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# Practicing Medicine

A major component of any medical simulation center is the ability to monitor, record, and remotely control the simulation scenario from a control room with space for monitors, keyboards, and microphones.



Although each simulation center is unique in size and function, our experience has identified several universal elements that apply across all simulation design projects, both large and small. In this three-part email series, we will discuss the primary spaces in a simulation center and the importance of their functions.

## Control and Observation Rooms

Typically there is one control room for every one or two simulation rooms – that is located adjacent to the simulation space. They are often behind one-way observation mirrors for the instructors to observe without influencing or increasing participant stress during the scenarios. Instructors can also operate simulators and the video equipment from the control room to modify the simulation in progress and provide a voice for the patient through the manikin.

The most important function of the control room is the ability to record both the audio and video from the simulated scenario at the same time. Discreet camera and microphone systems integrated in the simulation architecture allows for multi-channel recordings of all interactions between learners and live standardized patients or automated patient simulators.

Once the scenario is complete, the instructor can replay the scenario during debrief to create a valuable learning opportunity for the participants as they see themselves perform.

## Debriefing Rooms

No simulation center is complete without debriefing rooms. A key aspect of the simulation learning experience is the debriefing – an essential part of the learning experience.

These spaces are equally important to the educational environment as the simulation rooms. They allow for in-depth learning – a space where instructors and students can review the video, which the facilitator has bookmarked, and critique the simulation and review their performance.

Debriefing rooms are typically designed as intimate spaces to allow for engaged learning

and are intended to be used by two to four persons to review the exercise personally with the trainee. They are usually located in close proximity to the simulation lab itself for efficiency.

It's important to plan for an adequate number of debriefing rooms to support the simulation center. While simulation scenarios may go very quickly, the debriefing for that simulation typically lasts longer than the simulation itself.





# Case Study:

## University of Wisconsin Hospital and Clinics Clinical Simulation Program

University of Wisconsin doctors, nurses, and other health professionals can practice their skills and test their knowledge in real-world settings with no risk of harm to patients or practitioners thanks to the UW Simulation Center housed within the UW Hospital.

Given the wide range of users and scenarios that the center needs to support and the fact that the space allocated in the existing hospital was fixed and could not be expanded, flexibility was one of the key components in the design of the center.

The center includes four main flexible, high-fidelity simulation rooms that are grouped in pairs, with each pair organized around a shared control room. The concept of a shared control room optimizes the use of space and resources and allows for direct viewing from control areas into all simulation rooms.



“We wanted the Simulation Center to be extremely flexible so it could be used for multiple purposes. At first, we could not foresee all the ways our center could be used, but we now know its use is almost limitless.”

**Donna Katen-Bahensky, UWHC President and CEO**



[www.healthcaredesignmagazine.com/article/simulation-front-and-center](http://www.healthcaredesignmagazine.com/article/simulation-front-and-center)





**University of Wisconsin  
Hospital and Clinics  
Clinical Simulation Program**

The primary function for two of the simulation rooms is patient care. The rooms are designed to be configured to simulate a variety of different room types including inpatient, emergency treatment, intensive care, labor/delivery/recovery, and trauma. The rooms are separated by an operable partition that can be opened to accommodate a three-bed scenario.



The other two simulation rooms are larger and more complex and are designed to accommodate a large team interdisciplinary operating room and trauma scenarios as well as C-section. One of the two rooms is dedicated to the METI HPS manikin simulator – a fully automatic, high-fidelity patient simulator specifically designed for training in anesthesia, respiratory, and critical care.

The skills lab is a multi-functional training space with flexible tables and AV systems designed for surgical skill practice, group training, and continuing medical education (CME) courses. Skills training includes surgical, anesthesia, emergency medicine/trauma (adult and pediatric), microsurgery, critical care, laparoscopic, and pediatrics.

The center also includes several meeting areas located throughout the suite with

convenient access to simulation rooms. The meeting areas are used primarily for small classes, but can act as initial meeting rooms or cross-utilized for procedural training, depending on scheduling needs.

The simulation center meets all criteria in order to be successfully certified as an American College of Surgeons Level 1 Comprehensive Education Institute.

## Flad Architects



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