

# Expanding our reach

# To our simulation community

The UW Health Clinical Simulation Program is pleased to present its annual update for fiscal year 2024. The past year has been marked by significant growth, innovation and recognition.

Our program experienced a 20% increase from the previous year in educational hours delivered. This growth reflects the program's expanding reach—serving a diverse range of learners—including faculty, residents, fellows, medical students, nurses and other health care professionals. The team continues to develop new programs that extend across UW Health and the University of Wisconsin School of Medicine and Public Health.

Our research enterprise continues to flourish, providing support for numerous scholarly projects and securing research grants. The annual Simulation Days conference showcased several innovative abstracts stemming from research supported by our team. We continue to promote our work at regional, national and international conferences through podium presentations, posters and workshops.

In 2023, the Clinical Simulation Program achieved a significant milestone by receiving full accreditation from the Society for Simulation in Healthcare. Additionally, the program was reaccredited by the American College of Surgeons-Accredited Education Institute (ACS-AEI). These accreditations represent external validation of our commitment to providing high quality education and research activities.

Through our dedication to excellence in experiential training, innovation and collaborative partnerships, the Clinical Simulation Program continues to grow and meet the evolving needs of patients, providers and staff. We look forward to maintaining this trajectory of growth and service in the years to come.

Sincerely,



Sushant Srinivasan, MD, MSc, MHPE,  
CHSE, FAAP  
Medical Director  
UW Health Simulation Program



Shannon DiMarco, MSHS, CHSOS  
Administrative Director  
UW Health Simulation Program

## Big picture statistics

Total learner  
hours

**19,500+**

Total education  
hours

**4,400+**

Number of  
events

**875+**

# Enhance learner experience

## Education opportunities

To improve education quality, the Clinical Simulation Program offers online modules and in-person courses for facilitators to learn about simulation modalities, theory and practice.

- **Simulation Facilitator Orientation Module:** introductory module provides an overview of the Clinical Simulation Program and essential components of simulation education, showcasing the capabilities available to UW Health and the UW School of Medicine and Public Health communities; available online
- **Simulation Facilitation Course/Module:** covers best practices in pre-briefing, facilitation and debriefing; available both online and in person
- **Simulation Debriefing Module and Course:** focuses on effective debriefing to support psychologically safe learning environments and includes techniques for managing challenging debriefing situations; available in person

- **Simulation Curriculum Development Module:** helps facilitators understand curriculum creation steps based on Kern's Six Steps for Curriculum Development with a focus on simulation education; available online

## Expanded high technology equipment

Our program enhances learner experiences by matching simulation equipment with learning objectives and updating simulators to reflect accurate patient care. In the past year, we expanded our resources to include:

- **Anne:** a female high technology manikin with diverse skin tones and interchangeable accessories to represent a range of ages
- **3G Plus:** a high technology manikin representing adult patients with medium skin tones, compatible with real patient monitoring equipment
- **Ultrasound Mentor:** expanded module catalog for broader departmental use



“I want to thank the Simulation Program team for their incredible work hosting all our pediatric simulations and helping us create new technology to improve education for our trainees so they can provide excellent patient care!”

*Adam Bauer, MD*

*Assistant Professor of Pediatrics, Division of Neonatology;  
Associate Program Director,  
Pediatric Residency, UW School of Medicine  
and Public Health*

*During an immersive simulation, our simulation educator monitors a manikin's vitals to mimic patient care.*

# Expand geographic reach

The Clinical Simulation Program has expanded its educational reach beyond our walls to meet growing partnership requests. This in situ simulation allows us to deliver education at various locations, enhancing learner engagement. This fiscal year, we reached 2,595 learners and conducted 483 hours of simulation education across 23 locations, including those listed below.

## *UW Health locations*

- 20 S Park Clinic
- American Family Children's Hospital, East Madison Hospital and University Hospital
- Digestive Health Center
- Junction Rd Medical Center
- Union Corners Clinic Urgent Care and West Towne Clinic Urgent Care

## *UW Health affiliate locations*

- Dane County Airport
- Dane County Consortium EMS
- Madison Fire Department
- Oscar Mayer Building

## **Impact on patient care**

Our program's high quality education enhances staff preparedness and confidence. An OR staff member shared how in situ simulation improved their performance during a code. "Yesterday's code went very well thanks to the mock code. Conducting it in our OR with our equipment and team was the most realistic and useful training. It boosted my confidence and competence."



