whiskey every evening.
- Your energy has been low for the last several months.
- You struggle to fall asleep.
- You think about skipping work daily.
- You have been missing work 1-2 days per week.
- Your appetite has reduced, and your weight has dropped 15 lbs. in the last two months. You feel guilty about an affair you had with a person you met in your marathon training group.
- You miss the life you used to have with your spouse and son but know that things will never be the same again.
- You spend most of your free time looking at old family photos and "Facebook stalking" your spouse and son.
- You are unable to sit through an hour of TV or a movie.
- You prefer to keep yourself busy all the time but feel you are not getting anything done at home and at work.
- You have been sending money to your family every month (about \$1,000) pending formal child support arrangements.

- You have received multiple calls from lawyers about moving forward with divorce proceedings but have been ignoring them.
- You have been thinking of killing yourself lately "because I've ruined my life and will never be happy again."
- You have written multiple drafts of suicide notes to your son, estranged spouse, brother, and mother.
- You found a generic will online and have printed it and filled it out.
- You live on the fourth floor of an apartment building and often look out the window and imagine what it would be like to jump.
- On several occasions, including earlier this week, you have opened the window and sat on the ledge with your legs dangling outside.

Present life:

- You work as an accountant for an oil and gas firm but have been having trouble concentrating and completing your work lately. You call in sick several times per week and have been encouraged by your supervisor to see your doctor.
- Married 16 years. You have a 14-year-old son who has been living with your spouse since you and your spouse separated a few months ago.
- Separation was triggered when your spouse discovered evidence of an affair (credit card receipts for a hotel room).
- You met the person with whom you had the affair at your marathon training group. You ended that relationship shortly after your spouse discovered it and haven't been back to the training group since.
- You recently received notice that your spouse has filed for divorce.
- You spend most of your days alone in your apartment.
- You have a poor appetite and little interest in food.
- Your older brother has reached out to you, but you don't want to burden him with your problems. You are also embarrassed for him to see you in your current state. You have always lived in his shadow and have a lingering sense of sibling rivalry from your childhood.

• You used to visit your mother in her retirement home but haven't seen her since the separation. You are concerned that the divorce will upset her and complicate her health (neurocognitive disorder, dementia).

Life details:

- You used to be very active and enjoyed running training and walks with your spouse.
- You enjoyed taking your son to baseball practice.
- You were active in church and engaged in religious events 1-2 times per month.
- Lately, you have minimal phone contact with your son and have not been attending church or your marathon training group.
- You have ended an affair with a person from your marathon training group and have had minimal contact with your spouse since the separation.
- You have rejected outreach by your older brother and stopped visiting your mother in the retirement home.

Sexual history:

• You feel guilty for having an affair and feel that this has ruined your life. You were mostly satisfied with your sex life prior to the affair, and you hate yourself for throwing it all away for a fling.

Life details:

- You had a 4.0 GPA in school and have always been detail oriented.
- You have a bachelor's degree in business and have always wanted to pursue an MBA ("I'm too old to go back to school").
- You married your (now estranged) spouse shortly after finishing your bachelor's degree.
- You had a relatively happy childhood and have always been supported by family members.
- You grew up in a small, midwestern town and your spouse, son, older brother, and mother all live there. You currently live in a neighboring town.

• Your father died in a car accident about 10 years ago and you and your older brother have worked together to care for your mom since then. She is currently in a retirement home with mild neurocognitive disorder (dementia).

Current and past medical history:

- You are in a general state of good health.
- Unremarkable medical history.

Physical exam:

• The physician has done some basic health tests (blood pressure, heart rate, blood work) and there is no evidence of physical health problems.

Family history:

- Your father died in a car accident about 10 years ago.
- Your mother has mild neurocognitive disorder (dementia).
- Your older brother is in good health.
- There is no history of mental health problems in the family.

Overview of CAMS and specific questions that might be asked:

The MHPs will be practicing the Collaborative Assessment and Management of Suicidality (CAMS) model in this simulation. The interaction will start with an engagement during which the MHP will begin a conversation about suicide that will cover three general themes:

- Empathy for your suicidal ideation: The MHPs will be attempting to understand your suicidal thoughts and actions without judgment.
- Honesty: The MHP will deliver a verbal informed consent statement about the potential need for hospitalization. The MHP will also communicate their bias against suicide.

