

Emergency Medicine Research News

August 2019

Conducting innovative clinical and translational emergency care research to advance the health of the people of Wisconsin and beyond.

Top Stories

Manish Shah MD, MPH: Telemedicine and Dementia Research Highlighted at AAIC 2019, featured on 100+ media outlets

At the 2019 [Alzheimer's Association](#) International Conference in Los Angeles, California, [Manish Shah, MD, MPH](#), presented findings from a secondary analysis that showed that telemedicine in senior living communities can effectively decrease emergency department use by individuals with dementia. The resulting AAIC press release, *Telemedicine Programs Can Decrease Emergency Department Use By People With Dementia*, was mentioned in over 100 online outlets including Fox News, Yahoo!, and more.



To further discuss how a high-intensity telemedicine program that delivers care for acute illnesses can affect emergency care rates for those with dementia, **NeurologyLive & MD Magazine** spoke with Dr. Shah in interviews. More specifically, he detailed how more in-depth, far-reaching telemedicine measures could benefit the dementia patient population and others who may not actually be suitable for emergency care situations—even during an emergency. These substantial media highlights echo Dr. Shah's commitment to geriatric research and his continued impact on the community. A much-deserved congratulations, Manish!

**Telemedicine Programs Can Decrease Emergency Department Use
By People With Dementia**

**Dr. Shah's MD Magazine Interview: Telemedicine for Dementia
Population**



Kudos

-Kudos to **Nia Cayenne**, whose abstract "Social Isolation as a Predictor of Post-ED Visit Follow-Up by Older Adults" was accepted as an oral presentation at the **McNair Scholars Program Conference**. The conference is from July 25-27, 2019 at Kent State University in Ohio. Congrats, Nia!

[Midwest McNair Research Conference](#)

-Kudos to **Aaron Kraut MD**, whose WestJEM article "The Flipped Classroom: A Critical Appraisal" was recently featured on the **AAEM Insights newsletter**. The objective of this study was to review and critically appraise the medical education literature pertaining to a flipped-classroom education model, and to highlight influential papers that inform our current understanding of the role of the FC in medical education.

[AAEM Insights Newsletter](#)

Paramedic-Coached ED Care Transitions to Help Older Adults Maintain their Health

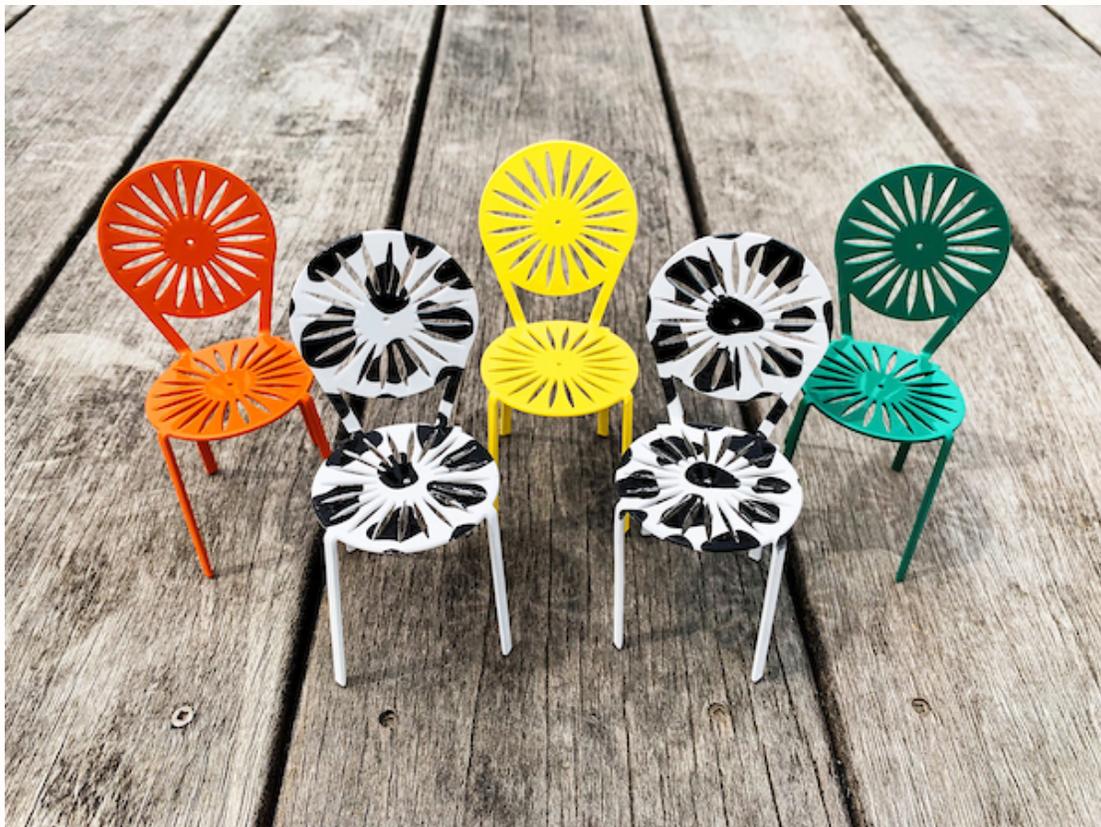
After nearly three and a half years of recruitment, **Dr. Manish Shah's Paramedic-Coached ED Care Transitions R01** has come to a close. The EDRC team enrolled 893 subjects and screened over 25,000 patients during the study. The primary aim of this study was to assess the effect of a paramedic visit within 48 hours of discharge from the ED on 30-day recidivism in the geriatric population. Given the medical complexity of this population, it is not

surprising that approximately 20% of older adults seen in the ED return back within 30 days, putting them at higher risk for adverse outcomes, such as readmission or nursing home placement. Previous research has found the ED-to-home transition particularly difficult for older adults, as the discharge process is rapid and isolated from the patient's primary care team, home health, and social services.

