



Canadian Surgical Technologies and Advanced Robotics
London Health Sciences Centre

Simulation Program Development Template: (Used for Manikin, Task Trainer and Standardized Patient Simulations)

| | |
|--------------------------|-------------|
| Developer Name: | Department: |
| Simulation Program Name: | Date: |

Section 4: Roles

List all roles required for the simulation including both the learner roles and supporting roles.

| Role | Played by learner, instructor or confederate? | Role | Played by learner, instructor or confederate? |
|---------|---|------|---|
| Patient | | | |
| | | | |
| | | | |
| | | | |

Simulated Patients or Confederates: Information on behaviors, emotional tone, and what cues are permitted should be clearly communicated for each role outside of the learners. A script may be created from Simulation Scenario document.

Will you require simulated patients for this scenario?

| | |
|--------------------------|--|
| <input type="checkbox"/> | Yes, we will need CSTAR to coordinate this |
| <input type="checkbox"/> | Yes, we will recruit our own |
| <input type="checkbox"/> | Not required |

Who will play the role of confederates? Will it be other learners, other HC professionals, “actors”?

How will you ensure the confederates are properly prepared?

What specific information will need to be shared with confederates? (Person, Learning Activity, Context)

Section 5: Equipment and Supporting Objects

Didactic:

Indicate the Audio/Visual Equipment Required for this Education Session:

| | |
|--------------------------|---|
| <input type="checkbox"/> | Computer presentation (PowerPoint, etc) |
| <input type="checkbox"/> | Videoconferencing |
| <input type="checkbox"/> | Video Recording |
| <input type="checkbox"/> | Audience Response System (iClicker) |
| <input type="checkbox"/> | None required |
| <input type="checkbox"/> | Other... |

Simulation:

Setting / Environment

| | | | |
|--------------------------|----------------|--------------------------|-----------------------|
| <input type="checkbox"/> | Emergency Room | <input type="checkbox"/> | Medical-Surgical Unit |
| <input type="checkbox"/> | ICU | <input type="checkbox"/> | Pediatric Unit |
| <input type="checkbox"/> | OR | <input type="checkbox"/> | Maternity Unit |
| <input type="checkbox"/> | PACU | <input type="checkbox"/> | Outpatient Clinic |
| <input type="checkbox"/> | Other: | | |

Fidelity (choose all that apply to this simulation):

| <input type="checkbox"/> | High fidelity mannequins | <input type="checkbox"/> | Task trainers |
|--------------------------|--------------------------|--------------------------|-----------------|
| <input type="checkbox"/> | SimMan 3G | <input type="checkbox"/> | IV arms |
| <input type="checkbox"/> | SimMan 3G (2) | <input type="checkbox"/> | central line |
| <input type="checkbox"/> | SimMom | <input type="checkbox"/> | airway model |
| <input type="checkbox"/> | Sim Junior | <input type="checkbox"/> | lumbar puncture |
| <input type="checkbox"/> | SimBaby | <input type="checkbox"/> | trauma man |

Recommended mode for Simulator: (i.e. manual, preprogrammed, etc.)

Other Props Required:

| Equipment Attached to Manikin/Simulated Patient: | Equipment Available in Room: |
|---|--|
| ID band | WOW cart |
| IV tubing with primary line fluids running at __mL/hr | Ultrasound |
| Secondary IV line running at __mL/hr | Crash cart with airway devices and emergency medications |
| IVPB with _____ running at mL/hr | Defibrillator/pacer |
| IV pump | Anaesthesia Machine |
| PCA pump | Suction |
| Foley catheter with __mL output | O2 delivery device (type) |
| Oxygen | Foley kit |
| Monitors attached (see below) | Straight catheter kit |
| Other: | Incentive spirometer |
| Monitors Required: | Fluids |
| Non-Invasive BP Cuff | IV start kit |
| Arterial Line | IV tubing |
| 5 lead EKG | IVPB tubing |
| Thermometer | IV pump |
| Pulse Oximeter | Feeding pump |
| Other: | Other: |

Supporting files (Diagnostics, EKG, Echo, assessment handouts, etc.):

| File: | Saved to: |
|-------|-----------|
| | |
| | |

Section 6: Pre-Brief

Pre-briefing

During this time, faculty/facilitators should identify expectations and orient participants to the environment, scenario, roles, time allotment, and objectives.