- Collaboration: The MHP will urge you to consider giving an evidence-based treatment approach a chance. This may be expressed using questions like:
 - Are you willing to give evidence-based treatment a chance?
 - Would you be willing to co-author a treatment plan with me?

The questions should communicate respect for your self-determination. The MHPs should clearly state the legal requirement to hospitalize you if there is "clear and imminent" danger of suicide, but this should not be used in a coercive manner. In fact, the MHP should verbalize that outpatient treatment is the preferred outcome. Theoretically, the CAMS model is based on the belief that coercion, intimidation, and even hospitalization are not effective ways of preventing suicide. The goal of these initial questions is to invite you to collaborate with your MHP in better understanding how suicide functions in your life and to develop a suicide-specific treatment plan.

Once you have agreed to give CAMS a chance, the MHP will ask for permission to sit next to you (move their chair next to yours) and they will proceed to complete the assessment and treatment plan collaboratively by passing a clipboard back and forth.

You will fill out Section A of the assessment as your MHP sits next to you and guides you through the process. This page is a blend of quantitative and qualitative measures. The MHP should be prepared to answer any questions you have about filling out the form.

Once this section is finished, you will hand the clipboard back to the MHP and they will fill out Sections B and C as they continue to sit next to you and ask questions. Most of the questions will be focused on your suicidality, though other topics may be addressed if they are relevant to your suicidal drivers.

If the MHP can get to the treatment planning phase within the allotted time (90 minutes), they will complete a "stabilization plan" with you. A major element of this plan is the reduction of access to means for suicide. The MHP will ask you for ideas about how to reduce your access to lethal means, and you can feel free to volunteer ideas or accept the suggestions they offer. The MHP will also explore coping strategies with you, and you can suggest ideas or accept suggestions the MHP may make (going on a walk, attending a church service, visiting your mother or brother, rejoining a different running group, medication, etc.).

Once the stabilization plan is finished, the MHP will help you identify the top two drivers of suicidal thoughts in your life. You will identify the dramatic change in your family (separation from your spouse and son) and constant negative thoughts and mood as the top two drivers of your suicidal impulses.

It is preferred to engage with the MHPs in a manner that realistically depicts a client who has never seen SSF forms before. It is expected that many clients will find concepts in this assessment confusing or uncomfortable. In some cases, you may say something like "I have no idea what to write here...," inviting the MHP to explore that topic with you before you fill out the form.

Ending the encounter:

- Once you have successfully completed the treatment plan, the MHP will create a "crisis card."
 - The purpose of a crisis card is to set clear expectations for emergency access to the MHP between regular sessions.
 - The crisis card prominently features essential contact information, such as the 988 Suicide & Crisis Lifeline (988 Lifeline), the agency's emergency line, and the MHP's direct phone number.
 - The design of the crisis card is intentionally compact (e.g., size of a business card), enabling clients to carry it at all times for quick access and reference in urgent situations.
- The MHP will then leave the room to make a copy of your treatment plan for you to keep in a prominent location in your apartment. The simulation will conclude when the MHP leaves to "make a copy." They will then knock on the door to reenter and debrief.

Debriefing:

- You can ask the learner: "What do you think went well in the simulation?" or "What worked well for you?" You can then transition to ask, "What might you do differently if you had the chance to do it all over?"
- Only offer insight related to the learner's relational efforts (i.e., your sense of the MHP's concern, comfort, and empathy for your situation). If you did not feel the MHP expressed empathy, or if the interaction felt awkward or distressing, you may share this with the MHP.

LAB INSTRUCTIONS

CAMS Simulation: The Case of Danny Denton

Problem:

Client at risk of suicide

Duration:

90 minutes

Scenario:

Danny Denton is a 38-year-old client who has come to see their physician at the insistence of their employer. During the visit with their physician, they screened positive for suicide risk on a suicide screening tool. The physician referred them to the clinic's MHP for a more in-depth assessment.

