Standardized Assessment for Evaluation of Team Skills (SAFE-TeamS)

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Several of the scenarios included in the assessment were adapted from TeamSTEPPS content: Agency for Healthcare Research and Quality. TeamSTEPPS Team Strategies & Tools to Enhance Performance & Patient Safety. Rockville, MD: Agency for Healthcare Research and Quality; [cited 2011 February 3]; Available from: http://teamstepps.ahrq.gov/.

Evidence for the validity of SAFE-TeamS is presented in:
Wright MC, Segall N, Hobbs G, Phillips-Bute BG, Maynard L, Taekman JM. Standardized Assessment for Evaluation of Teamwork: Feasability, Reliability, and Validity. Simulation in Healthcare: 2013.

Based on feedback from raters, minor changes have been made to scripts and scoring from the format that was used for the validation study with medical and nursing students. Anything that is changed from the version used for the validation study is documented with red text.

Objective

SAFE-TeamS is a tool that combines the use of standardized team members (actors playing the roles of other health care team members) in the context of challenging teamwork scenarios. Scoring of performance is observer-based rating of scenario-specific ideal team skill behaviors.

Skills Assessed

Each scenario contains 4 questions which assess performance on 2 to 4 of the following 6 team skill constructs:

1. Assistance: This refers to the examinees performance with respect a) offering with task assistance where relevant, b) following through with task assistance where relevant, or c) requestion assistance on tasks where relevant.
2. Closed loop communication: This refers to the examinees performance with respect to the use of closed loop communication techniques such as repeating back verbal information provided or communicating relevant next steps that make clear that a specific message was received.
3. Structured communication: This refers to the examinees performance with respect to communication using clear and concise language. This includes the use of the SBAR (situation, background, assessment, and recommendation) technique, but does not require SBAR as long as participants clearly and concisely convey the information important in the context of the simulation.
4. Situation assessment and advocacy: This refers to the examinees performance with respect to assessing relevant clinical details in the scenario (for example, that a patient is becoming unstable), verbalizing this assessment, and/or advocating for redirection of attention or specific actions that are in the best interest of the patient with respect to safe high quality care.
5. Assertion: This refers to the examinees performance with respect to maintaining and asserting their position in the face of opposition. This includes the use of the “two-challenge” rule which states that they should state their opposition twice and if it is not heeded, raise their concern to a higher level.
6. Debrief/conflict resolution: This refers to the examinees performance with respect to managing conflict, for example, through the use of techniques such as acknowledging the feelings or concerns of other individuals and respectfully desribing and managing important aspects of the scenario. This category also describes performance in the context of debriefing, which requires similar skills with respect to identifying problems that occurred and offering constructive feedback.

The following table maps the scenarios to the specific skills assessed:

		Skills Assessed					
#	Title	Assistance	Closed loop	Structured communi-cation	SA/ Advocacy	Assertion	Debrief/ conflict resolution
1	Benadryl Overdose		X	X		X	X
2	Transfusion Reaction			X	X (2)		X
3	Thoracic Aneurism			X		X	X (2)
4	GI Bleed				X (2)		X (2)
5	Phone Orders	X	X	X			X
6	Hand Hygiene	X			X	X	X
7	Phone Communication	X	X		X	X	
8	Manage Cardiac Arrest	X (2)	X		X		
9	Blood Mismatch			X	X	X	X
10	Too Much Insulin	X	X		X		X
11	Tie 'em Down	X		X	X		X
12	Foley Confusion			X		X	X (2)

Scoring

Each scenario includes 4 questions to be scored. A three-point scale is used to score specific behaviors: 0 – didn't exhibit the behavior, 1 – performed the behavior in some form, but not ideal, and 2 – ideal performance of the behavior. The total score for the scenario is the sum of the four scores which will be a single score that can range from 0 to 8, with 8 being the highest score achievable.

Based on two samples of data (38 medical and nursing students and 39 residents and practicing nursing) scored by actor raters, we may suggest a target benchmark score around 4.8 to 5. Based on this range, about 67% of medical and nursing students and 60% of more advanced trainees and providers scored below this mark prior to training and about 41% of medical and nursing students and 15% of more advanced trainees and providers scored below this mark after (different) training. We also found that the top 20% of examinees, individuals scoring near 5 or higher, show little improvement in SAFE-TeamS scores with training.

We have made some changes to the scoring based on raters comments (highlighted in red in the scenarios). In some cases, these changes may result in different scoring than we describe above. Specifically, in some scenarios prior to the changes, it was difficult for participants to score a 2 on some items. This may, in part, explain why the very best performers still only achieved mean scores in the range of 5 to 6. With the changes, it is possible that the overall means will rise slightly (and possibly more for some scenarios than others) and, if so, it may be reasonable to target a slightly higher benchmark.

Scenario Difficulty

The following table and figure provide means and standard deviations by scenario obtained from a sample of 38 final year nursing and medical school students rated by 3 external raters from video tape and 2 actor raters.

Number	Scenario	Mean	Standard deviation
1	Benadryl Overdose	5.3	2.0
2	Transfusion Reaction	5.2	2.2
3	Thoracic Aneurism	5.1	1.9
4	GI Bleed	5.1	2.0
5	Phone Orders	5.1	2.0
6	Hand Hygiene	5.0	2.3
7	Phone Communication	4.4	1.7
8	Manage Cardiac Arrest	4.2	2.2
9	Blood Mismatch	4.2	2.4
10	Too Much Insulin	3.8	1.9
11	Tie 'em Down	3.7	2.1
12	Foley Confusion	3.2	2.1

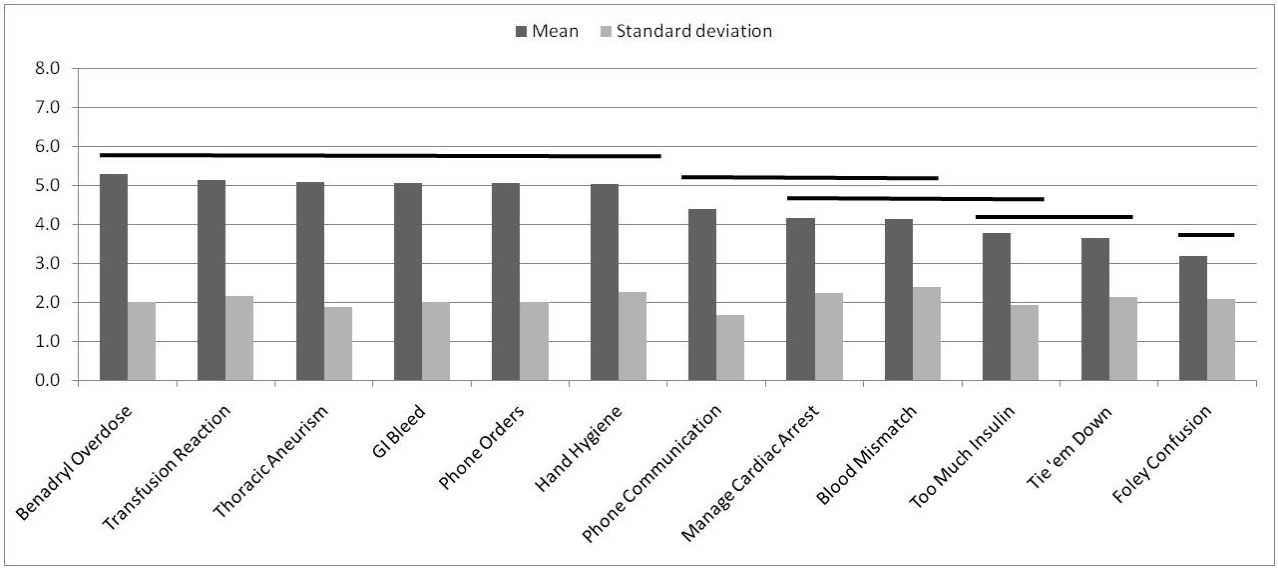

Figure. Means and standard deviations by scenario for 38 medical and nursing students. Lines above the graphed bars indicate groups of scenarios that are not significantly different with respect to mean score.

Background Information for Scenario 1: Benadryl Overdose

PATIENT (MANNEQUIN)
Gail Devers is a distressed 21-year-old college student who was brought to the ER by her roommate when she developed a rash and began wheezing as a result of an allergic reaction.

SETTING
Emergency room acute care area. A distressed young female patient (mannequin) is having an allergic reaction and arrives to the ED. She develops a rash and begins to wheeze. A nurse (participant) is caring for the participant. Dr. Johnson, an overly confident resident (SP), makes an incorrect drug order for the nurse to give to the patient. Pharmacist Griffith-Joyner (SP) questions the drug dose.

