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Nursing education programs face an increasing challenge: how to help students transition to practice as the number of clinical placements shrink and the costs of placements rise. Many nursing schools are looking to simulation-based education to help bridge this gap (Fey and Jenkins, 2015, Rizzolo, 2013). When simulation complements or substitutes for traditional clinical placements, the quality of educator's debriefing skills is a key factor to leverage the power of simulation (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014). We focus on a key driver of nursing educator debriefing excellence: using a debriefing standard to guide skills building and assess faculty competencies.

How does one "connect the dots" from educator debriefing standards to student clinical practice? Standards and guidelines for high-impact debriefing create a pathway to improve trainees' hands-on, applied learning using simulation-based education. Well-designed hands-on, simulation-based education, in turn, standardizes and accelerates acquisition of applied skills, instead of relying on time and chance to ensure that trainees are exposed to needed material (Gordon, 2012, Issenberg et al., 2005, McGaghie et al., 2014, McGaghie et al., 2010). Simulation plus debriefing provides standardized exposure with accelerated learning to systematically bridge the gap from theory and didactics to practice.

The Role of Debriefing in Simulation-Based Education

While simulation itself often seems like "the main event," postsimulation debriefing plays a crucial role in helping learners sustain good or improve weak performance (Dreifuerst, 2009, Eppich et al., 2015, Hunt et al., 2014). Importantly, successful debriefing not only helps transform learners' actions but helps learners transform perspectives and cognitive frameworks (Morse, 2015, Rudolph et al., 2006). Transforming existing assumptions, knowledge, and other cognitive frames is what helps nursing students provide improved patient care (Kolb, 1984, Palaganas et al., 2016, Schön, 1987). In contrast, poorly executed debriefings—whether in simulation, or across the curriculum—at best, leave learners' thinking and future actions unchanged, and, at worst, can demoralize learners or deprive them of learning (Archer, 2010, Baron, 1988).

To ensure that simulation is a robust substitute for clinical placements, educator competence in debriefing is important; moreover, educator excellence can be transformational for learners. Three recent policy statements underscore the quality of debriefing as a crucial factor in the impact of simulation-based nursing education. A National Council of State Boards of Nursing (NCSBN) study (Hayden et al., 2014), a National League of Nursing vision statement on debriefing across the curriculum (National League for Nursing [NLN] Board of Governors, 2015), and standards set by the

International Nursing Association for Clinical Simulation and Learning (INACSL; Decker et al., 2013) all draw connections between well-structured, theory-based debriefing and learning outcomes.

Improving Educator Competence in Debriefing: Barriers

While there is increasing incentive to enhance debriefing in simulation-based nursing education, two barriers make it difficult to develop a cadre of skilled debriefers: knowledge around what makes a debriefing "good" and how to meet these standards.

One barrier is balancing the various and sometimes competing needs that a debriefing entails. Instructors ask themselves: Is debriefing feedback or coaching? What is the role of this discussion? How much, if any, didactic teaching should take place? Should it be instructor-guided or primarily learner-centered? In simulation, learners are typically expected to demonstrate a number of clinical skills and to make a wider range of nursing decisions. In the context of multiple skills and decisions demonstrated or not demonstrated, what objectives are important to cover? Is debriefing undergraduates and preclinical students different from graduate and practicing nurses? While guidance on these questions is emerging (Eppich and Cheng, 2015, Jeffries et al., 2015), it has been difficult for individual instructors or their simulation programs to know what knowledge, skills, and attitudes should be developed to enhance the capacity of learning in debriefing (Cheng et al., 2015).

The second barrier is uncertainty on how specifically to meet standards of debriefing, such as those recently published by the INACSL (Decker et al., 2013). It is challenging for programs to focus simulation-based educator development efforts without specific, actionable examples of what effective debriefing structure, behaviors, phrasing might be (Fey & Jenkins, 2015). While general standards are very helpful, aiming for specific target behaviors is a key component of deliberate practice (Ericsson et al., 1993, Hunt et al., 2014) needed to achieve competence, excellence, or mastery of any skill, including debriefing.

