WISER Expands to Nine Satellite Centers

Over the past three years, WISER has seen a significant increase in training programs associated with UPMC hospitals located beyond walking distance from the main simulation center in the Oakland area of Pittsburgh. This increase in training programs has created the need for additional training centers. In addition to the main simulation center, WISER now oversees operations of simulation centers at nine UPMC hospitals. These facility offerings range from surgical education to pediatrics, OB and acute care. The satellite center model allows each facility to take advantage of WISER services including operations, curriculum development, IT, research, and administrative support. WISER is pleased to be working with each of these facilities to meet their needs as well as expanding WISER services.

Earlier this year WISER collaborated with the Watson Surgical Education Center at UPMC Presbyterian Hospital making it WISER's ninth satellite center. The Watson Surgical Education Center offers surgical residents and medical students a variety of sophisticated training tools and resources. The skills lab allows participants to use virtual reality simulators to practice basic and complex tasks in a safe setting before utilizing them in the actual environment. WISER will be supporting existing surgical programs and is working with academic faculty, nursing and clinical educators from across the UPMC Presbyterian/Montefiore complex to create new educational programs to take place at the Watson center. Most recently the Watson center became an official Fundamentals of Laparoscopic Surgery (FLS) Testing Center through the Society of American Gastrointestinal and Endoscopic Surgeons for the "hands-on" skills assessment portion of the FLS examination. The FLS Test measures cognitive knowledge, case/problem management skills and manual dexterity.

Magee Women's Hospital became WISER's eighth satellite center. MWH is a world class center for both women's health and comprehensive medical surgical care. WISER has been providing MWH staff the creation, operation and management of courses and training for several years now at the main WISER center, but now training can be conducted on-site at MWH. Our operations staff support the center's classes and equipment. Using WISER's Simulation Information Management System (SIMS), the new center will be able to track resources, schedule rooms and provide course materials and assessments for its classes. Our curriculum development team has been working with Magee's subject matter experts to develop new courses and enhance existing ones such as the Obstetric Crisis Team Training course.
Quick Tips:

Google Forms

Google Forms (google.com/forms) allow a quick, easy way for you to collect data. Simulation programs can use it for assessment, surveys, and evaluations. Forms are easy to design, work with PCs as well as tablets and phones, and store the retrieved data in Google Sheets. Viewing the data can be restricted to just who needs to see it, and charts and reports can easily be created. Best of all, it’s free to use!

WISER has been actively developing and supporting a variety of educational programs focusing on Clinical Response Team (CRT) Training for response to highly communicable diseases. From the initial onboarding of the CRT, to skills training, competency assessments and maintenance of knowledge, WISER has been collaborating with Emergency Preparedness to provide high quality training and assessment of the team. Due to this close working relationship and WISER’s education and simulation expertise, we were asked to support a Department of Health (DOH) high stakes drill to test the CRT’s response to the arrival of an Ebola patient. Using a standardized patient (SP) and manikins, WISER implemented the simulation component of the drill. The first stage of the drill required the transport of the SP in an Ispod, by ambulance to the emergency department (ED). Once in the emergency room bay, the SP was transferred from the isopod to the patient bed. Through a series of highly coordinated actions, WISER’s operational team provided simulated patient vials, fluid delivery, emesis, and blood draws. WISER’s Informational Technology team used a series of static and dynamic GoPro video cameras to capture each stage of the event. Once the patient drill was complete in the ED, the SP was then transported by ambulance to the infectious disease unit (IDU). Once again, WISER staff supported and recorded the patient transfer at every step of the way. In the IDU, the adult CRT transferred the SP to a patient bed and began patient care. Simultaneously, a pediatric patient, simulated using a manikin (Sim Junior), was being cared for by the pediatric CRT. All aspects of patient care were simulated in both the SP and manikin-based simulations, including patient assessment, fluid delivery, emesis, bed and linen changes, sample collection and handoff, and waste management. This drill required months of planning and coordination between the WISER team and Emergency Preparedness and was a great success! All of the hard work paid off and was even recognized by the DOH assessors through their comment on how effective the simulation component of the drill was. Thank you to the entire WISER staff for contributing to this effort!
Are you interested in running an activity at WISER?

WISER utilizes several well-established pathways to provide the infrastructure that will support you in the development and implementation of a variety of activities. If you are interested in creating educational programs, from traditional courses to online education, we will work with you to create a high-quality product that meets your educational objectives. In addition to courses, we can support research projects, workshops and conferences!

To initiate a WISER activity, please email wiserhelp@upmc.edu or call 412-648-6073. WISER's Director of Educational Development will contact you to learn more about your activity and provide you with an Activity Request Form. Thank you for your interest!