PARTICIPANT
A new ER nurse.

ADDITIONAL CHARACTERS
1. Dr. Johnson (SP), an overconfident third-year resident. He/she will not change an ordered drug dose, even when challenged.
2. Pharmacist Griffith-Joyner (SP), an experienced pharmacist. He/she will give the requested dose but ask that it be verified with the physician.

TEAM SKILLS EVALUATION
The participant should not agree to administer an overdose of Benadryl. Participants will be evaluated on:
1. Whether they repeat the physician's orders
2. Whether they communicate with the pharmacist and physician using
3. How insistent they are that the patient not receive an overdose.
4. Whether they initiate a debrief and, if so, how well they conduct the debrief

1a	Closed loop	Participant 0. Did not repeat orders 1. Acknowledged requests ("yes", "OK") 2. Clearly repeated orders and the details of those orders
1b	Structured communication	In communicating with pharmacist and resident, participant: 0. Provides only minimal information, does not provide patient background to the pharmacist or rationale for wrong beneadryl dose as provided by pharmacist 1. Provides additional information to pharmacist and resident, but did not use structured, concise language to convey information 2. Provides relevant information to both pharmacist and resident using structured, concise language to convey information
1c	Assertion	Participant 0. Did not correct Benadryl dose, administered drug 1. Voiced concern once or twice, but did not check with another source and either administered the drug or allowed resident to 2. Voiced concern at least twice and asked to check with another source, did not administer drug
1d	Debrief/conflict resolution	Participant 0. Did not initiate or take part in debrief 1. Reprimanded resident for not listening to him/her 2. Respectfully asked resident to consider other care providers' opinions, especially when busy/tired

PROPS

Telephone, phone number of attending next to telephone, pocket pharmacy guide, white coat, IV equipment, order form and pen, oxygen, pharmacy station, drugs – Benadryl, Albuterol, Ranitidine, Epinephrine

MEDICAL TERMS

- Anaphylaxis – a severe allergic reaction that can lead to death
- Subcutaneous – under the skin
- Nebulizer – a device used to administer medication in the form of a liquid mist to the airway
- Epinephrine – a synthetic form of adrenaline
- Albuterol (al-**byoo**-t*uh*-rawl) – a drug that helps open and relax the muscles of the lungs. Used to treat asthma
- Ranitidine (ra-**ni**-ti-deen; Zantac) – a drug used to inhibit stomach acid production
- Benadryl – an over-the-counter drug for treating allergic reactions

INFORMATION PROVIDED TO THE PARTICIPANT

You are a nurse in the emergency room acute care area. You are caring for a distressed young female having an allergic reaction. She develops a rash and is beginning to wheeze. There is a resident physician who is also working with you to care for the patient.

Script for Scenario 1: Benadryl Overdose

SCENARIO
In the emergency room acute care area, patient Gail Devers is wheezing as a result of an allergic reaction. The physician and nurse are at his bedside; a pharmacist is at his/her station.

SCENE
Dr. Johnson (listening to heart and lungs): "This is a classic case of anaphylaxis. Let's give her 1:1,000 epinephrine subcutaneously (0.5cc). Then get her a nebulized albuterol treatment, ranitidine 50 mg IV, and 125 mg IV of Benadryl. Write up an order and take it to the pharmacy." (Points to pharmacist. Puts on oxygen, then leaves room.)

> [If nurse realizes this is an overdose of Benadryl, he/she will check back dose and correct resident. If nurse doesn't realize this is an overdose, the pharmacist will tell the nurse.]

Pharmacist Griffith-Joyner (in corner of room): "Are you sure that's the dose of Benadryl Dr. Johnson meant? 125 mg is much more than we're used to seeing given. Here is the full 125mg, but be sure you check with the resident before it's administered"

> [Nurse returns. Nurse should bring erroneous order to resident's attention.]

Dr. Johnson (to nurse): "125mg of Benadryl is the correct dose. Don't argue with me, just give the drug. Do you want the patient to die?"

> [Nurse should challenge the order using the two-challenge rule. Should consult attending physician.]

When threatened with bringing in the attending, or if the nurse doesn't challenge the order, **Dr. Johnson** gives in and checks the dose in their PDA (or pocket pharmacy guide). After checking…

Dr. Johnson (without apologizing): "Cancel the Benadryl 125 mg order. Give 50mg Benadryl IV, now."

> [Nurse should try to initiate a debrief.]

Narrator (if nurse doesn't initiate a debrief): "The patient is stabilized. Is there anything else you'd like to say?"

> [Alternatively, Dr. Johnson can initiate a debrief with the participant, for example:}

Dr. Johnson: "You know, now that I think about it, I just went to a training class in Conflict Resolution and I think some of that stuff might have helped us here. Can you tell me how you think I handled our disagreement?"

Background Information for Scenario 2: Transfusion Reaction

PATIENT (MANNEQUIN)
Mikaela Johnson is a 40-year-old HIV+ patient admitted for pneumonia/anemia. She has developed shaking chills and a fever as a result of incorrect blood transfusion.

SETTING
Floor bed in the middle of the night. The patient (mannequin) is a HIV+ patient admitted for pneumonia/anemia with the last name of Johnson. She is to receive one unit of packed cells over one hour. Nurse Merritt (SP) has other pressing issues and has hung a unit of blood on his/her own because he/she couldn't find anyone else to cross check the unit of blood with. The patient now has developed shaking chills and a fever. The resident (participant) who is cross covering for the night should realize and question how the blood was checked.

PARTICIPANT
A second-year resident.

ADDITIONAL CHARACTERS
Nurse Merritt, a floor nurse with less than a year's experience. Nurse Merritt will not realize he/she gave the wrong patient's blood, and will become defensive when questioned about cross-checking the blood.

TEAM SKILLS EVALUATION
The participant should stop the blood when seeing the patient and should question the nurse about the blood. Participants will be evaluated on:

1. Whether they recognized the transfusion reaction and acted quickly to stop the blood.
2. Whether they recognized the likelihood that an error could be associated with the action and the procedural requirement to match the blood to the patient.
3. How well they managed a discussion with the nurse about cross-checking blood
4. The accuracy of their account of the incident to risk management

2a	Situation assessment/ advocacy	Participant 0. Required explicit prompting from nurse to act to stop blood (e.g., "should I stop the blood?") 1. Required minimal prompting from nurse to act to stop blood (e.g., "what should I do?") 2. Asked nurse to stop blood immediately without prompting from nurse
2b	Situation assessment/ advocacy	Participant 0. Accepted nurse's assessment that patient had developed a reaction to the transfusion, did not check blood slips or ask about blood check 1. Asked about blood check but did not check the slip himself/herself, or did check the slips but did not recognize the error 2. Checked the blood slip and asked the nurse if she checked the blood, identified error
2c	Debrief/ conflict resolution	Participant 0. Did not initiate or take part in discussion 1. Discussed error with nurse 2. Discussed error with nurse, how it could be prevented in the future, and how it should be reported
2d	Structured communication	Participant called lab/risk management/nursing supervisor 0. Did not give complete/accurate account of events 1. Gave accurate account, but did not use structured, concise language to convey information 2. Gave accurate account and used structured, concise language to convey information

PROPS

Blood bags for Johnston, blood slips for Johnston, pad of blood, patient arm band with the name Johnson, type and cross order, phone, phone numbers of lab, nursing supervisor, and risk management next to telephone, white coat

MEDICAL TERMS

- Cross-checking blood – making sure the right blood is given to the right patient by comparing blood and patient data with another care provider
- One unit packed red blood cells – one bag of blood
- Acetaminophen – Tylenol
- Pneumonia – inflammatory illness of the lungs
- Anemia – a blood disorder with a lower than normal red blood cell count
- Hematocrit – proportion of blood that is occupied by red blood cells. Normal value is 40-45.

INFORMATION PROVIDED TO THE PARTICIPANT

You are the resident cross covering the floor beds for the night. In the middle of the night, a patient is to receive one unit of packed red blood cells over one hour. She is an HIV+ patient admitted for pneumonia/anemia. A nurse is taking care of the patient.

Script for Scenario 2: Transfusion Reaction

SCENARIO
Floor bed in the middle of the night. The patient, Mikaela Johnson, is to receive one unit of packed cells over one hour. The nurse has other pressing issues and has hung a unit of blood on his/her own because he/she couldn't find anyone else to cross check the unit of blood with. 15 minutes later, the patient has developed shaking chills and a fever. The resident arrives.

