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INTERPROFESSIONAL POSTER SESSION
List of Abstracts
Poster #1

Training the Way We Perform: The ZIEL Interprofessional Code Blue Teamwork Simulation Program

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Background: Successful emergency cardiac resuscitation requires remarkable coordination between a large interprofessional team, assembled under extreme time pressure. Nationally, practitioners often have limited opportunities to practice crisis teamwork, and even fewer opportunities to practice with all interprofessional roles represented authentically. The Zamierowski Institute for Experiential Learning (ZIEL) at KUMC/TUKHS is in its second year of implementing rigorous simulation-based training for cardiac resuscitation teamwork with Acute Progressive Care nurses and Code Blue Team members (i.e., ICU nurses, Internal Medicine residents, and respiratory therapists).

Purpose:
1. To enhance interprofessional collaborative practice at TUKHS both for cardiac resuscitation specifically and for crisis teamwork broadly.
2. To advance a program of multiple applied research projects in teamwork science (e.g., investigating novel performance measurement systems to ensure high-reliability patient care; estimating the incremental effect of the program beyond standard BLS/ACLS training).

Methods: As of 10/29/2017, 283 participants have partially or fully completed a two-session course (111 APC RNs, 76 ICU RNs, 74 residents, & 21 RTs). Session One emphasized focused deliberate practice of key resuscitative tasks and teamwork skills. Session Two featured
repeated practice in full code blue scenarios to promote integration of skills and rich discussion regarding interprofessional collaboration and performance. Participants were asked to complete surveys following each session. Performance data was collected via multi-angle video recording, audio recording, and multiple sensors for automatic detection of key interventions (e.g., CPR quality). Research activities were approved by the KUMC IRB.

**Results:** Of participants completing the course to date, 100% believed the course would “definitely” (91%) or “probably” (9%) improve patient outcomes. Participants’ comments revealed that interprofessional learning was a key component of the course’s perceived effectiveness, particularly in increasing role clarity and practicing leadership and communication. 87% believed that implementing MD/RN co-leadership approach improved team coordination and maintenance of a shared mental model among team members. Data coding and analysis is ongoing to characterize teamwork and performance on key quality metrics. Efforts are also underway to coordinate with TUKHS personnel in investigating the effects of training on patient care processes and outcomes.

**Discussion/Conclusion:** While challenging from a scheduling standpoint, the ZIEL interprofessional Code Blue training program has promoted enhanced teamwork and high-quality care for cardiac resuscitation. Continuing research and development is aimed at refining the program and drawing insights for the broader science of teamwork in healthcare.
Poster #2

TeleHospice: Implementation Lessons from Rural Hospice Care with Mobile Tablets

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Conflicts of Interest: The authors have no conflicts of interest to report.

Background: In underserved rural communities, hospice personnel often travel great distances to reach patients, resulting in challenges to maintain access, quality, cost-effectiveness and safety. To address these disparities, the University of Kansas Medical Center piloted the country’s first TeleHospice (TH) service in 1998. Barriers such as technology limitations, costs and attitudes towards technology limited adoption (Cook et al., 2001). Led by an interprofessional research team including an oncologist, psychologist, nurse, social worker, and family physician, an updated academic-community project utilizes secure mobile videoconferencing to support TH services in Kansas’ frontier communities.

Purpose: To implement and evaluate a comprehensive TH service in rural Kansas.

Methods: Leveraging lessons learned from the early work, a secure cloud-based videoconferencing solution was chosen for ease of use. To maximize limited resources, the selection of hospice partners was guided by Gustafson et al.’s (2003) Organizational Change Manager, which also informed implementation gaps. The academic team partnered with Hospice Services, Inc., a leader in rural hospice care, providing services to 16 Kansas counties.

Results: From February 2016 through January 2017, 116 TH encounters occurred, encompassing 707 attendees over 7,462 minutes. The most common TH uses to date have been: administrative (e.g., connecting hospice staff across 16 counties); professional-to-professional (e.g., connecting hospice nurses at homes to additional TH professionals); and family support (e.g., connecting adult children with loved ones). The professional-to-professional videocalls have enhanced communication between the healthcare professional at
the home (often a nurse) and multiple healthcare professionals at a distance (e.g., medical director, social worker, bereavement counselor, chaplain) in order to provide the highest quality of care to patients and their caregivers. Initial use of videoconferencing for administrative purposes developed a comfort level in using it for clinical and family support purposes. For staff meetings alone, the hospice has saved approximately $2,500/month in travel, with TH staff noting increased morale driven by increased team communication.

**Discussion:** The ongoing study reflects the feasibility of the interprofessional TeleHospice approach. Compared with early work, technology advances and a community-centered approach have increased TH adoption.

**Conclusions:** With decreasing budgets as well as rural hospice closures, innovative, cost-effective and community-driven approaches such as TH are needed to decrease disparities. As dissemination occurs within national hospice organizations, continued research is needed to understand best fit within frontier hospices, to inform future urban applications and to address reimbursement.
Poster #3

Project ECHO (Extension of Community Healthcare Outcomes) for Pain Management: Preliminary Data from a Technology-Enabled Quality Improvement Approach

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Conflicts of Interest: The authors have no conflicts of interest to report.

Funding Source: This research was supported by CX2.

Background: Rural states such as Kansas mirror the nation in substantial gaps in evidence-based assessment and treatment of chronic pain. Because of the complexity of pain management and no “quick fixes,” our interprofessional team paired the successful telementoring Project ECHO approach with our broader hybrid, multi-component learning model in order to maximize practice change. This is particularly true in Kansas’ rural practices where there may be no/limited referral options for thorough assessment and treatment in pain management, as well as challenges associated with stigma around disclosing pain and seeking help. The ECHO intervention was developed with an interprofessional team, across pain
medicine, family medicine, nursing, behavioral health, pharmacy, public health, substance abuse treatment, and other specialties.

**Purpose:** The Pain Management approach evaluates the impact of 11 Pain Management ECHO Sessions and monitors results employing a quality improvement framework across two waitlist control cohorts.

**Methods:** Using a mixed methods approach, the project aims are: 1. To compare the ECHO-PM intervention group to a randomly assigned Waitlist Control in health system affiliated primary care practices. 2. To evaluate the impact of dose of ECHO-PM training on practice and provider outcomes. And 3. To assess the influence of organizational components on ECHO-PM participation.

**Results:** The poster presents strategies associated with recruiting and retaining 22 rural and frontier practice teams (across professionals) for the 6-month intervention. Data collection includes knowledge (Know Pain-12, CDC Guideline Adherence, QI knowledge), practice (adapted from the Academy of Integrated Pain Management assessment), and implementation readiness. Early implementation lessons learned are shared. Baseline information reflects significant gaps in pain management best practices. Early examples of the QI projects will be shared, such as change practice protocols to maximize use of K-TRACS (Kansas Prescription Monitoring Program).

