

Fellowship Symposium



Department of Family Medicine
and Community Health
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

May 13, 2021 — 8:30 AM – 11:40 AM

This symposium will feature short presentations by fellow representatives of the following Department of Family Medicine and Community Health fellowships:

Primary Care Research (PCR)
Academic (A)

WebEx Information

- Link: <https://uwmadison.webex.com/uwmadison/j.php?MTID=md5b06dc389eaa1108a1a6a832d16fb3a>
- Meeting number/Access code: 120 344 0975
- Join by phone: +1-415-655-0001 US Toll
- Password: 12345

Schedule of Events

8:30-8:40	Welcome & Opening Remarks Bruce Barrett, MD, PhD; Elizabeth Cox, MD, PhD; David Feldstein, MD: Directors, Primary Care Research Fellowship	10:00-10:25	Break
8:40-9:00	Julie Kirsch, PhD (PCR) Primary Care Implementation Challenges and Adaptations Related to Electronic Health Record Closed-Loop Referral ("eReferral") to a State Tobacco Quitline	10:25-10:45	KJ Hansmann, MD, MPH (PCR) Area Deprivation Share: A new measure for characterizing hospitals based on patients' social need
9:00-9:20	Jane Evered, PhD, RN (PCR) The Purpose and Process of Developing a Distress Protocol for a Qualitative Research Study	10:45-11:05	Maria Mora Pinzon, MD, MS (PCR) Understanding the perceptions of Alzheimer's disease and related dementias among Latinx older adults. A qualitative study
9:20-9:40	Katie Schmit, MD (PCR) Genotypic Distribution of Rhinovirus Infections in Healthy Children 4-7 Years of Age	11:05-11:30	Lashika Yogendran, MD (A), Alyssa Bruehlman, MD (A), and Kelli Heinrich, MD (A) CORE Cases: Collaborative Outpatient Resident Education
9:40-10:00	Tana Chongsuwat, MD (PCR) Addressing Disparities in Rates of Sexual Transmitted Infections (STIs) through a Mail-in Self-swab Collection Method for Screening	11:30 – 11:40	Closing Remarks Bruce Barrett, MD, PhD; Elizabeth Cox, MD, PhD; David Feldstein, MD: Directors, Primary Care Research Fellowship

Abstracts

Julie Kirsch, PhD (PCR)

Title: Primary Care Implementation Challenges and Adaptations Related to Electronic Health Record Closed-Loop Referral (“eReferral”) to a State Tobacco Quitline

Abstract:

Electronic health record-based closed-loop referral (“eReferral”) systematically connects patients who smoke to centralized services, such as a state tobacco quitline. Such eReferral programs in primary care outpatient clinics may increase the receipt of evidence-based smoking cessation treatment for patients who smoke. However, healthcare systems differ greatly in ways that affect eReferral implementation. This case study identifies design and implementation challenges and describes adaptations that were made to enhance the implementation of a closed-loop eReferral program that connects adult primary care outpatient patients who smoke to a state tobacco quitline. During an experimental evaluation of eReferral to the Wisconsin Tobacco Quit Line, we directly observed and gathered feedback from partners across 26 clinics in two Midwestern healthcare systems. Based on the Model for Adaptation Design and Impact (MADI), we described the types of eReferral design and implementation challenges and adaptations according to the following characteristics: 1) what was adapted; 2) the nature of the adaptation; 3) who participated in adaptation decision-making; 4) for whom or what was the adaptation made; 5) when did the adaptation occur. Major challenges to implementation of closed-loop eReferral to a tobacco quitline included: obtaining system-level and clinic buy-in for the project, including commitment of information technology resources; tailoring the eReferral program to healthcare system-specific EHR configurations; and tailoring to system- and clinic-specific workflows, roles, policies, and procedures. The majority of adaptations were intended to streamline eReferral processes. The impacts of the adaptations were monitored through

an iterative refinement and reassessment process and by conducting ongoing quality monitoring and coordination of clinician and information technology stakeholder communication and effort. Implementation of tobacco cessation state quitline closed-loop eReferral in primary care outpatient clinics is feasible but requires extensive coordination across entities, tailoring to local health system EHR configurations, and sensitivity to clinic-specific workflows.