SCENE
Nurse Merritt (to resident coming in): "Excuse me, doctor, can I get some help? It's about Mrs. Johnson. She is a 40-year old HIV+ woman admitted with presumed pneumonia. In addition to her pneumonia she is anemic with a hematocrit of 22. Her primary team asked me to transfuse two units of packed red blood cells before they left. She's had chills and has been feverish (38.9° C) since admission earlier today, but I think she's been getting worse since I gave her blood." (If resident asks about other vital signs): "Her other vital signs are stable."

> [Resident should tell Nurse Merritt to stop blood (after stopping blood, blood pressure will stabilize but patient will remain feverish) and may administer acetaminophen. When arriving at bedside should examine the blood and blood slip and notice that they are not properly cross-checked. They may also note there has been an error (switching Johnston for Johnson with clearly incompatible medical record numbers). Resident will likely question Nurse Merritt about how the blood was checked.]

Nurse Merritt (if questioned about cross-checking blood): "So, we checked both units of blood quickly since it was the beginning of my shift and all the other nurses were busy, I mean, we checked blood slips as well. So I hung the 1st bag, and once that was done I hung the second one.

If resident does not question blood administration and continues to treat transfusion reaction, **Nurse Merritt** should re-check blood and admit error: "Now, looking at the blood slip, oops, um seems like, well I guess I didn't check the names too closely, I think I gave this patient the wrong type of blood."

> [Resident should discuss scenario including why it happened and how it should be reported. Resident should use SBAR if communicating with lab, risk management or nursing supervisor.]

If resident doesn't initiate debrief, **Nurse Merritt** should prompt him/her: "I don't know how this could have happened… I've never made this mistake before."

If resident doesn't initiate phone call, or only calls lab to verify error and doesn't give full report, **Nurse Merritt** should request that error be reported: "I suppose we need to report this to risk management."

Background Information for Scenario 3: Thoracic Aneurysm

PATIENT (MANNEQUIN)
Maurice Greene, a married 57-year-old, has been driven to the ER by his co-worker after complaining of a ripping sensation in the chest and back pain.

SETTING
Emergency room acute care area. A patient (mannequin) has been admitted and is complaining of upper back pain and a ripping sensation in the chest. A Physicians Assistant (PA; SP) is passive about pushing for patient x-ray. The nurse (participant) will need to push for the study and immediate care.

PARTICIPANT
An experienced nurse at the emergency room acute care area.

ADDITIONAL CHARACTERS
1. Justin Gatlin (SP), a passive PA. Not willing to push radiology to accept patient stat.
2. Dr. Lewis (SP), an angry thoracic surgeon. Will demand to know why it took so long to get x-ray.
3. Narrator (Sim Center staff).

TEAM SKILLS EVALUATION
Participant should press radiology to accept patient urgently. When asked to describe what had happened, participant should not blame the PA. Participants will be evaluated on:
1. How well they negotiate with the PA/radiology to accept patient immediately
2. Whether they use structured, concise language when describing the patient's condition to radiology
3. How they describe the situation to a third person
4. Whether they initiate a debrief and, if so, how well they conduct the debrief

3a	Assertion	Participant 0. Did not push for patient to be sent to radiology immediately 1. Voiced concern once or twice 2. Voiced concern at least twice and asked to check with another source
3b	Structured communication	Participant 0. Did not call attending/radiology 1. Called attending/radiology, but did not use structured, concise language to convey patient information 2. Called attending/radiology and used structured, concise language to convey patient information
3c	Debrief/conflict resolution	Participant 0. Did not speak up and/or/blamed PA and/or blamed radiology 1. Related facts without blaming, but did not convey the subtlety in interpretaion by PA versus radiology 2. Stated that the radiology did not perceive the severity of the situation based on the first call and that a second call was required to convery this.
3d	Debrief/conflict resolution	Participant 0. Did not initiate debrief or was accusatory 1. Discussed facts without blaming and/or conveyed that their was a misinterpretation by radiology 2. Emphasized patient safety, e.g., explained what PA had missed, technically (if relevant), the importance of getting the study done urgently, and the importance of using appropriate language (perhaps with examples) to convey urgency.

PROPS

2 white coats, telephone, gurney, radiology phone number next to telephone

MEDICAL TERMS

- Radiology – the specialty that involves x-ray machines to diagnose diseases
- PA chest film – posterior to anterior (frontal view) chest x-ray
- Lateral chest film – side view chest x-ray
- Thoracic – chest area
- Aneurysm (**an**-*yuh*-riz-*uh*m) – a localized, blood filled dilation (balloon-like bulge) of blood vessels caused by disease or weakening of the vessel wall. This can burst and lead to death.

INFORMATION PROVIDED TO THE PARTICIPANT

You are the experienced nurse at the emergency room acute care area. A patient presents to the acute care triage area complaining of severe upper back pain and ripping sensation in their chest. He is responsive. A physicians assistant is here and is also a part of your health care team.

Script for Scenario 3: Thoracic Aneurysm

SCENARIO

In the emergency room acute care area, patient Maurice Greene is moaning, complaining of chest pain and not feeling well. PA and nurse are at his bedside.

SCENE

PA Gatlin (to participant): "I just got off the phone with radiology. We need a PA and lateral chest film. Radiology is backlogged and can't give me an estimate of time. I guess we'll just have to wait."

Patient (moaning and complaining of chest pain).

> [The participant should push for procedure to be done immediately.]

PA Gatlin: "I'm not sure about that, last time that I tried pushing for a procedure, I got yelled at and it is not something I want to go through again. Really, this isn't a big deal, I mean, the patient is still responsive."

> Participant should persist in advocating for exam. Should offer to call radiology and/or attending physician to facilitate.

If nurse offers to call, **PA Gatlin** should point him/her to phone.

Narrator:

If nurse pushed to rush procedure: "The patient leaves the room… Several hours later, the thoracic surgeon enters the room."

If nurse didn't push to rush procedure: "Radiology arrives after 10 minutes to transport the patient. Several hours later, the thoracic surgeon enters the room."

Dr. Lewis: "Why did you wait so long to get the initial chest x-ray? The patient nearly died."

PA Gatlin: "Radiology told me there was no way they could do the study right away. They had several other emergencies and we were told we would just have to wait."

Dr. Lewis (turns to participant):

If nurse didn't call attending/radiology: "You should know better. We've been working together for many years. I thought you knew a ripping sensation in the chest is an acute emergency. I can't believe you let this happen. He almost died."

If nurse did call attending/radiology: "Get me the names of ALL the people that you think contributed to delaying the study. This was UNACCEPTABLE."

Dr. Lewis (should wait for a response from the participant. If he/she doesn't say anything then storm out of room).

PA Gatlin: (turning to participant): "We almost lost that one."

[Participant should be given a chance to debrief with PA.]

Background Information for Scenario 4: GI Bleed

PATIENT (MANNEQUIN)
Wilma Rudolph is a single 40-year-old in respiratory distress with upper and lower GI bleeding. She is in critical condition and will need aggressive resuscitation. She has end-stage liver disease due to alcohol abuse. She is unresponsive and intubated, accompanied by her mother/father.

SETTING
ICU. A patient (mannequin) with end-stage liver disease is coming in with her parent, George/Mary (SP). Doctor (participant) will receive a living will stating that the patient does not wish to be resuscitated. Nurse Torrence (SP) and parent will object.

PARTICIPANT
An intensivist at the ICU of a large hospital.

ADDITIONAL CHARACTERS
1. Patient's parent, George/Mary (SP), will be near-hysterical, argumentative and litigious, insisting that everything be done for his/her daughter.
2. Nurse Torrence (SP) has little experience with living wills and will disagree with the doctor, wanting to resuscitate the patient.