*The simulation training ambulance allows us to deliver high quality prehospital and transport curriculum to the EMS community, significantly enhancing our in situ training capacity.*

# Increase visibility

In 2024, the Clinical Simulation Program boosted its regional, state and international presence by:

- Hosting annual Simulation Days
- Redesigning the website to enhance the program's digital presence
- Increasing the program's social media following by 34%
- Presenting at 10 national and international conferences



# Advance research and innovations

## Leading the way

Our Clinical Simulation Program staff have been fortunate to work with colleagues at UW Health and the UW School of Medicine and Public Health to create innovative and novel simulators that provide new educational opportunities for our learners and staff. Utilizing 3D printing and silicone injection molding, the following sessions have become mandatory curricula for residents continuing their education at UW Health:

- Clamshell thoracotomy
- ECMO cannulation
- Kidney transplant
- Liver transplant

## Moving research forward

This year, we partnered with UW Health and UW School of Medicine and Public Health teams on these education-based research initiatives:

- **Microaggressions:** We created a simulation-based course where resident trainees and their faculty supervisors practice identifying and responding to microaggressions. We found a statistically significant increase in learners' confidence in identifying and intervening when they witness a microaggression as well as navigating microaggressions as a learner.

- **Surgery Olympics:** Over the past three years, in collaboration with the Department of Surgery, we've hosted a Surgical Intern Olympics where incoming surgical residents were tested and instructed on basic surgical skills. This led to a plethora of surgical education research in computer-vision automated assessment, self-confidence and laparoscopic skills simulation, which our staff have disseminated via conference presentations, manuscripts and grants.



*Surgical residents practice retractor and port placement for a clamshell thoracotomy.*

We are driven by a vision to offer a world-class simulation program that promotes experiential learning across healthcare disciplines to improve the quality and safety of patient care in Wisconsin and beyond.

### Clinical Simulation Program faculty and staff

Shannon DiMarco, MSHS, CHSOS  
*Administrative Director*

Sushant Srinivasan, MD, MSc, MHPE, FAAP, CHSE  
*Medical Director*

Nicole Cardamone, CHSOS  
*Program Supervisor*

Emma Huston, MSc  
*Wet Skills Laboratory Program Manager*

Mark Johanneck, CHSOS  
*Simulation Specialist*

Erick Przybylski, MSMS, CHSE, CHSOS, CCEMT-P  
*Simulation Educator*

Amber Thompson  
*Education Operations Specialist*

Gina Tranel, MSHS, RN, CHSE  
*Simulation Educator*

### Simulation interns

Zach Bromet

Kiet Do

Nina Hekmat

Daisy Hester

Lydia Jacob

Emma Rolf

Abbie Schaefer

Shashwot Tripathy

Lael Warren

Jensen Weik

### Executive board

Rudy Jackson, DNP, MHA, RN, CENP  
*Board Co-Chair; Senior Vice President; Chief Nurse Executive*

Elizabeth Petty, MD  
*Board Co-Chair; Senior Associate Dean for Academic Affairs; Faculty, UW School of Medicine and Public Health*

Shiva Bidar-Sielaff, MA, CDM  
*Vice President and Chief Diversity Officer, UW Health; Associate Dean, Diversity and Equity Transformation, UW School of Medicine and Public Health*

Heidi Conrad, MBA  
*Chief Financial Officer, UW School of Medicine and Public Health*

Shannon DiMarco, MSHS, CHSOS  
*Administrative Director, Clinical Simulation Program, UW Health*

Robert Flannery, CPA  
*Senior Vice President and Chief Financial Officer, UW Health*

Michael Lohmeier, MD  
*Medical Director, EMS Education, Department of Emergency Medicine, UW School of Medicine and Public Health*

Kelly McQueen, MD, MPH, FASA  
*Chair, Department of Anesthesiology; Faculty, UW School of Medicine and Public Health*

John Rectenwald, MD, MS  
*Chair, Department of Vascular Surgery; Faculty, UW School of Medicine and Public Health*

Joshua Ross, MD, FAAP  
*Chief Medical Officer, UW Health Kids and American Family Children's Hospital; Faculty, UW School of Medicine and Public Health*

Lynn Schnapp, MD  
*Chair, Department of Medicine; Faculty, UW School of Medicine and Public Health*

Manish N. Shah, MD, MPH  
*Chair, Department of Emergency Medicine; Faculty, UW School of Medicine and Public Health*

Sushant Srinivasan, MD, MSc, FAAP, CHSE  
*Medical Director, Clinical Simulation Program*

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*Endorsed Simulation Education Network Program by the American Society of Anesthesiologists*

*Accredited Comprehensive Education Institute by the American College of Surgeons, Division of Education*

*Accredited Teaching/Education Simulation Program by the Society for Simulation in Healthcare*

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[med.wisc.edu/simulation](https://med.wisc.edu/simulation)