November 1, 2018

Director's Corner

Chest Compression Challenge

Intensive Care Unit
Interprofessional Education
 iTeachU Vascular Workshop
Poverty Simulations
Quality Academy
Procedural Skills Facilitator Course
Tech update: SSH SOTS Group
Research Update
Simulation Community Building
MSHA Intern Highlight

Director's Corner

Marjorie Lee White, MD, MPPM, MA

October saw the sim team spread out across the UAB enterprise meeting our mission of partnering to inject simulation throughout and change the way we care for patients. Highlights of the month for me were the Chest Compression Challenge done as part of UAB Quality Week, our Interprofessional ICU experience and a large pilot of our newly developed Opioid tabletop simulation. Please check out what we've been up to in the stories below. As part of our FY19 goals, we're also trying to better understand how to build on our in situ simulation program success (and

Chest Compression Challenge

Brian Mezzell, MBA & Charlie Prince, MS

High-quality cardiopulmonary resuscitation is extremely important for the survival of a victim of
Effective chest compressions revolve around proper compression depth, rate, adequate recoil, and minimizing interruptions in compressions. Performing effective chest compressions can be challenging, both mentally and physically. To highlight the importance and the difficulty of high-quality chest compressions, the Office of Interprofessional Simulation for Innovative Clinical Practice (OIPS) partnered with UAB Quality and Patient Safety to host the Chest Compression Challenge. Read the full story...

See the Chest Compression Challenge winners below:

**Congratulations to the Chest Compression Challenge Winners!**

Prizes were awarded to the individual with the highest score and to the unit with the highest participation and quality.

Congratulations to Alexis Gaines for a perfect score of 100 to win the individual high score.

The unit winners were the NICU for highest participation and the HTICU for overall highest quality compressions and interprofessionalism.

---

**Intensive Care Unit Interprofessional Simulation**

Michelle Brown, PhD, MS, MLS(ASCP) SBB & Penni Watts, PhD, RN, CHSE-A

"Awesome, everyone should have this opportunity!" A quote from one of the learners...what a great way to share the strength of this ICU simulation.

This multi-patient, interprofessional critical care simulation allows students to practice what we often discuss in didactic sessions - high functioning teams, effective communication, and knowing the roles of others on your team. The ICU has 7 simulated patients, each patient has a different diagnosis and acute concern. Four patients were high fidelity simulators and three were standardized patients. The simulation was conducted in real time and lasted approximately 45 minutes.

A unique, three-tiered approach to debriefing is used for this simulation. After the simulation learners remain in the individual patient rooms for a case debrief. Next, a large group debriefing is conducted with all students who participated in the simulation. Following this, learners debrief by profession to discuss profession-specific concerns.

One learner shared that the simulation allowed them to practice "good communication". Another discussed how "working on an interprofessional team was very valuable". Many learners elaborated on the realism of the simulation.
On October 18 and 19, the CA1 anesthesiology residents took part in a vascular access workshop where they had the opportunity to practice multiple procedures using ultrasound guidance and specialized procedural simulation trainers. For the past several weeks, the residents have taken part in a flipped classroom style of learning by studying didactic components of multiple vascular principles and procedures offered through commercially available iTeachU modules. The workshops, facilitated by Dr. Michelle Tubinis, provided residents the opportunity to gain confidence when performing the procedures and using the simulation trainers, while receiving real time coaching and feedback regarding ultrasound skills and procedural techniques. Following the workshop, residents will return to the simulated environment to complete a set number of successful cannulations for each procedure. The vascular module culminates with a final exam. Additional modules that the Department of Anesthesiology has, or will, partner with OIPS to offer simulation for are transthoracic echocardiography (TTE), transesophageal echo (TEE), Pulmonary/Gastric, and Peri-Arrest.

**Poverty Simulations**

Laurel Hitchcock, PhD

OIPS has been hosting poverty simulations to students and educational programs across the UAB campus since Fall 2015. To date, approximately 40 poverty simulations have been facilitated for over 4000 students from undergraduate and graduate students across the campus including social work, dentistry, nursing and business. Additionally, faculty, staff and students come together to help make the simulation run smoothly by leading the simulation, running small group debrief sessions, and playing the role of service providers for the simulation.

