

Scenarios/SP Case Development

Policy

Simulation scenarios and SP cases will be developed and supported by best practices, the content expertise of faculty/staff instructor(s) and the expertise of our CSL simulation content experts, i.e. the Director of Simulation Education and Operations or the Director of Simulation for the CNHS or the Coordinator of Simulation for UVMHC Nursing Education and Research.

New Courses

1. 2-3 months prior to event, call CSL at 802-656-0748 or email helen.brunelle@med.uvm.edu. She will send you the Request for Simulation Services form. Fill out and return to her.
2. Once reviewed you be notified to schedule a planning meeting with:
 - a. nancy.lemieux@uvm.edu (CNHS) for a planning meeting
 - b. Cate.nicholas@uvm.edu (all other)
3. During this meeting, the faculty/staff instructor will:
 - a. Fill out the Simulation Planning Template which goes through the following steps.
 - i. Needs assessment or gap analysis
 - ii. Identify the learners/level of learners
 - iii. Finalize goals and objectives
 - iv. Finalize simulation educational strategy/methods
 - v. Select debriefing strategy/feedback: we refer to PEARLS debriefing tool
 - vi. Identify learner assessment tools (formative or summative): We refer to the literature as a source for cases, learner assessment, and program assessment tools. If found then we adapt them, if not we develop them.
 - vii. Select program evaluation tools: can be created by program or by using CSL Program Evaluation Template.
 - viii. Identify additional resources, such as equipment and or materials. If EHR is needed, we involve our EHR specialist (jeff.rector@med.uvm.edu) to assist with building cases in the EHR training environment.
 - ix. Determine if there will be media used to support the scenario, e.g. chest X-rays, CT scans, etc. If the instructor wishes to use media, then it must be provided to the simulation specialist at least 5 working days prior to the scheduled event (all campus and federal holidays are excluded). The preferable format for photo media is in .JPEG format. The preferred format for video media is .MPEG or .MPG or .MOV. Any media provided to the simulation

⁷ Khamis, NN, Satava, RM, Alnassar SA, and Kern (2015) DEA stepwise model for simulation based curriculum develop for clinical skills, a modification of the six step approach. Surg Endosc DOI 10.1007/soo464-015-4206

specialist less than 5 working days from the scheduled event cannot be guaranteed to be ready for use during the event.

- x. Determine debriefing method/feedback/ learner assessment
 - xi. Determine program evaluation process
 - xii. Determine faculty development that may be needed to prepare for teaching the course
 - xiii. Identify additional resources, such as equipment and or materials. If EHR is needed, we involve our EHR specialist (jeff.rector@med.uvm.edu) to assist with building cases in the EHR training environment.
- b. Secure the event date(s) with the simulation specialist responsible for all CSL scheduling (sarah.e.page@med.uvm.edu).
 - c. Secure the staffing for the event by discussing with the Simulation Specialist (sarah.e.page@med.uvm.edu) the need for simulation Specialists(s) and/or standardized patient(s). The simulation specialist will recruit simulation Specialists and the SP Educator (robert.bolyard@med.uvm.edu or shirley.mcadam@med.uvm.edu) will recruit SPs for the event. Any cost for event will be determined at this meeting.

SPs- \$25 (includes fringe) per hour- minimum hours- 2 hours training plus 1 hour (30 minutes pre and post event) plus time for event. SPs are guaranteed these hours when they agree to participate. If event goes over and SPs agree to stay, additional time will be charged at 15 minute increments.

Sim Tech- \$25 (includes fringe) will be hired as needed for events. Minimum hours 2 hours of training plus 1 hour (30 minute pre and post) plus time for event. Sim Specialists are guaranteed these hours when they agree to participate. If event goes over, Sim Tech will be paid for additional time at 15 minute increments.

Invoice will be forwarded to faculty for approval prior to session. Faculty sign and return to Helen Brunelle.

- 4. Arrange a follow up meeting with the Senior Simulation Specialist (sarah.e.page@med.uvm.edu) and/or SP Educator (robert.bolyard@med.uvm.edu or shirley.mcadam@med.uvm.edu) to review scenario case or SP case.
- 5. Three to 7 days prior to event:
 - a. SP Event:
 - i. Meet with SPs and SP Educator to
 - ii. Describe learning objectives, expected outcomes of case
 - iii. Discuss level of the learner
 - iv. Discuss time commitment for SP and confirm their commitment
 - v. Review case
 - 1. Provide description of the patient---who this patient is (who is the SP representing)
 - 2. Read through together and answer any question SP has about the

case

3. Each SP will role play case with faculty
 4. Faculty will “titrate” performance. SP plays role to faculty specifications
 - vi. Identify SP rules of engagement with learner (the ways in which the SP ought to react or respond to student/learner actions, behaviors)
 - vii. Review possible unexpected student/learner actions, behaviors (i.e. nervous laughing; freezing)
 - viii. Review Fiction Contract, its meaning for all involved—the SP is asked to remain in character during simulation
 - ix. Review procedure for scenario in which SP provides feedback
 1. Provide and review SP feedback checklist (checklist should be specific)
 2. SP comes out of patient characterization at end of simulation; is introduced to the student as an SP; provides feedback based on checklist
 3. If SP does not provide feedback they should remain in character after simulation has ended until student and faculty exit room.
 - b. For SIM Event-Rehearsal (“dry-run”).
6. Day of go live event:
- a. Arrive 30 minute prior to meet with SPs and or SIM Team
 - b. Review course objectives, level of learner and review the case.
 - c. During SIM provide just in time feedback to SP and or SIM team to correct if needed
 - d. Stay 30 minutes after event to debrief SPs/CSL staff post event
 - e. Learners complete the program specific program evaluation or the CSL Program Evaluation Form. CSL administrative assistant tallies all of the Likert item responses from the CSL Program Evaluation Forms, collates the written feedback and forwards the evaluation summary to the Director Simulation Education and Operations.
7. Within in 2 weeks post event:
- a. CSL administrative assistant tallies all of the Likert item responses from the CSL Program Evaluation Forms, collates the written feedback and forwards the evaluation summary to the Director Simulation Education and Operations.
 - b. Schedule a debriefing meeting with the CSL team through helen.brunelle@uvm.edu to make changes based on feedback from the learners, faculty/staff instructor and CSL staff. This is an ongoing quality improvement process.