TEAM SKILLS EVALUATION
The participant's job is to calm the patient's parent and explain to the parent and nurse that the patient should not be resuscitated. Participants will be evaluated on:
1. How well they share the information in the living will with the parent and nurse
2. How well they manage the conflict
3. Whether they delegate the task of escorting the parent outside
4. How well they conducted a debrief

4a	Situation assessment/ advocacy	Participant 0. Didn't share information in patient chart and living will 1. Initiated a discussion about living will but was not respectful or didn't include mother 2. Initiated a discussion about living will; shared patient's wishes and requested compliance; used concise language and was respectful
4b	Debrief/conflict resolution	Participant managed conflict 0. Poorly. He/she did not acknowledge mother's feelings 1. Well. He/she briefly explained/repeated the legal situation to the nurse and patient's mother 2. Very well. He/she was respectful and considerate (e.g., "I'm sorry, I understand this is upsetting for you"), used calm tone of voice and body language
4c	Situation assessment/ advocacy	Participant 0. Did not ask nurse to or try to escort mother to another location 1. Asked nurse to or tried to escort mother to hallway 2. Respectfully asked nurse or mother to move to another location or called for additional resources (e.g., chaplain, patient advocacy)
4d	Debrief/conflict resolution	Participant 0. Did not take part in debrief 1. Discussed problems in care but was not constructive or did not fully cover important issues 2. Discussed disagreement and management of living wills with nurse; discussed what both could have done better to minimize problems

PROPS

Chart, living will, mannequin (intubated), gurney, blood bags (with blood), white coat

MEDICAL TERMS

- ICU – intensive care unit, specialized department in the hospital for treating critically ill patients
- GI – gastrointestinal
- Endoscopy – visual inspection of any cavity in the body using an endoscope, a long, flexible tube
- EGD – esophagogastroduodenoscopy, an examination of the esophagus, stomach and first part of the small intestine using an endoscope
- Colonscopy – an examination of the large intestine using an endoscope
- PMH – past medical history
- Intubation – insertion of a breathing tube into the windpipe
- Hypotension – low blood pressure
- Intensivist – an ICU physician, specializing in the care of critically ill patients
- Living will – a legal document specifying a desired course of treatment should the patient be unable to provide informed consent
- Pressor – a drug used to elevate arterial blood pressure

INFORMATION PROVIDED TO THE PARTICIPANT

You are an intensivist at an ICU. Your patient is on her way from the endoscopy suite with her mother/father. She is a 40-year old female in respiratory distress with upper and lower GI Bleeding. She just underwent EGD and colonoscopy. Evident bleeding was stopped but she remains anemic. Although the procedure was successful, the patient is still critical and will need aggressive resuscitation. Her PMH is significant for end stage liver disease due to alcohol abuse. She is unresponsive (intubated) and hypotensive. A young nurse is here to help you. He/she does not have any additional information about this patient.

Script for Scenario 4: GI Bleed

SCENARIO
In the ICU, patient Wilma Rudolph is unresponsive and intubated. A physician and a nurse are at her bedside, as well as her parent, who is holding her hand.

SCENE
Patient arrives in ICU with parent at bedside.

Parent (tearful): "I won't let you die, baby."

> [Doctor should direct resuscitation.]

Nurse Torrence hands the doctor an old chart and a living will that forbids long term ventilation, resuscitation with blood products, pressors or defibrillation of the heart.

> [Doctor should call out this new information and direct team to stop all interventions except fluid resuscitation.]

Parent (increasingly agitated): "You need to do EVERYTHING to keep my baby alive! I didn't agree with that stupid piece of paper when she signed it, and I don't agree now."

Nurse Torrence (disagreeing with doctor): "We CAN'T just let her die!"

Nurse Torrence makes motion to hang another unit of blood to continue resuscitation.

> [Doctor should stop nurse, citing the patient's wishes.]

Parent becomes increasingly agitated and litigious, threatening to sue the hospital and everyone involved in patient's care.

> [Doctor will likely ask the nurse to escort parent from room.]

If not, **Nurse Torrence** should try to escort **parent** from room. **Parent** will resist for a while, then say "I'm going to call my lawyer" and storm out.

Narrator: "It's 1 hour later and the patient has been resuscitated."

Nurse Torrence: "We have another patient coming to the unit with a living will."

> [Doctor should debrief on scenario.]

Narrator (if doctor doesn't initiate debrief): "Is there anything else you'd say to the nurse before the new patient arrives?"

If, during the debrief, the doctor asks what he/she could have done better, **Nurse Torrence** should ask if there's a way to let the doctor know he/she doesn't agree with the doctor in front of the patient.

Background Information for Scenario 5: Phone orders

PATIENT

Mr. Greenjeans is a 70-year-old scheduled for a multiple level lumbar decompression and fusion by orthopedic surgery.

SETTING

The location is a busy preoperative area in an academic medical center. Nurse Potter, a relatively experienced nurse, is preparing Mr. Greenjeans for surgery. Dr. Marsup, the attending anesthesiologist, calls the preoperative area to give nurse Potter supplemental admission lab orders. This participant is busy preparing his/her own patient but ends up answering the telephone. The participant takes the orders and goes about his/her business admitting the patients. Nurse Potter sends the ordered labs. Twenty minutes later, Dr. Marsup arrives in the preoperative area and asks for an additional lab value, which he claims was ordered over the phone.

PARTICIPANT

A newly hired perioperative nurse.

ADDITIONAL CHARACTERS

1. Nurse Potter (SP) is a confident and experienced perioperative nurse.
2. Dr. Marsup (SP) is a high-strung, overwhelmed anesthesiologist trying to get through a long list of cases.
3. Narrator (Sim Center staff).

TEAM SKILLS EVALUATION

The participant should use a check-back to confirm the orders and SBAR to communicate the physician's orders/needs. The participant should offer to help nurse Potter and handle the conflict in a non-confrontational manner. Participants will be evaluated on:

1. Do they use a check-back with Dr. Marsup's orders?
2. Do they use SBAR to communicate the orders to Nurse Potter?
3. Do they offer to help Nurse Potter?
4. How do they handle the conflict when Dr. Marsup becomes irate?

	Team Skills	Assessment
5a	Closed loop	Participant 0. Did not repeat orders 1. Acknowledged requests ("yes", "OK") 2. Repeated orders he/she would take on and the details of those orders
5b	Structured communication	Participant 0. Gave orders with no background information 1. Gave orders and background, but did not use structured, concise language to convey patient information 2. Gave orders and background information using structured, concise language to convey patient information
5c	Assistance	Participant 0. Did not offer help 1. Asked Nurse Potter if she needs help but didn't specify certain tasks 2. Asked Nurse Potter if she needs help and specified exactly what he/she will do
5d	Debrief/ Conflict resolution	Participant 0. Did not speak up when Dr. Marsup said he had ordered a chest X-ray 1. Spoke up but was confrontational or interested in who is right and wrong 2. Was non-confrontational and discussed how the situation might have happened and how to move forward productively

PROPS

Telephone, note pad, pencil or pen

MEDICAL TERMS

- Lumbar decompression and fusion – an operation on the back used to treat chronic pain
- Orthopedics (orth-o-peed-ics) – a "bone" doctor.
- Anesthesiologist (anesth-ees-e-ol-o-jist) – a doctor responsible for keeping the patient alive and comfortable during a surgical procedure
- PT – a blood test that shows how well a patient's blood clots
- PTT – a blood test that shows how well a patient's blood clots
- 12-lead EKG – a test to measure the electrical activity of the heart
- Chest X-ray – a way of looking inside a patient's chest to make sure the heart and lungs appear normal
- Hematocrit – a blood test that tells the physician how many red blood cells are present to carry oxygen in the body

INFORMATION PROVIDED TO THE PARTICIPANT

You are a newly hired nurse working in the pre-operative area of an academic medical center operating room. You are in the process of admitting a surgical patient. Nurse Potter, an experienced nurse, is busy admitting her patient. The transporters just dropped off Mr. Greenjeans, a patient scheduled for a lumbar decompression and fusion by orthopedics. Nurse Potter has been assigned to take care of Mr. Greenjeans. As you walk by the telephone, it rings……

Script for Scenario 5: Phone Orders

SCENARIO
The preoperative area of a busy operating room.

SCENE
Dr. Marsup (over the phone to participant): "May I speak to the nurse taking care of Mr. Greenjeans?"

> [The participant may ask Nurse Potter if she is able to take a call. If asked, Nurse Potter should respond she is in the middle of admitting her patient and please take a message. The participant should ask if he/she can take a message]

Dr. Marsup (over the phone to participant) "I'm stuck in room five but I want to order a stat 12-lead EKG, as well as a stat CBC, PT, and PTT on Mr. Greenjeans so they're ready when I come to see him."

> [The participant should "check-back" the orders.]

Dr. Marsup (Over the phone to participant): should correct any errors. "Thanks. Goodbye."

> [The participant should use SBAR to convey the orders to Nurse Potter.]

Nurse Potter (not looking up): "Okay. I'll get to them as soon as I can."

> [The participant may offer to help with orders, drawing labs.]

Narrator: "It's 20 minutes later."

Dr. Marsup arrives in the preoperative area**.**

> [Nurse Potter has sent the ordered labs but Dr. Marsup will ask for an additional lab value he claims was ordered over the phone.]

Dr. Marsup (looks at chart, then speaks to Nurse Potter): "We just finished in room 5. They're getting the room ready now for Mr. Greenjeans. I see orders for the PT, PTT, CBC and EKG. Where's the order for the chest X-ray?"

