



DHDPS News

Department of Healthcare Delivery & Population Sciences

May/June 2022

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DHDPS in the News

DHDPS Faculty members Drs. Schoenfeld, Soares, and Westafer had their [recent paper](#) on treating OUD in the ED [highlighted by the Addiction Treatment Forum](#)

DHDPS Faculty Dr. Peacock -Chambers' study on the 'Mothering from the Inside Out' program was featured in [Commonwealth Magazine](#)

DHDPS Fellow Dr. Barry Sarvet was [interviewed for Western Mass News](#) regarding the mental health impacts of school shootings and how to help your children feel safe after gun violence.

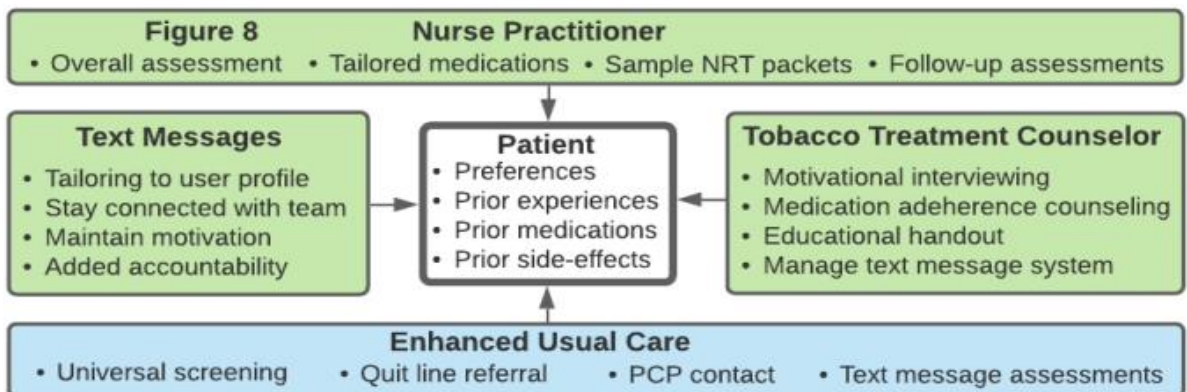
Delivering High Quality Cessation Aid to Hospitalized Smokers

We interviewed Quinn R. Pack, MD, MSc, Associate Professor of Medicine and Healthcare Delivery and Population Science, to learn about his recently awarded R01 from the National Heart, Lung, and Blood Institute (NHLBI). The study is "Implementing Effective Smoking Cessation Pharmacotherapy for Hospitalized Smokers with Cardiopulmonary Disease." This grant will study the impact of a Nurse Practitioner-led Tobacco Treatment Team (NPT3) on smoking cessation outcomes for hospitalized smokers.



What inspired this research grant? Smoking is the single most important preventable risk factor for premature death in the United States, yet 15% of US adults still smoke even though most of them want to quit. Among hospitalized patients, motivation to quit is typically very high. However, despite this high motivation and close interaction with physicians and nurses, only 20% of patients are ever prescribed a medication to help them quit smoking. This is a problem because there are many effective FDA-approved medications that can double or triple a patient's chance of quitting. Counseling and coaching also help, yet most patients receive neither support nor medications after hospital discharge.

How will you help smokers quit? We plan to enroll 420 patients in the randomized trial, half of whom will receive the intervention. There will be three parts to this intervention. First, a Nurse Practitioner will visit with the patient and prescribe tailored, guideline-concordant prescription smoking cessation medications. Second, a tobacco treatment specialist will visit with the patient to provide individualized counseling. Third, we will enroll the patient in a 6-month text-messaging system to support motivation and long-term cessation. This text system was developed by collaborators at UMass-Worcester.



How will you measure success? Our primary outcome will be smoking cessation rates at 6 months after hospital discharge, but we're also very interested in how many patients actually use prescription medications as well as the acceptability of the intervention to patients, physicians, and hospital administrators. Finally, we hope to demonstrate that the project will be economically viable and cost-effective. This will allow the NPT3 intervention to continue for years after the grant ends and help all hospitalized smokers quit permanently.



Increasing Birth Equity through the Inclusion of Doulas

Neena Qasba, MD, MPH is an Assistant Professor of OB-GYN at UMass Chan Medical School-Baystate. Dr. Qasba is the recipient of a 2-year grant from the Massachusetts Health Policy Commission Birth Equity and Support through the Inclusion of Doula Expertise (BESIDE) Investment Program.