Improving Educator Competence in Debriefing: One Solution

We believe that systematic, valid, and reliable standards for developing, critiquing, and assessing debriefing skills can overcome confusion about "what is debriefing, anyway?" and set concrete debriefing skill targets which an educator can work toward. The first and senior author (J.R., R.S.) have developed one such standard called the Debriefing Assessment for Simulation in Healthcare (DASH; Brett-Fleegler et al., 2012). The DASH was used in the recent NCSBN study of simulation efficacy (Hayden et al., 2014) and many other studies.

The DASH is a behaviorally anchored rating scale that can provide:

1) A research and theory-based standard to assess educator competence in debriefing that can be applied to any style of debriefing.
2) A developmental tool to guide debriefing skill acquisition via self- and peer-assessment.

Using the Debriefing Assessment for Simulation in Healthcare to Improve Debriefing: Many Paths

How, specifically, can the DASH help simulation educators assess or develop their debriefing skills? The DASH enumerates strong and weak debriefing practices. Different versions of the DASH allow educators to self-assess, provide peer-to-peer feedback, expert assessments, or allow for student assessments of debriefings. Because the DASH highlights different elements of debriefing, peer groups of educators or formal educator development programs can select elements of debriefing to work on.

Here are five examples of the DASH being used to guide or assess debriefing practice in a way that allows faculty to support practice readiness in their students:

MF: Faculty Development

The DASH is used at the University of Maryland School of Nursing as part of a comprehensive development plan for simulation faculty. During the orientation period, new simulation faculty are familiarized with the elements and dimensions of the DASH in conjunction with attending a debriefing workshop and work with an experienced mentor. During the remainder of the orientation period, the DASH is used to provide formative feedback to new faculty until they are ready to debrief independently. Beyond the orientation period, the DASH is used to provide formative feedback to all simulation faculty. Each faculty member videotapes a debriefing at least once per year. Several experienced simulation faculty then review the video with that person and use the DASH to provide formative feedback.

Table 1. DASH Elements and Dimensions

Element	Dimensions
1. Establishes an engaging learning environment (prebriefing).	• Clarifies course objectives, environment, confidentiality, roles, and expectations. • Establishes a "fiction contract" with participants. • Attends to logistical details. • Conveys a commitment to respecting learners and understanding their perspective.
2. 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.
3. Structures the debriefing in an organized way.	• Encourages learners to express their reactions and, if needed, orients them to what happened in the simulation, near the beginning. • Guides analysis of the learners' performance during the middle of the session. • Collaborates with participants to summarize learning from the session near the end.
4. 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.
5. Identifies and explores performance gaps.	· Provides feedback on performance.
	· Explores the source of the performance gap.
6. Helps learners 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.

CJM: Linking Debriefing Quality to Learning Outcomes

Since simulation-based learning activities are resource and educator intensive, they need to be used wisely. As the former director of the acute care nurse practitioner program at Drexel University School of Nursing and Health Professions, I realized that one potent focus of such activities is "shaking up" and transforming taken-for-granted thought patterns such as assumptions about scope of practice. In particular, I was interested in how to foster transformation of an experienced nurses' perspective to now include medical decision-making. To test this idea, I conducted a study using the DASH to examine the link between debriefing quality and changes in taken-for-granted thought patterns among nurse practitioner students ([Morse, 2015](#)). The findings showed that reflective debriefing can inspire students new to the nurse practitioner scope of practice. We found that well-structured, theory-based debriefing was able to transform experienced nurses' standard thinking to help them jump to new levels of practice. Using the DASH to study this process formally reinforced the value of scaffolding my colleagues and me to debrief in ways that create transformative learning experiences.

JCP: Assessing Educational Program Quality and Continuous Debriefer Development

As a past Chief Operations Officer of Loma Linda University Medical Simulation Center, I advocated the use of the DASH self- and peer-assessment to improve the quality of our program. In our weekly meetings, we randomly picked one simulation to review, including the debriefing. The DASH-trained staff used the DASH-Rater Version (DASH-RV) tool to assess the quality of our program via assessment of debriefers (in this case, trained educators who used our center). We filed the written assessment in the educators' mailboxes as a written feedback. If time permitted, we also provided verbal feedback to the educator using the tool. Examining and discussing recorded debriefings allowed program staff to learn and discuss factors for good debriefing by assessing themselves and others.