Nurse Potter (looking at Dr. Marsup and then at participant): "I didn't hear about a chest X-ray."

Dr. Marsup (looking at Nurse Potter, irritated then disgusted): "I ordered a chest X-ray when I called. You're telling me you didn't get the order? The whole reason I called in advance was to make sure there wasn't a delay between cases. Now we're going to waste another 30 minutes."

Nurse Potter (looking at participant)**.** "X-ray?"

> [The participant should be respectful, assertive, and non-confrontational about the X-ray order. The focus should be on how to move forward, not who was to blame]

Background Information for Scenario 6: Hand Hygiene

SETTING

A busy internal medicine clinic. Dr. Tsu is an overbearing attending. The participant is a new nurse who recently attended a seminar on the importance of hand washing in controlling patient infection. He/she watches as Dr. Tsu walks from room to room without washing his/her hands.

PARTICIPANT

A new nurse in the clinic.

ADDITIONAL CHARACTERS

1. Dr. Tsu (SP), the "captain of the ship", an overconfident, overbearing, demanding physician who feels rushed. He/she barks out orders, overwhelming co-workers, and is easily distracted.
2. Jennifer Spinner (SP) is an old, bitter nurse. She is confrontational and feels abused by her employers.
3. Narrator (Sim Center staff).

TEAM SKILLS EVALUATION

The participant's job is to discuss the importance of hand washing with Dr. Tsu. Participants will be evaluated on:

1. How quickly they realize there is a problem with hand hygiene
2. How quickly they discuss the issue with Dr. Tsu
3. Whether they offer assistance in obtaining supplies for hand washing
4. How they handle the situation when Dr. Tsu does not wash his/her hands later in the same day

	Team Skills	Assessment
6a	Situation assessment/ advocacy	Participant offered to help 0. Did not realize there is a problem with hand hygiene 1. Required explicit body language or prompting 2. In short time/without prompting
6b	Assertion	Participant 0. Did not discuss situation with Dr. Tsu 1. Discussed issue with Dr. Tsu, but was confrontational or escalateed issue without first discussing with Dr. Tsu 2. Discussed the situation with Dr. Tsu in a non-confrontational manner, used critical language
6c	Assistance	Participant 0. Did not offer to obtain needed supplies 1. Acknowledged the lack of supplies, but did not offer a solution 2. Made effort to obtain supplies on their own
6d	Debrief/conflict resolution	Participant 0. Did not voice concern to Dr. Tsu on second offense 1. Voiced concerns without using critical language 2. Used critical language to voice concerns

PROPS

Paper towels, wash basin, hand hygiene solution, patient chart

MEDICAL TERMS

- Iatrogenic (eye-at-row-genic) infection - an infection transferred from patient to patient by a hospital worker

INFORMATION PROVIDED TO THE PARTICIPANT

You are a new nurse in the Internal Medicine Clinic. As part of your orientation, you received a lengthy lecture on the importance of hand hygiene. You notice Dr. Tsu, the attending physician, is feeling rushed. You also notice he has failed to wash his hands between patients throughout the morning. Another nurse, Jennifer Spinner, is also working in the clinic with you.

Script for Scenario 6: Hand Hygiene

SCENARIO
In the Internal Medicine Clinic. Dr. Tsu hurriedly comes out of one patient room and picks up the next patient's chart (without washing his hands).

SCENE
Jennifer Spinner (to participant): **"**I can't believe how many patients they're bringing through the clinic these days. How are we supposed to keep up? We've got so many rules, regulations, and training modules, I can hardly keep it all straight."

Dr. Tsu (to participant): "Can you give Mrs. Potkey a hand?" (motioning back to room he just came from). "She couldn't stop coughing while I was examining her. She needs a chest X-ray and some blood work. " (turns back to chart).

> [The participant should verbalize concern to Dr. Tsu about his failure to wash his hands between patients.]

Actors should give participant some time to react. If no initial reaction, **Dr. Tsu** should move to begin a physical examination of the patient (mannequin). If still no input from participant, **Nurse Spinner** should say, "Dr. Tsu, did you wash your hands? I'm tired of reminding you all the time."

Nurse Spinner (hearing participant raise concerns about hand-washing turns to to Dr. Tsu, in confrontational manner)**:** "That's unacceptable. You know better. I'm going to write you up."

Dr. Tsu (defensively): "I know I'm supposed to wash my hands, but housekeeping never fills the paper towel dispenser. It's been empty all day. Every time I try the sterilizing foam, the container is empty. I'm already an hour behind in seeing patients."

> [The participant should try to shift the tone of the conversation to less confrontational, and offer solutions for restocking hand washing supplies.]

Narrator: "It's 3 hours later and the supplies have been restocked."

Dr. Tsu once again comes out of an examination room and picks up next patient's chart without washing his hands.

> [The participant should once again bring the issue to Dr. Tsu's attention. Discuss escalation of problem if they cannot come to a solution.]

Background Information for Scenario 7: Phone Communication

PATIENT (MANNEQUIN)
Calvin Smith is a 65-year-old widow, newly admitted with pneumonia. He has coronary artery disease and type II diabetes. He is complaining of shortness of breath, which seems to be worsening, and chest pain.

SETTING
Floor bed in the middle of the night. A 65-year-old patient (mannequin) is admitted with pneumonia. His PMH is significant for coronary artery disease and type II diabetes. Mr. Smith seemed a little out of breath during the last visit, but was just up out of bed. Now, the shortness of breath seems to be worsening and he is complaining of chest pain. The nurse (participant) will need to advocate to Dr. Hayes, the resident (SP), that this is urgent and needs immediate evaluation.

PARTICIPANT
A floor nurse.

ADDITIONAL CHARACTERS
1. Dr. Hayes (SP), a third-year resident who is overburdened – he/she is currently taking care of several patients.
2. Nurse McGuire (SP), a helpful, experienced nurse of equal status to the participant.

TEAM SKILLS EVALUATION
The participant should be assertive in asking the resident to come evaluate the patient immediately. The participant should also ask for help when needed. Participants will be evaluated on:
1. Whether they call for help
2. How insistent they are that the resident come immediately
3. Whether they repeat orders
4. Whether they ask for help when needed

7a	Structured communication	Participant 0. Did not call for help 1. Called for help, but did not use structured, concise language to communicate situation 2. Called for help and used structured, concise language to communicate situation
7b	Assertion	Participant 0. Did not push for resident to come immediately 1. Told resident case was urgent, since patient exhibited shortness of breath and chest pain 2. Insisted resident should come using critical language (e.g., “I’m concerned”, “when will you be here?”) and explained why
7c	Closed loop	Participant 0. Did not repeat resident’s orders 1. Acknowledged requests (“yes”, “OK”) 2. Repeated orders
7d	Assistance	Participant 0. Did not ask for help, even when needed 1. Hinted when help was needed 2. Was direct in asking for help when needed, e.g., asked nurse B to call RT

PROPS

Telephone, phone numbers of resident, respiratory care next to telephone, nasal cannulas, mannequin, white coat

MEDICAL TERMS

- PMH – past medical history
- Coronary artery disease – heart disease
- Pneumonia – inflammatory illness of the lung
- Diabetes mellitus type 2 – a disorder that is characterized by insulin resistance
- Nasal cannula – a device used to deliver oxygen through the nose
- Pulse oximetry – a sensor placed on the patient's fingertip/earlobe to measure blood oxygenation
- EKG (electrocardiogram, ECG) – records the electrical activity of the heart over time
- ABG (arterial blood gas) – a test performed to determine oxygen/carbon dioxide and acid/base balances in the arterial blood

INFORMATION PROVIDED TO THE PARTICIPANT

You are a nurse on the floor. During the middle of the night, you are the primary care nurse of Mr. Smith, a 65-year-old newly admitted with pneumonia. His PMH is significant for coronary artery disease and type II diabetes. The patient seemed a little out of breath during the last visit, but was just out of bed. Now patient is complaining of shortness of breath, which seems to be worsening, and chest pain. Another nurse is also in the room to help you. He/she does not have any information about this patient.

Script for Scenario 7: Phone Communication

SCENARIO
In a floor bed in the middle of the night, patient Calvin Smith is short of breath and complaining of chest pain. Two nurses are at his bedside.

SCENE
Patient (narrator): "I can't breathe. My chest hurts."

[Nurse should call for help.]

Nurse McGuire (in same room, looking at nurse): "I'll take care of the patient. Why don't you call Dr. Hayes, the covering resident, and have him/her come take a look?"

[Nurse should use SBAR to inform resident. May also call respiratory care urgently.]