The poverty simulations are not just a popular interprofessional event at UAB. They also appear to be effective at changing attitudes about poverty among future healthcare practitioners. In a recent publication in the Journal of Social Work Education, we found that the simulations showed promising improvements in students' ability to think critically about poverty. One of the most significant changes was in students' ability to understand others' perspectives regarding living in poverty; that is to apply empathy to those living in poverty. This suggests poverty simulations may help students from healthcare professions to better understand the lived experience of poverty. For more information about this research:


**Quality Academy**

Scott Buchalter, MD

On Sunday, October 21, twenty-four members of the Fall 2018 UAB Medicine Quality Academy cohort participated in a series of simulation sessions at the
Center for Patient Safety and Advanced Simulation put on by the Office of Interprofessional Simulation for Innovative Clinical Practice team. The UAB Medicine Quality Academy was developed by UAB Medicine in partnership with the School of Health Professions. Participants are nominated by UAB Medicine in concert with the School of Health Professions and come from all over UAB Health System as well as Children's of Alabama. Successful completion of the Quality Academy allows participants to be awarded an Academic Certificate in Healthcare Quality and Safety. Teams from the quality academy work on health system-based quality and safety projects. The simulation session provided an opportunity for hands-on learning in immersive and procedural simulation methods, which go hand-in-hand with improving quality and safety for our patients. Presentations from OIPS faculty included didactics to introduce the concepts deployed in simulation for individuals, teams and systems as well as an update on simulation activity currently occurring at UAB and beyond. Participants discussed additional uses for simulation in their projects, and some have made plans for future simulation activity in their areas of focus. Reactions to the simulation session were exceedingly positive and common themes included the importance of working together as a team and team communication. If you are interested in participating in the Quality Academy in the future, please contact Ashleigh Allgood, Program Manager, at the School of Health Professions, or Scott Buchalter, MD, Quality Education Officer for UAB Medicine.

Procedural Skills Facilitator Course
Don Reiff, MD & Lisa Bagby, MSN, RN, CHSE

In preparation for the pilot training for Advanced Practice Providers-Advanced Procedures, a Procedural Skills Facilitator Course was conducted on October 16. This course, facilitated by Dr. John Gullett and Lisa Bagby, focused on functional ultrasound skills for central venous access procedures and facilitation skills for procedural simulation. We are looking forward to utilizing these skills to facilitate upcoming APP learner simulation sessions for CVL insertion in the IJ, femoral, and subclavian sites as well as Vas Cath insertion in the IJ and femoral sites. Additional modules for thoracentesis and chest tube insertion are in development for this learner group. Thank you to Drs. Sam Windham, and Jonathan Black for your time, attention, and willingness to facilitate the upcoming procedural simulation sessions.

Tech Update: SSH SOTS Group
Tyler Burks - Manager - Clinical Simulation Operations - Audio Visual

During the January, 2018 Society for Simulation in Healthcare meeting, a connection was made with a special interest group devoted to sharing information in the clinical simulation community. The Simulation Operations Technology Section or SOTS is a diverse group of those in the clinical simulation field joining together to share new techniques as well as insights into the products that already exist or have just been released. The more we can share our knowledge in this area the better equipped we are at helping our teams and learners to achieve their goal of better healthcare outcomes for everyone.

Research Update
Shilpa Register, OD, PhD, MS

As we close out 2018, I wanted to share reflections on another of the top cited articles focused on interprofessional simulation. To identify these articles, we conducted a systematic search of
This month, we will provide an overview of one of these articles: Non-technical skills of surgeons and anaesthetists in simulated operating theater crises authored by AG Doumouras, M Hamidi, K Lung, CL Tarola, MW Tsao, JW Scott, DS Smink and S Yule.

This article was published in 2018 in the British Journal of Surgery. The authors investigated the impact of non-technical skills on surgeons and anesthetists in critical operating room simulated scenarios. Each group consisted of an interprofessional team of surgeons, anesthetists, and nurses who participated in half-day training simulations. They utilized two validated tools and had trained raters for data analysis. The authors found that higher scores on non-technical skills were associated with decreased time to crisis resolution. They further posit its relationship to reducing patient error rates with timely responses in crises. While the study had several limitations, it demonstrated the use of simulation to assist in identifying areas of improvement and/or training that would result in better patient care outcomes.