Visit WISER at IMSH 2017

WISER will be attending and contributing to the International Meeting on Simulation in Healthcare (IMSH), which will be held January 28-February 1 in Orlando, FL. Presentations and workshops from the WISER staff range from the Course Development process to accreditation preparation. When you’re not busy attending the workshops and presentations, stop by and see us at Booth 203 (near one of the beverage stations) in order to ask questions, learn about our simulation education capabilities, or to just say “Hi". Take a peek below to get a glimpse at the WISER offerings. We hope to see you in Orlando!

- Performing Educational Research: Complexities & Pitfalls Workshop
- Complexities in Educational Research
- An Expert Curriculum: Competent Facilitator Model
- A Guided Tour of the Course Development Process
- Scenario Creation Made Easy: A Step by Step Approach
- Create Engaging Pre-and Post–course Content
- In Situ Simulation: A Powerful Systems Diagnostic Tool
- Art and Science of Public Speaking
- International Partnership to Develop Faculty
- Pathway to Excellence: Prepare Your Center for Accreditation

WISER Welcomes Dr. Yanling Zhang!

WISER welcomes fellow Yanling Zhang, from The Second Xiangya Hospital, Central South University, Hunan, China, who specializes in anesthesia. Dr. Zhang will be with WISER until August 2017.

Dr. Zhang received her Doctorate degree from Central South University. Currently she is the Associate Chief Physician in the department of Anesthesiology at the Second Xiangya Hospital, Central South University where she works clinically and is involved in simulation education.

WISER’s world-class education offerings is what drew Dr. Zhang to study at WISER. She hopes to bring home teaching techniques and practices that will improve patient safety.

WISER is excited to welcome Dr. Zhang!
Meet our Simulators

SimBaby

SimBaby is an advanced infant high-fidelity simulator that can be used for all pediatric based simulation programs. The simulator has realistic anatomy and clinical functionality. With the advanced airway capabilities of SimBaby, participants can be trained and evaluated on the insertion of LMA and endotracheal airway management devices. SimBaby can be programmed to exhibit tongue edema, pharyngeal swelling and laryngospasm. SimBaby has palpable left radial, left brachial and bilateral femoral pulse points, has spontaneous respirations, chest rise with mechanical ventilation, can be defibrillated, cardioversion, and synched for external transthoracic pacing. SimBaby can also have a peripheral IV started in her right arm, and an intraosseous needle can be inserted in either lower extremity.

SimJunior

SimJunior is a pediatric simulator that was designed in concert with the American Academy of Pediatrics. SimJunior represents a six (6) year old boy capable of displaying a variety of conditions from a healthy child, to an unresponsive, critically unstable patient. SimJunior is able to display many of the same states as SimBaby, with the addition of seizures, and having an internal self-contained air compressor to enhance portability.

SimMan Classic

SimMan Classic has been referred to as the “workhorse” of simulators here at WISER. SimMan Classic, an advanced adult simulator, can be and has been used for just about any type of scenario (excluding infant) that one can think of. SimMan Classic has spontaneous chest rise with respiration, chest rise with mechanical ventilation, palpable left radial, left brachial, bilateral carotid and bilateral femoral pulse points. A peripheral IV can be started in his right arm. He also has all of the advanced airway features as SimBaby, including decreased cervical range of motion. In addition to the various advanced airway devices, participants are also able to perform a cricothyroidotomy with a large gauge needle and ventilate using a jet ventilator, or insert a smaller endotracheal tube directly into the trachea and perform ventilation. SimMan Classic is able to be defibrillated, cardioverted, externally paced, have a chest tube inserted, as well as resolving a pneumothorax with needle chest decompression bilaterally.

SimMan 3G

SimMan 3G is the most advanced simulator currently in WISER’s simulator family. In addition to the functionality and capabilities of SimMan Classic, SimMan 3G can display neurological symptoms, as well as various physiologic states. SimMan 3G can be operated via a wired connection, or wirelessly through his own internal network
Meet our Simulators (continued)

router. His advanced electronics also includes an automatic drug recognition system that uses RFID technology. 3G also has a built-in air compressor in his right leg that allows for spontaneous respirations and some pulses when not attached to an external air compressor. SimMan 3G also has the ability to blink, light sensitive pupillary reaction, seizing, as well as blood and body fluid excretion such as sweat on his forehead, and drool if necessary.

NOELLE Birthing Simulator

The NOELLE Birthing Simulator at WISER is considered a medium fidelity simulator. She is controlled by a control box and internally programmed to respond at specific time intervals when connected to her control mechanism. She does not have spontaneous respirations, however does display chest rise with mechanical ventilation. She does not have automatic pulses, but does have bilateral carotid pulse when manually activated. She is able to be intubated, ventilated, and have chest compressions performed on her. From an obstetric point of view, NOELLE is able to give birth normally, transverse or breech positions, limb presentation, prolapsed cord, Placenta previa, as well as exhibit shoulder dystocia. Participants are able to auscultate fetal heart tones, practice Leopold Maneuvers, and perform post-partum suturing.