**Discussion:** The ongoing study reflects the feasibility of the interprofessional Project ECHO approach across rural Kansas sites (e.g., community health centers, community clinics, hospitals, other sites). Initial results underscore the gaps in evidence-based pain management in the community and reinforce the benefit of pairing the ECHO approach with the QI component.

**Conclusions:** The project is concluding the second cohort in November 2017 and is evaluating the quantitative and qualitative impact across diverse rural sites. Future Pain Management ECHO series will be driven by priority topic areas identified by participants. Additional ECHO series such as an upcoming Opioid Addiction Treatment ECHO will also address these needs.
Poster #4
The Integration of Clinical Laboratory Science Students into a Simulation-Based Interprofessional Education Event

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Funding Source: None. This project developed and delivered in partnership between KUMC-SON, UME-SOM, KUMC-SHP and the Zamierowski Institute for Experiential Learning.

Background: In a position paper written by the American Society for Clinical Laboratory Science, it was recognized that the Clinical Laboratory Science (CLS) profession needs to fully integrate patient safety concepts into pre-certification curricula and entry-level competencies for graduates. This framework was guided by the Institute of Medicine (IOM) aims for improving healthcare. Other healthcare professions, such as medicine and nursing, have integrated competencies and professional activities into their respective curricula focused on the improvement of patient safety and the delivery of quality care. The Department of Clinical Laboratory Sciences within the School of Health Professions (SHP) is addressing competencies within its pre-certification curriculum for improving patient safety through the contribution of clinical laboratory expertise to the interprofessional team. Simulation offers an environment for the cultivation of interprofessional collaboration in the management of patients.
Purpose: To integrate CLS students into a longitudinal simulation curriculum structured to practice interprofessional collaboration in the management of cases requiring urgent to emergent patient care.

Methods: The event was structured to represent clinical content leveled to the academic curriculum of KUMC Undergraduate Medical Education (UME), School of Nursing (SON), and CLS programs and to scaffold IPEC Core Competencies using TeamSTEPPS® tools. The event is a targeted assessment involving two patient cases with urgent to emergent sepsis needs. The participants for the pilot included medical, nursing and first-year CLS students.

Results: The Event 2 simulation pilot launched on October 31, 2017. The planning and delivery of the event was completed with 2 medical students, 2 nursing students and 2 CLS students. This launch required 4 physician instructors, 2 nursing instructors, 1 CLS instructor in partnership with the Zamierowski Institute for Experiential Learning (ZIEL) education and simulation delivery team.

Discussion: The goal of integrating CLS students into the simulation was to engage in interprofessional practice of TeamSTEPPS® tools such as ISBARR and CUS. The integration of IPEC Competencies TeamSTEPPS® tools supports the pursuit of achieving competencies in interprofessional practice. This goal will not be fully evident until current program students graduate.

Conclusion: The integration of CLS students into a simulation-based IPE event provides a realistic portrayal of the healthcare team. There are future opportunities for longitudinal studies for students participating on an interprofessional healthcare team. The practice of interprofessional communication will prepare our learners for potential interactions in healthcare. The ZIEL Simulation Hospital located in the Health Education Building (HEB) provides the ideal venue for interprofessional education.
**Poster #5**

*Interprofessional Procedure Training for Medicine and Nursing Students*

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**Conflicts of Interest:** The authors have no conflicts of interest to report.

**Funding Source:** None. The project was developed and delivered in partnership between KUMC SON, SOM, and Zamierowski Institute for Experiential Learning

**Background:** Both the American Association of Medical Colleges and American Association of Colleges of Nursing have published procedural competencies for undergraduate students. In addition, licensing and accrediting bodies are universally acknowledging the need for interprofessional education for both trainees and professionals. Recognizing these standards, the University of Kansas Schools of Nursing (SON) and Medicine (SOM) created interprofessional procedure workshops to foster collaboration, communication and learning with and from other disciplines. The first workshop focused on venipuncture and peripheral intravenous catheter (PIV) insertion.

**Purpose:** The purpose of this simulation course was to deliver an interprofessional procedural curriculum to teach junior medical and nursing students peripheral IV insertion and venipuncture.

**Methods:** Broad learning goals for this curriculum were defined after review of the American Association of Colleges of Nursing Essentials of Baccalaureate Education (#6 and #9) American Association of Medical College Core Entrustable Professional Activities for Entering Residency (#9 and #12), the KU SOM graduation competencies, and the Core Competencies for Interprofessional Collaborative Practice sponsored by the Interprofessional Education Collaborative (CC4, CC5, and CC6). Learning objectives and specific content was developed based on the KU SON Skills Curriculum, the American College of Surgeons (ACS) and the
Association for Surgical Education Simulation-Based Surgical Skills Curriculum, and with iterative input from the SOM Clinical Skills Advisory Group representing all three KU SOM campuses.

The curriculum was structured according to the evidenced-based framework described by Sawyer et al.,1 “Learn, See, Practice, Prove, Do, Maintain.” Students completed pre-learning on the peripheral IV insertion and venipuncture procedures prior to the training sessions. Twenty-one first year medical students and 12-15 third year nursing students participated in each session, supported by one SON faculty instructor and five graduate nursing students. The practice was structured according to four procedural phases: Planning, Preparation, Insertion, and Post-Insertion Care. Each step was demonstrated (either by live instruction or expert video), and then students worked in small groups for deliberate practice. Whenever possible a student from each discipline was included. Since SON students completed training on these procedures previously, these students were able to provide peer coaching and modeling during the practice time.

**Results:** Eight sessions of training will be delivered between 10/25-11/21/2017. Training groups were comprised of 22 first-year medical students and 14-15 first-year BSN students. Early survey respondents agreed/strongly agreed at over 90% that the simulation was of appropriate level of difficulty, appropriate length of time, that instructors provided a safe environment for learning, that the simulation was clinically relevant, that they understood the expectations of the experience, and that they felt the participating in the simulation experience would improve quality and safety of the clinical care they would deliver. In open-ended questions, students conveyed an appreciation that the training experience was interprofessional.

**Discussion:** The goal of this interprofessional procedure curriculum is to achieve higher graduate competencies in procedural skills and interprofessional practice. This goal will not be fully evident until students reach graduation. The role of BSN students as peer coaches seemed to reinforce skills for BSN students, and also provided an opportunity for interprofessional collaboration focused on procedural safety. Future procedures may include: nasogastric tube insertion and maintenance, creating and maintaining a sterile field, Foley bladder catheterization, oxygenation, basic airway management and tracheostomy suctioning. Sustainability of an interprofessional program that delivers the high volume of simulated events and consumable procedure supplies to large cohorts of students requires institutional support for dedicated personnel and funding for adequate numbers of supplies for deliberate practice.