Focus of station:

The station aims to:

- Engage with client about suicidal ideation
- Complete initial session following CAMS model

Station set-up:

This station is configured to represent a typical exam room. MHP and SC will need room to move their chairs so they are sitting next to each other.

Equipment/Props:

Street clothes Two chairs Clipboard and pens Learners will bring copies of SSF-4 and a business card to use for creating a "crisis card."

References

- Aebersold, M. (n.d.). Simulation-based learning: No longer a novelty in undergraduate Education. *Online Journal of Issues in Nursing, 2*(323). https://doi.org/https://doi.org/10.3912/OJIN.Vol23No02PPT39
- Alexandrino-Silva, C., Pereira, M. L. G., Bustamante, C., Ferraz, A. C. de T., Baldassin, S., de Andrade, A. G., & Alves, T. C. de T. F. (2009). Suicidal ideation among students enrolled in healthcare training programs: a cross-sectional study. *Brazilian Journal of Psychiatry*, 31(4), 338–344. https://doi.org/10.1590/S1516-44462009005000006
- Al-Elq A. H. (2010). Simulation-based medical teaching and learning. *Journal of Family & Community Medicine*, *17*(1), 35–40. https://doi.org/10.4103/1319-1683.68787
- Angelina, F., Essakow, J., & Ju, M. (2022). Standardized patients' perspectives on bias in student encounters. *Academic Medicine*, *97*(11S), S29-S34. https://doi.org/10.1097/ACM.00000000004925
- Bal, A. S., Weidner, K., Leeds, C., & Raaka, B. (2016). Getting real about suicide prevention in the classroom and beyond: Using a classroom simulation to create communications for at-risk individuals. *Journal of Marketing Education*, 38(2), 90–97. https://doi.org/10.1177/0273475316652443
- Bearman, M., Palermo, C., Allen, L. M., & Williams, B. (2015). Learning empathy through simulation: A systematic literature review. *Simulation in Healthcare*, *10*(5), 308-319. https://doi.org/10.1097/SIH.00000000000113
- Black, P. N., Jeffreys, D., & Hartley, E., K. (1993). Personal history of psychosocial trauma in the early life of social work and business students, *Journal of Social Work Education*, 29(2), 171-180. https://doi.org/10.1080/10437797.1993.10778812
- Blanford, R. (2016). 3 *Tips for simulation center planning* [Review of 3 *Tips for Simulation Center Planning*]. CAE Healthcare. https://www.caehealthcare.com/blog/3-tips-for-simulation-center-planning/
- Bloom, B.S. (1956). Taxonomy of educational objectives: The classification of educational goals. *Handbook I: Cognitive domain*. David McKay Company.
- Bogo, M., Rawlings, M., Katz, E., & Logie, C. (2014). Using simulation in assessment and teaching: OSCE adapted for social work. Council on Social Work Education Press.
- Bohannon, L., Clapsaddle, S., & McCollum, D. (2019). Responding to college students who exhibit adverse manifestations of stress and trauma in the college classroom. *FIRE: Forum for International Research in Education*, 5(2), 66-78. https://eric.ed.gov/?id=EJ1233686