Dr. Hayes (on phone): "Okay. I'll be there as soon as I can, I'm tied up with another emergency." If nurse hasn't put oxygen on patient: "For now, put the patient on 3 liters oxygen by nasal cannula."

[Nurse should argue this is an acute change and should be handled immediately.]

Dr. Hayes (on phone): "Okay. I'll be there in a second."

Narrator: "After 5 minutes…"

Dr. Hayes arrives at patient bedside, whether or not nurse insisted that he/she come immediately.

Dr. Hayes (to nurse): "So tell me what happened." Examines patient's heart and lungs. (To patient): "Hello, I'm Dr. Hayes, can you tell me about when you started to have chest pain? What makes the pain worse or better? Can you describe to me where your pain is, point where it hurts the most? It is a sharp stabbing pain, dull ache or something else?"

Patient (narrator) (ignores questions): "I can't breathe. I can't breathe."

Dr. Hayes should stop questioning patient after patient complains twice of being unable to breathe.

Dr. Hayes (to nurse): "Get respiratory therapy here now and put her on oxygen and pulse oximetry. We need a stat 12 lead EKG, a chest x-ray, an arterial blood gas. We should also let her family know about this acute change."

[Nurse should check back orders and ask Nurse McGuire for assistance.]

Background Information for Scenario 8: Management of Cardiac Arrest

PATIENT (MANNEQUIN)
Michelle Hunter is a 46-year-old mother of two who is complaining of chest pain and shortness of breath. She is responsive but moaning in pain.

SETTING
General surgery clinic. Patient (mannequin) is complaining of chest pain and shortness of breath. Dr. Massey (SP) will be overbearing and overload Nurse Allen (SP) with many tasks. The nurse (participant) will need to step in and assist Nurse Allen.

PARTICIPANT
An experienced nurse at a general surgery clinic.

ADDITIONAL CHARACTERS
1. Dr. Massey (SP), the "captain of the ship", an overconfident, overbearing, demanding physician. He/she barks out orders, overwhelming co-workers.
2. Nurse Allen (SP), a passive, mousy, easily intimidated nurse. Nurse Allen is of equal status to the participant, but is less experienced. He/she is overwhelmed with many orders being given at once by Dr. Massey, gets confused and could make a fatal mistake if the participant does not intervene.

TEAM SKILLS EVALUATION
The participant's job is to step in to help Nurse Allen and to correct a dosing error. Participants will be evaluated on:
1. How quickly and effectively they support Nurse Allen by offering help
2. How clearly and definitively they repeat orders
3. Whether they correct the improper morphine dose and if so, how assertively
4. Whether they assist Nurse Allen in his/her tasks

	Team Skills	Assessment
8a	Assistance	Participant offered to help 0. Required a direct request 1. Required explicit body language or prompting 2. In short time/without prompting
8b	Closed loop	Participant 0. Did not repeat orders 1. Acknowledged requests ("yes", "OK") 2. Repeated orders he/she would take on and the details of those orders
8c	Situation assessment/ advocacy	Participant 0. Did not correct drug dose 1. Corrected drug dose 2. Corrected drug dose and administered drug or verified Nurse A heard him/her
8d	Assistance	Participant 0. Did not assist nurse A 1. Assisted nurse A 2. Clearly specified which orders he/she would take on and assisted nurse A

PROPS

IV equipment, code cart, ETT, laryngoscope, white coat

MEDICAL TERMS

- Laryngoscope (l*uh*-**ring**-g*uh*-skohp) – a medical instrument that is used to obtain a view of the vocal cords
- EKG (electrocardiogram, ECG) – records the electrical activity of the heart over time
- Colonscopy – an examination of the large intestine using an endoscope
- Electrolytes – ions that behave as an electrically conductive medium. In physiology, this includes sodium, potassium, calcium, magnesium, chloride, phosphate, etc.
- ETT (endotracheal tube) – a tube that is inserted into an anesthetized patient's trachea (windpipe) in order to ensure air is able to reach the lungs
- Arterial line – a thin catheter (tube) inserted into an artery
- ABG (arterial blood gas) – a test performed to determine oxygen/carbon dioxide and acid/base balances in the arterial blood
- CBC (complete blood count) – a blood test that monitors various disorders, such as anemia
- Sublingual – a route of administration in which certain drugs are entered directly into the blood stream via absorption under the tongue.
- Sinus tachycardia – a rapid heart rate
- ST depression – the ST segment is part of the heart trace in an EKG. A depression of this segment may signal injury to the heart, e.g., a heart attack

INFORMATION PROVIDED TO THE PARTICIPANT

You are a nurse at the General Surgery Clinic. The doctor has just admitted a patient and you are at the bedside. The patient is responsive but moaning, complaining of chest pain and shortness of breath. When connected to monitors, the EKG shows sinus tachycardia with ST depression. Another nurse is here and you are helping her admit the patient. He/she does not have any additional information about this patient.

Script for Scenario 8: Management of Cardiac Arrest

SCENARIO
In the general surgery clinic, patient Michelle Hunter is moaning, complaining of chest pain and shortness of breath. A physician and two nurses are at her bedside.

SCENE
Dr. Massey (to Nurse Allen): "Hook her up to the monitors, put her on oxygen and call for a stat chest x-ray and EKG. I need her chart right now! We'll need an arterial line. Draw an ABG, electrolytes, and CBC while you're putting that in. What was her potassium last time in the clinic?"

> [The participant should step in and offer assistance. He/she should support and encourage Nurse Allen. He/she should check-back the tasks he/she's taking ownership of.]

Patient (moaning and complaining of chest pain).

If the participant asks Dr. Massey what he can do, **Dr. Massey** should refer him to Nurse Allen: "You should help Nurse Allen here do his/her job!"

Nurse Allen (overwhelmed; uses body language to show stress and that he/she didn't get all the orders…but doesn't say anything to Dr. Massey. Looks for patient chart and prepares to put in an arterial line. If the participant doesn't offer help, he/she should request help.)

Dr. Massey (when vitals show up on screen continues to bark orders at Nurse Allen):
"Where's her chart? I need it now. Give her Aspirin 81 mg now, a sublingual nitroglycerin, and 5 mg of morphine."

Nurse Allen (getting increasingly stressed to the point of crying): "I'll give Aspirin and 18 mg of Morphine."

Dr. Massey is not paying attention to what Nurse Allen says.

> [The participant should correct Nurse Allen (the ordered dose was 5 mg of morphine, not 18) and should "check back" the dose with Dr. Massey.]

Background Information for Scenario 9: Blood Mismatch

PATIENT (MANNEQUIN)
Joe DeLoach is a married 49-year-old father of three who has been in a motor vehicle accident. He is in the OR, anesthetized.

SETTING
Operating room. The patient (mannequin) is s/p motor vehicle accident with liver laceration requiring resuscitation with blood. Dr. Ashford, the attending anesthesiologist (SP), has given the patient two bags of expired blood and is now asking the circulating nurse (participant) to sign the blood slips. The circulating nurse (participant) will need to challenge this and seek the charge nurse. Dr. Williams, a resident anesthesiologist (SP), will sign the blood slips.

PARTICIPANT
An experienced OR circulating nurse.

ADDITIONAL CHARACTERS
1. Dr. Ashford (SP), a senior, formidable anesthesiologist. He/she is used to being obeyed and requests that blood slips be signed against regulations.
2. Dr. Williams (SP), a first-year resident anesthesiologist. He/she respects authority and obeys the attending physician's request without question.

TEAM SKILLS EVALUATION
The participant should refuse to sign blood slips for blood he/she did not check (and which is expired). Participants will be evaluated on:
1. Whether they sign blood slips and, if not, how well they manage the situation
2. How they discuss the administration of expired blood
3. Whether they insist that the incident be reported
4. How well they report the incident

9a	Assertion	Participant 0. Co-signed blood units 1. Did not sign blood units, but either (1) reacted in a way that was not respectful or calm, (2) did not suggest another solution and/or (3) did not raise a concern about signing them after blood given 2. Would not co-sign blood units and respectfully and calmly (1) raised the concern that it was against procedure to do this after blood given and (2) suggested another solution.
9b	Situation assessment, advocacy	Participant 0. Did not check or did not notice blood was outdated 1. Identifed that blood was outdated and either did not dicuss it or only mentioned it 2. Identified that blood was outdated and discussed this and the implications with anesthesiologist. If relevant, prevented future use of outdated blood.
9c	Debrief/conflict resolution	Participant 0. Remained passive – did not offer to help resolve or report situation 1. Offered to report situation or asked if provider would report 2. Calmly and respectfully insisted on reporting situation; indicated he/she would follow up and/or explained the importance of reporting
9d	Structured communication	Participant 0. Did not suggest calling charge nurse/anesthesia division chief 1. Called charge nurse/anesthesia division chief, but did not use structured, concise language to communicate situation 2. Called charge nurse/anesthesia division chief and used structured, concise language to communicate situation

PROPS

Blood bags, blood slips (2 of 3 will have "Expired" labels), scrubs, telephone, phone number of division chief/charge nurse next to phone

MEDICAL TERMS

- S/p – status post
- Laceration – irregular wound caused by a blunt impact to soft tissue which lies over hard tissue
- General anesthesia – a state of total unconsciousness resulting from anesthetic drugs
- One unit packed red blood cells – one bag of blood

INFORMATION PROVIDED TO THE PARTICIPANT

You are a circulating nurse entering the operating room. The patient was involved in a motor vehicle accident with liver laceration and required resuscitation with blood. The patient is currently stable. The anesthesiologist calls you.