**Conclusion:** Recognizing scope of practice and curricular overlap has allowed the University of Kansas Schools of Nursing and Medicine to create interprofessional education opportunities
that will continue throughout the curriculum. Creating this curriculum will support graduates in preparations related to psychomotor skills and interprofessional collaboration required for safe patient care.

Poster #6

Benefits of immersive community health education: A qualitative analysis of students’ experiences

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Conflicts of Interest: The authors have no conflicts of interest to report.

Background: The Community Health Project provides a unique experience for health professions students to engage their community and expand professional development beyond the classroom. Students from multiple disciplines are matched with local community health agencies and participate in an eight-week internship, which culminates in a collaborative project. The immersive educational experience gives students primary insight into the health inequities they will encounter in their professional work.

Purpose: To explore the educational benefits of community health experiences for health professions students.

Methods: Across the 8-week internship, the weekly journals of fourteen Community Health Project student interns were assessed using direct thematic qualitative analysis. Themes of knowledge, skills, and behavior were used to categorize the benefits of immersive community health education and describe examples of career development.

Results: Thematic analysis revealed increase in knowledge (n=165), intent to change behavior (n=26), and professional skills development (n=75).

Discussion: Common themes included the ability to develop professional skills such as public speaking, inter-professional networking, and project presentation. Additionally, students reported gains in knowledge about local health agency operations, pressing community health
concerns, and initiatives to improve public health. Students demonstrated this knowledge as advocates for their agencies. Throughout the internship, students also indicated a desire to change their behaviors to better understand and consider health barriers their future patients may face.

**Conclusion:** The eight-week integrative and collaborative experience with local community-based agencies enhances student understanding of health promotion and disease prevention issues, and provides the opportunity for professional skills development not often obtained from the classroom experience. Students gain first-hand insight into barriers to health care access and are often inspired to pursue community health education for their future practice.
An interprofessional collaboration between a clinical social work training program and a clinical psychology internship training program to meet the behavioral healthcare needs of rural and urban underserved populations.

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Conflicts of Interest: The authors have no conflicts of interest to report.

The research was funded by the U.S. Department of Health and Human Services, Health Resources and Services Administration’s Behavioral Health Workforce Education and Training program.

Background: Rural and urban underserved communities are highly prevalent in Kansas, as they are throughout the U.S. Behavioral health workforce shortages contribute to barriers in access to healthcare. Two projects, one led by The University of Kansas in Lawrence, and the other by The University of Kansas Medical Center in Kansas City, are addressing these needs, each in a different but complementary way.

Purpose: To show how two training programs, one for clinical psychologists and the other for clinical social workers, can collaborate to enhance training, and expand the number of behavioral health professionals prepared to serve rural and vulnerable communities.

Methods: The KUMC program, the Concentric Training Model for Doctoral Level Psychologists will recruit two additional interns per year over the next four years into their APA accredited internship program. They will participate in an innovative method of professional training and development conceived as three concentric circles. The first or inner core involves interdisciplinary training in inpatient and outpatient adult and child mental illness. The next expanded circle provides interdisciplinary and integrated training in medical-mental health
seen in populations such as primary care, neurorehabilitation and cancer care, and the outer circle provides training in outreach programs such as telemedicine and Area Health Education activities to acquaint the intern with the needs of underserved communities, integrating this knowledge with their more basic experiences which take place predominantly on the KU Med campuses. Interns are trained to teach, advocate, research, and provide clinical service, preparing them for careers at many levels of the health care system. The KU School of Social Welfare will expand the number of master’s level social workers by offering experiential interprofessional and clinical training in integrated health care. Interprofessional Learning in Practice field sites will provide intentional opportunities for practicing interprofessional team-based care with rural and medically underserved populations. The programs will collaborate through joint participation in curriculum development, competency identification, practicum learning opportunities and shared teaching efforts which will enrich the training and preparatory experiences of each program.

**Results:** Results will be evaluated in terms of the numbers of individuals who focus their careers serving underserved populations throughout the four years of the grant, as well as evaluations of the quality of the training by faculty, trainees, and advisory groups with special expertise in underserved populations.

**Conclusions:** We are hopeful that these approaches will serve to reduce health disparities and access barriers in rural, vulnerable and underserved populations.
Poster #8

Evaluating Core Competencies of Interprofessional Collaboration: Thematic Analysis of Students Participating in the Community Health Project

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Conflicts of Interest: The authors have no conflicts of interest to report.

Background: Engaging health professional students in team-based care is central to achieving the triple aim of improved patient care, population health, and reduced per capita cost of health care. Many health professions design curricula to prepare students to accomplish this goal by structuring classroom workshops that facilitate student engagement with peers from different health professions. Albeit effective, this approach relies on simulated interprofessional interactions that neglect authentic relational team building strategies developed within the workplace. Immersion into an environment independent from the classroom setting is an invaluable learning tool. This approach instills the competencies of interprofessional collaboration and should be a core component to every health professions curricula.

Purpose: Demonstrate the need for academic partnership with community health organizations to enhance interprofessional collaboration in health professions students, and identify the value of workplace immersion as a fundamental component to health profession curricula.

Methods: The tangible effect workplace immersion has on student development was investigated. Journal entries from students participating in a University led Community Health Project (CHP) were analyzed. The CHP is a summer internship program that matches health professional students from different disciplines with non-profit agencies throughout Kansas and Missouri. Student interns work at their respective agency throughout the summer and record their experience in daily journals submitted online. Using a direct thematic analysis, we analyzed 8 weeks of daily journal entries from 14 health professional interns. Themes for analysis were constructed based on the core competencies as defined by the Interprofessional Collaborative Practice (IPEC) 2016 guidelines.
Results: Thematic analysis of journal entries identified the core competencies of Values/Ethics for Interprofessional Practice n=80, Roles/Responsibilities n=71, Interprofessional Communication n=342, and Teams and teamwork n=116.

Discussion: Students in the immersive CHP experience consistently reported daily events that reflect the four core competencies of interprofessional collaboration as defined by IPEC. A potential limitation of the study was identified in recording the instances of interprofessional collaboration. This occurred when identifying the core competencies of roles/responsibilities, values/ethics, and teams/teamwork; which were often illustrated in student journals during an interaction that inherently required interprofessional communication. Steps were taken during the review process to limit overlap between categories, however, there were instances where entries met criteria for two or more competencies simultaneously.

Conclusion: Workplace immersion of health professional students into a non-profit community health organization instills the values of interprofessional collaboration and team-based care, and should be a fundamental component to every health professions curriculum.
Poster #9

An Interprofessional Experience of Urgent Management of Hypoglycemia

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Conflicts of Interest: The authors have no conflicts of interest to report.

Funding Source: None. The project was developed and delivered in partnership between KUMC- SON, UME-SOM, and Zamierowski Institute for Experiential Learning.

