Appendix 1: Simulation scenario events table and dialogue

Study Scenario Events Table

All Events are tied to T=0, any number after T is in minutes (T=1 means one minute after T=0)

Event State	Patient Vitals	Instructor Cues/Notes
Baseline/Post Induction (Ends when handoff complete; state generally lasts 90 Seconds	ECG: NSR HR: 70 BP: 110/60 T: 35.9 SpO2: 99% RR:vent etCO2: 32 Iso: 1.3% Others (ICP, gases, TOF): PE findings: Labs, imaging studies	Induction was uneventful; handoff given per script *Antibiotics running
T=0 Post-Trocar Placement Pneumoperitoneum / Mild Hypovolemia (State duration: Hold vitals for 1 min +1 min to reach 86/56 + 2 mins holding at 86/56 = 4 min total)	ECG: NSR HR: 102 BP: 86/56 T: 35.5 SpO2: 100% RR: vent etCO2: 32 Insufflation pressure: 18 Others (ICP, gases, TOF): PE findings: Labs, imaging studies:	State begins: When handoff over. Surgeon places trocar at this point **(T=0);** **T=0** OB: "Ok, trocar is in." **T=1** OB: "There's a little blood in the pelvis." **T=1:** vitals trend over 1 min to BP 86/56, HR 102 **T=1.5** OB: "I can't tell if it's old blood, maybe she does have endometriosis." **T=2** OB: "The visualization in poor, what is the current insufflation pressure?"

T=3 Severe Hypovolemia (Stay in this state until treatment provided, then go to appropriate treatment state below)	ECG: NSR HR: 124 BP: 64/45 T: 35.4 SpO2: 100 % RR: etCO2: 30 Others (ICP, gases, TOF): PE findings: Labs, imaging studies: H/H: 8.2 / 24 (before disclosing retroperitoneal hematoma) H/H: 5.8 / 16 (after disclosing retroperitoneal hematoma) *Lab results: 2 minute latency after handed to nurse.	**T=3:** BP trends from 86/56 to 64/45 over 1 min **T=3:** OB:"I still can't get good visualization, do we need a new insufflator?" **T=5:** The pressure is good now, but the patient feels tight, is the patient relaxed? (1 twitch on TOF if asked) **T=5.5:** OB: "If you can, please give more relaxant." **T=6:** OB: "Nurse can you pull up the CT for me to review? **T=6.5** OB: "Is there an issue with the monitor? I am concerned about the patient." OB gives **no** further information to team unless DIRECTLY asked, if asked follow timeline below. If not asked, say **NOTHING** **T=7-8** "There is definitely a mass here and there wasn't one on the CT." **T=8-9**: "The mass looks bigger and it's blue. It could be a retroperitoneal hematoma." If asked to convert to open procedure: " I am not comfortable opening."
If at any time point practitioners give appropriate doses of fluids/vasopressors, you may allow for a SHORT (~30 Seconds) Mild Improvement State as outlined below		

Mild improvement	HR: decreases 10 BP: increases 8-10 mmHg Changes are transient (30 sec improvement and trends back to original state over another 30 secs)	If Rx: crystalloids (≤200ml), vasopressors (≤phenylephrine 100mcg, ≤epi 20mcg) *SBP remains ≤80 in severe hypovolemia state regardless of number of fluid challenges and/or pressors and/or transfusions.
Scenario Ending Cue		
Scenario Ends	Same as Severe Hypovolemia State	Vascular or General Surgical Consultant Called If participant does not ask then by minute 12 OB will state, "Can we consult a vascular surgeon? I do not feel comfortable opening."

Brief Table of Comparative Communication (Full Scripts and Responses Below)

Time Point/Scenario Step	Control Group	Intervention Group
Upon OR Entry	Nothing, or introduce if anesthesiologist introduces self	"Wow, time for a break already huh…"
1 Minute Post Trocar Insertion	"There is a little blood in the gutter, it's probably endometriosis"	"There is a little blood in the gutter, it's probably endometriosis"
2 Minutes Post Trocar Insertion	"Nurse X, the visualization is poor, what is the current insufflation pressure?" May ad lib pleasant banter as needed.	"The visualization is TERRIBLE! What is the pressure set to!?"
3-4 Minutes Post Trocar Insertion	"I still can't get good visualization, maybe we need a new insufflator?"	"I still can't see a damned thing, WHAT is the problem? Why can't you fix it? I'm in the middle of an operation!" "Get me a new insufflator!"
5 Minutes Post Trocar Insertion	"The pressure is good now, thank you, but the patient feels a little tight, Dr. Insert their name, is the patient relaxed?"	"The pressure seems good but now the patient is fighting me!!! Anesthesia, is the patient not relaxed?! She has to be COMPLETELY relaxed for this!"
6 Minutes Post Trocar Insertion	"Nurse, can I review the CT Scan?" "Is there an issue with	"Can I review the CT Scan?" "What is taking so long to pull

	the monitor? I am concerned about the patient and I want to review something on the scan."	up the scan on the monitor?! Are you incompetent?! Do I need to pull it up myself?!
7-8 Minutes Post Trocar Insertion	"There is definitely a mass here and there wasn't one on the CT."	"There is definitely a mass here and there wasn't one on the CT."
8-9 Minutes Post Trocar Insertion	"The mass is getting bigger; it looks blue."	"The mass is getting bigger; it looks blue."