Script for Scenario 9: Blood Mismatch

SCENARIO
In the OR, patient Joe DeLoach is asleep. An anesthesiologist is with him. The circulating nurse walks in.

SCENE
Dr. Ashford (looking at circulating nurse and pointing to 3 empty blood bags on floor): "Will you please sign these blood slips? I was in a hurry to resuscitate this patient and didn't have anyone to co-sign them with me. The bags are right there if you want to check them."

> [Circulating nurse should refuse to sign units he/she did not check.]

2 units of blood on floor/paperwork clearly outdated.

> [Circulating nurse should question the administration of outdated blood. Should offer to help with the reporting resolution of error.]

Narrator (if nurse doesn't notice that blood is outdated): "Two of the blood bags are expired."

Dr. Ashford (defensively): "I was in a hurry and the patient was unstable. There was no one there to co-sign the blood, so I did what was best for the patient. Now the patient is stable, so there's no harm done."

Dr. Williams walks into room.

Dr. Ashford (to Dr. Williams): "Will you sign those blood slips? I had to give 3 units of packed red blood cells in a hurry."

> [Circulating nurse should point out breech in procedure as well as the fact that the blood is outdated.]

Dr. Williams signs slips despite this information.

> [Circulating nurse should challenge this action. Should use two-challenge rule, then seek a consultation with division chief or charge nurse. Should use SBAR when communicating.]

If circulating nurse suggests reporting but doesn't initiate phone call, **narrator** should prompt to call.

Dr. Ashford (attempting to prevent call): "I made a small mistake but I won't do it again, there's no need to call the division chief/charge nurse."

Background Information for Scenario 10: Too much Insulin

PATIENT (MANNEQUIN)
Valerie Brisco-Hooks is a married 61-year-old. She is very drowsy.

SETTING
Floor bed in community hospital (without CPOE). Dr. Stephens (SP) wrote an order for 30 units of insulin to be administered subcutaneously. Nurse Graddy, the brand new nurse (SP), mistook the units symbol for a "0" and wrongly administered 300 units of insulin subcutaneous. The charge nurse (participant) hears the argument. He/she should resolve the argument and focus the team's attention on the patient.

PARTICIPANT
An experienced charge nurse at a community hospital.

ADDITIONAL CHARACTERS
1. Dr. Stephens (SP), an insensitive senior physician who belittles the new nurse for not knowing what the correct dose of insulin is.
2. Nurse Graddy (SP), a registered nurse fresh out of school who, defensively, blames the physician for his illegible handwriting and is reduced to tears by the end of the scenario.

TEAM SKILLS EVALUATION
The participant's job is to step in to resolve the argument and focus the team's attention on the patient. Participants will be evaluated on:
1. How well they manage the conflict
2. Whether they notice when the patient becomes unresponsive and notified the team
3. Whether they repeat orders
4. Whether they assist the new nurse

10a	Debrief/ conflict resolution	Participant managed conflict 0. Poorly. He/she was passive, talked to air, and/or blamed the nurse or the physician 1. Well. He/she acknowledged the conflict and/or tried to refocus the team on the patient 2. Very well. He/she used critical language (e.g., used names, said "I'm concerned"), resolved the conflict and was able to refocus the team on the patient
10b	Situation asessment/ advocacy	Participant 0. Did not notice patient was unresponsive 1. Noticed that patient became unresponsive, but was not assertive or talked to air 2. Notified the team that the patient had become unresponsive; used names and described the situation
10c	Closed Loop	Participant 0. Did not repeat orders 1. Acknowledged requests ("yes", "OK") 2. Repeated orders
10d	Assistance	Participant 0. Did nothing 1. Took on new RN's tasks 2. Divided tasks and engaged new RN in conversation (e.g., "what can you do?")

PROPS

1 cc syringe, insulin vial, clipboard with order sheet, white coat

MEDICAL TERMS

- Charge nurse – a registered nurse who has general responsibility for coordinating the nursing care of all patients in a unit
- Subcutaneous (subq) – under the skin
- Insulin- drug that is injected into the patient, used to treat diabetes
- CPOE (computerized physician order entry) – electronic instructions for patient treatment, e.g., to pharmacy
- D50 (dextrose 50%) – a drug used to increase blood glucose levels

INFORMATION PROVIDED TO THE PARTICIPANT

You are a charge nurse on the floor at the community hospital (without CPOE). The physician wrote an order for 30 units of insulin to be administered subcutaneously. The brand new nurse mistook the units symbol for a "0" and wrongly administered 300 units of insulin subq. You walk by and hear an argument at the patient's bedside. You decide to check it out.

Script for Scenario 10: Too much Insulin

SCENARIO
Floor bed in a community hospital. Patient Valerie Brisco-Hooks is very drowsy. A physician and a nurse are at her bedside.

SCENE
Dr. Stephens (to Nurse Graddy): "I can't believe you gave that much insulin to this patient! How could you possibly misinterpret my order? In all my 20 years of practice I have never seen ANYONE make this mistake. If you don't know 300 units of insulin is too much, you should go back to nursing school!"

Nurse Graddy: "You need to write more clearly. How could anyone possibly read your handwriting? Does it really take that much effort to write clearly so others can read your order? In my orientation they told us that you needed to WRITE OUT the word "unit" rather than using an abbreviation so this type of error won't occur."

Neither is paying attention to the patient, who is getting increasingly drowsy.

Narrator: "The patient is becoming increasingly drowsy."

> [Charge nurse hears commotion and comes to bedside to check things out. Charge nurse should listen to both sides of story. He/she should notice patient is drowsy (while other two continue to argue) and call this information out.]

Dr. Stephens: "I wrote an order for 30 units of insulin and this new incompetent nurse of yours apparently can't read!"

Nurse Graddy: "Excuse me! Incompetent? It only takes a second to write out "UNITS". Your U's looks like O's! No need to get bent out of shape for your own mistakes!"

Dr. Stephens: "Only an incompetent fool would think to give 300 units of insulin to a patient!"

Narrator: "The patient's become unresponsive."

> [Charge nurse should focus team on acute care of patient.]

Dr. Stephens (looking at Nurse Graddy): "Look what you did to her! Give her an amp of D50 stat, then check blood glucoses every 15 minutes for the next 2 hours. You haven't heard the last of this."

Nurse Graddy (tearfully): "I can't remember what the doctor just ordered for the patient!"

> [Charge nurse should step in, check back orders and offer to help. Directs new grad on what he/she can do.]

Background Information for Scenario 11: Tie 'em Down

PATIENT (MANNEQUIN)
Harrison Dillard is a 30-year-old with altered mental status after a drunken fall from a 3rd story window. He has multiple rib fractures and probable lung contusion. He is intubated and agitated.

SETTING
ICU. The patient (mannequin) is a 30-year-old with altered mental status after a drunken fall from a 3rd story window. He has multiple rib fractures and probable lung contusion. The intubated patient needs neurological checks every 15 minutes. Dr. Hampton (SP) has written for hand restraints. While Nurse Owens (SP) goes to get the restraints, the patient extubates. A second nurse (participant) should take care of the patient, resolve an argument between Dr. Hampton and Nurse Owens, and re-focus the team's attention on the patient.

PARTICIPANT
An ICU nurse with 5 years experience.

ADDITIONAL CHARACTERS
1. Dr. Hampton (SP), a young intensivist, will be angry that nurse didn't follow his/her orders.
2. Nurse Owens (SP), an ICU nurse of equal status to the participant. Will take a long time to complete doctor's order because of high workload.