Debriefing Assessment for Simulation in Healthcare (DASH) Facts

> **Goal**: To assess the quality of debriefings in health care simulation.
> **Foundation**: Drawn from theory and research on education, organizational behavior, psychology, and simulation in general; from international expert panel of debriefers; and from expert practical experience-based thousands of debriefings conducted by authors.
> **Assessment type**: Criterion referenced. The criteria describe domains of debriefing behaviors as six *Elements* each of which is defined by *Dimensions* that are further illustrated by example *Behaviors*.

Use: Applicable to assess a variety of debriefing styles and settings.

DASH family of instruments: DASH-Rater Version (for use by trained raters), DASH-Student Version (for use by students to assess their experience of an educator debriefing), and DASH-Instructor Version (for educator self-assessment). The DASH is available in German, French, Japanese with Spanish, Portuguese, and Arabic versions under development.

DASH "Sibling" Instrument: Feedback Assessment for Clinical Education (FACE©; to assess feedback conversations in the clinical context).

Availability: Additional information and access at www.harvardmedsim.org. Free with a Center for Medical Simulation copyright requirement to share any published use of the DASH via the DASH web page.

RO: Guiding Clinical Feedback: Feedback Assessment for Clinical Education

Integrating debriefing across a curriculum enhances reflective practice skills in learners (National League for Nursing (NLN) Board of Governors, 2015). "Debriefing" in clinical learning environments often takes the form of reflective feedback conversations where educators and learners identify and explore performance gaps and develop new pathways to improved practice. The DASH provides anchors in providing high-quality feedback to learners. To develop a robust tool for assessing reflective feedback conversations in clinical learning environments, I used the DASH as a starting point. The result is the Feedback Assessment for Clinical Education (FACE; Onello, 2015). Multidisciplinary research and international content experts informed the FACE structure and content. Parallel to the DASH, the FACE is a six-element, behaviorally anchored rating scale that applies principles of rigorous debriefing in the context of clinical feedback. It is both an assessment tool and a framework for educators to learn theory- and research-based, high-quality feedback behaviors.

Guidelines and regulations guiding debriefing quality

National Council of State Boards of Nursing Guidelines and International Nursing Association for Clinical Simulation and Learning Debriefing Standard

The National Council of State Boards of Nursing (NCSBN) recently published findings from the landmark National Simulation Study (Hayden et al., 2014). Findings indicated that up to 50% of simulated learning can effectively be substituted for traditional clinical experiences, under conditions similar to those in the study. For further clarification, the NCSBN recently released Simulation Guidelines for Prelicensure Nursing Programs (Alexander et al., 2015). In the guidelines, ensuring the competence of debriefing facilitators is addressed in several ways.

Since the publication of the National Simulation Study, several state Boards of Nursing have made recommendations about the use of simulation. For example, Florida (http://floridasnursing.gov/latest-news/chapter-2014-92-laws-of-florida-became-effective-on-july-1-2014/) and Maryland now allow up to 50% substitution, without specific guidelines beyond those recommended by the NCSBN. The Arizona State Board of Nursing has published an Advisory Opinion regarding the use of simulation in RN programs. The Advisory Opinion recommends that facilitators have formal immersion training and competency assessment specific to their roles. Congruent with the NCSBN Guidelines, the Arizona Advisory Opinion recommends that programs using simulation in place of traditional clinical experiences adopt

the International Nursing Association for Clinical Simulation and Learning (INACSL) Standards of Best Practice: Simulation.

The INACSL Standard VI: The Debriefing Process, Criteria 1 states that debriefing should be "Facilitated by a Person(s) Competent in the Process of Debriefing" ([Decker et al., 2013](#), p. S26). The Standard goes on to state that debriefers should have formal training and competence assessment. Competence should be assessed using an established instrument.