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|--|--|
| Introduction of all participants, learners and observers | |
| Review the objective of the day – formative vs. summative evaluation | |
| Description of the flow of the day (# of scenarios, timing, breaks and format) | |
| First time attendees are given a detailed orientation to mannequin and environment | |
| Discuss the roles and use of confederates | |
| Discuss realism limitations and expectations in context of a “fiction contract” | |
| Discuss the approach the instructors will be taking to performance – “we anticipate you will make mistakes”, “that is normal”, focus on learning from reflecting on our performance in the sim | |
| Explain how and when scenarios will be stopped – when learning objectives have been met | |
| Discuss how video will be used and what will happen to it after the session (written consent obtained) | |
| Prepare them for debrief | |
| Confidentiality discussed and written consent obtained | |

Important points to cover in pre-brief:

***include information from Step 3: Patient Information below to introduce each individual case**

Section 7: Scenario Planning Worksheets

SCENARIO:

Step 1: General Scenario Information

| | | |
|--------------------|-------------|-------------------------|
| Developer Name: | Department: | |
| Case Name: | Date: | Target Duration (mins): |
| Intended Learners: | | |

| |
|---|
| Case Description (describe your patient as a case presentation-Information for Facilitator ONLY): |
|---|

Step 2: Learning Objectives

| |
|--|
| At the end of this scenario, participants will be able to: |
| 1) |
| 2) |
| 3) |
| 4) |

Step 3: Patient Information

| | | | | |
|---|------|---------|---------|---------|
| Patient Name: | Age: | Gender: | Weight: | Height: |
| Clinical Setting: | | | | |
| Case Description for Participants: <i>One to two paragraphs on pertinent patient and scenario information- this will be the background provided to the learner and should include location, physician/help availability, family present, etc.</i> | | | | |

| | |
|--------------------------------------|--|
| Complaint: | |
| Allergies: | |
| Medications: | |
| PMH: | |
| Last Meal: | |
| Events Leading to Current Condition: | |
| Temperature: | |
| Labs: | |

Step 4: Scenario Algorithm

Initial Mannequin Capabilities and Options (Please **BOLD** your selections and all category options can vary through the simulation)

| <u>Airway Options</u> | <u>Vocal Sounds:</u> | <u>Breath Sounds:</u> | <u>Breathing Pattern:</u> | <u>Circulation:</u> | <u>Heart Sounds:</u> |
|--|--|--|--|--|--|
| <ul style="list-style-type: none"> • Normal Airway • Tongue Edema, Obstruction • Pharyngeal Obstruction • Laryngospasm • Upper Airway Obstruction | <ul style="list-style-type: none"> • Moaning • Pressured speech • Calm (relaxed) • Agitated • Screaming in pain • Unresponsive | <ul style="list-style-type: none"> • Normal breathing • Wheeze • Rhonchi • Coarse Crackles • Fine Crackles • Stridor | <ul style="list-style-type: none"> • Normal • Seesaw • Agonal • Decreased BS bilaterally <p><u>Chest Rise:</u></p> <ul style="list-style-type: none"> • Normal • Shallow • Deep | <ul style="list-style-type: none"> • Normal Circulation • Weak Pulses • Absent Pulses (PEA) | <ul style="list-style-type: none"> • <u>Normal Heart Tones</u> • Early Systolic Murmur • Holosystolic Murmur • Diastolic Murmur • Continuous Gallop |

| State | Simulator Parameters (Bold which to display on Monitor) | Manikin/SP Actions and Patient Status | Learner Actions/ Expected Interventions: | May Use the Following Cues: |
|-----------------|---|---|--|---|
| Baseline | Vitals: ECG: HR: RR: BP: SpO2: ETCO2: Temp: Pt Condition: Other: | Verbal information provided by patient: Changes to Status: | | Role member providing cue: Cue: Trigger to move to next state: |
| | Vitals: ECG: HR: RR: BP: SpO2: ETCO2: Temp: | Verbal information provided by patient: Changes to Status: | | Role member providing cue: Cue: Trigger to move to next state: |
| | Vitals: ECG: HR: RR: BP: SpO2: ETCO2: Temp: | Verbal information provided by patient: Changes to Status: | | Role member providing cue: Cue: Trigger to move to next state: |

Step 5: Key Debriefing Points (recommend using the PEARLS model)

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|---|
| Amount of time for debrief: |
| Setting the Scene (state the goal of debrief): |
| Reactions (solicit initial reactions): |
| a. Description (develop shared understanding): What was actually going on with the patient? |
| <p>Analysis Use plus/delta, directed feedback or advocacy / inquiry for analysis of performance</p> <p>Team Work--Crisis Resource Management Elements – questions to aid in discussion</p> <p>a. Leadership: Was there a clear leader? Were roles clearly delineated? Did the leader delegate tasks appropriately?</p> <p>b. Communication Skills: Did the leader communicate effectively with the rest of the team? Did the leader listen to input from the team? Were clear instructions given regarding tasks? Was there closed loop communication? Did team members feel comfortable to speak up, ask for clarification if needed, express concerns or share ideas?</p> <p>c. Situational Awareness: Was there a shared mental model i.e. did everyone understand what was going on with the patient? Did team members continually re-assess and update each other as to the current state of the patient?</p> <p>d. Resource Utilization: Were all team members appropriately engaged in the activity? Did team members feel they could ask for help and get help with performing any assigned tasks? Was there need for more help from other specialties, consult services and were they engaged in a timely manner?</p> <p>Physiology – Medical Expert</p> <p>b. Use advocacy /inquiry to identify learner frame/ rationale for (insert intervention)</p> |
| Application / Summary: (identify takeaways) |