TEAM SKILLS EVALUATION
The participant's job is to step in to resolve the argument and focus the team's attention on the patient. Participants will be evaluated on:
1. Whether they call for help when needed
2. How clearly they explain the situation
3. How well they manage the conflict
4. Whether they offer to help

11a	Situation assessment/ advocacy	Participant 0. Did not call for help 1. Called for help when needed 2. Called for help using names and describing the situation
11b	Structured communication	Participant 0. Said he/she only knows that patient has self-extubated 1. Explained situation, but did not use structured, concise language 2. Explained situation using structured, concise language
11c	Debrief/ conflict resolution	Participant managed conflict 0. Poorly. He/she was passive, talked to air, and/or blamed nurse A 1. Well. He/she acknowledged the conflict and/or tried to refocus the team on the patient 2. Very well. He/she used critical language (e.g., used names, said "I'm concerned"), resolved the conflict and was able to refocus the team on the patient
11d	Assistance	Participant offered to help 0. Required a direct request 1. Required explicit body language or prompting 2. In short time/without prompting

PROPS

ETT, mannequin, circuit, hand restraints, ambu bag, mask, white coat

MEDICAL TERMS

- ICU – intensive care unit, specialized department in the hospital for treating critically ill patients
- Intensivist – an ICU physician, specializing in the care of critically ill patients
- ETT (endotracheal tube)- A tube that is inserted into a patient's trachea (windpipe) in order to ensure air is able to reach the lungs
- Extubate – when the breathing tube is removed from a patient's trachea (windpipe)
- Ventilator – a machine designed to move breathable air into and out of the lungs, to provide respiration for a patient who is physically unable to breathe
- Contusion- a form of traumatic injury. Lung contusion is a bruise on the lung
- Neuro checks – brief checks of neurological status
- Bag mask ventilate – a hand-held device used to ventilate a patient who is physically unable to breathe

INFORMATION PROVIDED TO THE PARTICIPANT

You are a nurse in the ICU. A fellow nurse's patient is a 30-year old with altered mental status after a drunken fall from a 3rd story window. The intubated patient has multiple rib fractures and probable lung contusion. He needs neurological checks every 15 minutes. The physician has written for hand restraints for this patient. The nurse has stepped away to get them. The patient self-extubates and the ventilator alarm goes off.

Script for Scenario 11: Tie ‘em Down

SCENARIO
In the ICU, patient Harrison Dillard is intubated and agitated after a drunken fall from a third story window.

SCENE

[Nurse walks by room and notices patient is extubated. Nurse should call for help, hopefully will administer oxygen or bag mask ventilate.]

Dr. Hampton (angry at nurse): “Why wasn’t this patient restrained? I wrote that order more than 30 minutes ago.”

[Nurse should communicate what happened using SBAR, should continue to mask ventilate patient.]

Nurse Owens arrives with restraints and is berated by **Dr. Hampton** for not following orders. **Nurse Owens** and **Dr. Hampton** ignore the patient.

Nurse Owens (to Dr. Hampton): “What happened? I just went to get restraints for a second!”

Dr. Hampton: “Why did it take you so long? I wrote an order for restraints 30 minutes ago! Were you drinking coffee this whole time? Now the patient has extubated himself and we have another problem to fix!”

Nurse Owens: “It’s not my fault. We are totally understaffed. I had to run out to get the restraints. What was I supposed to do?”

Dr. Hampton (to Nurse Owens): “Well, too late for that. Now I don’t want you to leave this patient. He’s in no condition to be left alone. Stay here while I call for backup help.”

[Nurse should refocus team on acute situation and offer to help with re-intubation and restraint.]

Dr. Hampton: “Restrain the patient, then sedate and re-intubate him.”

Background Information for Scenario 12: Foley Confusion

PATIENT
Ralph Metcalfe is a 59-year-old in the operating room for lumbar decompression and fusion.

SETTING
A busy operating room. Dr. Tavin, an anesthesiologist, has induced general anesthesia. The attending neurosurgeon is not present. Dr. Tavin expects the case to last 4-5 hours, as noted on the operating room schedule. She has the participant, a neurosurgical resident, place a Foley catheter. After the urinary catheter is placed, the attending neurosurgeon, Dr. Azule, enters the room. He is upset with the resident, berating him/her and saying a Foley catheter is not necessary for a single level lumbar decompression and fusion. Dr Tavin and Dr. Azule argue over the discrepancy in the case booking and what the surgeon planned to do.

PARTICIPANT
A junior neurosurgical resident.

ADDITIONAL CHARACTERS
1. Dr. Tavin (SP), an assertive, experienced, slightly tactless anesthesiologist.
2. Dr. Azule (SP) is an overbearing, overconfident orthopedic surgeon. He is brash and can be obnoxious to the nursing staff but especially to his residents.

TEAM SKILLS EVALUATION
The participant should respectfully explain the situation to Dr. Azule and attempt to resolve the conflict between Dr. Azule and Dr. Tavin. Participants will be evaluated on:
1. How well they explain the situation
2. How they resolve the conflict between Dr. Azule and Dr. Tavin
3. How they handle verbal abuse by Dr. Azule
4. Whether they attempt to dissect the problem and prevent its future occurrence

	Team Skills	Assessment
12a	Structured communication	Participant communicated the situation to Dr. Azule 0. Did not give complete/accurate account of events 1. Gave accurate account, but did not use structured, concise language to convey information 2. Gave accurate account and used structured, concise language to convey information
12b	Debrief/conflict Resolution	Participant managed conflict 0. Poorly. He/she did not speak or was too meek to intervene 1. Well. He/she briefly explained/repeated the cause of the situation 2. Very well. He/she was respectful and considerate (e.g., "I'm sorry, I understand this is upsetting for both of you"), used calm tone of voice and body language
12c	Assertion	Participant 0. Did not speak up or defend him/herself. Accepted verbal abuse. 1. Defended self from verbal abuse, but did not address concern at Dr. Azule's behavior 2. Defended self and addressed concern over verbal abuse. Redirected attention to patient care
12d	Debrief/conflict resolution	Participant 0. Did not take part in a debrief 1. Discussed problems but was not constructive or did not fully cover important issues 2. Discussed disagreement, management and offered solution for how same situation may be avoided in the future

PROPS

Scrubs, Foley Catheter, mannequin, hospital gowns, masks, gloves, caps

MEDICAL TERMS

- Neurosurgeon (Ner-o-ser-jun) – a surgeon that operates on the brain and spinal cord
- Anesthesiologist (anes-thees-ee-ol-o-jist) – a physician responsible for keeping the patient alive and comfortable during a surgical procedure
- Resident – physician in training. Possesses an MD degree and is working to become a consultant in a medical specialty
- Foley (pho-lee) catheter – a catheter placed in the bladder to drain urine from the patient
- Lumbar decompression and fusion – an operation on the back used to treat chronic pain
- PA (physician's assistant) – aids surgeon in the examination and scheduling of patients

INFORMATION PROVIDED TO THE PARTICIPANT

You are a junior neurosurgery resident working on the spine service. Your patient is scheduled to have a 3 level lumbar decompression and fusion. Just after the case started, Dr. Tavin, the attending anesthesiologist, asked you to place a Foley catheter since the case is scheduled for 4-6 hours. You have just finished placing the Foley catheter when your attending, Dr. Azule, arrives…..

Script for Scenario 12: Foley Confusion

SCENARIO
In the neurosurgery operating room. The participant, a neurosurgery resident, has just finished putting in the Foley catheter requested by Dr. Tavin.

SCENE
Dr. Tavin (to participant as Dr. Azule is walking in door): **"**All done with the Foley catheter?"

Dr. Azule (angry to resident/participant): "Why did you put in a Foley catheter? This patient doesn't need one. This case is only going to take 2 hours."

[The participant should verbalize the situation using SBAR.]

[Actors should allow time and focus attention to prompt participant to speak]

Dr. Tavin (after participant speaks; to Dr. Azule, irritated): "I asked him/her to put that in. The case on the operating room schedule is scheduled for 4-6 hours. I wish you'd book your cases accurately, then we could avoid this type of situation. I could understand if this was a single occurrence, but this happens every day. It's only a matter of time before a patient gets hurt."

Dr. Azule (defensively, irritated): "I don't book these cases with the operating room, my PA does. I told the chief resident and the operating room front desk last night that I'd only be doing a single level."

(Turning to participant): "Why didn't you know about the change? I can't believe residents these days. Back when I was a resident, I would have never set foot in the operating room without knowing EXACTLY what my attending planned to do. If this patient has an infection post-operatively, it's your fault. What do you have to say for yourself?"

[The participant should try to shift the tone of the conversation to less confrontational, and offer solutions.]

[This scenario requires further editing to provide participant with opportunity for behaviors to be scored].