Cincinnati Children's

Center for Simulation and Research

Course Catalog

January 1, 2020

Contact Us
Email: simulationcenter@cchmc.org
Phone: 513-636-6992

Cincinnati Children's
changing the outcome together

About Us

The Center for Simulation and Research at Cincinnati Children's, founded in 2001, was the first pediatric simulation center in the United States. We received the status of Accreditation by the Society of Simulation in Healthcare in 2011 within the areas of Teaching/Education and Systems Integration/Patient Safety, becoming the first simulation center in Ohio and the first pediatric simulation center in the United States to receive this status.

In 2016, we were accredited once again by the Society of Simulation in Healthcare within the areas of CORE, Teaching/Education, Systems Integration, and Research.

We create innovative simulation-based programs to enhance patient safety and promote experiential learning for all members of the healthcare team, in collaboration with content experts and facilitators from multiple divisions and subspecialists throughout Cincinnati Children's Hospital Medical Center. This catalog represents the current course offerings as of January 1, 2020.

Additionally, we have demonstrated the ability to develop new courses on an annual basis, from conception through implementation for both internal and external clients. If you cannot find a course you are looking for, please feel free to contact us to discuss course development.

Our Courses

We currently have over 100 active courses which we schedule annually. Course renewal and intake for course development are reviewed annually prior to scheduling.

The Center for Simulation & Research offers courses that train individuals, small groups, and large groups of learners. Foci of these training sessions can range from simple tasks to interprofessional team interactions with complex medical equipment (i.e. ECMO, CRRT).

To help better classify the content and learning objectives of our courses, we have developed the following training categories:

- Systems Integration (29.8% of all active courses)
- Teamwork and Communication (23%)
- Technical Skill-Based Competency (25%)
- Complex Medical Equipment (5.7%)
- Simulationist Instruction (5.7%)
- Unit and/or Care Process Orientation (5%)
- Certification (3.8%)
- Patient- and/or Caregiver-Focused (2%)

This catalog also includes our inactive courses. Inactive courses are not scheduled in the current fiscal year, but may become active as needed.

CME information

We work closely with our Continuing Medical Education Office to offer continuing education credit to participants. Please note that for any newly developed courses the required application documents need to be submitted at least 60 days prior to course offering. Also, please keep in mind that CME credit is not applicable to all courses or training sessions that we offer.

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Pricing

Courses are priced based on room use, simulator and supporting equipment, setting (lab, in situ, off site), staffing required, and type of training. Courses for internal (CCHMC) providers are assigned as “core” or “value add” pricing, whereas courses for external providers as assigned as “external” pricing. Please feel free to contact us to discuss cost estimates.

Video Recording

For simulations performed in our simulation lab, we routinely video-record the training sessions. All participants are asked to sign an *Authorization and Consent to Photograph and Publish* form prior to training. Video recording is performed to allow video-based debriefing to occur after each scenario is completed. Other potential uses of the recordings include program-based research or simulation-based assessment of teams or individuals. If videos are used for those purposes, the individual participants are made aware of intent prior to recording and additional consent is obtained, as applicable. Video recording infrequently occurs during in situ simulations or other simulations performed outside of our simulation lab setting.

Facilities and Resources

We have multiple simulation labs. Our largest space is a 13,000 sq. ft. facility occupying what was formerly the labor and delivery suite of the Bethesda Oak Hospital, now part of the Cincinnati Children’s Oak Campus, includes multiple inpatient rooms, trauma and ICU rooms, two task training rooms, two debriefing rooms, a large classroom, and several storage and tech rooms. Our Old Research Building (ORB) Sim Lab, built on Cincinnati Children’s main campus, is a 500 sq. ft. space which includes two sim rooms, a central control room, a debriefing room, and a storage room. Lastly, our new Cincinnati Children’s Liberty Campus Simulation & Skills Lab includes 600 sq. ft. for Liberty staff orientation, task training, and team training.

We have over 40 high-fidelity simulators. We complement these simulators with an array of basic task trainers and bedside equipment to recreate the actual clinical care environment.

Click here to meet our team.

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Title	In situ Adult Care	**Course #**	ADULT01
Course Objectives	- Recognition of adult-specific emergencies resulting in MRT (stroke, MI, PE, sepsis), and generation of basic differential for these diagnoses. - Identification of initial steps in management of adult emergencies. - Location of adult-specific protocols, and identification of adult-specific resources that would be required in the event of an adult emergency (notification of Hospital Medicine Adult Care team, contacting UC consultants, initiating transfer to UC).		
Category	Systems Integration		
Learners	MD, RN, RT, APN		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2016		
Content Expert(s)	Brian Herbst, Jennifer O'Toole		
Lead Educator	Brant Merkt, RN		

Title	AHA – ACLS	**Course #**	AHA01
Course Objectives	This classroom, video-based, Instructor-led course uses a series of simulated adult emergencies to: - Reinforce the important concepts of a systematic approach to adult assessment, basic life support, ACLS treatment algorithms, effective resuscitation and team dynamics; - Improve the quality of care provided to seriously ill or injured adults, resulting in improved outcomes.		
Category	Certification		
Learners	MD, RN, RT, APN, CRNA, Paramedic, Pharmacist		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 15; Max. 32		
Prerequisites	Online Pre-Course Work		
Year Developed	2012		
Content Expert(s)	Rachel Keller-Smith, Brant Merkt, Shawn McDonough		
Lead Educator	Rachel Keller-Smith, RT		

Title	AHA – Combo, ACLS & PALS	Course #	AHA02
Course Objectives	This classroom, video-based, Instructor-led course uses a series of simulated adult and pediatric emergencies to: - Reinforce the important concepts of a systematic approach to adult assessment, basic life support, ACLS and PALS treatment algorithms, effective resuscitation and team dynamics; - Improve the quality of care provided to seriously ill or injured adults and children, resulting in improved outcomes.		
Category	Certification		
Learners	MD, RN, RT, APN, CRNA, Paramedic, Pharmacist		
Location	Oak Simulation Lab		
Length	6 hours		
Class size	Min. 25; Max. 48		
Prerequisites	Online Pre-Course Work		
Year Developed	2012		
Content Expert(s)	Rachel Keller-Smith, Brant Merkt, Shawn McDonough		
Lead Educator	Rachel Keller-Smith, RT		

Title	AHA – PALS	Course #	AHA05
Course Objectives	This classroom, video-based, Instructor-led course uses a series of simulated pediatric emergencies to: - Reinforce the important concepts of a systematic approach to pediatric assessment, basic life support, PALS treatment algorithms, effective resuscitation and team dynamics; - Improve the quality of care provided to seriously ill or injured children, resulting in improved outcomes.		
Category	Certification		
Learners	MD, RN, RT, APN, CRNA, Paramedic, Pharmacist		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 15; Max. 32		
Prerequisites	Online Pre-Course Work		
Year Developed	2003		
Content Expert(s)	Rachel Keller-Smith, Brant Merkt, Shawn McDonough		
Lead Educator	Rachel Keller-Smith, RT		

Title	In situ Anesthesia Fellow	**Course #**	ANES01
Course Objectives	Clinical fellows in the department of anesthesia at CCHMC will: - Comprehend acute clinical scenarios involving the delivery of anesthetic care to complex pediatric patients; - Devise and execute appropriate corrective measures to the proposed circumstances; - Critique the performance of others through appropriate constructive feedback.		
Category	Systems Integration		
Learners	MD (Fellows)		
Location	In situ		
Length	2 hours (2-3 scenarios followed by individual debriefings)		
Class size	Min. 3		
Year Developed	2008		
Content Expert(s)	Nick Pratap, Surya Narayanasamy		
Lead Educator	Jamie Shoemaker, RN		

Title	In situ Anesthesia Attending	**Course #**	ANES02
Course Objectives	Clinical faculty in the department of anesthesia at CCHMC will: - Comprehend acute clinical scenarios involving the delivery of anesthetic care to complex pediatric fetal care and liver transplant patients; - Devise and execute appropriate corrective measures to the proposed circumstances; - Critique the performance of others through appropriate constructive feedback.		
Category	Systems Integration		
Learners	MD		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 2		
Year Developed	2015		
Content Expert(s)	Michael Sikora, Jagroop Parikh, Surya Narayanasamy		
Lead Educator	Shawn McDonough		

Title	Anesthesia CRNA	**Course #**	ANES03
Course Objectives	Certified registered nurse anesthetists in the department of anesthesia at CCHMC will: - Comprehend acute clinical scenarios involving the delivery of anesthetic care to complex pediatric patients; - Devise and execute appropriate corrective measures to the proposed circumstances; - Critique the performance of others through appropriate constructive feedback.		
Category	Systems Integration		
Learners	CRNA		
Location	In situ		
Length	2 hours (2-3 scenarios followed by individual debriefings)		
Class size	Min. 3		
Year Developed	2016		
Content Expert(s)	Carrilee Powell, Sean Barclay, Joanna Paquin		
Lead Educator	Shawn McDonough		

Title	Simulation for Student Registered Nurse Anesthetists: Common Pediatric Anesthesia Complications	**Course #**	ANES04
Course Objectives	During this simulation experience the student registered nurse anesthetists (SRNAs) will: - Become familiar with the pediatric anesthesia equipment and set up at Cincinnati Children's Medical Center; - Review common physiology and anesthetic complications that occur to pediatric patients undergoing anesthesia; - Review and practice skills necessary to recognize, manage, and treat common pediatric anesthetic complications such as laryngospasm, bronchospasm, and bradycardia.		
Category	Systems Integration		
Learners	SRNA		
Location	In situ		
Length	Varies		
Class size	Varies		
Year Developed	2018		
Content Expert(s)	Carrilee Powell, Michael Sikora		
Sim Super User	Carrilee Powell		
Lead Educator	Jamie Shoemaker, RN		

Title	APN Procedural Training	**Course #**	APN01

Course Objectives	- To verify and recredential of participants, procedural skill competency already clinically demonstrated in the past; The participant can perform the skill without issue if they have not had a recent clinical opportunity to perform the identified skill.
	- To provide objective feedback from the Content Expert of the observed performance of the specific skill using an acknowledged skills checklist.
	  - *NOTE: Use of a skill checklist sheet is to promote consistency and standardization in review of all participants while providing discreet feedback and individualized learner needs for improvement.*
	  - *The skill checklist sheet will be given to each participant at end of their demonstration*
	- To review with each participant their self-reflection during and on the demonstrated skill.		