Background: The increased capacity of simulation programming within the Zamierowski Institute for Experiential Learning and the Summer 2017 launch of the new KUMC curriculum for Undergraduate Medical Education presented a directive to deliver manikin-based simulations within the medical student curriculum. The School of Nursing’s baccalaureate program embraced the opportunity to partner with the School of Medicine to create and deliver interprofessional simulations.

The University of Kansas Schools of Medicine and Nursing have partnered with the Zamierowski Institute for Experiential Learning to plan an interprofessional, longitudinal simulation curriculum for their students. These experiences provide the opportunity for students to work as a health care team while caring for computerized ‘patients’ in the ZIEL Simulation Hospital on the 4th floor of the state of the art Health Education Building.

Methods: The first of four simulations for 177 first year medical students and 114 third year nursing students was delivered in October 2017. The event was based on learning objectives aligned and leveled to both groups’ didactic curriculum and program goals. The event
included a workshop component on ISBARR, a TeamSTEPPS tool® that offers a communication framework to succinctly convey essential information. Following the workshop, students completed 2 immersive simulation experiences that required team communication to manage a patient with critical hypoglycemia. After each case, instructors facilitated a debriefing. Following the 2-hour session students completed a post-event survey for program evaluation purposes.

**Results:** 24 sessions of Event 1 were delivered. Students participated in the simulation event in interprofessional teams of 3-4 M1 students and 2-3 N3 students. Survey respondents agreed/strongly agreed at over 90% that the simulation was of appropriate level of difficulty, appropriate length of time, that instructors provided a safe environment for learning, that the simulation was clinically relevant, that they understood the expectations of the experience, and that they felt the participating in the simulation experience would improve quality and safety of the clinical care they would deliver. Elements of interprofessional competencies were exposed during post-event debriefing and open-ended survey responses. During the debriefing, students extended mutual respect to each other, communicated across professions in respectful and supportive manner, discussed and contrasted their scopes of practice, and expressed the value of shared information to achieve optimal patient care.

**Discussion:** Interprofessional Event 1 successfully engaged novice students to a clinical scenario that incorporated foundational elements of teamwork and communication. The interprofessional experience was embedded in a highly realistic and authentic clinical context through immersive manikin-based simulation. Student feedback was positive. These students will participate in a total of 8 manikin-based simulation events over the first 2 years of their curriculum that will introduce increasing complex clinical situations that will challenge the students to practice and achieve high levels of team performance.

**Conclusion:** While the impact on student competencies in interprofessional practice will not be fully evident until these students approach graduation, Event 1 proved to be an effective approach to achieve a high level of student engagement in an interprofessional experience that was clinically relevant to the students.
Poster #10
Development of an Interprofessional, Longitudinal Curriculum Addressing Management of Urgent and Emergent Conditions

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Conflicts of Interest: The authors have no conflicts of interest to report.

Funding Source: None, project developed and delivered in partnership between KUMC School of Nursing’s BSN program (SON-BSN), School of Medicine’s Undergraduate Medical Education program (SOM-UME) and the Zamierowski Institute for Experiential Learning (ZIEL).

Background: Health education accrediting bodies are increasingly specifying the competencies that graduates must achieve through standards such as the BSN Essentials, published by the American Association of Colleges of Nursing, and the Core Entrustable Professional Activities (EPA) for Entering Residency by the Association of American Medical Colleges. Additionally, both programs integrate Interprofessional Collaborative Practice (IPEC) Core Competencies in their program graduation requirements. The curricula for SON-BSN and SOM-UME have both adapted over recent years to target the knowledge, skills and attitudes required for graduation. Simulation offers the unique opportunity for students to iteratively practice applying their academic content to an authentic care environment as individuals and teams. This can be particularly helpful for urgent or emergent patient conditions that students may encounter in inpatient or outpatient settings upon graduation, but may not acquire sufficient experience prior to graduation. The SON-BSN and SOM-UME partnered to design a longitudinal
curriculum that provides students the opportunity for repeated practice caring for patients with urgent or emergent conditions as an interprofessional team.

**Purpose:** The purpose of the interprofessional curriculum is to deliver a longitudinal simulation curriculum structured to teach and offer practice in team management of urgent patient conditions.

**Methods:** Through targeted needs assessment of the SON-BSN and SOM-UME curricula, review of the accreditation criteria, and review of the didactic curricular content, priorities were set for the simulation program. Simulation events were structured to integrate clinical content from the didactic curricula, while including leveled objectives targeting the AAMC CoreEPAs, BSN Essentials, and the IPEC Core Competencies, often achievable through targeted TeamSTEPPS® tools. Learners participate in two simulation events each semester within the first two years of the respective academic programs. As clinical content allows, additional health professions students are able to participate in simulation events including Clinical Lab Science in Fall 2017 with aspirations to include Respiratory Therapy and Pharmacy students with future programming.

**Results:** The simulation program was launched at the onset of the 2017-2018 academic year. The planning and delivery of the simulation program to 177 M1 students and 114 nursing students requires 5 dedicated physician instructors and 10 nursing instructors in partnership with Zamierowski Institute for Experiential Learning (ZIEL) education and simulation delivery team. Each simulation event requires over 20 hours/SOM and SON faculty instructor and ZIEL educator for planning. Each simulation event is delivered through 24 sessions requiring 48 hours of both SOM and SON faculty instructors.

**Discussion:** The goal of the simulation curriculum is to achieve higher graduate competencies in interprofessional practice and treatment of urgent and emergent conditions. Impact will not be fully evident until current students reach graduation. Sustainability of a simulation program that delivers the high volume of simulation events to large cohorts of students requires institutional support for dedicated personnel and the simulation facilities.

**Conclusion:** Expanded simulation capacity on the KUMC campus allows delivery of simulation of this volume of participants with realistic clinical representation. KUMC has potential to achieve higher levels of student competencies through an innovative, interprofessional simulation curriculum delivered in state-of-the-art facilities.
Poster #11

Improving transitions of care through interprofessional communication of medication errors and medication reconciliation

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Funding Source: The Kansas Reynolds Program in Aging Teaching Fund for Innovations in Interprofessional Education

Background: Transitions of care from hospital to home are fraught with opportunities for error, particularly with medication reconciliation. During this transition of care, medication errors can result in negative outcomes. It is estimated that 40% of medication errors occur due to inadequate reconciliation around transitions of care periods¹. Interprofessional communication is a critical skill for providing quality team-based care and can potentially prevent these medical errors.³,⁴ Simulation is a key opportunity to practice and improve interprofessional communication around medical error with the goal to help prevent medical error.

