

ARC Pilot Awards 2024-25

Research in progress meeting



UMass Chan
MEDICAL SCHOOL



UMass Memorial Health

Ambulatory Research
Consortium

Dec 13, 2024

Pilot awards 2025

Awards are 25 K each

Time: January 2025- June 30, 2026

Funded by: FMCH, PQHS, Medicine and CCTS

Pilot full proposals 2024

	PI name	Department
Paramedic Acute Response Approach for Adults with Intellectual and Developmental Disabilities (PARA-AIDD)	Laurel O'Connor	Emergency Medicine
	Emily Lauer	FMCH
	Deborah Dreyfus	FMCH
Beta-Testing Reaching Calm: A Multi-Component Digital Intervention to Prevent Perinatal Anxiety Disorders in Obstetric Settings	Martha Zimmermann	Psychiatry
	Anna Whelan	Obstetrics & Gynecology
	Nancy Byatt	Psychiatry, Obstetrics & Gynecology and PQHS
Primary Care and Behavioral Health Integration: Improving Performance Measures	Daniel Mullin	FMCH
	Jennifer Carroll	FMCH
	M. Diane McKee	FMCH
Advancing palliative care and health equity: a community-based participatory research study to guide a culturally informed collaborative care model of palliative care for community settings in central Massachusetts	Suzanne Mitchell	FMCH
	Jennifer Reidy	Palliative Care/FMCH

1. Paramedic Acute Response Approach for Adults with Intellectual and Developmental Disabilities (PARA-AIDD)

Aim 1: Evaluate the feasibility and process outcomes of PARA-AIDD. Leveraging the UMass Research Informatics Core, we will monitor the healthcare trajectories of participating patients throughout the pilot period. Primary feasibility outcomes will include program referrals, the number of clinicians and DDS staff who refer patients to the intervention, the number of home visits completed, and clinical and operational protocol fidelity. We will also evaluate the impact of the intervention on the acute care trajectories of patients by assessing the 72-hour and 7-day escalation rate of PARA-AIDD visits to emergency services and using an expert consensus panel to estimate the appropriateness of intervention utilization by rating whether visits avoided ED visits and if participants' complaints were ambulatory sensitive.

Aim 2: Perform a pre- and post-intervention analysis using a difference-in-differences approach to evaluate changes in healthcare utilization patterns following the implementation of a targeted intervention. Participants will serve as their own control. Primary comparative outcome metrics include ED visits, hospital admissions, and ambulatory visits. This approach will allow us to assess the intervention's effectiveness in optimizing healthcare delivery and reducing unnecessary resource use by accounting for underlying trends and external factors within the same population.

Aim 3: Qualitatively evaluate program implementation and sustainability using CFIR across key domains. We will perform post-intervention interviews with (n~12) stakeholders including patients, clinicians, administrators, and payors to explore intervention usability, adoption, and protocol fidelity (Intervention Characteristics), participant acceptability (Characteristics of Individuals), and contextual factors (Inner and Outer Setting) that impact intervention performance.

Investigators name	Department
Laurel O'Connor	Emergency Medicine
Emily Lauer	FMCH
Deborah Dreyfus	FMCH

2. Beta-Testing Reaching Calm: A Multi-Component Digital Intervention to Prevent Perinatal Anxiety Disorders in Obstetric Settings

Reaching Calm includes:

- 1) digital Anxiety Sensitivity Intervention using SMS text and web-based user interface,
- 2) training for Ob/Gyn providers, and
- 3) implementation protocol for integrating anxiety prevention into the Ob/Gyn setting

Aim 1: Beta-test Reaching Calm (digital intervention, training, implementation protocol) at an Ob/Gyn clinic. We will recruit perinatal patients (n=30) experiencing elevated anxiety symptoms using the Generalized Anxiety Disorder-7 scale (GAD-7₄₃). We will assess patients invited, enrolled, and retained, acceptability, and usability.

Aim 2: Identify barriers and facilitators to implementing Reaching Calm by conducting qualitative interviews with a subset of perinatal patients (n=12) and Ob/Gyns (n=6). We will explore opportunities to scale the intervention for future application to other settings via one focus group with Family Medicine physicians (n=4).

Aim 3: Refine Reaching Calm in response to patient, provider, and staff feedback. We will modify the digital interface, training components, and implementation protocols to address implementation barriers.

Investigators name	Department
Martha Zimmermann	Psychiatry
Anna Whelan	Obstetrics & Gynecology
Nancy Byatt	Psychiatry, Obstetrics & Gynecology and PQHS
Claudeleedy Pierre	FMCH
Kristina Gracey	FMCH

3. Advancing palliative care and health equity: a community-based participatory research study to guide a culturally informed collaborative care model of palliative care for community settings in central Massachusetts

Aim 1: To understand the experiences and needs of a diverse group of seriously ill patients and their caregivers.

Aim 2: To assess healthcare leaders' and primary care providers' perspectives on the needs of seriously ill patients and caregivers, as well as their own experiences of barriers in caring for these vulnerable patients.

Conduct 4 semi-structured 90-minute long focus groups, each comprised of 8-10 patients and caregivers recruited from the palliative care clinic as well as primary and subspecialty clinics at UMass Memorial Health.

Conduct interviews with:

- 20 primary care clinicians and clinical leaders.
- 10 senior hospital leaders, and primary care department chairs, division chiefs, outpatient medical directors and palliative care team members.

Investigators name	Department
Suzanne Mitchell, MD	FMCH
Jennifer Reidy, MD	Palliative Care/FMCH

4. Primary Care and Behavioral Health Integration: Improving Performance Measures

Aim 1: Recruit 12 primary care practices (8 clinicians and/or staff in each practice) to complete the PIP.

Aim 2: Summarize the 12 practices' level of performance on 14 pay-for-performance measures associated with public and private healthcare payer contracts.

Look for the association between the PIP and practice-level performance on 14 pay-for-performance measures (including both process and outcomes measures).

- Use generalized estimating equations (GEE) to model the association of the PIP with the practice-level pay-for-performance measures.
- Visualize the association between PIP and the 14 pay-for-performance measures.

Investigators name	Department
Daniel Mullin, PsyD MPH;	FMCH
Jennifer Carroll, MD, MPH	FMCH
M. Diane McKee, MD, MS	FMCH