

THE NORTEX NEWSLETTER

Medication Safety

Collaborating to Improve Medication Safety in Community and Ambulatory Settings

Preventable medication errors are a significant threat to patient safety in ambulatory settings. More than a third of community-dwelling older adults take 5 or more prescription medications, and the total number of prescriptions dispensed in the US has increased every year to 4.5 billion in 2016. The World Health Organization recently launched the third Global Patient Safety Challenge: “Medication without Harm”, to recognize that unsafe medication practices and medication errors are a leading cause of injury and avoidable harm.

Primary care clinics are in a unique position to engage patients and home caregivers to reduce risks of medication-related preventable harms, such as polypharmacy and medication errors. In a closed system like acute care hospitals, safeguards are in place in acquisition, storage, prescribing, administration, and monitoring. In community and ambulatory settings, safeguards are few, especially against errors in self-directed medication use. It is not unusual to find older adults having to manage 10 or more prescription medications at home, often by multiple prescribers, yet barriers are in abundance for primary care physicians to deprescribe. Medication information in primary care offices is often incomplete, and transition of care often introduces inconsistencies and inaccuracies in medication histories. Some of the recommended medication safety practices, such as brownbag review, talking with community pharmacists and reducing medication regimen complexity, are not always used, and gaps in information, skills, and knowledge regarding medication use at home are common. Current research demonstrates that after hospital discharge more than half of patients are unable



to recall if they were educated on discharge medications.

Researchers from the University of Texas at Arlington, NorTex, and John Peter Smith Health Network are collaborating to develop innovative and practical ways to address medication related risks in primary care settings. We are employing concepts and methods from engineering fields, such as human factors and industrial engineering, to understand problems associated with medication safety in ambulatory settings. For example, human factors observations at home found that current patient engagement practices do not recognize expected errors and performance failures by patients and family members in medication management. Our team hopes to identify new insights into medication safety improvement in ambulatory settings.

NORTEX RESEARCH PROJECTS

FEATURED CURRENT NORTEX PROJECT

Surrogate Decision-Making Communication in the Intensive Care Unit

Patients admitted to the intensive care unit (ICU) are sometimes unable to make decisions about their care, and may rely on close relatives or friends who act as surrogate decision-makers (SDMs). To our knowledge, no studies have characterized the intersections of health disparities related to gender, race, health literacy and language barriers with perceived stress in the ICU, confidence in decision-making skills, and communication in this setting.

Structured communication tools have been implemented in healthcare settings with the ultimate goal of increasing patient safety. One such collection of tools, TeamSTEPPS, is an evidence-based framework that looks to optimize team performance within healthcare settings. At its core, it focuses on developing leadership, communication, situation monitoring and mutual support skills of team members.

NorTex is collaborating with Marian Gaviola, PharmD on a research project titled, “Surrogate decision-making communication in the intensive care unit.” For this project, we are conducting a survey and focus group discussion about the needs, barriers, and attitudes of SDMs when communicating with HCPs in the ICU, as well as assess the feasibility of adapting TeamSTEPPS tools in this setting. Participation in the study includes a phone screening process and a study visit. The study visit includes completing surveys and participating in a focus group session.

*Marian Gaviola
PharmD*



FEATURED COMPLETED NORTEX PROJECT

Atopic Dermatitis: Recognizing a Phobia to Topical Corticosteroid

Atopic Dermatitis (AD) is a chronic inflammatory disease affecting up to one in every five children worldwide. It is characterized by a defect in the skin barrier, allowing penetration by allergens, causing a relapsing inflammatory response. Generally, people with atopic dermatitis suffer from dry, sensitive skin with a characteristic intense itch. AD is commonly treated with topical corticosteroids; however, patients fear using topical corticosteroids due to the perceived potential for side effects.

NorTex, in collaboration with INCEDO, conducted a

survey among primary care providers throughout Texas to collect information concerning primary care providers' acknowledgement and recognition of topical corticosteroid (TCS) phobia. A total of 84 providers (12 nurse practitioners, 4 physician assistants, and 65 physicians) completed the survey. Thirty-one percent reported they often/always prescribe TCS for pediatric patients with AD, and 66% reported they were confident/very confident when prescribing TCS for pediatric patients with AD. Fifty-one percent responded that they ask their patients /caregivers if they have concerns when prescribing TCS for AD in pediatric patients, and 33% reported that their pediatric patients/caregivers sometimes or always/often express concerns about using TCS for AD. Understanding patient fears is critical for healthcare providers to deliver optimal care.

This research was part of a larger project conducted by INCEDO and funded by SNAOFI.