Purpose: The purpose of this pilot study is to create a simulation that will facilitate interdisciplinary learning of medication reconciliation during a care transition. The main objectives of this study are; a) recognizing the components of effective medication reconciliation during care transitions; b) understanding the role the community pharmacist contributes to patient care; and c) effectively communicating an error to another health professional.
Methods: Year 3 medical students (SOM), year 2 pharmacy students (SOP), physical therapy (PT), speech therapy (ST) and occupational therapy (OT) students currently participate in a simulated hospital discharge encounter. This study extends that experience to include patient follow up in the outpatient pharmacy where a medication error will be uncovered. Students will complete pre-learning about medication reconciliation and key components of a successful transition of care. After the simulation, debriefing with discussion around the role of pharmacy in discharge planning will occur. The second part of the encounter will involve the pharmacy learner reviewing a standardized patient encounter that simulates a community pharmacist’s medication reconciliation and discovery of a discrepancy. The pharmacy student will then videoconference with SOM, PT, ST and OT learners to discuss the discrepancies and rectify the errors.

Results: Anticipated outcomes of this pilot study include; a) evaluation of knowledge assessment scores to identify gaps in knowledge about transitions of care in an effort to develop new curricula on this topic; b) identification of potential improvements in awareness of interprofessional roles; c) evaluation of medical error communication. This information will be used to further improve education regarding transitions of care.
Poster #12

Demonstrating Interprofessional Collaborative Competency on Advanced Pharmacy Practice Experiences Through Interprofessional Simulations

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Conflicts of Interest: The authors have no conflicts of interest to report.

Background: Pharmacy Education standards have incorporated interprofessional (IP) education into their guiding documents to assure graduating pharmacists are competent to collaborate with a variety of healthcare teams regardless of their practice setting. Incorporation of simulations can provide pharmacy students a consistent, authentic opportunity to work with students from other health care professions as a team during advanced pharmacy practice experiences (APPEs).

Purpose: Assess the impact of a required IP simulation during APPEs on students’ self-reported IP collaborative competency.

Methods: Fourth-year pharmacy students completing APPEs were required to participate in one of three IP simulations during the 2016-17 academic year. Pharmacy student self-perception of IP competence was measured by the Interprofessional Collaborative Competencies Attainment Survey (ICCAS), administered in a retrospective pre-test/post-test design. The ICCAS yields six subscale scores (communication, collaboration, roles & responsibilities, collaborative patient-centered approach, conflict management, and team functioning) on a 7-point Likert scale from strongly disagree to strongly agree. The scores were computed as the mean score across the items of the subscale. The quantitative survey was analyzed using descriptive statistics (i.e., frequencies, means and standard deviations) to obtain an overview of the data. Paired t-tests were used to compare the pre- and post-test results.

Results: During the 2016-17 academic year, 157 pharmacy students were assigned to complete an IP simulation. 150 students (95.5% response rate) completed the ICCAS. The subscale means were compared from baseline to completion of the simulation and were communication: 5.85 versus 6.48, collaboration: 6.04 versus 6.61, roles and responsibility: 5.88
verses 6.54, collaborative patient-centered approach: 5.82 verses 6.54, conflict management: 5.86 verses 6.49, team functioning: 5.93 verses 6.58, respectively. All subscales achieved statistical differences from baseline to completion of simulation (p<0.001).

Discussion: The students demonstrated significant improvement in each of the ICCAS subscales after completing the IP simulations, which reflect the widely accepted interprofessional education collaborative core competencies for practice. A confounding influence that was not controlled for was the varying level of IP clinical experiences that the students were exposed to throughout the year. To address this limitation, the IP simulations were moved to the P3 year to better prepare students for IP collaboration as they enter APPE rotations.

Conclusion: The use of IP simulations prepared students to be competent to engage in IP collaboration.
Poster #13

Implementation of an early extubation protocol in cardiac surgical patients decreased ventilator time but not intensive care unit or hospital length of stay

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Conflicts of Interest: None

Background: There is significant emphasis placed on early extubation after cardiac surgery. The Society of Thoracic Surgery (STS) identifies extubation following cardiac surgery in less than 6
hours as a marker of quality. There is currently conflicting data whether early extubation provides benefits to patients, decreases ICU length of stay or improves hospital outcomes.

**Purpose:** We initiated a multidisciplinary protocol in postoperative cardiac surgical ICU patients with the goal of ventilator liberation within 6 hours after departure from the operating room. Our hypotheses were that the implementation of the protocol would increase the proportion of patients extubated within 6 hours of leaving the OR without significantly impacting ICU length of stay.

**Methods:** We prospectively analyzed time to extubation in 459 postoperative cardiothoracic surgical patients prior to and after initiation of a protocol aimed at achieving extubation within six hours. A comprehensive rapid ventilation weaning protocol was derived by a multidisciplinary group of care givers which implemented multiple strategies for expediting early extubation. We analyzed the proportion of patients extubated within the 6 hour goal as well as their intensive care unit length of stay and hospital length of stay. Secondary outcomes included 30-day mortality, reintubations, postoperative renal failure, sternal wound infections, postoperative strokes, postoperative cardiac arrest and reoperation for any cardiac reason.

**Results:** With the implementation of a rapid weaning multidisciplinary protocol, median ventilation times decreased from 7.4 hours to 5.7 hours (p<0.0001). The proportion of patients extubated within 6 hours increased from 36% to 55% after implementing the protocol (p=0.0001). ICU length of stay increased from a mean of 49.4 hours to 54.2 hours (p = 0.01). Only patients who achieved extubation within 6 hours had a significant increase in ICU hours. Longer ICU length of stay, longer hospital length of stay, renal failure and reoperation was associated with longer ventilator durations.

**Discussion:** Early extubation in cardiac surgery can be attainable with implementation of inexpensive strategies. However, the success of early extubations did not translate into decreased ICU hours or hospital days. In fact, after implementation of the protocol, ICU hours increased by a median of 5 hours (p = 0.01). Possible reasons for this study demonstrating an increase in ICU stay despite a decrease in ventilation times is that extubation is not the driving force behind readiness to leave the ICU.
Poster #14

Seizure freedom solely with resection of sphenoid wing temporal encephalocele in patient with proven independent hippocampal seizures

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Conflicts of Interest: None

Background: Temporal encephalocele is a protrusion of brain tissue through a bone defect in the middle cranial fossa. It is an increasingly recognized cause of drug resistant epilepsy (DRE) with debated surgical strategy. Multidisciplinary care is optimal for evaluating patients for epilepsy surgery.

Purpose: To emphasize the optimal surgical approach to achieve seizure freedom

Case Report: A 47 year-old right handed female school teacher with a 15 year history of DRE was deprived surgical treatment 10 years ago due to concerns of memory loss given dominant temporal lobe epilepsy with unfavorable Wada test results. Her recent evaluation revealed a previously unnoticed left sphenoid wing temporal encephalocele. Hippocampi were normal. Scalp EEG demonstrated independent left > right anterior temporal sharp waves and independent bitemporal seizures. FDG-PET showed bitemporal hypometabolism, neuropsychological testing was normal, and functional MRI revealed left hemisphere language. Invasive monitoring with bitemporal depth electrodes identified seizures arising from the region of the encephalocele (3/8) and independent left hippocampal seizures (5/8).