- Bosse, H. M., Mohr, J., Buss, B., Krautter, M., Weyrich, P., Herzog, W., Jünger, J., & Nikendei, C. (2015). The benefit of repetitive skills training and frequency of expert feedback in the early acquisition of procedural skills. *BMC Medical Education*, 15(1). https://doi.org/10.1186/s12909-015-0286-5
- Cant, R. P., & Cooper, S. J. (2016). Use of simulation-based learning in undergraduate nurse education: An umbrella systematic review. *Nurse Education Today, 49*, 63-71. https://doi.org/10.1016/j.nedt.2016.11.015
- Chernikova, O., Heitzmann, N., Stadler, M., Holzberger, D., Seidel, T., & Fischer, F. (2020). Simulation-based learning in higher education: A meta-analysis. *Review of Educational Research*, 90(4), 499–541. https://doi.org/10.3102/0034654320933544
- Cramer, R. J., Johnson, S. M., McLaughlin, J., Rausch, E. M., & Conroy, M. A. (2013). Suicide risk assessment training for psychology doctoral programs: Core competencies and a framework for training. *Training and Education in Professional Psychology*, 7(1), 1-11. https://doi.org/10.1037/a0031836
- Cross, W., Matthieu, M. M., Lezine, D., & Knox, K. L. (2010). Does a brief suicide prevention gatekeeper training program enhance observed skills? *Crisis*, *31*(3), 149–159. https://doi.org/10.1027/0227-5910/a000014
- Doolen, J., Giddings, M., Johnson, M., Guizado de Nathan, G. & O Badia, L. (2014). An evaluation of mental health simulation with standardized patients. *International Journal of Nursing Education Scholarship*, *11*(1), 55-62. https://doi.org/10.1515/ijnes-2013-0075
- Doolen, J., Mariani, B., Atz, T., Horsley, T. L., Rourke, J. O., McAfee, K., & Cross, C. L. (2016). High-fidelity simulation in undergraduate nursing education: A review of simulation reviews. *Clinical Simulation in Nursing*, 12(7), 290-302. https://doi.org/10.1016/j.ecns.2016.01.009
- El-Awaisi, A., Jaam, M., Wilby, K. J., & Wilbur, K. (2022). A systematic review of the use of simulation and reflection as summative assessment tools to evaluate student outcomes following interprofessional education activities. *Journal of Interprofessional Care*, 36(6), 882-890. https://doi.org/10.1080/13561820.2022.2026899
- Felix, H. M. & Simon, L. V. (2022). *Types of standardized patients and recruitment in medical simulation*. National Library of Medicine. http://www.ncbi.nlm.gov/books/NBK549907/
- Furman, G. E., Miller, J. L. (2020). Development of scenario and training materials: Fundamentals, interprofessional and hybrid scenarios, and inclusion of patients in standardized patient methodology. In G. Gliva-McConvey, C. F. Nicholas, & L. Clark, (Eds.), Comprehensive healthcare simulation: Implementing best practices in standardized patient methodology. Comprehensive Healthcare Simulation Series. Springer. https://doi.org/10.1007/978-3-030-43826-5

- Galal, S., Vyas, D., Mayberry, J., Rogan, E. L., Patel, S., & Ruda, S. (2018). Use of standardized patient simulations to assess impact of motivational interviewing training on social–emotional development. *Pharmacy*, 6(3), 65. https://doi.org/10.3390/pharmacy6030065
- Gerdes, K. E., Segal, E. A., & Lietz, C. A. (2010). Conceptualizing and measuring empathy British Journal of Social Work, 40(7), 2326-2343. https://doi.org/10.1093/bjsw/bcq048
- Hanson, M., Tiberius, R., Hodges, B., Mackay, S., McNaughton, N., Dickens, S., & Regehr, G. (2002). Implications of suicide contagion for the selection of adolescent standardized patients. Academic Medicine, 77(10), S100-S102. https://doi.org/ 10.1097/00001888-200210001-00031
- Harrell, C. R., Gladwin. B., & Hoag, M. P. (2013). Mitigating the "Hawthorne Effect" in simulation studies. In 2013 Winter Simulations Conference: Simulation Making Decisions in a Complex World, 2722-2729. https://ieeexplore.ieee.org/document/6721643
- Healey, K., Milbourne, G., Aaronson, W. E., & Errichetti, A. M. (2004). Innovative training for integrated primary health care teams: Creating simulated/standardized patient training in an international context. *Families, Systems, & Health, 22*(3), 368-375. https://doi.org/10.1037/1091-7527.22.3.368
- Herrmann, E. K. (1981). Mrs. Chase: A noble and enduring figure. *The American Journal of Nursing*, *81*(10), 1836–1836. http://www.jstor.org/stable/3462728
- Hung, C. C., Kao, H. S., Liu, H. C., Liang, H. F., Chu, T. P., & Lee, B. O. (2021). Effects of simulation-based learning on nursing students' perceived competence, self-efficacy, and learning satisfaction: A repeat measurement method. *Nurse Education Today*, 97, 104725. https://doi.org/10.1016/j.nedt.2020.104725
- Keiser, M. M., & Turkelson, C. (2017). Using students as standardized patients: Development, implementation, and evaluation of a standardized patient training program. *Clinical Simulation in Nursing*, 13(7), 321-330.
- Kelly, D., Lesselroth, B., Liew, A., Loper, A., Palmer, R., Kollaja, L., Monkman, H., Ijams, S., Rodriguez, K., Homco, J., Wickham, A., Laurent, J., Wen F. A. (2022). Telepsychiatry simulation for suicide assessment: Increasing virtual mental health competency in health professional students. *Journal of American Academy of Child Adolescent Psychiatry*, 61(10), S274-S275. https://doi.org/10.1016/j.jaac.2022.09.422
- Jarosinski, J. M. & Webster, D. A. (2016). Acting with a purpose: The lived experience of actors in the role of standardized patients portraying mental illness. *Clinical Simulation in Nursing*, 12(12), 539-545. https://doi.org/10.1016/j.ecns.2016.08.005

