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/fellowship 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:

1. **Step 1: Reaction** - How well did the learners like the learning process?
2. **Step 2: Learning** - What did they learn? (Did they meet the objectives for the session?)
3. **Step 3: Behavior** - What changes in performance might result from the learning?
4. **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.

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\(^8\) Kirkpatrick, DL and Kirkpatrick JD. Evaluating Training Programs: the four levels. 3rd Ed. (2006) Barrett-Koehler San Francisco
Optional during Step 4 we ask each participant to create a non-anonymous action plan in which they are asked to:

- identify which attributes they would like to sustain and how they plan to accomplish this
- Identify which performance gaps they would like to eliminate and their plan for improvement. We keep a copy and email it back to them in 3-6 months to see how they are doing with their plan.

Program and Faculty Evaluation

- The template is adapted to the activity and the faculty/staff instructors.
- The evaluation form is handed to participants at the end of the activity.
- The learners must complete it in order to get recognition for their participation.
- The CSL administrative assistant tallies all of the Likert item responses, collates the written feedback and forwards the evaluation summary to the Director Simulation Education and Operations.
- A debriefing meeting is arranged following the first session to make changes based on feedback from learners, faculty and CSL staff. This is an ongoing quality improvement process.
Debriefing the Debriefers:

Debriefing with the participants after a simulation is a crucial step in consolidating lessons learned from simulations. The Debriefing Assessment for Simulation in Healthcare (DASH©) assists in debriefing the debriefer in order to increase their expertise. The DASH© is designed to allow assessment of debriefings from a wide variety of disciplines and courses, varying numbers of participants, a wide range of educational objectives, and various physical and time constraints. The DASH© was created and validated at the Center for Medical Simulation (CMS), Boston, MA.

- DASH Elements and Dimensions
- Establishes an engaging learning environment
- Clarifies course objectives, environment, confidentiality, roles, and expectations
- Establishes a “fiction contract” with participants & attends to logistic details & conveys a commitment to respecting learners and understanding their perspective
- Maintains an engaging learning environment
- Clarifies debriefing objectives, roles, and expectations
- Helps participants engage in a limited-realism context
- Conveys respect for learners and concern for their psychological safety
- Structures the debriefing in an organized way
- Encourages trainees to express their reactions and, if needed, orients them to what happened in the simulation, near the beginning
- Guides analysis of the trainees' performance during the middle of the session
- Collaborates with participants to summarize learning from the session near the end
- Provokes engaging discussions
- Uses concrete examples and outcomes as the basis for inquiry and discussion
- Reveals own reasoning and judgments
- Facilitates discussion through verbal and nonverbal techniques
- Uses video, replay, and review devices (if available)
- Recognizes and manages the upset participant
- Identifies and explores performance gaps
- Provides feedback on performance
- Explores the source of the performance gap
- Helps trainees achieve or sustain good future performance
- Helps close the performance gap through discussion and teaching

- Demonstrates firm grasp of the subject
- Meets the important objectives of the session

The debriefer can request a peer debriefing session or a session with the Director of Simulation Education and Operations. The observed session can be in real time or by video. The debriefer can have students assess them and/or use the self-assessment DASH®. All of these DASH® versions are on the CMS website, https://harvardmedsim.org/debriefing-assessment-simulation-healthcare.php

DASH – Rater Version is a highly reliable instrument designed for use by trained raters. CMS offers a webinar, DASH Rater Training Workshop, several times per year. People who want to become trained DASH raters should be experienced debriefers.

DASH – Student Version is designed for students to rate their instructors on the quality of a debriefing. There are two forms available for the DASH-SV:

**DASH – SV Long Form** asks students to rate instructors on the six DASH Elements and the Behaviors associated with each Element. There are a total of 23 Behaviors associated with the Elements. The DASH-SV Long Form takes about 5-7 minutes to Complete and provides significant diagnostic information to the instructor.

**DASH – SV Short Form** asks students to rate instructors on the six DASH Elements. It can be answered in less than 3 minutes but is not as diagnostic as the longer student form.