Given her profession, normal memory, normal hippocampus we opted for a left temporal tip/encephalocele resection while sparing the mesial structures. There were no post-operative deficits, and the patient is 9 months seizure free.
Discussion: While the literature suggests that lesionectomy without further mesial temporal resection can be effective, from our literature review, this is the first case describing seizure freedom after lesionectomy in a patient with proven independent unilateral hippocampal seizures. We speculate the hippocampal epileptogenesis is secondary to the adjacent brain lesion. Larger studies are needed to confirm this finding.

Conclusion: In properly selected patients with temporal encephalocele and independent hippocampal seizure, seizure freedom can be achieved with encephalocele resection only without mesial temporal lobectomy. Multidisciplinary approach is beneficial for epilepsy surgery in identifying and optimizing a good response to surgery.
Poster #15

Interprofessional Simulation Participants’ Perspectives of Teamwork, Communication and Roles after Simulation of Acute Patient Care Scenarios in the KU Family Medicine Clinic

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Conflicts of Interest: None

Purpose: This project evaluated interprofessional simulation participants’ perspectives on teamwork, communication, and clinical roles after participating in simulation of acute outpatient scenarios. We compared participants’ perspectives to their colleagues who did not participate. Our KU Family Medicine (FM) residents are given simulation opportunities in the inpatient setting, however residents spend much of their training in the clinic. Using simulation to practice acute scenarios in the outpatient setting is more representative of their clinical practice.

Background: Hospital-based simulation is being used with increasing frequency in residency training, not as common in outpatient settings.9 Healthcare professionals must develop skills in interprofessional collaborative practice, communication, teamwork, and professionalism.6,8 Team-training through simulation is an environment to practice these skills and can improve participant knowledge of roles and attitudes towards team members.8 Maximizing simulation technology for learning with and from other professions is a critical component of interprofessional education.5

Methods/Analysis: This study was approved by the KU IRB as a Quality Improvement project. Family Medicine residents and clinic nurses (LPNs and RNs) participated in simulation of acute patient care scenarios in the outpatient setting. We surveyed nurses and residents who participated in simulation and those who had not participated. We compared their perspectives of “Clinic Roles/Processes” and “Teamwork/Communication.” Respondents were asked to rate statements on these topics on a Likert Scale, a rating closer to 1.0 being a positive result. Descriptive statistics were used to analyze the data.

Results: 9 resident and 8 nurse (4 RN, 4 LPNs) simulation participants, 6 resident and 4 nurse (LPNs) non-participants completed the survey.
Roles/Processes: Resident simulation participants rated an improved understanding of the LPN/RN role (2.55) compared to non-participants (3.25). They had an improved understanding of the clinic process during an acute situation (2.11) compared to non-participant residents (3.67). All nurses reported good understanding of resident role, however nurse simulation participants had improved understanding of clinic process (1.75 compared to 2.5).

Communication/Teamwork: For all groups, communication and teamwork were areas where simulation had a perceived positive impact. Resident and nurse simulation participants rated improved teamwork (2.22, 1.75) and improved communication (2.22, 1.38). All groups believed that each other were approachable and team-oriented.

Conclusions: Interprofessional simulation of outpatient-based acute care scenarios at KU FM improved team members’ self-reported knowledge of clinic roles/processes, attitudes regarding teamwork and communication. By engaging staff in simulation, we improved understanding of each groups’ roles. There was improved attitudes towards team members, specifically being team-oriented and most evident from the nursing perspective. Resident clinics have high turnover of physicians due to residents changing every 3 years, simulation can offer a method for the clinic team to practice teamwork and communication while also improving attitudes towards each other to provide quality patient care.

References:
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Poster #16

How Intentional Communication among Health Professionals in Situations of Ethical Conflict Influences Interprofessional Collaborative Practice and Improves Patient Health Outcomes

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Conflicts of Interest: Both authors have ties to academic centers

Background: In the course of patient care, ethical dilemmas may arise. At times, members of the interprofessional patient care team may have differing views as how to best care for their patients. When such ethical conflicts arise, it is imperative that everyone collaborate to formulate a plan that not only provides the best patient care, but also addresses individual team member’s concerns. Such collaboration requires intentional and honest communication.

Purpose: To promote the use of effective communication techniques between health care professionals during situations involving ethical conflict. This intentional effort to communicate highlights the intrinsic value of the unique skillsets, knowledge, and perspectives that each member of the interprofessional team contributes when discussing the care for ethically complex patients.

Methods: A systematic literature review was conducted to identify how the use of effective interprofessional communication during ethically complex cases affected patient outcomes and team morale.

Results: Multiple studies support the need for implementation of communication strategies that facilitate interprofessional collaboration when ethical dilemmas arise. One study specifically highlighted the importance of initiating this training in nursing, medical, and pharmacy schools so that students possess this skill set prior to interacting as professionals in a clinical setting.

Discussion: When medical care is complicated by ethical issues, formulaic approaches are not appropriate, especially when the ethical beliefs of care givers are not aligned. Resultant poor communication can cause feelings of stress and discomfort which can negatively impact patient care. Creating an environment that facilitates intentional and honest communication can
promote collaborative interprofessional resolution of ethical dilemmas as each team member feels free to share their unique skills and experiences with each other. Team leaders can promote collaborative communication by ensuring that each team member’s unique perspective is heard, understood, and validated by the rest of the team. Regardless of traditional professional hierarchies, ethical decision-making is not value-laden and no single profession has the right or ability to singularly determine the appropriate course of action when working as part of an interprofessional healthcare team. All must be heard.

**Conclusion:** Interprofessional collaborative practice is a benchmark of patient-centered care. The use of effective interprofessional communication is vital in order to work through ethical dilemmas as they arise. The literature examined supports this claim, and as healthcare professionals, the authors agree that the implementation of intentional and honest communication between interprofessional team members will decrease ethics-related conflict and yield improved patient outcomes.

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Poster #17

Facilitating Interprofessional Research: Developing and Implementing an Umbrella Protocol for Interprofessional Education and Practice Research Projects

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Conflicts of Interest: None

Background: Conducting quality research related to interprofessional practice and education (IPE) is essential for achieving the Quadruple Aim. A part of the mission of the Center for Interprofessional Practice, Education and Research (CIPER) at Kansas University Medical Center (KUMC) is to improve the education of health professionals and quality of patient care through IPE research. In an effort to minimize the time spent submitting a new proposal to the Human Subjects Committee, we created a Research Umbrella Protocol (RUP) that expedites the submission and approval process for faculty and/or preceptors interested in conducting exempt-level IPE research.

Purpose: The purpose of this proposal is to describe the RUP and some of the benefits and challenges of this strategic initiative aimed at encouraging IPE research at KUMC.