Category	Technical Skill-Based Competency		
Learners	APN		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Varies		
Year Developed	2017		
Content Expert(s)	Kevin Fisher		
Lead Educator	Jamie Shoemaker, RN		

Title	In situ ACCU	**Course #**	CARD01
Course Objectives	- Staff will demonstrate appropriate use of emergency equipment: O2 masks, Mapleson bag, defibrillator, crash cart, code sheet. - Staff will quickly identify deteriorating patient status, notify necessary staff for assistance and follow appropriate PALS/ACLS algorithms. - Identify areas of strength and weakness in staff's preparation for medical emergency situations likely to happen on ACCU.		
Category	Systems Integration		
Learners	RN, MD, RT, PCA, APN, HUC		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2012		
Content Expert(s)	Melissa Kimball, Alicia Rice		
Lead Educator	Brenda Williams, RN		

Title	In situ CARU	**Course #**	CARD02
Course Objectives	- Provide a forum for discussion and questions about scenarios to help engage and increase CARU RN knowledge of common code practices. - Examine multiple scenarios to allow the nurse a base of knowledge of how to react, who to notify, and what steps to take to ensure patient safety. - Examine scenarios to help increase critical thinking skills, and increase knowledge of code situations.		
Category	Systems Integration		
Learners	RN, MD, RT, APN		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2014		
Content Expert(s)	Melissa Kimball, Zachary Ruehl		
Lead Educator	Brenda Williams, RN		

Title	In situ CICU	**Course #**	CARD03
Course Objectives	- Improve team communication through the use of established safety behaviors (closed loop communication, shared mental model, etc.). - Increase the care provider's capability of unit specific technical skills and equipment. - Identify team level knowledge deficits and latent safety threats in order to develop care standardization of best practice. - Identify and increase awareness of resources available in the CICU.		
Category	Systems Integration		
Learners	RN, MD, RT, PCA, APN, HUC		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2008		
Content Expert(s)	Amy Florez, Rachel Clendenin		
Lead Educator	Brenda Williams, RN		

Title	CICU Team Safety	**Course #**	CARD06
Course Objectives	Provide opportunity for role clarity and effective/respectful communication in critical situations. - Identify team level knowledge deficits and latent safety threats in order to develop care standardization of best practice - Discuss obstacles to teamwork and communication, i.e. authority gradients. Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling. - Improve knowledge of and comfort with technical skills in common CICU patient care and emergencies		
Category	Teamwork and Communication		
Learners	RN, RT, PCA, MD, APN, HUC		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 6		
Year Developed	2007; redeveloped in 2016		
Content Expert(s)	Ilias Iliopoulos, Rachel Clendenin, Amy Florez		
Lead Educator	Brenda Williams, RN		

Title	CICU Orientation Simulations	**Course #**	CARD07
Course Objectives	- Practice specific Critical Care assessments and appropriate responses in order to assess and increase retention of class content. - Provide the opportunity to work through scenarios (with coaching) in order to increase knowledge base and critical thinking. - Identify and increase awareness of resources available in the CICU.		
Category	Unit and/or Care Process Orientation		
Learners	RN		
Location	In situ		
Length	4 hours		
Class size	Varies; min. 4		
Year Developed	2016		
Content Expert(s)	Marii Bretz, Julie Andreotta		
Lead Educator	Brenda Williams, RN		

Title	In situ Cath Lab	**Course #**	CARD10
Course Objectives	- Provide a forum for discussion and questions about scenarios to help engage and increase Cath Lab RN knowledge of common code practices. - Examine multiple scenarios to allow the nurse a base of knowledge of how to react, who to notify, and what steps to take to ensure patient safety. - Examine scenarios to help increase critical thinking skills, and increase knowledge of code situations.		
Category	Systems Integration		
Learners	RN		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2016		
Content Expert(s)	Melissa Kimball, Zachary Ruehl		
Lead Educator	Brenda Williams, RN		

Title	Cardiac Core Curriculum	**Course #**	CARD11
Course Objectives	- Review and demonstrate knowledge of content covered in didactic lectures such as assessment, complications, and physiology. - Identify appropriate medical management and treatment plans		
Category	Unit and/or Care Process Orientation		
Learners	RN		
Location	In situ		
Length	2 hours		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2016		
Content Expert(s)	Amanda Schubert, David Cooper		
Lead Educator	Brenda Williams, RN		

Title	CICU Fellow Bootcamp	**Course #**	CARD13
Course Objectives	To provide a simulation-based review of critical procedures for first year CICU fellows in an environment that will also improve their confidence and competence in team leadership, communication and teamwork. - Introduce, practice and discuss medical decision making and task management skills in the CICU setting. - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling. - Provide opportunity for hands-on practice of unit specific procedures, i.e. central venous catheter placement, to introduce and build procedural competency.		
Category	Technical Skill-Based Competency		
Learners	MD, 1st Year Fellows		
Location	ORB Simulation Lab		
Length	6 hours		
Class size	Min. 4		
Year Developed	2018		
Content Expert(s)	David Cooper, Ivan Wilmot		
Lead Educator	Brenda Williams, RN		

Title	PCICS Conference	**Course #**	CARD14
Course Objectives	- Present a standardized orientation curriculum for pediatric CICU/acute care APPs that is endorsed by PCICS - Provide a process for self-evaluation of initial and ongoing knowledge and decision making in the care of pediatric CICU/acute care patients through the use of unfolding case scenarios embedded throughout the curriculum - Facilitate a consistent sharing and replication of orientation and continuing education processes for pediatric CICU/acute care APPs - Standardize a simulation training program for pediatric CICU/acute care APPs - Evaluate application of knowledge and critical thinking of pediatric CICU/acute care APPs based on performance on a written exam and in simulation scenarios		
Category	Technical Skill-Based Competency		
Learners	CICU, Cardiology, PICU, and NICU Advanced Providers		
Location	Oak Simulation lab		
Length	24 hours (3 days)		
Class size	20-40		
Year Developed	2019		
Content Expert(s)	Lindsey Justice, Christin Diller, Amy Florez		
Lead Educator	Brenda Williams, RN		

Title	In situ Code Team Training	**Course #**	CODE01
Course Objectives	- Improve code teams understand of team roles and responsibilities. - Improve code team's team efficacy in relation to space and equipment. - Improve team CPR quality (Zoll is measuring CPR outcomes).		
Category	Systems Integration		
Learners	MD, RN, RT, Paramedic, Pharmacist, Protective Services, Chaplain		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 13, with representation from each profession on the code team		
Year Developed	2013		
Content Expert(s)	Ken Tegtmeyer		
Lead Educator	Rachel Keller-Smith, RT		

Title	In situ Mock Code	**Course #**	CODE02
Course Objectives	- Improve code teams understand of team roles and responsibilities. - Continued non-technical skill training, teamwork and communication. - Identification of team level knowledge deficits and latent safety threats.		
Category	Systems Integration		
Learners	MD, RN, RT, Paramedic, Pharmacist, Protective Services, Chaplain		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 13, with representation from each profession on the code team		
Year Developed	2008		
Content Expert(s)	Ken Tegtmeyer, Maya Dewan		
Lead Educator	Jamie Shoemaker, RN		

Title	In situ Mock MRT	**Course #**	CODE03
Course Objectives	- Recognition of a deteriorating patient. - Application of nontechnical teamwork and communication skills. - Understanding of the MRT process and when to activate the system.		
Category	Systems Integration		
Learners	MD, RN, RT, APN		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size			
Year Developed	2018		
Content Expert(s)	Ken Tegtmeyer		
Lead Educator	Jamie Shoemaker, RN		

Title	CRRT University – External	**Course #**	CRRT01
Course Objectives	- Improve aptitude in caring for CRRT patients. - Increase working knowledge of the CRRT machine and ability to troubleshoot alarms. - Enhance abilities to navigate and adapt to complex situations involving CRRT. - Develop strategies for addressing challenging communication issues and program structure.		
Category	Complex Medical Equipment		
Learners	MD, RN, RT, Perfusionist		
Location	ORB Simulation Lab		
Length	8 hours		
Class size	Min. 6; Max. 8		
Year Developed	2013		
Content Expert(s)	Jolyn Morgan, Amanda Snyder, Stuart Goldstein		
Lead Educator	Jamie Shoemaker, RN		

Title	CRRT – ECMO	**Course #**	CRRT02
Course Objectives	- Increase working knowledge of the how the CRRT pressures and ECMO pressures are interrelated and ability to troubleshoot alarms. - Enhance abilities to navigate and adapt to complex situations involving ECMO and CRRT. - Develop strategies for addressing challenging communication issues and program structure.		
Category	Complex Medical Equipment		
Learners	MD, RN, RT, APN		
Location	ORB Simulation Lab		
Length	4 hours		
Class size	Min. 4; Max. 8		
Year Developed	2014		
Content Expert(s)	Jolyn Morgan, Amanda Snyder, Lori Burkhardt		
Lead Educator	Jamie Shoemaker, RN		

Title	CRRT – CICU & PICU	**Course #**	CRRT03
Course Objectives	- Improve aptitude in caring for CRRT patients. - Increase working knowledge of the CRRT machine and ability to troubleshoot alarms. - Enhance abilities to navigate and adapt to complex situations involving CRRT. - Develop strategies for addressing challenging communication issues and program structure.		
Category	Complex Medical Equipment		
Learners	MD, RN, APN		
Location	ORB Simulation Lab		
Length	4 hours		
Class size	Min. 3; Max. 8		
Year Developed	2013		
Content Expert(s)	Jolyn Morgan, Amanda Snyder, Lori Burkhardt		
Lead Educator	Jamie Shoemaker, RN		

Title	Disaster Preparedness	**Course #**	DIS01
Course Objectives	- No lost time injuries reported associated with the incident (OSHA Reportable injuries); - Successful crowd/traffic control; - No disruption of quality care to patients; - No near misses or serious safety events; - Timely distribution of staff support services (food, water, housing, transportation, parking, and mental health); - Effective tools for staff response/recovery available (yellow binders, backpacks, ID Badge Cards); - Avoidance of supply chain disruptions; - Effective monitoring of critical resources and assets; - Mitigation and recovery of utilities; - Rapid identification of safety hazards.		
Category	System Integration		
Learners	RN, MD, RT, PCA, Paramedics, CRNA, APN, CRC, Students		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession that should respond to a disaster (code yellow)		
Year Developed	2013		
Content Expert(s)	Nathan Timm, Amber Antoni		
Lead Educator	Cheryl Marshall, RN		

Title	ECMO Patient Safety	**Course #**	ECMO01
Course Objectives	- Explain how simulation technology allows for the deliberate practice of high-risk ECMO events. - Identify potential problems that may be encountered with the centrifugal pump. - Demonstrate the technical skills necessary to troubleshoot and correct problems with the centrifugal pump. - Demonstrate effective communication while working with the team during ECMO emergencies.		
Category	Teamwork and Communication		
Learners	MD, RN, RT		
Location	ORB Simulation Lab		
Length	4 hours		
Class size	Min. 4		
Year Developed	2008		
Content Expert(s)	Sarah Kraus, Reanna Smith		
Lead Educator	Rachel Keller-Smith, RT		

Title	In situ ECMO – eCPR	**Course #**	ECMO02
Course Objectives	- Coordinate floor team and surgical team best practice to emergently place a patient on ECMO. - Continue non-technical skill training, i.e. teamwork and communication, that is introduced in the lab setting. - Identify and mitigate team level knowledge deficits and latent safety threats. - Leverage lessons learned to develop best practice algorithms.		
Category	Systems Integration		
Learners	MD, RN, RT, PCA		
Location	In situ		
Length	2 hour		
Class size	Min. 10		
Year Developed	2016		
Content Expert(s)	Sarah Kraus, Reanna Smith		
Lead Educator	Rachel Keller-Smith, RT		

Title	In situ ED	**Course #**	ED01
Course Objectives	In partnership with the Medical Resuscitation Committee, simulation will be used for systems integration: - Continue non-technical skill training, i.e. teamwork and communication, that is introduced in the lab setting; - Identify and mitigate team level knowledge deficits and latent safety threats; - Leverage lessons learned to develop best practice algorithms. - Introduce new best practice algorithms.		
Category	Systems Integration		
Learners	RN, MD, RT, PCA, Paramedics, Students		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2007		
Content Expert(s)	Benjamin Kerrey, Gary Geis, Mary Frey		
Lead Educator	Jamie Shoemaker, RN		