The BESIDE Investment Program seeks to 1. Increase the number of Black birthing people who are informed about the benefits of doula care and offered the opportunity to work with doulas, particularly doulas who are from the communities of, or share lived experience of inequities with, Black birthing people; 2. Improve the prenatal, labor and delivery, and postpartum care of Black birthing people through the support of doulas; 3. Support the development of a culture of understanding and mutual respect between doulas



and clinical and administrative staff within Massachusetts birthing hospitals and birth centers; and 4. Embed principles of racial equity and cultural humility in the design and implementation of programs offering doula services.

BESIDE
DOULA PROGRAM

The BESIDE grant will help Baystate Medical Center to build a new doula program for Black birthing people by contracting with Springfield Family Doulas. The program will support 30 Black birthing people over the course of two years and train three additional doulas. The program includes significant community outreach and communication to ensure community members are aware of the role and benefits of doulas. All obstetrics staff at Baystate will undergo anti-racism and cultural humility trainings led by a local, women of color-led organization. Some staff will also participate in a Racial Disparities and Health Equity committee within the OB-GYN department. The BESIDE team will also survey community organizations to better understand the needs of Black birthing people in the community.

Learning Health System Award Program: Triaging Automated ECG Readings in the ED

We followed up with LHS award program recipient Dr. Ashley Deutsch, Assistant Professor of Emergency Medicine at UMass Chan-Baystate, for more details regarding her LHS project evaluating the safety of delaying physician evaluation of electrocardiograms with automated interpretations of "Normal" or "Otherwise Normal."



Congratulations on the LHS award. Can you tell us about your motivation for the project?

Each year there are more than nine million Emergency Department (ED) visits for acute chest pain in the U.S. Chest pain is the second most common chief complaint for patients undergoing emergent evaluation. Expedited identification of life-threatening acute ST-segment elevation myocardial infarction on ECG is critical to timely intervention and optimal patient outcomes. The current AHA recommendation is for all ED chest pain ECGs to be obtained within 10 minutes of patient arrival and immediately screened for STEMI by a physician. ECG machines provide computerized interpretations, but it is unknown if a machine interpretation of "Normal ECG" or "Otherwise Normal ECG" is reliable in excluding the diagnosis of STEMI.

It is well established that physician interruption leads to increased susceptibility to mistakes and bias. If immediate physician evaluation of ECGs with these computerized interpretations can be safely eliminated, it would decrease physician interruption, potentially decrease diagnostic error, and allow PCTs, physicians, and nurses to focus care where it has the largest patient impact.



What are the goals for the project?

Our goal is to optimize resource utilization and maximize patient safety by decreasing unnecessary immediate confirmatory ECG interpretations. We first used a large sample of ECGs with the computerized interpretations of "Normal" or "Otherwise Normal" to calculate a negative predictive value for STEMI. With the help of the LHS we are using the DMAIC process to eliminate unnecessary interruptions for immediate interpretation of these ECGs, deferring physician interpretation to the time of patient evaluation. This also allows us to redirect resources towards more impactful patient care.

What makes this project unique?

This is the largest study of ECGs with the computerized interpretation of "Normal ECG" and the only study currently that looks at the interpretation of "Otherwise Normal ECG." To our knowledge, no Emergency Department has eliminated immediate interpretation of these triage ECGs with an eye on safety and quality.

How does this work apply to our patients at Baystate Health?

Baystate's Emergency Departments are frequently required to manage a mismatch of patient demand and available resources due to forces that are impacting every part of healthcare in the US. When we can safely streamline workflow and eliminate unnecessary tasks and interruptions, we can focus that care of more timely, impactful care for patients and prevent bias and error due to interruptions.

Race and Racism in Perinatal Opioid Use Disorder Research

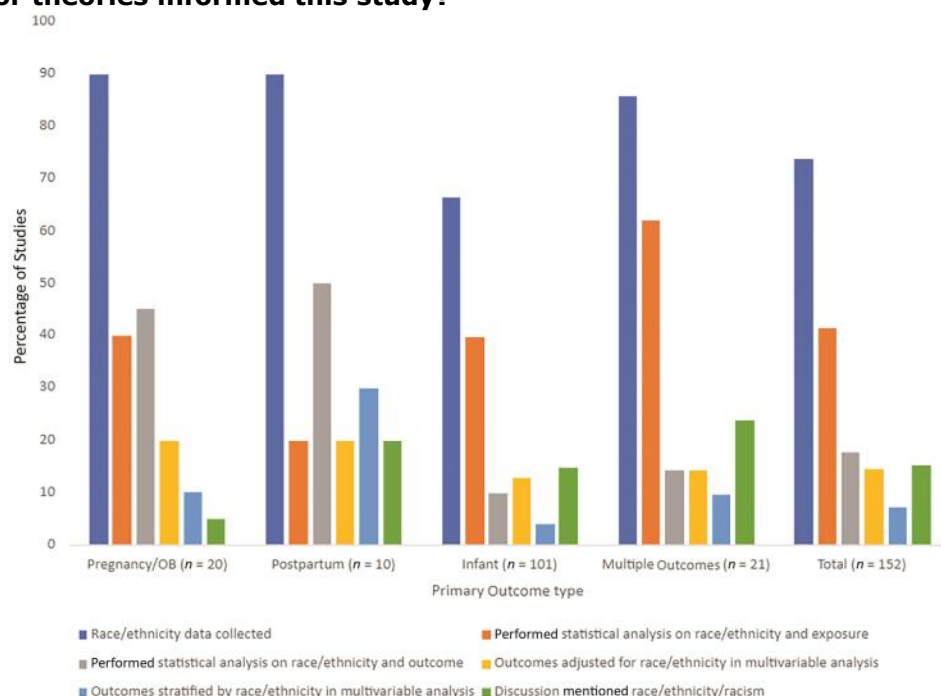
We interviewed Elizabeth Peacock-Chambers MD, MSc, Assistant Professor of Pediatrics and Healthcare Delivery and Population Sciences at UMass Chan Medical School-Baystate, about her [recent article](#) published in Pediatrics.