Methods: The IP Research Umbrella Protocol was developed for exempt-level research at KUMC. The protocol is inclusive of research questions related to student, staff and faculty readiness for, experience with, learning through, perceptions towards, and behavior associated with IPE. To participate, an interested researcher simply completes an abbreviated research protocol template, which is reviewed by the CIPES Assessment and Scholarship committee, prior to submission as an addendum to the already approved RUP. Once submitted and approved as an addendum, the researcher is notified and research can commence.

Results and Discussion: The IP Research Umbrella Protocol has been piloted with multiple projects, all of which have been approved in 2-3 weeks as addenda, as opposed to the 6-8 weeks that has been common for new project submissions. In addition, persons submitting the projects find the abbreviated protocol template to be much less time consuming than
developing an entire protocol for a new IRB submission. From a coordination perspective, the principal investigator for the RUP needs to ensure that projects are up-to-date, which necessitates effective communication with the contact persons for each addendum. In addition, the protocol review by the CIPER Assessment and Scholarship committee must be coordinated to maintain a timely addendum submission and approval. This process has opened doors for mentorship related to IPE research between those submitting projects and individuals on the CIPER Assessment and Scholarship committee.

**Conclusion:** The IPE RUP streamlines and expedites the submission and approval process for faculty and/or preceptors who are interested in conducting exempt-level IPE research, which encourages these individuals to conduct the IPE research necessary to understand the impact of our interprofessional education and collaborative practice endeavors.
Poster #18

Determination of Antimicrobial Prescribing Practices in an Integrated Health System Emergency Department

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Conflicts of Interest: None

Background: Healthcare improvement is constant.¹ Communication gaps can exist between institutions and the communities served.² Antibiotic stewardships play a key role in minimizing antibiotic usage and preventing resistance in hospitals and associated clinics by systematically reviewing patients’ data.³ Antibiotic stewardships utilize interprofessional collaborative practices including professionals from medicine, pharmacy, nursing, social services, clinical laboratory scientists, etc.⁴, to proactively identify potential problems a tertiary care, integrated health system’s Emergency Department (ED) wants to identify antimicrobials prescribed into the outpatient community.

Purpose: Primary goal is determining the number of oral antimicrobial prescribed to adult outpatients (18+) within 5-14 day treatment window. Secondary goals include the diagnosis, and non-capsule/tablet antimicrobial prescriptions to non-adults, or outside the treatment window.

Methods: This quality improvement study is a pilot, prospective evaluation. Patients are identified via the report: “ED Recently Discharged and NOT admitted Patients” over thirty days in summer of 2017. Other project inclusions: prescribed antimicrobial(s) and “discharged from ED”. Exclusions to this project include: “admission to the hospital” and antimicrobial hypersensitivity.

Results: Total antimicrobials prescribed over thirty days is 653. Adults prescribed oral antimicrobials are 467 (15.6 daily). Patients are diagnosed with infections including: urinary tract, cellulitis, soft tissue injury, abscess, upper respiratory, dental caries, gastrointestinal, sexually transmitted, otitis, pneumonia, viral, pyelonephritis, tick-borne, fungal, Bell’s Palsy and
sepsis. The number of non-adult, non-oral and outside window treatment antimicrobials are 186 (6.2 daily).

**Discussion/Conclusion:** With 67,000 patients annually, or 184 patients daily, treated in the ED, approximately 11.9% receive an antimicrobial treatment on discharge. These antimicrobials treat 16 different forms of infection. Limitations and potential future studies include seasonal variability, whether the patient obtained prescription and complied with treatment.

**References:**

Poster #19
Determining the Impact of an Interprofessional Practice Experience on Patients Presenters

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Conflicts of Interest: None

Background: Experts recommend aligning interprofessional education and practice models to simultaneously transform healthcare to achieve the Triple Aim. The objective of this study was to evaluate the impact of an Interprofessional (IP) Practice Experience on patients, including population health outcomes and their experience of healthcare.

Methods: A traditional primary care clinic was operationally transformed into an IP training site where IP learners provide direct patient care as synchronous teams in the clinic or through home visits under the supervision of IP preceptors. The IP training site clinic cares for a cohort of approximately 1000 patients and provides primary care services to 100 patients each week. A wide variety of professions participate in the IP Practice Experience and approximately 200 IP learners are exposed to the model each academic year. This IP Practice Experience was developed in 2011 and in 2014 became an incubator site for the National Center Innovations Network and data collection began.

The top three chronic disease diagnosis for the patient population include hypertension, depression, and diabetes mellitus. Health indicators for these populations were retrospectively collected before the IP clinic and during the IP clinic and include blood pressure (BP), Patient Health Questionnaire (PHQ) screening/score, and hemoglobin A1c (HbA1c). The patient experience of the IP clinic was also collected using three methods. Patient satisfaction surveys were administered yearly to a random cohort of patients, feedback was collected from a patient advisory board, and brief semi-structured interviews of a random sample of patients was conducted. A mixed methods approach using qualitative and quantitative methodologies was used. This study was approved by the Institutional Review Board.

Results: Interim results have been analyzed for 493 patients seen during this time period and all health indicators are trending toward improvement when compared at baseline (pre-IP clinic) and 6 months (IP clinic). Statistical significance was achieved for two indicators. A total of 183
patients completed the satisfaction survey over three years and 85% were established patients of the clinic. Respondents strongly agreed or agreed that they would return to the clinic for future visits (100%) and that they understood the roles of the interprofessional team members (98%). They felt the interprofessional team of learners improved their care (75%) and were satisfied with their clinic visit that day (91%).

**Conclusions:** An IP Practice Experience that intentionally aligns education and practice has a positive impact on patients.
Clinical utility of hemodynamic transesophageal echocardiography (hTEE) in the management of unstable cardiothoracic ICU patients

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Conflicts of interest: None

Background: Impaired cardiac performance is a common cause of hemodynamic instability in intensive care unit (ICU) patients, necessitating a rapid and reliable means for accurately assessing cardiac function. Direct visualization with transthoracic echocardiography (TTE) is one commonly employed diagnostic modality. However, specific perioperative circumstances often limit TTE image acquisition, such as post-operative cardiac displacement, chest tubes, pericardial drains, and anatomic changes caused by mechanical circulatory support (MCS) devices.1

Transesophageal echocardiography (TEE) offers potential advantages in image acquisition over TTE in the postoperative setting. However, traditional TEE probes can cause oropharyngeal and esophageal injury2, especially in anticoagulated patients and cannot be left in place for prolonged periods. A newer imaging modality utilizes a miniaturized monoplane transesophageal probe (hTEE, Imacor) (figure 1) and has shown success in guiding medical decision making in hemodynamically unstable postoperative cardiac surgical patients.3-5 This device offers comfort and the ability to remain in place for continual management guidance.