Jobes, D. A. (2016). *Managing suicidal risk: A collaborative approach*. The Guilford Press.

- Joiner, T. (2005). Why people die by suicide. Harvard University Press.
- Jones, F., Passos-Neto, C. E., & Braghiroli, O. F. M. (2015). Simulation in medical education: Brief history and methodology. *Principles and Practice of Clinical Research*, 1(2). Retrieved from https://journal.ppcr.org/index.php/ppcrjournal/article/view/12/12
- Kalafat, J., & Elias, M. (1995). Suicide prevention in an educational context: Broad and narrow foci [Review of Suicide Prevention in an Educational Context: Broad and Narrow Foci]. Wiley Online Library.
 https://onlinelibrary.wiley.com/doi/10.1111/j.1943-278X.1995.tb00397
- Kourgiantakis, T., Sewell, K. M., Hu, R., Logan, J., & Bogo, M. (2020). Simulation in social work education: A scoping review. *Research on Social Work Practice*, *30*(4), 433–450. https://doi.org/10.1177/1049731519885015
- Lavingia, R., Bryan, J. L., & Asghar-Ali, A. A. (2021). Using a standardized patient encounter to teach psychiatry residents how to recognize and respond to elder abuse. *Academic Psychiatry*, 45(2), 246-247. https://doi.org/10.1007/s40596-020-01336-4
- Lateef F. (2010). Simulation-based learning: Just like the real thing. *Journal of Emergencies, Trauma, and Shock, 3*(4), 348–352. https://doi.org/10.4103/0974-2700.70743
- Lee, E., & Kourgiantakis, T. (2021). Applying behavioural activation (BA) and simulation-based learning (SBL) approaches to enhance MSW students' competence in suicide risk assessment, prevention, and intervention (SRAPI). Social Work Education, 42(4), 1-20. https://doi.org/10.1080/02615479.2021.1976136
- Lewis, K. L., Bohnert, C. A., Gammon, W. L., Hölzer, H., Lyman, L., Smith, C., Thompson, T. M., Wallace, A., & Gliva-McConvey, G. (2017). The association of standardized patient educators (ASPE) standards of best practice (SOBP). Advances in Simulation, 2, 10. https://doi.org/10.1186/s41077-017-0043-4
- Mah, J., Bingham, K., Dobkin, E., Malchiodi, L, Russell, A., Donahue, S., Staff, I., Ivy, M., & Kirton, O. (2009). Mannequin simulation identifies common surgical intensive care unit teamwork errors long after introduction of sepsis guidelines. *Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare* 4(4), 193-199. https://doi.org/10.1097/SIH.0b013e3181abe9d6
- Mann, J. J., Michel, C. A., & Auerbach, R. P. (2021). Improving suicide prevention through evidence-based strategies: a systematic review. *American Journal of Psychiatry*, 178(7), 611-624. https://doi.org/10.1176/appi.ajp.2020.20060864
- Martin, R., Mandrusiak, A., Russell, T., & Forbes, R. (2022). A toolbox for teaching telehealth using simulation. *The Clinical Teacher*, *19*(4), 270–275. https://doi.org/10.1111/tct.13510