KTD: Using the DASH for 360° Feedback on Faculty Skills

The DASH-Student Version (DASH-SV) was developed to gather student feedback on the debriefing experience, specifically to identify the extent to which students perceive that the facilitator demonstrated the six elements of effective debriefing following simulation sessions. It has been used in several different ways. First, as a quality improvement measure of teaching and learning involving student feedback, an important yet often overlooked component. Using the DASH-SV, students assess the facilitator and how the debriefing impacted their own engagement and learning. Second, the DASH-SV data were used as a part of a 360-degree evaluation process since the DASH-RV and DASH-SV scales use the same six elements and effectiveness scale. Comparing the assessment of students and faculty peers provides insights from the different perspectives and encourages self-reflection. Because the DASH-RV and DASH-SV data can be shared with both groups of raters and the debriefing facilitator, students learn the value of peer evaluations as an important lifelong skill, and faculty learn how students perceive the debriefing experience. Finally, student assessment of debriefing using the DASH-SV can be used as the primary source of feedback when it is not possible to conduct peer review. Inter-rater reliability between the DASH-RV and DASH-SV has been consistently high in some contexts and data from each scale correlate well with each other.

RS: Instructor Certification at the Center for Medical Simulation

The Center for Medical Simulation in Boston provides simulation courses to interprofessional teams, discipline-specific groups, and simulation educators. Center for Medical Simulation faculty must be certified (view process www.harvardmedsim.org). Certification includes an array of experience and professional development requirements, as well as a summative assessment of a recorded debriefing that includes DASH ratings of four or above on all six DASH elements.

Future Directions

Our work and continued studies using the DASH have revealed many new pathways for the future of simulation-based learning, including serving as the skeleton for other related assessment tools (e.g., feedback in clinical contexts) and providing the structure for faculty development programs. As the most robust debriefing standard, many researchers and educators are using the DASH to explore many aspects of debriefing toward learning and as an integral part in simulation-based learning. The dimensions, in themselves, serve as research topics for future study.

References

Alexander et al., 2015. M. Alexander, C.F. Durham, J.I. Hooper, P.R. Jeffries, N. Goldman, S. Kardong-Edgren, ..., C. Tillman. **NCSBN simulation guidelines for prelicensure nursing programs.** Journal of Nursing Regulation, 6 (3) (2015), pp. 39-42

Archer, 2010. J.C. Archer. **State of the science in health professional education: Effective feedback.** Medical Education, 44 (1) (2010), pp. 101-108, 10.1111/j.1365-2923.2009.03546.x

Baron, 1988. R.A. Baron. **Negative effects of destructive criticism: Impact on conflict, self-efficacy, and task performance.** Journal of Applied Psychology, 73 (2) (1988), pp. 199-207

Brett-Fleegler et al., 2012. M. Brett-Fleegler, J. Rudolph, W. Eppich, M. Monuteaux, E. Fleegler, A. Cheng, R. Simon. **Debriefing assessment for simulation in healthcare: Development and psychometric properties.** Simulation in Healthcare, 7 (5) (2012), pp. 288-294, 10.1097/SIH.0b013e3182620228

Cheng et al., 2015. A. Cheng, V. Grant, P. Dieckmann, S. Arora, T. Robinson, W. Eppich. **Faculty development for simulation programs: Five issues for the future of debriefing training.** Simulation in Healthcare, 10 (4) (2015), pp. 217-222, 10.1097/SIH.0000000000000090

Decker et al., 2013. S. Decker, M. Fey, S. Sideras, S. Caballero, T. Boese, A.E. Franklin, ..., J.C. Borum. **Standards of best practice: Simulation standard VI: The debriefing process.** Clinical Simulation in Nursing, 9 (6) (2013), pp. S26-S29

Dreifuerst, 2009. K.T. Dreifuerst. **The essentials of debriefing in simulation learning: A concept analysis.** Nursing Education Perspectives, 30 (2) (2009), pp. 109-114

Eppich and Cheng, 2015. W.J. Eppich, A. Cheng. **Promoting excellence and reflective learning in simulation (PEARLS): Development and rationale for a blended approach to health care simulation debriefing.** Simulation in Healthcare, 10 (2) (2015), pp. 106-115, 10.1097/SIH.0000000000000072

Eppich et al., 2015. W.J. Eppich, E.A. Hunt, J.M. Duval-Arnould, V.J. Siddall, A. Cheng. **Structuring feedback and debriefing to achieve mastery learning goals.** Academic Medicine, 90 (11) (2015), pp. 1501-1508, 10.1097/ACM.0000000000000934

Ericsson et al., 1993. K.A. Ericsson, R.T. Krampe, C. Tesch-Romer. **The role of deliberate practice in the acquisition of expert performa.** Psychological Review, 100 (3) (1993), pp. 363-406