Title	In situ Urgent Care	**Course #**	ED02
Course Objectives	In partnership with urgent care leadership, simulation will be used for systems integration: - Continue non-technical skill training, i.e. teamwork and communication, that is introduced in the lab setting; - Identify and mitigate team level knowledge deficits and latent safety threats; - Leverage lessons learned to develop best practice algorithms.		
Category	Systems Integration		
Learners	MD, RN, APN, PCA		
Location	In situ		
Length	1 hour		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2012		
Content Expert(s)	Evan Yeung, Victoria Hartwell		
Lead Educator	Rachel Keller-Smith, RT		

Title	ED Patient Safety	**Course #**	ED03
Course Objectives	Leverage high-fidelity simulation within an interprofessional course to highlight the need for patient safety in resuscitative care. - Introduce and discuss obstacles to teamwork and communication, i.e. authority gradients. - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling. - Require practice of unit specific resuscitation equipment, i.e. rapid infuser, to assess for and improve procedural competency. - Identify latent safety threats during simulation and debriefing (by reflection on clinical environment) and discuss, if possible, solutions to mitigate those threats.		
Category	Teamwork and Communication		
Learners	RN, MD, RT, PCA, Paramedics		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 5		
Prerequisites	AHA – Instructor New		
Year Developed	2005		
Content Expert(s)	Gary Geis		
Lead Educator	Brant Merkt, RN		

Title	ED Faculty Procedural Training	**Course #**	ED04
Course Objectives	Leverage deliberate practice and mastery learning principles through hands-on task training to maintain procedural competency in the following resuscitative care procedures: - Central venous catheter placement, including use of bedside ultrasound; - Needle and tube thoracostomy; - Endotracheal intubation, using direct and indirect laryngoscopy; - Needle and surgical cricothyrotomy; - Post-tonsillectomy hemorrhage.		
Category	Technical Skill-Based Competency		
Learners	MD, EM Senior Fellows		
Location	Oak Simulation Lab		
Length	2 hours		
Class size	Min. 1		
Year Developed	2014		
Content Expert(s)	Gary Geis		
Lead Educator	Gary Geis, MD		

Title	ED Team Training	**Course #**	ED05
Course Objectives	In partnership with the Medical Resuscitation Committee, simulation will be used for: - Maintenance non-technical skill training, i.e. teamwork and communication, that is introduced in the lab setting. - Identification and mitigation of team level knowledge deficits and latent safety threats. - Team collaboration in the clinical management of two (2) resuscitation scenarios. - Work with resuscitation equipment (defibrillator, Storz, Belmont). - Assess understanding and adherence to best practice algorithms.		
Category	Teamwork and Communication		
Learners	RN, MD, RT, PCA, Paramedic		
Location	Oak Simulation Lab		
Length	2 hours		
Class size	Min. 8		
Year Developed	2014		
Content Expert(s)	Mary Frey		
Lead Educator	Jamie Shoemaker, RN		

Title	ED – ICU Bootcamp	**Course #**	ED06
Course Objectives	Leverage high-fidelity simulation with hands-on task training to highlight the need for procedural competency in resuscitative care: - Introduce, practice and discuss medical decision making and task management skills, i.e. rapid sequence intubation, surrounding resuscitative care in the shock trauma suite, and ICU setting. - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling. - Require hands-on practice of unit specific procedures, i.e. central venous catheter placement, to introduce and build procedural competency. - Introduce concept of collegial relations between the disciplines of critical care and emergency medicine.		
Category	Technical Skill-Based Competency		
Learners	MD, 1st Year Fellows		
Location	Oak Simulation Lab		
Length	8 hours		
Class size	Min. 4		
Year Developed	2010		
Content Expert(s)	Gary Geis, Benjamin Kerrey, Michelle Eckerle, Maya Dewan, Ken Tegtmeyer, Andrew Lautz		
Lead Educator	Brant Merkt, RN		

Title	EM Clinical Staff/APNs	**Course #**	ED07
Course Objectives	Leverage high-fidelity simulation with hands-on task training to highlight the need for procedural competency in emergency care: - Introduce, practice and discuss medical decision making and task management skills, i.e. recognition and management of shock, surrounding emergencies in the urgent care setting. - Require hands-on practice of unit specific procedures, i.e. bag-mask ventilation, to assess for and improve procedural competency.		
Category	Technical Skill-Based Competency		
Learners	MD, APN		
Location	Oak Simulation Lab		
Length	2 hours		
Class size	Min. 4		
Year Developed	2009, *significantly revised in 2014*		
Content Expert(s)	Gary Geis, Evan Yeung		
Lead Educator	Rachel Keller-Smith, RT		

Title	EM Clinical Staff/APNs Bootcamp	**Course #**	ED08
Course Objectives	Leverage high-fidelity simulation with hands-on task training to highlight the need for procedural competency in emergency care: - Introduce, practice and discuss medical decision making and task management skills, i.e. recognition and management of shock, surrounding emergencies in the urgent care setting. - Require hands-on practice of unit specific procedures, i.e. bag-mask ventilation, to assess for and improve procedural competency.		
Category	Technical Skill-Based Competency		
Learners	MD, APN who are newly hired and before they begin covering urgent care shifts		
Location	Oak Simulation Lab		
Length	6 hours		
Class size	Min. 4		
Year Developed	2014		
Content Expert(s)	Gary Geis, Evan Yeung, Kamali Bouvay, Angela Brown		
Lead Educator	Rachel Keller-Smith, RT		

Title	PEM Fellow Assessment	**Course #**	ED09
Course Objectives	To assess a 2nd-year pediatric emergency medicine (PEM) fellow's skills in the following: - Team leadership, as measured by the modified Ayo High Performance Teamwork Scale (MHPTS). - Task management, as measured by compliance with the ED's rapid sequence intubation checklist. - Life-saving bedside procedures, i.e. endotracheal intubation and tube thoracostomy, as measured by validated checklist instruments.		
Category	Technical Skill-Based Competency		
Learners	MD (fellows)		
Location	Oak Simulation lab		
Length	2 hours		
Class size	1		
Year Developed	2013		
Content Expert(s)	Paria Wilson, Michelle Eckerle		
Lead Educator	Rachel Keller-Smith, RT		

Title	PEM Fellow Procedures	**Course #**	ED10
Course Objectives	To build and maintain PEM fellow's technical (procedural) skills in the following procedures: - Rhythm recognition, Cardioversion and Defibrillation; - IO and central venous catheter placement; - Needle and Tube thoracostomy; - Bag-mask ventilation and endotracheal intubations.		
Category	Technical Skill-Based Competency		
Learners	MD (fellows)		
Location	Oak Simulation lab		
Length	2 hours		
Class size	Min. 4		
Year Developed	2014		
Content Expert(s)	Paria Wilson, Michelle Eckerle		
Lead Educator	Rachel Keller-Smith, RT		

Title	Research Coordinator Training	**Course #**	ED11
Course Objectives	- Introduce, practice and discuss enrollment of participants and data collection in research protocols in the setting of the Emergency Department with applicable care team providers.		
Category	Unit and/or Care Process Orientation		
Learners	Research Coordinators		
Location	ORB Simulation Lab		
Length	Varies		
Class size	1		
Year Developed	2014		
Content Expert(s)	Andrea Kachelmeyer		
Lead Educator	Jamie Shoemaker, RN		

Title	Airway Management Training	**Course #**	ED12
Course Objectives	- Demonstrate the ability to provide bag-mask ventilation to a simulated pediatric patient - Verbalize their approach to rapid sequence intubation in a non-difficult pediatric airway - Demonstrate the ability to perform laryngoscopy and tracheal tube delivery across a range of a simulated pediatric patients, including infant, child, and adolescent - Verbalize their approach to both difficult and missed pediatric airways - Pass a final assessment using an airway management checklist		
Category	Technical Skill-Based Competency		
Learners	MD (Residents)		
Length	4 hours		
Location	Oak Simulation Lab		
Class size	Min. 1		
Year Developed	2017		
Content Expert(s)	Benjamin Kerrey, Gary Geis		
Lead Educator	Benjamin Kerrey, MD		

Title	First Year PEM Procedural Onboarding	**Course #**	ED13
Course Objectives	By the end of these sessions, the fellow will be better able to: - Obtain and set up the basic equipment required for endotracheal intubation, tube thoracostomy and femoral central venous catheter placement; - Verbalize the key anatomic landmarks that guide safe and efficient placement of endotracheal tubes, chest tubes and femoral central venous catheters; - Demonstrate performance of endotracheal intubation, tube thoracostomy and femoral central venous catheter placement in a simulated setting.		
Category			
Learners	MD (Residents)		
Length	Varies		
Location	Oak Simulation Lab		
Class size	Min. 1		
Year Developed	2018		
Content Expert(s)	Gary Geis, Michelle Eckerle		
Lead Educator	Gary Geis, MD		

Title	Community Education	**Course #**	EDU01
Course Objectives	- In Development		
Category			
Learners	Varies		
Length	Varies		
Location	Outreach		
Class size	Varies		
Year Developed	2018		
Content Expert(s)	Varies		
Lead Educator	Michelle Rios, RN		

Title	ENT Bootcamp	**Course #**	ENT02
Course Objectives	- Participants will practice skills specific to the care and intervention of patients exhibiting life threatening ENT signs/symptoms. - Participants will demonstrate the skills practiced in simulated scenarios that exhibit clinical emergent situations. - Participants will reflect upon their interventions and receive feedback regarding gaps in their individual performance.		
Category	Technical Skill-Based Competency		
Learners	MD (Residents)		
Length	4 hours		
Location	Oak Simulation Lab		
Class size	Min. 4		
Year Developed	2011		
Content Expert(s)	Charles Myer IV		
Lead Educator	Rachel Keller-Smith, RT		

Title	Equipment Use	**Course #**	EQUIP01
Course Objectives	- Use of low- to mid-fidelity simulation modalities to test new clinical equipment or processes		
Category	Technical Skill-Based Competency		
Learners	Varies		
Location	Varies		
Length	Oak Simulation Lab		
Class size	Min. 1		
Year Developed	2018		
Content Expert(s)	Varies		
Lead Educator	Jamie Shoemaker, RN		

Title	Fetal Care	**Course #**	FETAL01
Course Objectives	- Identification of latent safety treats in the clinical care environment. - Test location of supplies, equipment, etc. to ensure delivery staff feels comfortable with new space. - As volume increases, add standard maternity emergencies to continue development of processes and workflow.		
Category	Systems Integration		
Learners	RN, RT, APRN, MD, Radiology Techs, Echo Techs, PCA		
Location	In situ		
Length	Varies		
Class size	10		
Year Developed	2018		
Content Expert(s)	Kim Burton		
Lead Educator	Jamie Shoemaker, RN		

Title	Summer Interns (Outreach)	**Course #**	INT01
Course Objectives	- Students will understand that medical care requires teamwork. - Students will learn about how pediatric simulators are used in medical training. - To provide the students the opportunity to actually touch a simulated "patient" and practice a maneuver like intubation, IV and IO placement, CPR, and running a simulator.		
Category	Systems Integration		
Learners	Students		
Location	ORB Simulation Lab		
Length	3 hours		
Class size	Min. 10		
Year Developed	2014		
Content Expert(s)	Cindy Bachurski		
Lead Educator	Cheryl Marshall, RN		