SENTIRE: AN INNOVATIVE NEW PRIVATE PRACTICE MODEL



Richard Young, MD, has launched an innovative new private practice model based on research he did when he was named as a CMS Innovation Advisor in 2012. It's called the SENTIRE system, and it is available for other physicians to use. The SENTIRE system allows for both face-to-face visits and telephone/text/email exchanges. The fee structure is

transparent and available on the websites, along with sample bills. His hope is to care for uninsured patients and those with high-deductible health insurance plans. He accepts no insurance for this model. The reality of the high-deductible

plans is that most patients will pay for primary care out of their pocket, except in years with exceptional expenses. Dr. Young offers a more affordable and transparent option for patients than urgent care centers and many clinics that are owned or controlled by the large healthcare systems in the region.

Dr. Young is still the Director of Research and Associate Program Director for the JPS Family Medicine Residency. However, on Wednesday afternoons, he is off from JPS to see scheduled patients at the Total Care facility at 6049 S. Hulen, next to the EECU office. He is also available for non-face-to-face visits in the evenings and on weekends.



For information on Dr. Young's practice visit, www.DrRichardAYoung.com

For information about the SENTIRE system, visit www.sentirecare.com

2019 JPS RESEARCH SYMPOSIUM: "FOSTERING HEALTH EQUITY THROUGH RESEARCH AND PRACTICE"

Save the date! JPS Health Network is hosting the 2019 JPS Research Symposium Friday, June 7th, 2019. The symposium will be held at the Riley Center at Southwestern, located at 1701 W. Boyce Avenue Fort Worth, TX 76115 from 8:00 AM to 4:00 PM. The theme for this year's research symposium is "Fostering Health Equity through Research and Practice". The topic of Health Equity comprises a growing international initiative to diminish healthcare disparities and promote research focused on solutions.

There will be two keynote speakers with esteemed expertise in health equity. Dr. Marcella Wilson is the author of *Diagnosis Poverty: A new approach for understanding and treating an epidemic*. In her newest role, President and Founder of Transition to Success™, Dr. Wilson is leading a national social change movement with a standard of care to treat poverty as an environmentally

based medical condition. Dr. Wilson will be joined by the American Heart Association, who is proactively leading initiatives addressing the health inequities and disparities that exist in our country.

The symposium will provide a forum for JPS and Tarrant County community researchers to share research insights and ideas via poster and podium presentation sessions. The symposium will commence with an awards ceremony honoring those with outstanding research contributions.



For more information on JPS Research Day, contact ResearchSymposium@jpshealth.org.

MEMBER HIGHLIGHT: CECILY KELLY, MD



Born and raised in Texas, Dr. Cecily Kelly has always had a passion for research and medicine. When she was a child she was always responsible for taking care of the family pet's ailments; hence, it was only natural that once she was older she would be passionate about treating humans. Dr. Kelly began her interest in research when she was working on her undergraduate degree. She volunteered in the clinical pathology lab at the local medical school and became involved in a study on colon cancer cells and their suppressed growth with an eastern mushroom called Ling Zhi. This research was later published in 2003, *Inhibitory effects of Ling Zhi (Ganoderma lucidum) extract on inflammation and cytokine expression in human colonic carcinoma cells HT-29*. A761-A761. Hong, KJ & Hostrup, CN & Shen, Chwan-Li & Pence, BC. (2003).

The summer after her first year of medical school, Dr. Kelly became involved in research with Shriner's Children's Hospital in Houston. There she investigated changing the approach to how children with infantile blount's disease were diagnosed and treated. Her research was later presented at the Pediatric Orthopaedic Association of North America conference in Canada and later published in the *Journal of Pediatric Orthopaedics* in 2007, *Body mass index as a prognostic*

factor in development of infantile Blount disease. Scott AC, Kelly CH, Sullivan E (2007). She was also awarded the Frank C. Webber award for research from a poster presentation that she gave to her medical school class in 2003.

When Dr. Kelly continued doing research during her residency, but this time she focused on maternal obesity and its effects on delivery outcomes in pregnant women. She presented to her residency class and was awarded for the best research project for her residency class.

After residency Dr. Kelly moved to the Seguin area and started her own full scope family medicine and obstetrics clinic with her spouse, Austin Kelly. Since its opening day, Kelly Family Clinic has quadrupled in size and is now located at 794 Generations, Ste. 100, New Braunfels, TX 78130. She continues to be involved in clinical research with NorTex/UNT Health Science Center as well as STARNet (South Texas Ambulatory Research Network). When she is not working at the clinic or delivering babies, she spends time with her husband and four children.



MISSION

Create solutions toward a healthier community through interdisciplinary primary care, public health service, research and education.

VISION

Be the team of choice for innovative primary care and public health research.