Fey and Jenkins, 2015. M.K. Fey, L.S. Jenkins. **Debriefing practices in nursing education programs: Results from a national study.** Nursing Education Perspectives, 36 (6) (2015), pp. 361-366

Gordon, 2012. J.A. Gordon. **As accessible as a book on a library shelf: The imperative of routine simulation in modern health care.** Chest, 141 (1) (2012), pp. 12-16, 10.1378/chest.11-0571

Hayden et al., 2014. J.K. Hayden, R.A. Smiley, M. Alexander, S. Kardong-Edgren, P.R. Jeffries. **The NCSBN National Simulation Study: A longitudinal, randomized, controlled study replacing clinical hours with simulation in prelicensure nursing education.** Journal of Nursing Regulation, 5 (2 supplement) (2014), pp. S1-S66

Hunt et al., 2014. E. Hunt, J.M. Duval-Arnould, K. Nelson-McMillan, J. Bradshaw, M. Diener-West, J. Perretta, N. Shilkofski. **Pediatric resident skills improve after "rapid cycle deliberate practice" training.** Resuscitation, 85 (7) (2014), pp. 945-951

Issenberg et al., 2005. B.S. Issenberg, W.M. McGaghie, E.R. Petrusa, D.L. Gordon, R.J. Scalese. **Features and uses of high-fidelity medical simulation that lead to effective learning: A BEME systematic review.** Medical Teacher, 27 (1) (2005), pp. 10-28

Jeffries et al., 2015. P.R. Jeffries, K.T. Dreifuerst, S. Kardong-Edgren, J. Hayden. **Faculty development when initiating simulation programs: Lessons learned from the National Simulation Study.** Journal of Nursing Regulation, 5 (4) (2015), pp. 17-23

Kolb, 1984. D.A. Kolb. **Experiential learning: Experience as the source of learning and development.** Prentice-Hall, Englewood Cliffs, NJ (1984)

McGaghie et al., 2014. W.C. McGaghie, S.B. Issenberg, J.H. Barsuk, D.B. Wayne. **A critical review of simulation-based mastery learning with translational outcomes.** Medical Education, 48 (4) (2014), pp. 375-385, 10.1111/medu.12391

McGaghie et al., 2010. W.C. McGaghie, S.B. Issenberg, E.R. Petrusa, R.J. Scalese. **A critical review of simulation-based medical education research: 2003-2009.** Medical Education, 44 (1) (2010), pp. 50-63, 10.1111/j.1365-2923.2009.03547.x

Morse, 2015. K.J. Morse. **Structured model of debriefing on perspective transformation for NP students.** Clinical Simulation in Nursing, 11 (3) (2015), pp. 172-179 http://dx.doi.org/10.1016/j.ecns.2015.01.001

National League for Nursing (NLN) Board of Governors, 2015. National League for Nursing (NLN) Board of Governors. **Debriefing across the curriculum.** National League for Nursing, Washington, DC (2015)

Onello, 2015. R. Onello. **Assessing the quality of feedback during clinical learning: Development of the Feedback Assessment for Clinical Education (FACE).** (PhD) University of Maryland, Baltimore, MD, USA (2015). Retrieved from http://hdl.handle.net/10713/4617

Palaganas et al., 2016. J. Palaganas, M. Fey, R. Simon. **Structured debriefing in simulation-based education.** Advanced Critical Care, 27 (1) (2016), pp. 78-85

Rizzolo, 2013. M.A. Rizzolo. **Clinical simulations in nursing education: Advanced concepts, trends, and opportunities.** P. Jeffries (Ed.), History and evolution of simulations: from oranges to avatars, Lippencott, Williams and Wilkins, Philadelphia, PA (2013)

Rudolph et al., 2006. J.W. Rudolph, R. Simon, R.L. Dufresne, D.B. Raemer. **There's no such thing as a "non-judgmental" debriefing: A theory and method for debriefing with good judgment.** Simulation in Healthcare, 1 (1) (2006), pp. 49-55

Schön, 1987. D. Schön. **Educating the reflective practitioner: Toward a new design for teaching and learning in the professions.** Jossey-Bass, San Francisco (1987)