Title	In situ Liberty ED	**Course #**	LIB01
Course Objectives	In partnership with the Liberty ED leadership and the Medical Resuscitation Committee, simulation will be used for systems integration: - Continue non-technical skill training, i.e. teamwork and communication, that is introduced in the lab setting; - Identify and mitigate team level knowledge deficits and latent safety threats; - Leverage lessons learned to develop best practice algorithms.		
Category	Systems Integrations		
Learners	MD, RN, RT, PCA, Paramedic		
Location	In situ (Liberty)		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2008		
Content Expert(s)	Elena Duma, Kristy Atkinson		
Lead Educator	Cheryl Marshall, RN		

Title	Liberty ED Patient Safety	Course #	LIB02
Course Objectives	- Introduce and discuss obstacles to teamwork and communication, i.e. authority gradients - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling; - Require practice of unit specific resuscitation equipment, i.e. rapid infuser, to assess for and improve procedural competency; - Identify latent safety threats during simulation and debriefing (by reflection on clinical environment) and discuss, if possible, solutions to mitigate those threats.		
Category	Teamwork and Communication		
Learners	RN, MD, RT, PCA, Paramedic		
Location	Liberty		
Length	4 hours		
Class size	Min. 6		
Prerequisites	AHA – Instructor New		
Year Developed	2013		
Content Expert(s)	Elena Duma, Kristy Atkinson		
Lead Educator	Cheryl Marshall, RN		

Title	In situ Liberty Inpatient	Course #	LIB04
Course Objectives	Leverage high-fidelity simulation within an interprofessional course to highlight the need for patient safety in resuscitative care. - Introduce and discuss obstacles to teamwork and communication, i.e. authority gradients; - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling; - Require practice of unit specific resuscitation equipment, i.e. code cart, to assess for/improve procedural competency; - Identify latent safety threats during simulation and debriefing (by reflection on clinical environment) and discuss, if possible, solutions to mitigate those threats; - Identify and educate team members on Liberty Inpatient – specific differences in MRT and Code team structure and use of telemedicine for MRT's and Codes.		
Category	Systems Integration		
Learners	MD, RN, RT, PCA, APN, PA, Residents, telemedicine		
Location	Liberty inpatient unit (in situ)		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2015		
Content Expert(s)	Julie Snider, Amy Rule, Yemisi Jones		
Lead Educator	Cheryl Marshall, RN		

Title	Liberty Inpatient Safety	Course #	LIB05
Course Objectives	Leverage high-fidelity simulation within an interprofessional course to highlight the need for patient safety in resuscitative care. - Introduce and discuss obstacles to teamwork and communication, i.e. authority gradients; - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling; - Require practice of unit specific resuscitation equipment, i.e. code cart, to assess for/improve procedural competency; - Identify latent safety threats during simulation and debriefing (by reflection on clinical environment) and discuss, if possible, solutions to mitigate those threats; - Identify and educate team members on Liberty Inpatient – specific differences in MRT and Code team structure and use of telemedicine for MRT's and Codes.		
Category	Teamwork and Communication		
Learners	MD, RN, RT, PCA, APN, PA, Residents, telemedicine		
Location	Liberty		
Length	4 hours		
Class size	Min. 6		
Prerequisites	AHA – Instructor New		
Year Developed	2015		
Content Expert(s)	Julie Snider, Amy Rule, Yemisi Jones		
Lead Educator	Cheryl Marshall, RN		

Title	In situ Liberty Clinic	Course #	LIB06
Course Objectives	Upon completion of this course, the participant will be able to: - Locate and set up the emergency equipment: i.e: oxygen, suction, pulse oximeter; - Demonstrate the ability to access emergency service personnel, i.e: 911 or Code Team; - Discuss their role in an emergency, i.e: Nurse assesses the patient, MA gathers equipment and assists per delegation.		
Category	Systems Integration		
Learners	MD, RN, APN, RT, Medical Assistants, LPN, Ortho Techs		
Location	Liberty		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2018		
Content Expert(s)	Michelle Swartz		
Lead Educator	Cheryl Marshall, RN		

Title	Liberty ED Big Room Workshop	**Course #**	LIB07
Course Objectives	- Define Criteria for activation of Big Room Response for Trauma Stat, Trauma Alert, Trauma Evaluation, Medical Evaluations - Understand and Demonstrate Roles and Responsibilities in the Big Room - Identify key concepts of primary survey for Bedside RN - Demonstrate trauma and medical resuscitation skills through simulation		
Category	Teamwork and Communication		
Learners	RN, RT, Paramedics, PCA		
Location	Liberty		
Length	2 hours		
Class size	TBD		
Year Developed	2016		
Content Expert(s)	Kristy Atkinson, Michelle Sorrell		
Lead Educator	Cheryl Marshall, RN		

Title	Liberty Skills Lab	**Course #**	LIB20
Course Objectives	Leverage deliberate practice and mastery learning principles through hands-on task training to maintain/improve/develop procedural/skills competency in the following care procedures: - Central venous catheter placement, including use of bedside ultrasound; - Needle and tube thoracostomy; - Endotracheal intubation, using direct and indirect laryngoscopy; - Needle and surgical cricothyrotomy; - Lumbar puncture/epidural placement; - Crash cart; - Zoll defibrillator; - Intraosseous placement; and - Additional training as requested by units.		
Category	Technical Skill-Based Competency		
Learners	MD, RN, RT, Paramedics, PCA		
Location	Liberty		
Length	Varies		
Class size	Varies		
Year Developed	2019		
Content Expert(s)	Cheryl Marshall		
Lead Educator	Cheryl Marshall, RN		

Title	Liberty Skills Lab: TCC Training Course	**Course #**	LIB21
Course Objectives	- Learner verbalizes understanding of complex line management and resources available regarding complex line management. - Learner verbalizes understanding of CLABSI standards and resources available regarding CLABSI prevention. - Learner demonstrates needless connector change, completing all steps on job instruction sheet. - Learner demonstrates CVC dressing change, completing all steps on job instruction sheet. - Learner demonstrates drawing blood samples for cultures from a central line, completing all steps on the job instruction sheet.		
Category	Technical Skill-Based Competency		
Learners	RN		
Location	Liberty		
Length	4 hours		
Class size	Min. 2; max. 5		
Year Developed	2020		
Content Expert(s)	Rachel Ellison		
Lead Educator	Cheryl Marshall, RN		

Title	Liberty Skills Lab: APP Procedural Training	**Course #**	LIB22
Course Objectives	- Leverage deliberate practice and mastery learning principles through hands-on task training to gain and maintain competency in the following procedures and tasks: - sterile technique, including draping, gowning and gloving; - incision and drainage; - suturing		
Category	Technical Skill-Based Competency		
Learners	Surgical PA, APRN		
Location	Liberty Skills Lab		
Length	3 hours		
Class size	Varies		
Year Developed	2019		
Content Expert(s)	Rachel Ellison		
Lead Educator	Cheryl Marshall, RN		

Title	Paramedic Refresher	**Course #**	MEDIC01
Course Objectives	Leverage high-fidelity simulation to: - Maintain knowledge and skills surrounding pediatric and adult assessment and pre-hospital resuscitation and management of Trauma and Medical patients; - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling; - Require practice of unit specific resuscitation equipment, i.e. airway equipment, code medications, transport equipment.		
Category	Teamwork and Communication		
Learners	Paramedics		
Location	Oak Simulation Lab		
Length	2 hours		
Class size	Min. 4		
Year Developed	2010		
Content Expert(s)	Ken Crank, Josh Boyd, Tracy Crank, Kim Hartley, Hamilton Schwartz		
Lead Educator	Brant Merkt, RN		

Title	EMS Liberty Township Fire Department (Outreach)	**Course #**	MEDIC02
Course Objectives	Leverage high-fidelity simulation to: - Increase confidence, comfort level, and skill interventions of EMS staff when providing care to pediatric patients; - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling; - Require practice of unit specific resuscitation equipment, i.e. airway equipment, code medications, transport equipment.		
Category	Teamwork and Communication		
Learners	Paramedics		
Location	Liberty Township Fire Department		
Length	4 hours		
Class size	Min. 4		
Year Developed	2014		
Content Expert(s)	Christopher Oakes		
Lead Educator	Cheryl Marshall, RN		

Title	Mobile Unit (Outreach)	Course #	MOBILE01
Course Objectives	Leverage high-fidelity simulation in local community care settings, including EMS agencies, general acute care hospitals, and pediatric primary care offices, in order to: - Maintain knowledge and skills surrounding pediatric assessment and pre-hospital resuscitation; - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling; - Require practice of environment/unit specific resuscitation equipment, i.e. airway equipment, code medications, transport equipment		
Category	Teamwork and Communication		
Learners	Firefighters, Paramedics		
Location	Reading Fire Department		
Length	TBD		
Class size	TBD		
Year Developed	2016		
Content Expert(s)	Brant Merkt		
Lead Educator	Brant Merkt, RN		

Title	In situ NICU	Course #	NICU01
Course Objectives	- Determine the impact of simulation training on the technical skills of the NICU team; - Determine the impact of simulation training on non-technical skills including provider attitudes surrounding safety and teamwork; - Identify Latent Safety Threats that exist in the clinical environment and that may arise in actual patient emergencies.		
Category	Systems Integration		
Learners	MD, RN, RT, APN		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2008		
Content Expert(s)	Beth Haberman, Beth Ann Johnson, Shelly Hoehn, Shari Casey		
Lead Educator	Michelle Rios, RN		

Title	NICU Patient Safety	**Course #**	NICU02
Course Objectives	- Determine the impact of simulation training on the technical skills of the NICU team. - Determine the impact of simulation training on non-technical skills including provider attitudes surrounding safety and teamwork. - Identify Latent Safety Threats that exist in the clinical environment and that may arise in actual patient emergencies.		
Category	Teamwork and Communication		
Learners	MD, RN, RT, APN		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 6		
Year Developed	2008		
Content Expert(s)	Beth Haberman, Beth Ann Johnson, Shelly Hoehn, Shari Casey		
Lead Educator	Michelle Rios, RN		

Title	NRP	**Course #**	NICU04
Course Objectives	- Demonstrate best practice recommendations on the best available evidence. - Identify the different types of skills necessary for successful neonatal resuscitation. - Demonstrate and develop effective teamwork and communication.		
Category	Certification		
Learners	MD, RN, RT, APN		
Location	Oak Simulation Lab		
Length	3-4 hours		
Class size	Min. 4; max. 30		
Year Developed	2016		
Content Expert(s)	Peggy Hendricks, Karen Simon, Beth Ann Johnson		
Lead Educator	Rachel Keller-Smith, RT		

Title	NICU Bootcamp	**Course #**	NICU05
Course Objectives	- To provide a simulation-based review of critical procedures (intubation, umbilical line placement, and chest tube placement) for first year NICU fellows in an environment that will also improve their confidence and competence in team leadership, communication and teamwork prior to direct patient care.		
Category	Technical Skill-Based Competency		
Learners	MD		
Location	ORB Simulation Lab		
Length	8 hours		
Class size	5		
Year Developed	2016		
Content Expert(s)	Beth Ann Johnson, Jennifer Brady		
Lead Educator	Michelle Rios, RN		

Title	NICU Fellows Course	**Course #**	NICU06
Course Objectives	- Communication, teamwork and leadership skills - Medical management skills during difficult scenarios and rare conditions - Procedural skills of rarely encountered procedures		
Category	Teamwork and Communication		
Learners	MD		
Location	ORB Simulation Lab		
Length	1 hour		
Class size	5-6		
Year Developed	2018		
Content Expert(s)	Beth Ann Johnson, Jennifer Brady, Sai Mukthapuram		
Sim Super-Users	Jennifer Brady		
Lead Educator	Michelle Rios, RN		

Title	NICU Delivery Team	**Course #**	NICU07
Course Objectives	- Provide opportunity for staff to be more comfortable with the delivery space and equipment. - Improve comfort with the entire delivery process - from how the team is notified through returning the infant to the NICU. - Practice effective teamwork skills to provide care to the newborn. - Provide scenarios to allow staff to resuscitate newborns following NRP guidelines.		
Category	Systems Integration		
Learners	RN, RT, APRN, MD, Radiology Techs, Echo Techs, PCA		
Location	In situ		
Length	1 hour		
Class size	10		
Year Developed	2018		
Content Expert(s)	Shari Casey		
Lead Educator	Brenda Williams, RN		

Title	PEMS	**Course #**	NUR02

Course Objectives	- Early identification of crisis situation and distress (respiratory/shock).
	- Understand the elements of the pediatric assessment triangle and primary survey.
	- Implementation of appropriate emergency measures:
	  - Oxygen delivery devices, oxygen flow rate, and oxygen concentration provided;
	  - Defibrillation versus cardioversion;
	  - Code medications;
	  - Fluid bolus for circulation resuscitation via push/pull method and possible IO placement.
	- Differentiate between activation of Medical Response Team vs. Code Team.
	- Introduce and discuss obstacles to teamwork and communication, i.e. authority gradients.		