Research and Innovations in Medical Education (RIME) Week

OIPS had the opportunity to highlight our research at this year's Research and Innovations in Medical Education (RIME) Week. Briana Miller presented data from our poverty simulation; Chase Cox presented research related to our sepsis sims; Jill Deaver presented data from pilot focus groups to assist in determining literary search behaviors. We were pleased to have a diverse group of projects presented this year.

UAB Medicine Quality Week Inpatient Storyboard Symposium

Amanda Gargus, MSN, RN

On October 18, OIPS participated in the Inpatient Story Board Symposium during UAB Medicine Quality Week. Our submission titled "The Implementation of Electronic Health Record Simulations to Improve Sepsis Outcomes in Hospital Systems" highlighted our Sepsis Tabletop simulation. This simulation is used to enhance clinical awareness, decrease time to sepsis recognition, standardize care, improve compliance with the UAB Code Sepsis process and provide data for process improvements.

Simulation Community Building

Opioid Tabletop Sim Pilot for American Academy of Pediatrics

Shelby May, Clinical Simulation Equipment Technician

During the Annual Meeting for the Alabama Chapter of the American Academy of Pediatrics on September 29, OIPS team members Marjorie Lee White, Michelle Brown, Shelby May, Kelly Roszczyński, and Addiction Medicine Physician, Cayce Paddock, hosted a unique, two-hour CME experience titled: An Opioid Simulation: Experiencing the Road to Recovery. The tabletop simulation experience allowed participants to navigate life as someone with opioid use disorder, to help them better understand patients that they may encounter in the future. The simulation weaved real-life examples in order to provide guidance for pediatricians to understand the foundations of the disease and resiliency in their patients. OIPS would like to extend a special thank you to Emily Vance, Terri Glass-Williams, and Allyson Varley for their help developing this tabletop simulation.
Helena Rivera recently joined the Office of Interprofessional Simulation for Innovative Clinical Practice as a MSHA Student Associate. She was born in Pensacola, Florida and attended the University of Florida to earn her bachelor's degree in management. Helena is a currently enrolled at UAB and is pursuing her dual Master of Science in Health Administration and Master of Business Administration degrees. Her family includes her parents, Paul and Kim, and their dog, Oliver, a Bichon/Chihuahua mix. Helena's interests include cooking, hiking, and reading. Her favorite food is all desserts and the latest book she read was "Five Days at Memorial" by Sheri Fink. Helena can be found on Facebook, LinkedIn, and Instagram.

Important Dates for Simulation Community and/or Facilitator Development

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 1, 2018</td>
<td>ESP Workshop</td>
</tr>
<tr>
<td>November 8, 2018</td>
<td>Sim 1</td>
</tr>
<tr>
<td>November 10, 2018</td>
<td>MOCA</td>
</tr>
<tr>
<td>December 6, 2018</td>
<td>Sim 2</td>
</tr>
<tr>
<td>December 8, 2018</td>
<td>MOCA</td>
</tr>
<tr>
<td>December 13, 2018</td>
<td>Difficult Debriefings Workshop</td>
</tr>
</tbody>
</table>

For Facilitator Development Opportunities, visit [https://www.uab.edu/simulation/development-opportunities](https://www.uab.edu/simulation/development-opportunities)
Standing (left to right): Charlie Prince (Director of Operations), Andres Viles (Simulation Coordinator Senior), Marjorie Lee White (Director), Amanda Gargus (Clinical Simulation Coordinator), Teldra McCord (Clinical Simulation Equipment Technician), Kelly Markham (Administrative Associate), Erin Blanchard (RN Simulation Educator Senior), Brian Mezzell (Communications Specialist), Betty Farley (Program Director III), Brad Bertke (Program Coordinator I), Shilpa Register (Director of Research), Shelby May (Clinical Simulation Equipment Technician), Fenil Patel (Simulation Coordinator), Ben Whitaker (Clinical Simulation Specialist)

Seated (left to right): Lisa Bagby (Director of Procedural Simulations), Tyler Burks (Manager - Clinical Simulation Operations - Audio Visual), Dawn Taylor Peterson (Director, Faculty Development & Training), David Mathews (Clinical Simulation Equipment Technician), April Belle (Director of In Situ Simulations), Joe Castongia (Clinical Simulation Equipment Technician)

For more information, please visit us on the web at http://www.uab.edu/simulation