Existing or Reoccurring Courses

Once a course had been run several times and examined using ongoing quality improvement, there is less need for oversight.

1. The faculty/staff instructor contacts the CSL scheduler (sarah.e.page@med.uvm.edu) to secure dates, times, rooms and identify the staffing needs.
2. The faculty/staff instructor contacts the SP Educator assigned to them and/or the Senior Simulation Specialist to make any changes required to the case or scenario. The SP Educator or Simulation Specialist will consult with the Director of Simulation Education and Operations as needed.
3. Cost determined and signed invoice returned.
4. The course runs and program evaluations are completed.
5. Debrief meeting is held at the end of a course for all faculty/staff instructor(s) and CSL staff to review learner evaluations and their own reflections for ongoing quality control.

Authorship

Any scenario created will list the primary author first. Additional authorship additions and/or co- authors will be dependent on level of added work/value to the scenario.

Scenarios for the CSL:

First author – scenario author

Last author – Staff of the Clinical Simulation Laboratory at UVM

Limitations of SP program

We cannot specifically recruit individuals for whom English is not a second language including blind/deaf individuals, nor can we recruit medical translators. Please refer to Interpreting and Translation Services at the University of Vermont Medical Services for assistance. <https://www.uvmhealth.org/medcenter/pages/patients-and-visitors/patients/assistance/translation-services.aspx>

Course and faculty/staff instructor evaluation by the participants

There are several different course and faculty evaluations methods and each discipline or institution will determine which methods to use:

UVM LCOM:

- Simulation based education teaching programs are evaluated by learners at the conclusion of the course in which they are imbedded. Faculty course/clerkship directors meet with the appropriate CSL staff before, during and at the conclusion of the course to plan, adjust and respond to learner feedback for course design.
- CSE case checklists, accuracy of SP portrayal, and learner performance is monitored by the SPs, SPE and the CSL Systems and Assessment Coordinator.
- The Systems and Assessment Coordinator calculates grades and information about the case checklist performance (item analysis). This data is given to the SPE and the course/clerkship director. Decisions are made as to whether or not an item is dropped from the final scoring process. SPs provide written feedback to the learners regarding items not done, or not done correctly, along with a global statement of performance based on provided criteria.
- The Director of Simulation Education and Operations reviews the final grades prior to them being sent to the course/clerkship director. Those learners who do not meet the standards will have their video reviewed and checklist confirmed by the SPE prior to releasing results. Memos are prepared to send to the learner and the course/clerkship director addressing the performance gap with recommendations for remediation. The final decision regarding the passing or failing of the CSE rests with the course/clerkship director in consultation with the Director of Simulation Education and Operations.
- The SP Educator address portrayal and accuracy during training and, sometime, in real time during the CSE. The SPE reviews all the SP written Comments to

learners before they are released. The SPE edits Comments, as needed, to insure that the content is learner-centered. The SPE educates SPs on their written Comments, as needed.

CNHS simulation based education programs are evaluated by the learners during and after the conclusion of the course in which they are offered. CNHS course directors consult, and work with, the CSL staff to make appropriate adjustment(s) to the content.

Medical Center:

- Nursing programs are evaluated at the conclusion of the activity by the Coordinator of Simulation for Nursing Education and Research who evaluates and provides feedback for the CSL staff.
- Residency/fellows programs are evaluated by the instructor and/or course directors and feedback is provided to the CSL staff as needed.
- ATLS, BLS, PALS and NPR are evaluated by the trainer/s in each case.
- Recruitment, fund raising and alumni events: each entity evaluates the program and meets with the CSL staff as needed.

Outside users: Each program evaluates the offering and consults with CSL staff as needed.

CSL Evaluation Process

Policy

All participants have the opportunity to provide feedback to the faculty/staff instructors and the CSL staff regarding the simulation session through the CSL Program Evaluation Tool

Procedures

The Director of Simulation Education and Operations has developed a template that can be easily adapted to any program offering. The template employs Kirkpatrick's 4 steps of program evaluation.⁸

The four steps of evaluation consist of:

Step 1: Reaction - How well did the learners like the learning process?

Step 2: Learning - What did they learn? (Did they meet the objectives for the session?)

Step 3: Behavior - What changes in performance might result from the learning?

Step 4: Results - What are the tangible results of the learning in terms of reduced cost, improved quality, increased production, efficiency, etc.

The faculty evaluation portion uses select elements from the short version of The Debriefing Assessment for Simulation in Healthcare (DASH©) which is designed to assist in evaluating and developing debriefing skills.

The template uses a Likert scale of 1 to 5, 5 being the best. They are asked to provide written feedback on how to improve this aspect of the activity.

⁸ Kirkpatrick, DL and Kirkpatrick JD. Evaluating Training Programs: the four levels. 3rd Ed. (2006) Barrett-Koehler San Francisco