Jane Evered, PhD, RN (PCR)

Title: The Purpose and Process of Developing a Distress Protocol for a Qualitative Research Study

Abstract:

Qualitative researchers have an ethical obligation to identify and address distress participants experience, particularly in research studies asking participants to recall potentially traumatic or aversive events. The development and use of distress protocols for attending to participants' psychological distress are one important avenue for reducing risk to participants in qualitative research interviews. People living with and after cancer, their care partners, and palliative and supportive cancer care clinicians experience distinct stress in the context of COVID-19 due to elevated risk of infection, uncertainty, and potential disruptions in treatment protocols. These stressors can be amplified when patients, care partners, and clinicians are asked to reflect on their experiences. For the Virtual Supportive Cancer Care Research Study Research, we developed a protocol designed to help early-career qualitative interviewers navigate participant distress. With an oncology social worker and an oncology nurse researcher, we constructed a structured flow chart and a resource list for interviewers to use in case of a participant's expressed or observed distress in in-depth semi-structured virtual interviews. The protocol directs interviewers through phases of assessing, re-assessing, and referring participants to accessible resources, providing a road map for ethically and sensitively navigating participant distress. Evaluation of the

distress protocol found that while no interviewers had to activate the protocol, interviewers felt more comfortable and confident engaging participants in discussions of potentially sensitive topics. Future research can further explore the efficacy of teaching and utilizing this protocol in other contexts and content areas, including how investigators can adapt the protocol to reflect accessible resources in their research settings. During and beyond the context of virtual data collection during COVID-19, the distress protocol supports investigators in upholding their responsibility to conduct ethical research attentive to psychological safety.

Katie Schmit, MD (PCR)

Title: Genotypic Distribution of Rhinovirus Infections in Healthy Children 4-7 Years of Age

Abstract:

There are over 150 different types of rhinoviruses (RV), which are a common cause of upper and lower respiratory tract infections in children and adults. Although infection does result in immunity, it is type-specific, resulting in a wide variety of RV infections and re-infections. Childhood RV infection research has focused on bronchiolitis, asthma exacerbations, and those requiring hospitalization. There is limited information about these infections in older children in ambulatory settings. The study objective was to identify the distribution of RV by species and genotype in both symptomatic and asymptomatic children older than 2 years of age over multiple respiratory seasons. This prospective observational cohort study followed healthy children 4-7 years of age from two pediatric clinics in Madison, Wisconsin over the course of 1 year between 2012 and 2017. Nasal samples were collected and analyzed for respiratory viruses by multiplex polymerase chain reaction at 3 time points: asymptomatic surveillance visits, 3-4 days after symptom onset of an upper respiratory tract infection, and 2-week recovery visits. Specific rhinovirus species (RV-A, RV-B, and RV-C) and genotypes were

identified by further sequencing methods. Nasal PCR identified RV in 486 specimens in 207 children; 45% of infections were identified at the surveillance visits and 41% at the acute symptomatic visits. RV-A was the predominant serotype followed by RV-C and then RV-B. There were 121 different RV genotypes identified that circulated throughout the years; 56 for RV-A, 16 for RV-B, and 49 for RV-C. Compared to the previous year, 60-80% of the circulating genotypes were new. Genotype distribution of recovery samples was similar to acute samples, likely representing persistent shedding. In conclusion, RV infections in children have a diverse distribution of genotypes. Identifying the genotypes involved in these infections helps to advance the understanding of RV epidemiology and transmission in children.

Tana Chongsuwat, MD (PCR)

Title: Addressing Disparities in Rates of Sexual Transmitted Infections (STIs) through a Mail-in Self-swab Collection Method for Screening

Abstract:

The United States Prevention Task Force recommends yearly screening for N. gonorrhea and C. trachomatis in sexually active women age 24 and younger and in older women who are at increased risk for infection (Grade B). Gonorrhea and chlamydia are most commonly reported STIs in the United States with a nearly 30% increase between 2015 and 2019 and highest burden among racial and ethnic minority groups, LGBTQ persons, and youth. Previous research supports the accuracy of vaginal self-collected swabs compared to clinician-collected swabs. Currently, direct-to-consumer options for a mail-in method are widely available although limited research has been done on mail-in self-collected vaginal swabs for STI testing as an option through primary care clinics. This presentation will discuss the protocol for performing a mix-methods survey to determine acceptability of such a program as well as proposed conceptual model and data analysis plan.