Tell us about this project, the team, and the goal of the study.

Perinatal Opioid Use Disorder Research, Race, and Racism: A Scoping Review was a project led by Dr. Davida Schiff at Massachusetts General Hospital. The team involved in this scoping review was multi-disciplinary from medical, public health, and nonprofit organizations across Massachusetts, including people with lived experience. Given the significant racial inequities in maternal-infant morbidity and mortality across the US, the objectives of the study were to: (1) identify studies assessing for racial/ethnic inequities in outcomes and health care utilization among maternal-infant dyads affected by opioid use disorder (OUD); (2) critically assess how the existing literature incorporates and analyzes parental or infant data on race/ethnicity; and (3) evaluate how studies addressed the role of structural determinants of health, specifically racism. We included both qualitative and quantitative studies from peer reviewed journals between 2000 to 2020.

What frameworks or theories informed this study?

This study was informed by the *Public Health Critical Race Framework* (PHCRF), an adaptation of critical race theory. The PHCRF principles highlight the importance of race consciousness, race as a social construct, the intersections of race with other characteristics including gender, and the pervasiveness of racism, including in health care settings (Ford et al., 2010).



Need help with your research?

We are available for consultation with an appointment – in person, through video conference, or phone.

For more information, see [here](#)

What were the main findings from this study?

In the scoping review of >2000 studies in the medical literature describing maternal and infant outcomes among dyads affected by OUD, only 152 quantitative were designed to investigate how outcomes may differ by race/ethnicity. Among the quantitative studies included in the review, it was interesting to find that most (66%) examined infant outcomes, particularly given the racial disparities we see in maternal morbidity and mortality. However, studies focused on infant outcomes were less likely to include or analyze information about race/ethnicity, compared to studies focused on maternal outcomes. Multiple maternal OUD treatment studies found racial/ethnic inequities for pregnant people with OUD. Among the qualitative studies, none addressed the role that race, ethnicity, or racism may have had on the identified themes.

What are some of the take-away points and recommendations you learned from this study?

I was surprised to see so few studies examined racial/ethnic disparities in this population. I was even more surprised to see those that did identify racial/ethnic differences often made concerning conclusions, such as the interpretation that Black infants required less morphine for neonatal withdrawal because of biological differences. Thus, even when studies do address race and racism as predictors of health outcomes, accurate reporting, analysis, and interpretation are needed. Including affected communities in exploring research questions about race and racism, public health critical race praxis, and reproductive justice frameworks could all improve the research process on this issue.