Years of Service Award Tradition

Cheers, as we celebrate three individuals for their years of service at WISER! WISER is committed to recognizing and celebrating the years of service that our employees share which helps contribute to WISER’s legacy. This award is initially bestowed upon employees who have reached the milestone of five years of service and is subsequently celebrated every five years thereafter.

In the past several months, WISER has recognized and celebrated three employees who have delivered a combined 25 years of committed service. It is with great pleasure to recognize and celebrate Kevin Miracle, MBA, CHSOS, Manager of Simulation Services, for his five years of service, as well as Max Leake, Web/Multimedia Application Developer, and Jennifer Sinclair, Course Scheduler, for each of their ten years of service. These individuals have been influential in the impact and presence that WISER delivers. Thank you for you continued service of excellence.
Assessment, Debriefing, Comprehensive, and Development are just a few words that describe WISER’s Improving Simulation Instructional Methods (iSIM) course.

iSIM is a three (3)-day immersive program designed to cover the fundamental skills for the creation and delivery of high quality simulation-based healthcare education through a variety of techniques and technologies while emphasizing hands-on learning through active participation.

The program is intended for healthcare professionals and educators who are interested in improving their instructional skills. Each participant will engage in an interactive experience and gain knowledge and skills to enhance their ability to design and conduct simulation-based learning and assessment activities.

The course has been designed and is actively facilitated by internationally renowned experts in simulation and faculty development from WISER at The University of Pittsburgh, and The Gordon Center for Research in Medical Education at the University of Miami. This course will prepare educators to enhance their skills using simulation methods.

The iSIM course is held at WISER in Pittsburgh, Pennsylvania three times a year. Register now for the next available iSIM course April 3-5. Save $200 by using the discount code (WISER!).

Visit the course website at: http://www.isimcourse.com or call 412-648-6073 for more information.
Central Venous Cannulation Course Updates Focus on Patient Safety

Future participants can expect added value from updated online pre-course materials and task trainers at WISER.

WISER's Central Venous Cannulation (CVC) course has recently undergone some exciting updates. A wide variety of learners and faculty participate in this course, led by course director Dr. Ryan Romeo from the department of anesthesiology. The goals of these updates are to improve the consistency with how the central line course is taught and emphasize elements of the procedure that are critical to patient safety. There is a renewed focus on sterile technique, as reducing central line infections continues to be an important system wide quality initiative. There is also a new focus on the use of ultrasound, including new ultrasound capable task trainers. Ultrasound is now widely available in many clinical settings and has been shown to decrease complications.

Future participants can expect added value from updated online pre-course materials and task trainers at WISER. In addition to an improved user interface, the online materials include more information about ultrasound use for CVC placement. New ultrasound capable task trainers have been deployed to give learners more hands on practice and hone their motor skills for this procedure. Additionally, a standardized course set up at WISER was implemented. All participants have access to additional materials to practice donning and doffing sterile gowns and gloves, sterile draping, suturing lines in place, and applying sterile dressings.

Instructor support materials detailing these updates are available for existing instructors. If you are interested in becoming part of the CVC instructor group, training is available. Please contact wiserhelp@upmc.edu, for more information.
Greetings Colleagues,

We have been very busy across the WISER enterprise over the last few months. Our utilization of simulation for helping with system design, latent threat detection and patient safety is exploding. We have been actively involved with many of our system hospitals with our Inpatient Crisis Response System Evaluation program.

The program involves working the local safety and operational leadership at the hospital and running simulated crisis or “code” events to measure the system response and identify areas for potential improvement. In addition to local quality improvement, we have had hospitals formally incorporate the program into external accreditation processes such as those involving the cardiac catheterization lab.

We just completed playing a pivotal role in a large system drill during which the Department of Health of Pennsylvania evaluated our response capabilities to respond to emerging infectious threats. While the program was modeled after Ebola, and that particular threat has subsided for the time being, the focus is now on overall readiness for the same or similar situation that may occur in the future.

Our health system policies, processes, communications, teamwork and interactions with the local EMS community were all put to the test. For those interested in the simulation program role in such a planning process check out the article our team wrote in Simulation in Healthcare entitled “Rapid Development and Deployment of Ebola Readiness Training Across an Academic Health System: The Critical Role of Simulation Education Consulting, and Systems Integration”.

Educating others on how to get started in, or improve their ability to plan and conduct simulation continues to be a investment of what we do at WISER. We have been very busy with the education of our visiting fellows, preceptors and local faculty members in various faculty development programs. Our Improving Simulation Instructional Methods (iSIM) suite of programs that we developed with the Gordon Center of the University of Miami continues to be a major cornerstone in the development of simulation educator expertise in the US and around the world.

So as we head into winter in the US, we will be moving forward with our efforts at maximizing the potentials recognized from simulation to provide the ultimate value: Safer and better care of the patients we serve.

Until next time,

Happy simulating!

Paul