Category	Systems Integration		
Learners	RN		
Location	Oak Simulation Lab		
Length	3 hours		
Class size	Min. 8		
Year Developed	2009		
Content Expert(s)	Jenny Saupe		
Lead Educator	Shawn McDonough		

Title	A3N Nursing	**Course #**	NUR03
Course Objectives	Team training with emphasis on technical skills (assessment, decision making and delivery of care) within the following emergency pediatric situations: - Respiratory failure; - Compensated shock; - Cardiopulmonary arrest.		
Category	Teamwork and Communication		
Learners	RN		
Location	In situ (A3N)		
Length	2 hours		
Class size	Min. 5		
Year Developed	2016		
Content Expert(s)	Beth Dendler		
Lead Educator	Jamie Shoemaker, RN		

Title	Oncology Team Safety	**Course #**	ONC01
Course Objectives	- Participants will improve technical and non-technical behaviors in dealing with infrequently experienced, emergent events encountered during this Oncology-based simulation program. The program will provide opportunity to improve efficiency and safety in recognizing simulated patient cues, identifying and treating specific medical emergencies while providing clinical care to patients within CBDI Oncology practice.		
Category	Teamwork and Communication		
Learners	MD, APN, RN, Pharmacists		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 8		
Year Developed	2018		
Content Expert(s)	Paula Cuthrell		
Lead Educator	Michelle Rios, RN		

Title	In situ Periop Code	**Course #**	PERIOP01
Course Objectives	- Identification of latent safety threats and team knowledge deficits during the simulation; - Identification of need for code blue response; - Activation of code blue response; - Application of PALS/ACLS guidelines in cardiac arrest care; - Team identifies and assumes appropriate roles during code training; - Activation of PICU care team during perioperative code event.		
Category	Systems Integration		
Learners			
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2017		
Content Expert(s)	Michael Sikora; Ken Tegtmeyer		
Lead Educator	Rachel Keller-Smith, RT		

Title	Perinatal Outreach	**Course #**	PERIOUT01

Course Objectives	- Assess and improve clinical knowledge, skills and behaviors related to:
	  - Neonatal resuscitation;
	  - Bag-valve mask ventilation;
	  - Chest compressions;
	- Assess and improve non-technical skills, i.e. situation awareness and closed loop communication, among providers.
	- Evaluate the clinical environment for preparedness and latent that to safety and that may arise in actual patient emergencies.		

Category	Systems Integration		
Learners	MD, RN, RT, APN, Midwives, OB Techs		
Location	Outreach		
Length	4 – 8 hours		
Class size	Min. 4; max. 24		
Year Developed	2012; revised in 2016		
Content Expert(s)	Nicole Boswell		
Lead Educator	Nikki Durr, RN		

Title	In situ PICU	**Course #**	PICU01
Course Objectives	- To facilitate communication among team members during a code situation. - To utilize critical care knowledge in caring for a coding patient. - To demonstrate effective use of resuscitation equipment.		
Category	Systems Integration		
Learners	MD, RN, RT, PCA, Pharmacist		
Location	In situ		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2008		
Content Expert(s)	Ken Tegtmeyer		
Lead Educator	Jamie Shoemaker, RN		

Title	ICU Faculty Procedural Training	**Course #**	PICU02
Course Objectives	Leverage deliberate practice and mastery learning principles through hands-on task training to maintain procedural competency in the following resuscitative care procedures: - Central venous catheter placement, including use of bedside ultrasound; - Needle and tube thoracostomy; - Endotracheal intubation, using direct and indirect laryngoscopy; - Needle and surgical cricothyrotomy.		
Category	Technical Skill-Based Competency		
Learners	MD, APN, ICU Fellows		
Location	Oak Simulation Lab		
Length	2 hours		
Class size	Min. 1		
Year Developed	2014		
Content Expert(s)	Maya Dewan, Andrew Lautz		
Lead Educator	Gary Geis, MD		

Title	PICU Team Safety	**Course #**	PICU03
Course Objectives	- ***In redevelopment***		
Category	Teamwork and Communication		
Learners	MD, RN, RT, PCA, Pharmacist		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 8		
Year Developed	2020		
Content Expert(s)	Matt Zackoff		
Lead Educator	Jamie Shoemaker, RN		

Title	PICU Orientation	**Course #**	PICU04
Course Objectives	- Practice Critical Care resuscitation interventions in order to assess and increase retention of class content. - Provide the opportunity to work through code situations in order to increase knowledge base and critical thinking. - Identify and increase awareness of resources available in the PICU. - Introduce and discuss team leadership, communication and teamwork techniques (closed loop communication, shared mental model, etc.).		
Category	Technical Skill-Based Competency		
Learners	RN		
Location	ORB Simulation Lab		
Length	2 hours		
Class size	Min. 6		
Year Developed	2010		
Content Expert(s)	Kelly Ely		
Lead Educator	Jamie Shoemaker, RN		

Title	In situ Psychiatric	**Course #**	PSY01
Course Objectives	- Increase confidence and decrease anxiety related to high acuity, low frequency medical emergencies in psych setting. - Improve overall performance in pediatric resuscitation, increase knowledge of equipment. - Improve teamwork and communication, increase knowledge of roles and available resources.		
Category	Systems Integration		
Learners	RN, MD, MHS		
Location	In situ		
Length	1 hour		
Class size	Min. 6		
Year Developed	2013		
Content Expert(s)	Sara Hughes, Amberly Schmaltz, Katie Haller		
Lead Educator	Shawn McDonough		

Title	Psychiatric Team Training	**Course #**	PSY02
Course Objectives	- Increase confidence and decrease anxiety related to high acuity, low frequency medical emergencies in psych setting. - Improve overall performance in pediatric resuscitation, increase knowledge of equipment. - Improve teamwork and communication, increase knowledge of roles.		
Category	Teamwork and Communication		
Learners	RN		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 4		
Year Developed	2014		
Content Expert(s)	Sara Hughes, Amberly Schmaltz, Katie Haller		
Lead Educator	Shawn McDonough		

Title	In situ Code Conference	**Course #**	RES01
Course Objectives	- To expose pediatric residents to real-time high-fidelity simulation experiences that address the most commonly encountered pediatric code situations (e.g., respiratory arrest, cardiac arrest, septic shock). - To provide hands-on practice with equipment and materials utilized in code situations (e.g. defibrillator, code-cart). - To provide focused feedback in a small group setting on code team performance. - To provide large group discussion of evidence-based resuscitation in pediatric patients.		
Category	Teamwork and Communication		
Learners	MD (residents)		
Location	In situ (A8 – resident conference room)		
Length	1 hour		
Class size	Min. 18		
Year Developed	2013		
Content Expert(s)	Gary Geis, Sang Lee, Pediatric residency chief residents		
Lead Educator	Jamie Shoemaker, RN		

Title	ED Resident Training	**Course #**	RES02
Course Objectives	Leverage high-fidelity simulation with hands-on task training to highlight the need for procedural competency in resuscitative care: - Introduce, practice and discuss medical decision making and task management skills, i.e. RSI checklist application, surrounding invasive procedures in the shock trauma suites; - Require hands-on practice of unit specific procedures, i.e. defibrillation, to assess for and improve procedural competency.		
Category	Technical Skill-Based Competency		
Learners	ED Residents		
Location	ORB Simulation Lab		
Length	2 hours		
Class size	Min. 6		
Year Developed	2012		
Content Expert(s)	Connie McAneney		
Lead Educator	Brant Merkt, RN		

Title	RESUS	**Course #**	RES03
Course Objectives	- Recognition and management of cardiopulmonary arrest in the primary care setting. - Improvement in comfort and confidence of procedural care in CPR, bag-mask ventilation, IO access, defibrillation, delivery of code medications, and push-pull volume resuscitation. - Recognition and early goal directed therapy of shock in a pediatric-aged patient. - Improvement in comfort and confidence of first year residents as the team leader during resuscitative care of a critically ill simulated child.		
Category	Technical Skill-Based Competency		
Learners	MD (residents)		
Location	ORB Simulation Lab		
Length	2 hours		
Class size	Min. 3, Max. 8		
Year Developed	2014		
Content Expert(s)	Gary Geis; Sang Lee; Pediatric residency chief residents		
Lead Educator	Jamie Shoemaker, RN		

Title	Simulation Facilitator	**Course #**	SIM01
Course Objectives	- Identify key aspects to simulation development which aid in a successful simulation session and debrief -Explore Kolb's learning theory and its application to simulation - Review multiple debriefing styles and their application to simulation based medical education (SBME) - Examine what components make up a quality debrief – specifically by analyzing the 8 OSAD domains - Demonstrate knowledge of debriefing components and styles through video review observation and practical application		
Category	Simulationist Instruction		
Learners	RN, MD, RT, CRNA, APN, other facilitators		
Location	Oak Simulation Lab		
Length	4 hours (or 8 hours)		
Class size	Min. 4, Max. 8		
Year Developed	2008		
Content Expert(s)	Gary Geis		
Lead Educator	Brant Merkt, RN		

Title	Simulation Facility Orientation	**Course #**	SIM02
Course Objectives	- Tour of simulation lab(s) - How to schedule room use - Expectations upon arrival and how to clean up after - Accessing room(s), equipment, and supplies		
Category	Simulationist Instruction		
Learners			
Location	Oak Sim Lab or ORB Sim Lab		
Length	1-2 hours		
Class size	1-4		
Year Developed	2018		
Content Expert(s)	Jamie Shoemaker, Liv Duty		
Lead Educator	Jamie Shoemaker, RN		

Title	Simulation Observation	**Course #**	SIM03
Course Objectives	- Observation of high-fidelity simulation courses lead by a Simulation Center Educator		
Category	Simulationist Instruction		
Learners			
Location			
Length	20 hours (within a six month period)		
Class size	1		
Year Developed	2018		
Content Expert(s)	Jamie Shoemaker, Liv Duty		
Lead Educator	Jamie Shoemaker, RN		

