Committee for the Future observes a Critical Care Transport Simulation

Pediatric Simulation Center
Annual Report 2014
Making a Difference

In 2014, the Pediatric Simulation Center celebrated its 6th year and 36,000th learner. The Center first began working with the Committee for the Future in 2008 and revamped the experience for committee members in 2014 to give them a view into the care of a patient who is transported from an outside hospital by Critical Care transport via helicopter and cared for in the PICU. The Committee for the Future gives emerging community leaders throughout Alabama the opportunity to experience Children’s of Alabama’s surgical, medical and family centered care services first hand, in addition to learning about hospital operations and research initiatives. The Center creates a safe, realistic environment allowing health care providers and students to increase their knowledge, hone their skills, and practice teamwork in the context of real life patient scenarios.

Members of the 2015 Committee for the Future observe an educational training event in the Pediatric Intensive Care Unit at Children’s of Alabama during a rotation day at the hospital.
Improving the Care We Provide

In 2014, the Pediatric Simulation Center encountered 14 different types of internal learners including patient family members. The Center provided training for 4,794 internal staff members and 69 patient family members. Our mission is to integrate simulation throughout the hospital in a structured learning environment to promote excellence in clinical care, patient safety, and education for all pediatric healthcare practitioners and teams. Focusing on interprofessional education as well as patient and family education furthers the Center’s impact and helps ensure safe and quality care for our patients.

Our In-House Learners in 2014*

- RN (3260)
- MD (1046)
- Respiratory Therapy (134)
- Clinical Assistant (117)
- Pharmacy (77)
- Patient & Family (69)
- Radiology Tech (68)
- PT / OT (47)
- Registered Dietician (15)
- Lab (11)
- Chaplain (7)
- Dental (7)
- Pharmacy Tech (4)
- Social Work (1)

*Numbers do not include students.
Educating Future Clinicians

In 2014, the Pediatric Simulation Center conducted:

- 37 medical student simulations
- 37 nursing student simulations
- 12 simulations for genetic counseling students
- 8 courses for pharmacy students
- 2 simulations for Master of Science in Health Administration (MSHA) students

The Center also mentored 10 third year medical students during their two month Scholarly Activity Block and 17 fourth year medical students during two and four week elective periods.

In 2014, the Center educated 2,057 students.
Serving the Community

In 2014, the Pediatric Simulation Center led a variety of simulations focused on improving pediatric care for community members and parents.

(Left) A mom practicing tracheostomy emergencies. (Bottom) Students from the Science Career Scholars Program pose for a photo at their closing ceremony.

• 327 school nurses attended 2 hour simulation sessions focusing on common chronic illnesses in school children

• 22 teenagers observed a simulation during the Trauma Prevention Program

• 69 patient family members attended simulation to practice tracheostomy and/or home ventilator emergencies prior to discharge

• 64 middle school students participated in the monthly Science Career Scholars program which introduces students to healthcare careers

• 209 middle school and high school students from 8 different schools toured the center to learn more about health related careers
Offering Quality Programs

In 2014, the Pediatric Simulation Center saw 7,055 learners and facilitated 17,654 learner hours of simulation. Throughout the year, the Center conducted:

- 690 simulation sessions
- 1045 hours of simulation
- 18 Mock Codes / 6 Mock Traumas
- 22 sessions for New Graduate nurses
- 33 family education simulations
- 30 Neonatal Resuscitation simulations
- 17 Nursing Orientation simulations
- 16 Anesthesia simulations
- 14 PALS simulations
- 8 ECMO simulations
- 76 Nursing Vigilance simulations

The Center also implemented 10 new simulation courses in 2014, bringing our total number of course offerings to 100 courses.