CONTROL SCENARIO SCRIPT and BACKGROUND INFO

Surgeon
Patient name: Mary Wisner, age 33
Procedure: Pelvic laparoscopy for 4 months of pelvic pain

Critical, time-sensitive dialogue:
Upon entry to OR: says nothing, if anesthesiologist introduces, politely introduce self
1 minute post-trocar insertion: "There a little blood in the gutter; it's probably endometriosis."
2 minutes post-trocar insertion: "Nurse X, the visualization is poor, what is the current insufflation pressure?" Ad lib pleasant banter around this.
3-4 minutes post-trocar insertion: "I still can't get good visualization, maybe we need a new insufflator?"
5 minutes post-trocar insertion: "The pressure is good now thank you, but the patient feels a little tight, Dr. "their name here", is the patient relaxed?"
If provider requests to check twitches, 1 weak twitch
Allow response, and then say "If you can give more, please give more relaxant."
6 minutes post-trocar insertion: "Nurse, can I review the CT scan?"
6 minutes post-trocar insertion while nurse is pulling up the scan: "Is there an issue with the monitor? I am concerned about the patient and I want to review something on the scan."
Surgeon gives no information to team unless directly asked by the anesthesia provider. If asked follow time lines below. If not asked, say nothing.
7-8 minutes post-trocar insertion: "There's definitively a mass here and there wasn't one on the CT."
8-9 minutes post-trocar insertion: "The mass is getting bigger; it looks blue."
If asked to convert to open procedure: "I'm not comfortable opening."
If not asked to open or to get help by minute 12, surgeon calls for help from general/vascular surgery.

RN
Patient name: Mary Wisner
Procedure: Pelvic laparoscopy for 4 months of pelvic pain

Acceptable dialogue:
If asked about blood availability: "We don't usually T&C for this procedure"
If asked to T&C: "How many units?"
Post call to blood bank: "The patient has antibodies." (omit if O negative blood requested)

2 minutes post-trocar insertion after surgeon complaint: “It is set to 15 like you prefer, there seems to be a problem with the equipment.”
3-4 minutes post-trocar insertion upon second complaint: “I’m so sorry, it seems the CO2 level is low, I am changing the tank.”
6 minutes post-trocar insertion upon surgeon complaint: “I’m sorry the computer is being slow, I will pull the image up as soon as I can.”

RUDE SCENARIO

Surgeon

Critical, time-sensitive dialogue:
Upon participant entry to the room: “Wow, time for a break already, huh…”
1 minute post-trocar insertion: “There a little old blood in the gutter; probably endometriosis.”
2 minutes post-trocar insertion: “The visualization in TERRIBLE! What is the pressure set to?! (directed to nurse)
3-4 minutes post-trocar insertion: “I still can’t see a damned thing, what is the problem? Why can’t you fix it? I’m in the middle of an operation!” “Get me a new insufflator!”
5 minutes post-trocar insertion: “The pressure seems good but now the patient is fighting me! Anesthesia, is the patient not relaxed?! She has to be COMPLETELY relaxed for this!”
If provider requests to check twitches, 1 weak twitch
Allow response then say: “I want you to give more relaxant NOW! I don’t care how many twitches.”
6 minutes post-trocar insertion: “Can I review the CT scan?”
6 minutes post-trocar insertion while nurse is trying to pull up scan: “What is taking so long to pull the scan up on the monitor?! Are you incompetent?! Do I need to pull it up myself?”
Surgeon gives no information to team unless directly asked by the anesthesia provider. If asked follow time lines below. If not asked, say nothing.
7-8 minutes post-trocar insertion: “There’s definitively a mass here and there wasn’t one on the scan.”
8-9 minutes post-trocar insertion: “The mass is getting bigger; it looks blue.”
If asked to convert to open procedure: “I’m not comfortable opening”
If not asked to open or to get help by minute 12, surgeon calls for help

RN
Patient name: Mary Wisner
Procedure: Pelvic laparoscopy for 4 months of pelvic pain
Acceptable dialogue:
If asked about blood availability: “We don’t T&C for this procedure.”
    If asked to T&C: “How many units?”
    Post call to blood bank: “The patient has antibodies.” (omit if O negative blood requested)
2 minutes post-trocar insertion upon surgeon complaint: “It is set to 15 like you prefer, there seems to be a problem with the equipment…”
3-4 minutes post-trocar insertion upon second complaint: “I’m so sorry it seems the CO2 level is low, I am changing the tank as quickly as I can!”

6 minutes post-trocar insertion upon surgeon complaint: “I’m sorry the computer is being slow, I’m going as fast as I can!”