Title	Simulation Low-Fidelity Equipment Training	Course #	SIM04
Course Objectives	- Training, safe use and care of low-fidelity simulation equipment - How to schedule (check in/check out) equipment use		
Category	Simulationist Instruction		
Learners			
Location			
Length	Personalized to individual		
Class size	1		
Year Developed	2018		
Content Expert(s)	Jamie Shoemaker, Liv Duty		
Lead Educator	Jamie Shoemaker, RN		

Title	Simulation High-Fidelity Equipment Training	Course #	SIM05
Course Objectives	- Training, safe use and care of high-fidelity simulation equipment - How to schedule (check in/check out) equipment use		
Category	Simulationist Instruction		
Learners			
Location			
Length	Personalized to individual		
Class size	1		
Year Developed	2018		
Content Expert(s)	Jamie Shoemaker, Liv Duty		
Lead Educator	Jamie Shoemaker, RN		

Title	EMS Curriculum Research	**Course #**	SIMFELLOW01
Course Objectives	- Increase working knowledge and confidence when providing care for a critically ill or injured pediatric patient. - Enhance familiarity and proper use of pediatric specific equipment and cognitive aids. - Discuss and demonstrate proper pediatric airway and vascular access management. - Provide non-technical skill training, i.e. teamwork and communication.		
Category	Teamwork and Communication		
Learners	Paramedics		
Location	Outreach		
Length	Varies (1-8 hours)		
Class size	Varies		
Year Developed	2019		
Content Expert(s)	Sang Lee		
Lead Educator	Brant Merkt, RN		

Title	Space Testing: Critical Care Building	**Course #**	ST01
Course Objectives	- Replicating mockups of new clinical areas for staff to test and simulate various levels of care, from standard bedside care to complex critical care scenarios.		
Category	Systems Integration		
Learners	Varies		
Location	Critical Care Tower / Warehouse		
Length	Varies		
Class size	Varies		
Year Developed	2018		
Content Expert(s)	Wendy Bankes		
Lead Educator	Aimee Gardner, CP		

Title	Third Year Students	**Course #**	STUD01
Course Objectives	- Describe non-invasive oxygen delivery devices available in the pediatric setting. - Recognize signs and symptoms of respiratory distress in a pediatric patient. - Describe methods for NP/OP suctioning of pediatric patients - Apply appropriate interprofessional communication techniques such as huddles, shared mental model, and SBAR using Using TeamSTEPPS communication training. - Discuss physiologic response to shock in pediatric patients. - Recognize early and late signs and symptoms of shock in pediatric patients. - Discuss intravenous and intraosseous access in pediatric patients for the treatment of shock. - Perform techniques for intraosseous access in pediatric patients. - Perform push-pull technique for administering fluid bolus in pediatric patients		
Category	Teamwork and Communication		
Learners	Third year medical and RN students		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 6		
Year Developed	2014		
Content Expert(s)	Amy Guiot, Joe Real, Pam Hutchinson		
Lead Educator	Gina Klein, RN		

Title	TAP MD (Outreach)	**Course #**	TAP01
Course Objectives	- Students will understand that medical care requires teamwork. - Students will practice working in teams and on communication skills. - Students will learn about how pediatric simulators are used in medical training. - To provide the students the opportunity to actually touch a simulated "patient" and practice a maneuver like intubation, IV and IO placement, CPR, and running a simulator. - Students will practice working in teams and on communication skills" is not an objective for this course.		
Category	Unit and/or Care Process Orientation		
Learners	Students in TAP MD program		
Location	Oak Simulation Lab		
Length	4 hours		
Class size	Min. 8		
Year Developed	2014		
Content Expert(s)	Heleena McKinney		
Lead Educator	Cheryl Marshall, RN		

Title	In situ TCC Patient and Caregiver Training	**Course #**	TCC01
Course Objectives	- Build caregiver's confidence to care for trach patient in home setting. - Demonstrate skills to manage trach patient in home setting. - Recognition of airway emergency in trach patients within the home setting. - Initiation of emergency response.		
Category	Patient- and/or Caregiver-Focused		
Learners	Parents/Caregivers		
Location	In situ (A3S)		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2016		
Content Expert(s)	Lisa Mack		
Lead Educator	Michelle Rios, RN		

Title	TCC A3S Patient Safety	**Course #**	TCC02
Course Objectives	Team training with emphasis on technical skills (assessment, decision making and delivery of care) within the following emergency pediatric situations: - Respiratory failure in an infant or child with a tracheostomy; - Compensated shock in an infant or child with a tracheostomy; - Cardiopulmonary arrest in an infant or child with a tracheostomy.		
Category	Teamwork and Communication		
Learners	RN, RT, PCA, APN		
Location	In situ (A3S)		
Length	2 hours		
Class size	Min. 6		
Year Developed	2016		
Content Expert(s)	Rachel Ellison, Emily Knoebel, Julie Snider		
Lead Educator	Michelle Rios, RN		

Title	In situ TCC	**Course #**	TCC03
Course Objectives	- RN identify rapidly changing patient condition quickly and escalate concerns related to care appropriately; - APN, RN, & RT demonstrate a team approach to caring for a patient with a rapidly changing clinical status; - Identify Latent Safety Threats that exist in the clinical environment and that may arise in actual patient emergencies.; - Utilize simulation to improve retention of previously learned information and to increase knowledge base and critical thinking		
Category	Systems Integration		
Learners	RN, RT, PCA, APN		
Location	In situ (A3S)		
Length	0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)		
Class size	Min. 5, with representation from each profession on that unit		
Year Developed	2016		
Content Expert(s)	Rachel Ellison, Emily Knoebel, Julie Snider		
Lead Educator	Michelle Rios, RN		

Title	Transport Team Simulation Training	**Course #**	TRAN02
Course Objectives	- Participants will recognize and manage a patient based on a variety of case-based scenarios using a human patient simulator. - Participants will review and apply teamwork and communication skills in multidisciplinary teams using a human patient simulator. - Participants will review technical and non-technical skills and understand how to apply these skills into their own practice.		
Category	Teamwork and Communication		
Learners	RNs, Paramedics, RTs, EMTs		
Location	Liberty Skills Lab		
Length	1 hour		
Class size	Min. 3, Max. 5		
Year Developed	2020		
Content Expert(s)	Kristy Atkinson		
Lead Educator	Cheryl Marshall, RN		

Title	Advanced Trauma Life Support (ATLS)	**Course #**	TRAU01
Course Objectives	- Assess the patient's condition rapidly and accurately. - Resuscitate and stabilize the patient according to priority. - Determine if the patient's needs exceed a facility's capacity. - Arrange appropriately for the patient's inter-hospital transfer (who, what, when, and how). - Assure that optimum care is provided and that the level of care does not deteriorate at any point during the evaluation, resuscitation, or transfer process		
Category	Technical Skill-Based Competency		
Learners	RN, MD, RT, Paramedic		
Location	Oak Simulation Lab		
Length	16 hours (two days)		
Class size	Min. 18		
Year Developed	2010		
Content Expert(s)	Kelly Harrison, Josh Boyd		
Lead Educator	Shawn McDonough		

Title	Trauma Outreach	**Course #**	TRAU02
Course Objectives	Leverage high-fidelity simulation within Interprofessional training to: - Reveal to external participants the impact of teamwork, communication, situational awareness, mental modeling, mutual performance monitoring, and supportive behaviors towards the planning, execution and evaluation of safe, effective pediatric trauma resuscitative care. - Establish roles and demonstrate the responsibilities associated with each role while recognizing the impact on teamwork, communication, situational awareness and supportive behavior in caring for simulated pediatric trauma victims. - Applying the systematic processes identified in the providers' policies, procedures and protocols to analyze and differentiate the condition of and to initiate a plan of care for simulated trauma victims. - During the post simulation debriefing, participants will self-reflect upon their exhibited skills, knowledge and attitudes identifying areas for improvement and/or latent threats.		
Category	Teamwork and Communication		
Learners	RN, MD, RT, Paramedic, APN		
Location	Oak Simulation lab		
Length	3 hours		
Class size	Min. 8		
Year Developed	2012		
Content Expert(s)	Rich Falcone, Margot Daugherty		
Lead Educator	Shawn McDonough		

Title	Trauma Team	**Course #**	TRAU03
Course Objectives	Leverage high-fidelity simulation within an interprofessional course to highlight the need for patient safety in trauma care. - Review and practice communication, team leadership and teamwork techniques, i.e. mental modeling. - Introduce and review pediatric trauma management principles, including primary and secondary surveys (assessment), medical decision making, and initial “golden hour” management. - Require practice of unit specific resuscitation equipment, i.e. rapid infuser, to assess for and improve procedural competency. - Identify latent safety threats during simulation and debriefing (by reflection on clinical environment) and discuss, if possible, solutions to mitigate those threats.		
Category	Teamwork and Communication		
Learners	RN, MD, RT, PCA, Paramedic, Pharmacists		
Location	Oak Simulation Lab		
Length	2 hours		
Class size	Min. 8		
Year Developed	2006		
Content Expert(s)	Rich Falcone, Margot Daugherty		
Lead Educator	Brant Merkt, RN		

Title	Trauma Workshop	**Course #**	TRAU04
Course Objectives	- The participant will employ the principles of trauma resuscitation in a simulation environment. - The participant will demonstrate the tasks of their assigned role in a simulated patient scenario.		
Category	Teamwork and Communication		
Learners	RN, RT, PCA, Paramedic – new orientees from OR, PICU, and ED		
Location	Oak Simulation Lab		
Length	1 hour		
Class size	Min. 8		
Year Developed	2009		
Content Expert(s)	Margot Daugherty		
Lead Educator	Brant Merkt, RN		

Title	Advanced Trauma Life Support (ATLS) Refresher	**Course #**	TRAU07
Course Objectives	- Assess the patient's condition rapidly and accurately. - Resuscitate and stabilize the patient according to priority. - Determine if the patient's needs exceed a facility's capacity. - Arrange appropriately for the patient's inter-hospital transfer (who, what, when, and how). - Assure that optimum care is provided and that the level of care does not deteriorate at any point during the evaluation, resuscitation, or transfer process		
Category	Technical Skill-Based Competency		
Learners	RN, MD, RT, Paramedic		
Location	Oak Simulation Lab		
Length	8 hours		
Class size	Min. 18		
Year Developed	2019		
Content Expert(s)	Kelly Harrison, Josh Boyd		
Lead Educator	Shawn McDonough		

Title	SonoSim Ultrasound Program	**Course #**	US01
Course Objectives	By the end of these sessions, the learner will be better able to: - Understand and recognize sonographic anatomy needed to perform bedside ultrasounds for diagnostics and procedural care - Interpret images as normal or abnormal - Obtain images during bedside sonography - Translate image acquisition and interpretation into increased frequency of performance of bedside ultrasounds clinically		
Category	Technical Skill-Based Competency		
Learners	PEM Fellows and Faculty		
Length	Based on module length		
Location	Oak Simulation Lab		
Class size	Individual learning, as modules online		
Year Developed	2018		
Content Expert(s)	Ted Brenkert, Gary Geis, Andrew Lautz		
Lead Educator	Gary Geis, MD		

Title	Introduction to Critical Care Point of Care Ultrasound	**Course #**	US02
Course Objectives	By the end of these sessions, the learner will be better able to: - Setup ultrasound machine to obtain POC imaging, including improved knowledge related to basic knobology and image acquisition - Use ultrasound imaging to obtain peripheral and central venous access on simulation task trainers - Perform ultrasound for hemodynamic assessment on healthy volunteers		
Category	Technical Skill-Based Competency		
Learners	Critical care nurse practitioners		
Length	6 hours		
Location	Oak Simulation Lab		
Class size	Minimum 4, Maximum 8		
Year Developed	2019		
Content Expert(s)	Andrew Lautz, Ted Brenkert, Gary Geis, Maya Dewan		
Lead Educator	Gary Geis, MD		