KJ Hansmann, MD, MPH (PCR)

Title: Area Deprivation Share: A new measure for characterizing hospitals based on patients' social need

Abstract:

Background: Medicare's Hospital Readmissions Reduction Program (HRRP) places disproportionate penalties on hospitals serving populations with complex medical and social needs. Without measures to identify the social need intensity of populations cared for by these hospitals, the HRRP cannot account for these risk factors, leading to burdensome penalties that may inadvertently hinder the ability of such hospitals to care for vulnerable populations. The objective of this analysis is to characterize the social need intensity of US hospital acute care populations. **Methods:** Using the Area Deprivation Index (ADI), a validated measure that ranks neighborhood socioeconomic disadvantage based on income, employment, housing, and education factors, we determined an "Area Deprivation Share" (ADS) for hospitals with 25 or more qualifying discharges using 100% of national Medicare claims data from 2013-2014. Hospital ADS is the proportion of discharges residing in the most disadvantaged neighborhoods (ADI \geq 80th percentile) out of all qualifying discharges during the study period. **Results.** Of 4,563 hospitals, median ADS was 17% (Interquartile Range: 6% - 34%). Hospitals in the highest quintile of ADS (39% to 100%), were more frequently located in small towns or isolated rural areas (49.6%, compared to 23.0% in the lower quintiles) and served a higher percentage of Black patients (18.9%, compared to 9.6% in the lower quintiles). **Conclusions:** ADS is a potential tool to inform future Medicare policy decisions. Additional research will inform how hospitals target care processes to meet the needs of patients with complex social needs. Further study can also explore overlapping disadvantage domains of socioeconomic status, race, and rurality.

Maria Mora Pinzon, MD, MS (PCR)

Title: Understanding the perceptions of Alzheimer's disease and related dementias among Latinx older adults. A qualitative study.

Abstract:

Background: Health disparities in Alzheimer's Disease and Related Dementias (ADRD) are a result of multiple factors, including beliefs among Latinx individuals that ADRD symptoms are part of normal aging, lack of ADRD knowledge, and limited access to culturally appropriate healthcare services. The purpose of this study was to understand the perceptions that Latinx older adults have about ADRD.

Methods: Twenty-three Spanish-speaking Latinx older adults (ages 50 – 87 years old) participated in telephonic structured interviews using card sorting technique to explore their perceptions about ADRD. Ahead of the interview, participants received by mail six cards with different colors and images that represented conditions that affect older adults (Depression, Diabetes, Hypertension, Memory Problems, Alzheimer's Disease, and Dementia). Participants were asked to arrange the cards according to their perception of similarities, severity, and embarrassment, and to explain their reasoning. We used inductive content analysis to qualitatively analyze the data.

Results: Participants perceived that ADRD is a spectrum of different conditions where "memory problems" are the initial stage, which then progresses to dementia, and then develops into Alzheimer's disease. Individuals who had family members with a diagnosis of Alzheimer's disease also shared this perception. Most participants described Alzheimer's disease as a stage where people "lose everything" characterized by inability to remember events, and difficulties connecting with family members and friends.

Conclusion: Latinx individuals perceived dementia and Alzheimer's disease as separate entities, which indicates that healthcare providers and public health agencies need to adjust their communication strategies to promote conversations about ADRD in this population.

Lashika Yogendran, MD (A), Alyssa Bruehlman, MD (A), and Kelli Heinrich, MD (A)

Title: CORE Cases: Collaborative Outpatient Resident Education

Abstract:

When the UW Family Medicine residency started a new clinic-based orientation for interns, we wanted to teach fundamental outpatient topics using a flipped-classroom approach. We created Collaborative Outpatient Resident Education (CORE) cases with the aim of increasing knowledge and improving resource navigation. Objectives included the application of a flipped classroom model to help residents improve confidence in core topics as well as resource navigation for further learning, recognition that adult learners may see more benefit in collaborative learning versus a traditional lecture format, and identification of topics that interns may find relevant to their training and eventual practice. CORE Cases include five cases about common outpatient topics: adult preventive medicine, pediatric/adolescent preventive medicine, hypertension/hyperlipidemia, diabetes, and COPD/asthma. Family medicine interns did pre-research before each session, then discussed the cases in small groups with a faculty facilitator. Participants completed pre- and post-surveys for each case. Analysis was performed with descriptive statistics and Mann-Whitney tests of paired and pooled survey response data. Eighteen interns participated in the five CORE case sessions. Participation in surveys varied (range: 5-18 participants) which limited paired analysis of pre- and post-survey data (range: 5-16 pairs). Respondents noted improved confidence knowledge of adult preventive medicine ($p=0.008$), pediatric/adolescent preventive medicine ($p=0.001$), hypertension/hyperlipidemia ($p=0.002$), diabetes mellitus ($p=0.011$). They reported a statistically significant improvement in familiarity with resources for those same topics. Responses showed a similar but not statistically significant trend in improved knowledge and resource familiarity for

COPD/asthma. Respondents agreed that the CORE cases were relevant, would impact their future practice, and the interactive structure was preferable over a traditional lecture format. The CORE case flipped-classroom curriculum helped improve interns' self-reported knowledge of important outpatient topics and familiarity with resources.