DHDPS Publications: April - May

1. Lewis NM, Naioti EA, Self WH, ...**Steingrub JS**, ...Tenforde MW; IVY Network Collaborators. Effectiveness of mRNA Vaccines Against COVID-19 Hospitalization by Age and Chronic Medical Conditions Burden Among Immunocompetent US Adults, March-August 2021. *J Infect Dis.* 2022 May 16;225(10):1694-1700. PMID: 34932114; PMCID: PMC9113447. [PubMed](#)
2. Tenforde MW, Self WH, Zhu Y, ...**Steingrub JS**, ...Patel MM; Influenza and Other Viruses in the Acutely Ill (IVY) Network. Protection of mRNA vaccines against hospitalized COVID-19 in adults over the first year following authorization in the United States. *Clin Infect Dis.* 2022 May 17:ciac381. Epub ahead of print. PMID: 35580849; PMCID: PMC9129194. [PubMed](#)
3. Russell CB, **Qasba N**, Evans ML, Frankel A, Arora KS. Variation in the interpretation and application of the Medicaid sterilization consent form among Medicaid officials. *Contraception.* 2022 May;109:57-61. Epub 2022 Jan 14. PMID: 35038447. [PubMed](#)
4. Grant MC, Lothar SA, **Engelman DT**, Hassan A, Atluri P, Moosdorf R, Hayanga JA, Merritt-Genore H, Chatterjee S, Firstenberg MS, Hirose H, Higgins J, Legare JF, Lamarche Y, Kass M, Mansour S, Arora RC. Surgical Triage and Timing for Patients With Coronavirus Disease: A Guidance Statement from The Society of Thoracic Surgeons. *Ann Thorac Surg.* 2022 May 18:S0003-4975(22)00706-8. Epub ahead of print. PMID: 35595089; PMCID: PMC9113762. [PubMed](#)
5. Rosenblum AL, **Pack QR**. Fractional Flow Reserve-Guided PCI as Compared with Coronary Bypass Surgery. *N Engl J Med.* 2022 May 12;386(19):1864. PMID: 35544400. [PubMed](#)
6. Tenforde MW, Patel MM, Ginde AA, ...**Steingrub JS**, ...Self WH; Influenza and Other Viruses in the Acutely Ill (IVY) Network. Effectiveness of Severe Acute Respiratory Syndrome Coronavirus 2 Messenger RNA Vaccines for Preventing Coronavirus Disease 2019 Hospitalizations in the United States. *Clin Infect Dis.* 2022 May 3;74(9):1515-1524. PMID: 34358310; PMCID: PMC8436392. [PubMed](#)
7. Challen K, **Westafer L**, Milne WK. Hot off the press: Stop fallin'-Geriatric fall prevention in the emergency department. *Acad Emerg Med.* 2022 Apr;29(4):507-508. Epub 2022 Mar 22. PMID: 35191135. [PubMed](#)
8. Shaw AD, Guinn NR, Brown JK, Arora RC, Lobdell KW, Grant MC, Gan TJ, **Engelman DT**, Perioperative Quality Initiative (POQI) and Enhanced Recovery after Surgery-Cardiac (ERAS-Cardiac) investigators. Controversies in enhanced recovery after cardiac surgery. *Perioper Med (Lond).* 2022 Apr 28;11(1):19. PMID: 35477446; PMCID: PMC9047268. [PubMed](#)
9. **Engelman DT**. ERAS without Intraoperative Goal Directed Fluid Therapy is Still ERAS. *Ann Thorac Surg.* 2022 Apr 22:S0003-4975(22)00551-3. Epub ahead of print. PMID: 35469744. [PubMed](#)



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10. Challen K, **Westafer L**, Milne WK. Hot off the Press: We care a lot: the EmPATH study. Acad Emerg Med. 2022 Apr 21. Epub ahead of print. PMID: 35451205. [PubMed](#)
11. Patel P, Deshpande A, Yu PC, Imrey PB, **Lindenauer PK**, Zilberberg MD, **Haessler S**, Rothberg MB. Association of fluoroquinolones or cephalosporin plus macrolide with Clostridioides difficile infection (CDI) after treatment for community-acquired pneumonia. Infect Control Hosp Epidemiol. 2022 Apr 20:1-8. Epub ahead of print. PMID: 35440348. [PubMed](#)
12. **Schoenfeld EM**, **Westafer L**, Beck SA, Potee BG, Vysetty S, Simon C, Tozloski JM, Girardin AL, **Soares W**. "Just give them a choice": Patients' perspectives on starting medications for opioid use disorder in the ED. Acad Emerg Med. 2022 Apr 15. Epub ahead of print. PMID: 35426962. [PubMed](#)
13. Shea MG, Headley S, Mullin EM, Brawner CA, Schilling P, **Pack QR**. Comparison of Ratings of Perceived Exertion and Target Heart Rate-Based Exercise Prescription in Cardiac Rehabilitation: A RANDOMIZED CONTROLLED PILOT STUDY. J Cardiopulm Rehabil Prev. 2022 Apr 5. Epub ahead of print. PMID: 35383680. [PubMed](#)
14. Kwon JH, Tenforde MW, Gaglani M, ... **Steingrub JS**, ...Self WH; Influenza and Other Viruses in the Acutely Ill (IVY) Network. mRNA Vaccine Effectiveness Against COVID-19 Hospitalization Among Solid Organ Transplant Recipients. J Infect Dis. 2022 Apr 6:jiac118. Epub ahead of print. PMID: 35385875; PMCID: PMC9047160. [PubMed](#)
15. **Westafer LM**, Vinson DR. Risk for Recurrent Venous Thromboembolism in Patients With Subsegmental Pulmonary Embolism Managed Without Anticoagulation. Ann Intern Med. 2022 Apr;175(4):W43. PMID: 35436438. [PubMed](#)