Purpose: This exploratory study, investigated the impact on medical decision making in the postoperative setting utilizing the hTEE probe. Additionally, we evaluated if the subset of patients with MCS devices tended to have less useful hTEE examinations than patients without MCS devices.
Methods: In this prospective, observational study, 77 hTEE examinations were obtained in 53 cardiothoracic ICU patients (table 1). Medical management changes prompted by the hTEE examination were documented (table 2). The impact of the hTEE examination on medical decision making was assessed to be either clinically meaningful or not, as a subjective decision by the critical care physician who was specialty trained in hTEE probe examinations. Furthermore, exam usefulness was analyzed in patients with and without MCS devices.

Results: Overall hTEE exams added clinically meaningful information in 77% (n=41) of hemodynamically unstable patients, and showed higher utility in patients without MCS devices compared to those with MCS devices. When stratifying MCS by device type, those with temporary MCS devices had a higher utility than those with durable (long-term) MCS devices. (table 3).

Discussion/Conclusion: This study demonstrates that the hTEE probe provides clinically useful information that led to management changes in hemodynamically unstable postoperative cardiac surgical patients. This is the first study to identify discrepancies in hTEE usefulness based on disparities in MCS device presence and device type. Based on this observational study of feasibility, we believe there is clinical utility in hTEE imaging as an adjunct to traditional invasive monitoring, especially in patients without MCS devices.

References:
Poster #21  
IPE Passport Program: Developing a Community of Interprofessional Colleagues

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Conflict of Interest: None

Funding source: This study has been funded by a Clinical Faculty Research Grant. Grant funded $5,000.

Background and purpose: The Institute of Medicine (IOM) (2013), in the Future of Nursing: Leading Change, Advancing Health, recommends that schools of nursing provide training opportunities early on and throughout the nursing curriculum for interprofessional collaboration. Health care organizations and schools of nursing should provide resources for ensuring continual competency in working alongside the interprofessional team (IOM, 2011).

There have also been increasing requests for nursing student participation in interprofessional learning opportunities. In response, the School of Nursing (SON) implemented an Interprofessional Education (IPE) Passport. The IPE Passport is a program requirement for the undergraduate nursing students that consist of multiple interprofessional educational experiences over four semesters. The purpose of the IPE Passport Program is to develop nursing students’ ability for interprofessional (IP) collaborative practice by completion of the undergraduate curriculum.

Research Questions:
1. What are the attitudes of N4 (senior) and N3 (junior) nursing students toward interprofessional practice?
2. Do attitudes of nursing students change over time?

Methods: This pilot study assesses nursing student’s attitudes toward IP collaborative practice in the context of the IPE Passport program, using the Interprofessional Attitudes Survey (IPAS) to measure students’ attitudes. The study has two cohorts:

Cohort 1 is the N4/senior nursing students who graduated May 2017 and who have completed the IPE Passport Program. Cohort 2 is the N3/junior nursing students who will graduate in May 2018. This cohort is invited to complete the IPAS survey three times: first, in January 2017.
prior to the FIPC: An Introduction to TeamSTEPPS Level I, second, in May 2017, and third, immediately prior to graduation in May 2018, after completion of the IPE Passport.

Results: Mid project results comparing like nursing groups at baseline and at the conclusion of the program are discussed. There is an increase in the number of students who strongly agree that shared learning produces better team workers, helps students to become more effective team members, and helps students communicate better with other professionals and patients from baseline to conclusion of the IPE Passport Program.

Conclusion: Interprofessional education where students learn with, from, and about each other can impact nursing students’ attitudes about interprofessional collaboration. Students feel interprofessional education develops effective team communication and teamwork.
Non-equivalence of predictive equations and weight-based equations for estimation of energy requirements

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Conflicts of Interest: None

Background: Based on expert consensus, the current ASPEN-SCCM guidelines for energy provision in hospitalized patients recommend that for non-obese individuals, in the absence of indirect calorimetry, a published predictive equation or a simplistic weight-based equation (25–30 kcal/kg/d) should be utilized.

Purpose: To determine the equivalency of predictive equations and weight-based equations, we retrospectively calculated energy needs for 1524 normal weight (NW) and overweight (OW) parenteral nutrition patients by comparing estimated basal energy requirement (BER) from the Harris-Benedict (HB) and Mifflin-St Jeor (MSJ) predictive equations with two weight-based equations: 25 kcal/kg and 30 kcal/kg.

Methods: Eight groups were analyzed: young (ages 18-25) NW men (n=168) and women (n=115), young OW men (n=63) and women (n=50), older (ages 63-67) NW men (n=294) and women (n=269), and older OW men (n=338) and women (n=227). The mean group body mass index (BMI, an expression of relative weight) for the 4 NW groups ranged from 21.4 to 22.5 kg/m², whereas the mean group BMIs for the 4 OW groups ranged from 26.9 to 27.3 kg/m².

Results: The relationship between the predictive equations and the weight-based equations was highly variable. The 25 kcal/kg equation provided 97-103% of the HB estimate and 101-108% of the MSJ estimate of BER in young NW patients and 127-134% of the HB estimate and 130-144% of the MSJ estimate of BER in older OW patients. The 30 kcal/kg equation provided 117-123% of the HB estimate and 121-130% of the MSJ estimate of BER in young NW patients and 152-161% of the HB estimate and 156-173% of the MSJ estimate of BER in older OW patients. In relation to BER, calculated energy needs using weight-based equations were systematically greater for women than for men.
Discussion: These results suggest that weight-based equations may underfeed some young, NW individuals (especially men) and may overfeed older, OW individuals (especially women). At the very least, the results demonstrate that predictive equations and weight-based equations should not be considered equivalent techniques for estimating energy requirements.

Conclusion: When calculating energy requirements, practitioners should be aware that weight-based equations will generate estimates that are increasingly greater in relation to predictive equations as a function of age and relative weight. These findings suggest that equations that take age, sex, height and weight into consideration are preferable.
Poster #23

Association of Schools of Allied Health Professions – Student Assembly (ASAHP-SA)

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Presented at Association of Schools of Allied Health Professions annual conference in San Antonio in October 2017.

Conflicts of Interest: None

Background: Evidence suggests students perform best in blended interprofessional settings in comparison to uni-professional settings alone (Liu et al., 2016); providing exemplary national opportunities for students to participate in interprofessional collaboration is essential to an outstanding education.

Purpose: The purpose of the Association of Schools of Allied Health Professions – Student Assembly (ASAHP-SA) is to foster a national collaborative healthcare community by providing all students with opportunities for leadership, professional preparation, and interprofessional exposure beyond the boundaries of their field of study and institutional affiliation. Developed in 2015, ASAHP-SA serves as a division of and receives funding from the Association of Schools of Allied Health Professions (ASAHP) national organization. Considering the organization’s recent development, the organization is in the process of developing student chapters across the nation to then further explore the significant role interprofessional collaboration plays in today’s healthcare culture. Through this, ASAHP-SA can offer students a hands-on and autonomous opportunity for leadership by creating an organization led predominately by students on a local, regional, and national level and foster the development of interprofessional research and exploration.