This study aimed to improve the ED-to-home transition in two domains, education/engagement and follow-up, using the Coleman's Care Transitions Intervention (CTI). The CTI utilizes a care transitions coach, which was a community paramedic in this study, to help patients manage their health and address their needs.

This research drew on many community partners, including the Madison Fire paramedics delivering the intervention, EMS services from the surrounding areas, medical director cooperation, and nursing support. The data from this study is currently being analyzed, and we are hopeful of the positive effect this research will have on our community and the geriatric population as a whole.

We would like to thank all of our dedicated nurses, techs, and collaborators for helping us complete this study!



Upcoming Events

VIP Grand Rounds

Novel Psychoactive Substances

August 1, 2019

10:00a.m.-10:50a.m.

Alex Manini, MD

Dumfounded Discoveries

August 22, 2019

10:00a.m.-10:50a.m.

Paul Pepe, MD MPH

August 29, 2019

10:00a.m.-10:50a.m.

Mary Clyde Pierce, MD

September 5, 2019

10:00a.m.-10:50a.m.

Lainie Yarris, MD MCR

Journal Club, August 13, 2019

Topic - Critical Care

Leads - Marin Darsie, MD and Joshua Glazer, MD

6:30p.m. - 8:30p.m.

DEM Social M&M, August 19, 2019 @ 12:00p.m.

Research Lecture, August 29, 2019

Topic - Qualitative Design

Lead - Michael Replinger, MD PhD

9:00a.m. - 9:50a.m.

Labor Day, September 2, 2019

Recent Publications

Manuscripts:

Patterson BW, Jacobsohn GC, Shah MN, Song Y, Maru A, Venkatesh AK, Zhong M, Taylor K, Hamedani AG, Mendonca EA. Development and validation of a pragmatic natural language processing approach to identifying falls in older adults in the emergency department. [BMC Medical Informatics and Decision Making. July 2019.](#)

Gillespie SM,...**Shah MN**, et al. High-Intensity Telemedicine Reduces Emergency Department Use by Older Adults With Dementia in Senior Living Communities. [JAMDA. July 2019.](#)

Norman RS, **Shah MN**, Turkstra LS. Reaction time and cognitive-linguistic performance in adults with mild traumatic brain injury. [Brain Injury. July 2019.](#)

Studies Currently Enrolling in the ED

All of Us

The purpose of this study is to build a national database that will be available to researchers to further precision medicine. Enrollers will approach patients to participate, help them go through the portal to complete the baseline surveys, and schedule follow-up appointments with patients for bio-specimen collection. We are hoping to enroll family members and guests in this study as well. For questions, see Dr. Manish Shah.

Clinical Evaluation of the Omron Wheeze Detector Prototype and Algorithm

The purpose of this study is to test a wheeze detector prototype created by Omron Healthcare in pediatric patients with a history of asthma or suspected of having asthmatic symptoms. This is a new protocol but is a continuation of the previous Omron study that is more tailored to the target patient population. Enrollers will take a 30-second recording of eligible patients breathing to capture lung sounds of interest. For questions, see Dr. Manish Shah or Dr. Michael Kim.

Engineering Safe Care Journeys for Vulnerable Older Adults

As a part of the AHRQ grant titled “Engineering Safe Care Journeys for Vulnerable Older Adults”, researchers from the Wisconsin Institute for Healthcare Systems Engineering will soon begin conducting observations in the ED to observe disposition decision-making discussions between patients and clinicians. Their intent is to better understand the disposition decision-making process for older adult patients and barriers/facilitators in the process. They will use these data to design a tool that will improve transitions from the ED to the hospital, the patient’s home and skilled nursing facilities. If you have any questions or concerns about the observations, please contact the study PI, Dr. Pascale Carayon (pcarayon@wisc.edu).

Evaluating the Utility of Thermal Imaging in Diagnosing Cellulitis for Lower Extremity Complaints in the Emergency Department

The main purpose of the study is to determine the temperature gradient between affected and unaffected legs in patients with cellulitis and compare the difference in temperature between cases of cellulitis and pseudocellulitis. A secondary purpose is to assess the impact of thermal imaging data on diagnostic assessments of potential cellulitis cases when added to standard techniques. For questions, see Dr. Mike Pulia.

Sonographic Cardiopulmonary Features of Early Sepsis

This study aims to correlate cardiopulmonary sonographic findings in patients with early severe sepsis with the need for vasopressor support and positive pressure ventilation, as well as mortality and level of care on admission. Ultrasound faculty consent and enroll ED patients that have the sepsis BPA pop up in HealthLink. For questions, see Dr. Nikolai Schnittke or Dr. Sara Damewood.

Study Close-Outs!

ORBEX

The EDRC Program recently ended recruitment for the ORBEX study looking to examine asthma prevention in children who are at risk of developing asthma. This study was headed up by Dr. Dan Jackson in the Asthma & Allergy Department. Overall, the EDRCs screened 558 children for study eligibility and obtained permission to contact from 21 of these during the December to June study period. The EDRCs enjoyed working with this pediatric population and are looking forward to more studies working with children!



BerbeeWalsh Department of Emergency Medicine

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Please send newsletter ideas and suggestions to Sharon West:

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