Title	Point of Care Ultrasound for Central Venous Access	**Course #**	US03
Course Objectives	By the end of these sessions, the learner will be better able to: - Understand and recognize sonographic anatomy for venous catheter placement - Interpret vascular images, including use of color imaging - Obtain images during bedside sonography on simulation task trainers - Use ultrasound imaging to obtain peripheral and central venous access on simulation task trainers		
Category	Technical Skill-Based Competency		
Learners	Critical care fellows		
Length	6 hours		
Location	Oak Simulation Lab		
Class size	Minimum 4, Maximum 8		
Year Developed	2020		
Content Expert(s)	Andrew Lautz, Maya Dewan, Ted Brenkert, Gary Geis		
Lead Educator	Gary Geis, MD		

Title	Diagnostic Point of Care Ultrasound in the PICU	**Course #**	US04
Course Objectives	By the end of these sessions, the learner will be better able to: - Understand and recognize sonographic anatomy for hemodynamic and lung assessment - Interpret cardiac, vascular and lung images - Obtain images during bedside sonography on healthy volunteers		
Category	Technical Skill-Based Competency		
Learners	Critical care fellows		
Length	6 hours		
Location	Oak Simulation Lab		
Class size	Minimum 4, Maximum 8		
Year Developed	2020		
Content Expert(s)	Andrew Lautz, Maya Dewan, Ted Brenkert, Gary Geis		
Lead Educator	Gary Geis, MD		

Title	VAD Resource Course	**Course #**	VAD01
Course Objectives	- Practice unit specific equipment assessing for and improving competency. - Practice VAD specific assessments and interventions in order to increase retention of class content. - Provide the opportunity to work through VAD scenarios (with coaching in “201” class) in order to increase knowledge base and critical thinking. - Identify and increase awareness of resources available in the CICU and A6C.		
Category	Complex Medical Equipment		
Learners	RN		
Location	Heart Institute and Oak or ORB Simulation Lab		
Length	2-4 hours		
Class size	6-10		
Year Developed	2016		
Content Expert(s)	Katrina Fields		
Lead Educator	Brenda Williams, RN		

Title	VAD Conference	**Course #**	VAD03
Course Objectives	- Provide overview of pediatric ventricular assist devices (VAD): Berlin Heart, SynCardia, Heartware, Thoratec; - Provide opportunity to collaborate with other centers in order to create standardized regional guidelines for pediatric VADs – including management, daily VAD care, discharge preparation. - Provide opportunity to practice trouble shooting and management of alarms. - Demonstrate how to use simulation to enhance each center's VAD program education.		
Category	Complex Medical Equipment		
Learners	RN, MD, RT, CCP		
Location	Heart Institute Conference Room or Oak		
Length	4 hours		
Class size	10 -50		
Year Developed	2015		
Content Expert(s)	Katrina Fields		
Lead Educator	Brenda Williams, RN		

Title	VAD201	**Course #**	VAD04
Course Objectives	- Practice on unit specific equipment - assessing for, and improving competency - in a combined classroom/simulation setting - Practice VAD specific assessments and interventions - Provide the opportunity to work through VAD scenarios (with coaching) in order to increase knowledge base and critical thinking. - Identify and increase awareness of resources available in the CICU and A6C		
Category	Complex Medical Equipment		
Learners	RN, MD, RT, CCP		
Location	Heart Institute Conference Room or Oak		
Length	4 hours		
Class size	10 -50		
Year Developed	2015		
Content Expert(s)	Katrina Fields		
Lead Educator	Brenda Williams, RN		

Title	In situ VAD Patient and Caregiver Discharge Training	**Course #**	VADPT01
Course Objectives	- Assess patient and caregiver knowledge and comfort with VAD care, alarms, and treatments prior to discharge - Provide opportunity for patient and family to work through common VAD scenarios		
Category	Patient- and/or Caregiver-Focused		
Learners	Patient, Caregivers		
Location	Patient Room or Heart Institute Clinic Room		
Length	2 hours		
Class size	1-4		
Year Developed	2015		
Content Expert(s)	Katrina Fields		
Lead Educator	Brenda Williams, RN		

Inactive Courses

Title	*Adult Care Protocols*	***Course #***	*ADULT02*
Course Objectives	- *Recognition of adult-specific emergencies resulting in MRT (stroke, MI, PE, sepsis), and generation of basic differential for these diagnoses.* - *Identification of initial steps in management of adult emergencies.* - *Location of adult-specific protocols, and identification of adult-specific resources that would be required in the event of an adult emergency (notification of Hospital Medicine Adult Care team, contacting UC consultants, initiating transfer to UC).*		
Category	*Teamwork and Communication*		
Learners	*MD, RN, RT, APN*		
Location	*ORB Lab*		
Length	*4 hours*		
Class size	*Min. 6, Max. 10*		
Year Developed	*2015*		
Content Expert(s)	*Brian Herbst; Jennifer O'Toole*		
Lead Educator	*Jerome Bauer, RN*		

Title	*AHA – Instructor New*	***Course #***	*AHA03*
Course Objectives	*Led by the AHA Training Center Faculty, this course:* - *Outlines AHA guidelines and teaching requirements set forth by AHA for ACLS and/or PALS Instructors who will teach PALS, ACLS, and Combo courses for the Simulation Center;* - *Introduces the instructors to the Simulation Center while demonstrating the basics of running a simulator, setting up and resupplying stations, and the process for becoming an AHA Instructor.*		
Category	*Simulationist Instruction*		
Learners	*Eligible AHA Instructors*		
Location	*Oak Simulation Lab*		
Length	*4 hours*		
Class size	*Min. 1; Max. 12*		
Year Developed	*2010*		
Content Expert(s)	*Rachel Keller-Smith, RT; Brant Merkt, RN*		
Lead Educator	*Rachel Keller-Smith, RT*		

Title	*AHA – Instructor Update*	***Course #***	*AHA04*
Course Objectives	*Led by the AHA Training Center Faculty, this course:* - *Outlines AHA updated requirements and guidelines set forth by AHA for ACLS and/or PALS Instructors who will teach PALS, ACLS, and Combo courses for the Simulation Center.*		
Category	*Simulationist Instruction*		
Learners	*AHA Instructors*		
Location	*Oak Simulation Lab*		
Length	*4 hours*		
Class size	*Min. 1; Max. 12*		
Prerequisites	*AHA – Instructor New*		
Year Developed	*2010*		
Content Expert(s)	*Rachel Keller-Smith, RT; Brant Merkt, RN*		
Lead Educator	*Rachel Keller-Smith, RT*		

Title	*In situ CTRC*	***Course #***	*ALLER01*
Course Objectives	- *Staff will demonstrate/verbalize improved comfort level with emergency equipment-nebulizers, O2 masks-rebreathers, AED, crash cart, and code sheet.* - *Standardize communication plan with physician when patient concerns or questions arise.* - *Staff will demonstrate/verbalize improved comfort and confidence responding to adult emergencies, as we are seeing more adult infusion patients with more co-morbidities*		
Category	*Systems Integration*		
Learners	*RN, PCA, LPN, MA*		
Location	*In situ*		
Length	*0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)*		
Class size	*Min. 5, with representation from each profession on that unit*		
Year Developed	*2014*		
Content Expert(s)	*Becky Russo; Lori Brunner*		
Lead Educator	*Brant Merkt, RN*		

Title	*Blood Transfusion Course*	**Course #**	*BLOOD01*
Course Objectives	- *To teach, communicate and verify a standardized, safe, and highly reliable blood transfusion process.* - *Identify and train blood resource nurses (educators, RNII's and RNIII's) to 1) Serve as a transfusion resource for unit staff 2) Perform low fidelity simulation in order to meet CAP required annual education and document staff competency/skill checkoff.* - *Promote use of the new blood transfusion checklist which will assist in efficiency and standardization of the blood component transfusion process.* - *Identify and raise awareness of potential process failures in order to comply with blood transfusion policy and promote patient safety.*		
Category	*Technical Skill-Based Competency*		
Learners	*RN II, RN III, Unit Educators*		
Location	*Oak Simulation Lab*		
Length	*4 hours*		
Class size	*Min. 1*		
Year Developed	*2015*		
Content Expert(s)	*Maryann Weingartner; Kathy Aponte; Kim Burton; Caryl Shelton; Piper Coleman*		
Lead Educator	*Brant Merkt, RN*		

Title	*Cardiac Resuscitation for the Advanced Provider*	**Course #**	*CARD04*
Course Objectives	- *Improve comfort and competence of Team Lead responsibilities by practicing established safety behaviors, team leadership and team work techniques (closed loop communication, shared mental model, etc.).* - *Discuss obstacles to teamwork and communication, i.e. authority gradients.* - *Identify team level knowledge deficits and latent safety threats in order to develop care standardization of best practice.* - *Identify and increase awareness of resources available in the CICU.*		
Category	*Technical Skill-Based Competency*		
Learners	*RN, MD, RT, APN*		
Location	*Oak or ORB Simulation Lab*		
Length	*4 hours*		
Class size	*Min. 5 RNs, 1 APRN, 1 MD*		
Year Developed	*2016*		
Content Expert(s)	*Amy Ryan; Ilias Iliopoulos*		
Lead Educator	*Brenda Williams, RN*		

Title	*CICU Equipment Blitz*	***Course #***	*CARD08*
Course Objectives	- *Provide opportunity for staff to perform equipment specific hands-on skills in a simulated scenario.* - *Utilize simulation to improve retention of previously learned information and to increase knowledge base and critical thinking.* - *Identify and increase awareness of resources available in the CICU*		
Category	*Unit and/or Care Process Orientation*		
Learners	*RN*		
Location	*In situ*		
Length	*Varies*		
Class size	*Varies*		
Year Developed	*2017*		
Content Expert(s)	*Amy Donnellan*		
Lead Educator	*Brenda Williams, RN*		

Title	*Heart Institute Parent Education Day*	***Course #***	*CARD12*
Course Objectives	- *In Development*		
Category	*Patient- and/or Caregiver-Focused*		
Learners			
Location			
Length			
Class size			
Year Developed	*2017*		
Content Expert(s)			
Lead Educator	*Shawn McDonough, RN*		

Title	*Camp Joy (Outreach)*	***Course #***	*CJ01*
Course Objectives	*- Provide systems integration assessment and training for camp related emergencies.* *- Provide refresher CPR and AED training.*		
Category	*Teamwork and Communication*		
Learners	*Camp Staff*		
Location	*Camp Joy*		
Length	*8 hours*		
Class size	*Min. 3*		
Year Developed	*2015*		
Content Expert(s)	*Aimee Gardner, CP*		
Lead Educator	*Brenda Williams, RN*		

Title	*Complex Care Clinic*	***Course #***	*COM01*
Course Objectives	*- Empower staff to advocate for patient needs, i.e., calling codes using scripted language, applying non-rebreather to patients in emergent situation as appropriate, and using scripted language to obtain additional help from unit staff* *- Improve communication and relationship between providers and staff to work toward the goals of patient safety and advocacy.* *- Provide consistent and evidence-based refresher of PALS algorithm specific to respiratory distress and failure.* *- Provide consistent and evidence-based refresher of emergent trach management.*		
Category	*Systems Integration*		
Learners	*RN, MD, MA*		
Location	*Oak or ORB Simulation Lab*		
Length	*2.5 hours*		
Class size	*Min. 6; Max. 8*		
Year Developed	*2016*		
Content Expert(s)	*Maureen Switzer; Corinne Bria*		
Lead Educator	*Cheryl Marshall, RN*		