DASH – Instructor Version is designed to allow an instructor to self-assess. There are two forms available for the DASH-IV:

**DASH – IV Long Form** asks instructors to rate the six DASH Elements and the Behaviors associated with each Element. There are a total of 23 Behaviors associated with the 6 Elements. The DASH-IV Long Form takes about 5-7 minutes to Complete and provides significant diagnostic information to the instructor.

**DASH – IV Short Form** asks instructors to rate on the six DASH Elements. It can be answered in less than 3 minutes but is not as diagnostic as the longer instructor form.

Our goal is to have 2-3 experienced debriefers complete the DASH Rater Training Workshop by the end of 2015 and to have every faculty/staff instructor Complete at least one self-assessment and to have either a peer assessment or student assessment completed yearly.
Debriefing Assessment for Simulation in Healthcare (DASH) Instructor Version

Directions: Please provide a self-assessment of your performance for the introduction and debriefing in this simulation-based exercise. Use the following rating scale to give a score to each of the six "Elements." For each Element, component behaviors are given that would indicate positive performance in that Element. Do your best to rate your overall effectiveness for the whole Element guided by the behaviors that define it. If a listed behavior is not applicable (e.g., how you handled upset people if no one got upset), just ignore it and don’t let that influence your evaluation. You may have done some things well and some things not so well within each Element. The Element rating is your overall impression of how well you executed that particular Element. Element 1 assesses the introduction at the beginning of the simulation-based exercise, Elements 2 through 6 assess the debriefing.

Rating Scale

<table>
<thead>
<tr>
<th>Rating</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptor</td>
<td>Extremely Ineffective / Detrimental</td>
<td>Consistently Ineffective / Very Poor</td>
<td>Mostly Ineffective / Poor</td>
<td>Somewhat Effective / Average</td>
<td>Mostly Effective / Good</td>
<td>Consistently Effective / Very Good</td>
<td>Extremely Effective / Outstanding</td>
</tr>
</tbody>
</table>

Skip this element if you did not conduct an introduction.

Element 1: I set the stage for an engaging learning experience

- I introduced myself, described the simulation environment, what would be expected during the activity, and introduced the learning objectives, and clarified issues of confidentiality
- I explained the strengths and weaknesses of the simulation and what the participants could do to get the most out of simulated clinical experiences
- I attended to logistical details as necessary such as toilet location, food availability and schedule
- I stimulated the participants to share their thoughts and questions about the upcoming simulation and debriefing and reassured them that they wouldn’t be shamed or humiliated in the process

Element 2: I maintained an engaging context for learning

- I clarifed the purpose of the debriefing, what was expected of the participants, and my role (as the instructor) in the debriefing
- I acknowledged concerns about realism and helped the participants learn even though the case(s) were simulated
- I showed respect towards the participants
- I ensured the focus was on learning and not on making people feel bad about making mistakes

Element 3: I structured the debriefing in an organized way

- I guided the conversation such that it progressed logically rather than jumping around from point to point
- Near the beginning of the debriefing, I encouraged participants to share their genuine reactions to the case(s) and I took their remarks seriously
- In the middle, I helped the participants analyze actions and thought processes as we reviewed the case(s)
- At the end of the debriefing, there was a summary phase where I helped tie observations together and relate the case(s) to ways the participants could improve their future clinical practice

Element 4: I provoked in-depth discussions that led them to reflect on their performance

- I used concrete examples—not just abstract or generalized comments—to get participants to think about their performance
- My point of view was clear; I didn’t force participants to guess what I was thinking
- I listened and made people feel heard by trying to include everyone, paraphrasing, and using non-verbal actions like eye contact and nodding etc.
- I used video or recorded data to support analysis and learning
- If someone got upset during the debriefing, I was supportive and constructive in trying to help them deal with it

Element 5: I identified what they did well or poorly—and why

- I provided concrete feedback to participants on their performance or that of the team based on accurate statements of fact and my honest point of view
- I helped explore what participants were thinking or trying to accomplish at key moments

Element 6: I helped them see how to improve or how to sustain good performance

- I helped participants learn how to improve weak areas or how to repeat good performance
- I was knowledgeable and used that knowledge to help participants see how to perform well in the future
- I made sure we covered the most important topics

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