- Cardiology Simulation
- CRNP Skills
- ED iConnect
- ED Nurses (New Graduates)
- Mock Medical Resuscitation
- Nursing Vigilance
- Nutrition Simulation
- PT/OT Simulation
- Pulmonary/Smoking Cessation Sims
- Registered Dietician Simulation

Nursing Vigilance is an ongoing course that was designed and implemented for inpatient nurses in 2014. It is an educational initiative that involves simulation focusing on assessment, communication and thinking patterns that influence the daily decisions of our clinicians. The course has been well received by staff with positive reviews. As of December 2014, 76 sessions were conducted with a total of 280 participants.
Investigating Best Practice

Our team is actively involved in research projects to determine best practice in simulation education including teaching communication skills, clinical skills, and procedural skills. We currently have Institutional Review Board approval for the following research projects:

- Education and Training on the use of the Epi-Pen
- Nursing Triage Decision Making for Nurses in the Emergency Department
- Tracheostomy Education for Patient Families
- Endocrine Simulations for Residents and Nurses who Care for Diabetic Patients
- Gastrointestinal Simulations for Residents
- Nutrition Simulations for Residents on their Ward Rotation
- Critical Actions for Nurses during the First Five Minutes of a Code
- Pediatric Resident Procedures
- Pediatric Anesthesiology Resident Simulations
- Pulmonary Simulations focusing on Smoking Cessation for Family Members
- Cardiology Simulations for Residents and Nurses who care for Cardiac Patients
- Rapid Cycle Deliberate Practice for the Neonatal Resuscitation Program
- Needle Aspiration Simulation for Neonatology Residents and Nurse Practitioners
- Breaking Bad News to Families
- Code Cart Quality Improvement
- Nursing Vigilance Simulations for all Nurses in the hospital

Residents use rapid cycle deliberate practice to improve neonatal resuscitation skills.
Sharing Our Expertise

This page and the following pages include publications and presentations from 2014. For a comprehensive list of our publications and presentations, please visit www.childrensal.org/PediatricSimulationCenter

**Publications**


**Book Chapters**


**Abstracts**


**Presentations**


**Posters**


McDonald JM, Tofil NM, Winter LW. Rapid Cycle Deliberate Practice: Implementing a new approach to team building and education in neonatal resuscitation team training. Research and Innovations in Medical Education Week – University of Alabama at Birmingham, Birmingham, AL, September 2014.


Epps N, Larson-Williams L, White ML, Youngblood A, Peterson DT, Zinkan JL, Abdullatif H, Tofil N. A multidisciplinary, longitudinal simulation to teach pediatric residents and nurses how to diagnose, treat, and manage pediatric patients with diabetic ketoacidosis. Research and Innovations in Medical Education Week – University of Alabama at Birmingham, Birmingham, AL, September 2014.

Harper J, Tofil N. Knowledge of anaphylaxis and epinephrine autoinjectors among pediatric fellows and residents. Research and Innovations in Medical Education Week – University of Alabama at Birmingham, Birmingham, AL, September 2014.

Faculty & Staff

Supplemental Nursing Staff
Leslie Hallmark, RN
Annitrice Young, RN

Adjunct Faculty
Steve Baldwin, MD, Pediatric Emergency Medicine
Michael Barnett, MD, Palliative Care Medicine
Jennifer Beall, PharmD
Kim Benner, PharmD
David Bernard, MD, Pediatric Emergency Medicine
Carl Coghill, MD, Neonatology
Jerry Cox, MD, Pediatric Anesthesiology
James Gambrell, MD, General Pediatrics
Chris Jolliffe, RN, Sexual Assault Nurse Examiner
Shruti Kant, MD, Pediatric Emergency Medicine
Collin King, MD, Pediatric Anesthesiology
Linnea Larson-Williams, MD, Pediatric Endocrinology
Jeannine Maclin, MD, Pediatric Gastroenterology
Lauren Nassetta, MD, General Pediatrics
Ashley Nichols, MD, Palliative Care Medicine
Tammy Pope, BSN, RN, RNC
Robert Richter, MD, General Pediatrics
Paul Scalici, MD, General Pediatrics
Amanda Soong, MD, General Pediatrics
Brad Troxler, MD
Susan Walley, MD
Marjorie Lee White, MD, Pediatric Emergency Medicine
Lindy Winter, MD, Neonatology
Mary Worthington, PharmD

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