- Mulvogue, J., Ryan, C., & Cesare, P. (2019). Nurse simulation facilitator experiences learning open dialogue techniques to encourage self-reflection in debriefing. *Nurse Education Today*, 79, 142–146. https://doi.org/10.1016/j.nedt.2019.05.021
- Murphy, S., Imam, B., & MacIntyre, D. L. (2015). Standardized patients versus volunteer patients for physical therapy students' interviewing practice: a pilot study. *Physiotherapy Canada*, 67(4), 378-384. https://doi.org/10.3138/ptc.2014-50E
- Ní Chianáin, L., Fallis, R., Johnston, J., McNaughton, N., & Gormley, G. (2021). Nothing about me without me: A scoping review of how illness experiences inform simulated participants' encounters in health profession education. *BMJ Simulation & Technology Enhanced Learning*, 7(6), 611–616. https://doi.org/10.1136/bmjstel-2021-000886
- Palaganas, J. C., Epps, C., & Raemer, D. B. (2014). A history of simulation-enhanced interprofessional education. *Journal of Interprofessional Care*, *28*(2), 110-15. https://doi.org/10.3109/13561820.2013.869198
- Wang, C. & Hallmark, B. (2017, December 6). *Recruiting and hiring SPs*. NLN Nursing EDge. https://nursingedge.nln.org/2017/12/05/recruiting-and-hiring-sps/
- Roberts, R., Chur-Hansen, A., Winefield, H., Patten, S., Ward, H., & Dorstyn, D. (2017). Using OSCEs with simulation to maximize student learning and assess competencies in psychology: A pilot study. *Focus on Health Professional Education: A Multi-disciplinary Journal*, 18(2), 61-75. https://doi.org/10.11157/fohpe.v18i2.140
- Robles, M. J., Miralles, R., Esperanza, A., & Riera, M. (2019). Different ways to present clinical cases in a classroom: video projection versus live representation of a simulated clinical scene with actors. *BMC Medical Education*, *19*(1), 70. https://doi.org/10.1186/s12909-019-1494-1
- Roggentien, K. (2018, May 8). Acting the part: How simulated patients contribute to medical education. Carver College of Medicine. https://medicine.uiowa.edu/content/acting-part-how-simulated-patients-contribute-me dical-education
- Shabatura, J. (2022, July 26). Using Bloom's taxonomy to write effective learning outcomes. University of Arkansas Teaching Innovation and Pedagogical Support. https://tips.uark.edu/using-blooms-taxonomy/
- Sheen, J., Shutherland-Smith, W., Thompson, E., Yousef, G. J., Dudley A., King, R., Hall, K., Dowling, N., Gurtman, C., & McGillivray, J. A. (2021). Evaluating the impact of simulation-based education on clinical psychology students' confidence and clinical competence. *Clinical Psychologist*, 25(3), 271-282. https://doi.org/10.1080/13284207.2021.1923125

- Thomas, L., & Reeves, S. (2015). Sociological fidelity: Keeping the patient at the heart of Interprofessional Learning. *Journal of Interprofessional Care*, 29(3), 177-178. https://doi.org/10.3109/13561820.2015.1035179
- Watters, C., Reedy, G., Ross, A., Morgan, N. J., Handslip, R., & Jaye, P. (2015). Does interprofessional simulation increase self-efficacy: A comparative study. *BMJ Open*, 5(1), e005472. https://doi.org/10.1136/bmjopen-2014-005472
- Wallace, P. (2007). Coaching standardized patients: For use in the assessment of clinical competence. Springer Publishing Company.
- Wasserman, J. A. & Browne, B. J. (2021). On triggering and being triggered: Civil society and building brave spaces in medical education. *Teaching and Learning in Medicine*, 33(5), 561-567, DOI: <u>10.1080/10401334.2021.1887740</u>
- Willson, M. N., McKeirnan, K. C., Yabusaki, A., Buchman, C. R. (2021). Comparing trained student peers versus paid actors as standardized patients for simulated patient prescription counseling. *Exploratory Research in Clinical and Social Pharmacy*, 4. https://doi.org/10.1016/j.rcsop.2021.100081