Title	*Interprofessional AR Code Team Training*	***Course #***	*DX01*

Course Objectives	- *Recognition of and response to patient decompensation*
	  ○ *Deteriorating mental status*
	  ○ *Worsening respiratory status*
	  ○ *Worsening perfusion/hemodynamic status*
	  ○ *Arrest state: CPR, BVM, epinephrine*
	  ○ *Recognition and management of ventricular fibrillation*
	- *Improve code team functionality*
	  ○ *Understanding of team roles and responsibilities.*
	  ○ *Efficacy in relation to space and equipment.*
	  ○ *CPR quality (Zoll is measuring CPR outcomes)*		

Category	*Teamwork and Communication*		
Learners	*MD, APRN, RN, RT*		
Location	*ORB Simulation Lab*		
Length	*1 hour*		
Class size	*Min. 7*		
Year Developed	*2019*		
Content Expert(s)	*Matt Zackoff*		
Lead Educator	*Jamie Shoemaker, RN*		

Title	*Child Life/Holistic New Employee Orientation*	***Course #***	*HOL01*
Course Objectives	*Introduce new hire Integrative Care employees to a general hospital room environment and multiple medical devices(i.e. Alaris pumps, g-tubes, etc.) in order to:* - *Decrease potential safety issues centered around unfamiliar medical devices and/or medical conditions;* - *Increase familiarity with patient setting to best provide a relaxing atmosphere for integrative care interventions.*		
Category	*Unit and/or Care Process Orientation*		
Learners	*Holistic Health Specialists; Music Therapists; Art Therapists*		
Location	*Oak Simulation Lab*		
Length	*4 hours*		
Class size	*Min. 1*		
Year Developed	*2016*		
Content Expert(s)	*Judy Goins*		
Lead Educator	*Brant Merkt, RN*		

Title	*Motion Capture*	***Course #***	*MOTION01*
Course Objectives	*Leveraging motion capture, accelerometry and different sized airway task training manikins to:* - *Determine baseline motion curves during laryngoscopy and intubation used by airway providers at different levels of experience;* - *Assess for differences between novices and experts;* - *Determine "ideal" motion curve for success, thus allowing development of a training program to accelerate expertise in advanced airway skills.*		
Category	*Technical Skill-Based Competency*		
Learners	*Novices (pediatric residents) and Experts (pediatric anesthesiologists)*		
Location	*Motion Capture Lab, Winslow Building*		
Length	*1 hour*		
Class size	*1 participant per course*		
Year Developed	*2016*		
Content Expert(s)	*Ben Kerrey, Gary Geis, Ted Cooper, Adam Kiefer*		
Lead Educator	*Ben Kerrey, MD*		

Title	*A4N Nursing*	***Course #***	*NUR04*
Course Objectives	- *Improve floor team's understanding of code team roles and responsibilities.* - *Improve floor team's team efficacy in relation to space and equipment in preparation for the code team's arrival.*		
Category	*Teamwork and Communication*		
Learners	*RN*		
Location	*ORB Simulation Lab*		
Length	*2 hours*		
Class size	*Min. 8*		
Year Developed	*2016*		
Content Expert(s)	*Emily Mayhaus, RN*		
Lead Educator	*Jamie Shoemaker, RN*		

Title	*Ortho Spine In situ*	***Course #***	*ORTH01*
Course Objectives	*Simulation-based training will be utilized in the operating suite setting to:* *- Assess the environment for obstacles to communication, i.e. hierarchies, halo effect, etc.;* *- Educate bedside providers on a novel escalation of concern policy;* *- Identify and mitigate latent safety threats;*		
Category	*Systems Integration*		
Learners	*MD, CRNA, RN, radiology technician*		
Location	*In situ*		
Length	*1 hour (20 minute simulation, 30-40 minute debriefing)*		
Class size	*Min. 5 and representative of the ortho spine team*		
Year Developed	*2015*		
Content Expert(s)	*Peter Sturm, James McCarthy*		
Lead Educator	*Rachel Keller-Smith, RT*		

Title	*Pre-Sim Online Course*	***Course #***	*PRESIM01*
Course Objectives	*The purpose of this eLearning course is to give clinical employees some basic knowledge about what can lead to a Serious Safety Event (SSE) and how teams can work together to prevent SSEs from occurring. Obstacles to teamwork and communication techniques are reviewed and placed into the context of medical resuscitation.*		
Category	*Simulationist Instruction*		
Learners	*Any*		
Location	*Web-based (ELM)*		
Length	*1 hour*		
Class size	*Not-applicable*		
Year Developed	*2010*		
Content Expert(s)	*Gary Geis, MD*		
Lead Educator	*Gary Geis, MD*		

Title	*Suspect Patient In situ*	***Course #***	*DIS02*
Course Objectives	*In preparation and/or response to identified "suspect" patient populations, i.e. Ebola Virus, simulation will be used in the in situ setting to:* - *Evaluate unit and institution preparedness, i.e. identify and mitigate latent threats to patients and staff;* - *Educate providers on most up-to-date assessment and management recommendations;* - *Develop system-based protocols to handle triage and assessment of these unique populations.*		
Category	*Systems Integration*		
Learners	*RN, MD, RT, PCA, Paramedic, CRNA, APN, CRC, Students*		
Location	*In situ*		
Length	*0.5 hours (10-15 minutes of simulation, 10-15 minutes of bedside debriefing)*		
Class size	*Min. 5, with representation from each profession on that unit*		
Year Developed	*2015*		
Content Expert(s)	*Matthew Gneuhs*		
Lead Educator	*Cheryl Marshall, RN*		

Title	*Interpreter Services*	***Course #***	*INTER01*
Course Objectives	*Language interpreters will be exposed to high-fidelity simulations to:* - *Improve comfort and confidence interpreting critical care resuscitations;* - *Improve comfort and confidence interpreting during death and dying scenarios.*		
Category	*Teamwork and Communication*		
Learners	*CCHMC-employed language interpreters*		
Location	*Oak Simulation Lab*		
Length	*4-hour*		
Class size	*Min 2*		
Year Developed	*2016*		
Content Expert(s)	*TBD*		
Lead Educator	*Jerome Bauer, RN*		

Title	*Lumbar Puncture Training/Assessment*	***Course #***	*LP01*
Course Objectives	*Training:* *- To build and maintain a resident's skill in the preparation, procedure, and completion of a lumbar puncture on an infant manikin.* *Assessment:* *- To assess a faculty or fellow's skills in the preparation, procedure, and completion of a lumbar puncture on an infant manikin, as part of the institution's requirement for procedural credentialing.*		
Category	*Technical Skill-Based Competency*		
Learners	*MD*		
Location	*Oak Simulation Lab*		
Length	*0.5-1 hours*		
Class size	*1*		
Year Developed	*2015*		
Content Expert(s)	*Gary Geis, MD*		
Lead Educator	*Gary Geis, MD*		

Title	*Day 5 Nursing Orientation*	***Course #***	*NUR01*
Course Objectives	*Demonstrate 5 Core competencies of Phase I in RN Orientation in a simulated setting.* *- Demonstrate basic use of the Nursing Process;* *- Access various forms of documentation;* *- Identify safety initiatives used when providing care to patients and families;* *- Describe/use effective communication skills to promote safe care;* *- Identify expected behaviors for professional development.*		
Category	*Unit and/or Care Process Orientation*		
Learners	*RN*		
Location	*Oak Simulation Lab*		
Length	*8 hours*		
Class size	*Min. 1*		
Year Developed	*2015*		
Content Expert(s)	*Barb Hensley; Jenny Saupe; Angie Nienaber*		
Lead Educator	*Cheryl Marshall, RN*		

Title	*Central Venous Catheter (CVC) Safety Course*	***Course #***	*SSECVC01*
Course Objectives	*By the end of this session, the learner will be able to:* *- Identify safe practices during placement of central venous catheters.* *- Recognize the importance of and technique for guide wire care when placing a central venous catheter.* *- Demonstrate competency in placement of a femoral central venous catheter on a task-trainer, as measured by a validated assessment tool.*		
Category	*Technical Skill-Based Competency*		
Learners	*Physicians with central venous access as part of their scope of practice*		
Location	*Oak Simulation Lab*		
Length	*2 hours*		
Class size	*4 per session*		
Year Developed	*2017*		
Content Expert(s)	*Gary Geis (Emergency Medicine); Maya Dewan (Critical Care); Richard Falcone (Pediatric Surgery)*		
Lead Educator	*Gary Geis, MD*		
Title	*Transport Team Procedural Training*	***Course #***	*TRAN01*
Course Objectives	*Leverage deliberate practice and mastery learning principles through hands-on task training to maintain procedural competency in the following resuscitative care procedures:* *- Central venous catheter placement, including use of bedside ultrasound;* *- Needle and tube thoracostomy;* *- Endotracheal intubation, using direct and indirect laryngoscopy;* *- Needle and surgical cricothyrotomy.*		
Category	*Technical Skill-Based Competency*		
Learners	*MD*		
Location	*Oak Simulation Lab*		
Length	*2 hours*		
Class size	*Min. 2, Max. 4*		
Year Developed	*2016*		
Content Expert(s)	*Hamilton Schwartz, MD*		
Lead Educator	*Gary Geis, MD*		

Title	*Trauma Nurse Competency*	***Course #***	*TRAU06*
Course Objectives	- *The participant will employ the principles of trauma resuscitation in a simulation environment.* - *The participant will demonstrate the tasks (responsibilities) of their assigned role in a simulated patient scenario.* - *The participant will rotate through multiple trauma simulations in order to demonstrate all of the "core" tasks required of a trauma core nurse.*		
Category	*Technical Skill-Based Competency*		
Learners	*Nurses from the emergency department or SRU who obtain the status of trauma core nurse*		
Location	*Oak Simulation Lab*		
Length	*2.5 hours*		
Class size	*Min. 8*		
Year Developed	*2013*		
Content Expert(s)	*Margot Daugherty*		
Lead Educator	*Jerome Bauer, RN*		

Title	*VAD Blitz*	***Course #***	*VAD02*
Course Objectives	- *Provide opportunity for staff to perform VAD specific hands-on skills* - *Utilize simulation to work through VAD scenarios in order to increase knowledge base and critical thinking.* - *Identify and increase awareness of resources available in the CICU and A6C*		
Category	*Complex Medical Equipment*		
Learners	*RN, MD, RT, CCP*		
Location	*Heart Institute Conference Room or Oak*		
Length	*4 hours*		
Class size	*10 -50*		
Year Developed	*2015*		
Content Expert(s)	*Katrina Fields*		
Lead Educator	*Brenda Williams, RN*		

Title	*SynCardia Human Factors Training*	***Course #***	*VADHF01*
Course Objectives	- *In Development*		
Category	*Patient- and/or Caregiver-Focused*		
Learners	*Patient, Caregivers*		
Location	*Patient Room or Heart Institute Clinic Room*		
Length	*2 hours*		
Class size	*1-4*		
Year Developed	*2015*		
Content Expert(s)	*Katrina Fields*		
Lead Educator	*Aimee Gardner, CP*		