POPULATION HEALTH INITIATIVE
UNIVERSITY of WASHINGTON

Tier 2 Pilot Grant Letter of Intent: Establishing Proof-of-Concept
Winter 2026

Project Information

Proposed Project Title	Co-designing a culturally responsive vaccine communication intervention with caregivers and community-based organizations to increase childhood vaccine uptake among East African children
Approximate Budget Request	$65,000

Applicant Information

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Overview of Proposed Research Plan

Abstract

The resurgence of measles, mumps, rubella, and varicella (MMRV)—2025 marking the highest measles cases in 33 years—is not a public health threat, but reality in Washington. Neighborcare, a community health clinic (CHC), and Dr. Shin found that East African (EA) patients under age two have 60–69% lower odds of receiving ≥1 MMRV vaccine compared to peers, reflecting disparities driven by systemic barriers and misinformation. To address this, Neighborcare, Somali Health Board (CBO), and Drs. Shin and Ali propose a tripartite partnership to develop and test a community-informed intervention using Intervention Mapping. We will:

Aim 1: Conduct a community-engaged needs assessment with a multi-level community advisory board (CAB) to identify determinants of MMRV vaccination among EA community.

Aim 2: Co-design a theory-informed, culturally-responsive vaccine communication intervention and implementation plan with the CAB.

This project will generate two proof-of-concepts aligned with Population Health pillars: a community/theory-informed intervention (human health) and a tripartite CHC–CBO–academic partnership (social and economic equity), providing a scalable model for advancing health equity.

Background and Significance

EA communities (e.g., Somali, Eritrean, Ethiopian) have been targeted by anti-vaccine advocates, contributing to declines in MMRV vaccination and subsequent outbreaks. In Washington, ≥1 MMR dose by age three among children with Somali-born parents declined ~50% from 2009–2022. Dr. Shin and Neighborcare found EA children under two have 60–69% lower odds of ≥1 MMRV vaccination (Figure 1). Providers shared caregivers decline MMRV vaccines due to autism fears and religious concerns, compounded by anti-vaccine social media. Clinic leaders emphasized the need to engage the community "beyond the clinic walls" but lack capacity, highlighting the urgency of community-driven interventions.

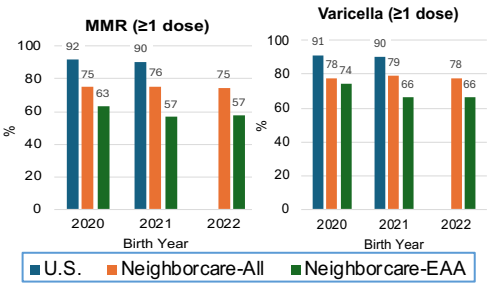

Figure 1. ≥1 MMR and Varicella Completion by Age 2 Among Children Born in 2020-2022

Innovation

EA communities face complex barriers to MMRV vaccination, yet tailored interventions are scarce. Our innovation is the partnership model: engaging clinicians, community leaders, and caregivers to co-develop culturally-responsive content that reflects their values. Integrating community voices, clinical insight, and academic rigor will offer a scalable model for advancing population health (Figure 2).

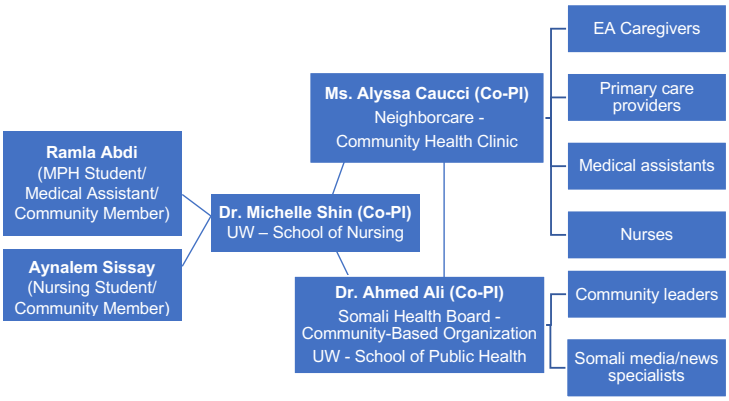

Figure 2. Tripartite Co-PI Model & Team Composition

Methods

Aim 1 (IM Step 1). A CAB of clinicians, community leaders (e.g., imam) and caregivers (n=4-5) will guide 1–2 focus groups exploring cultural/structural determinants of vaccination. Following data collection, the CAB will co-identify short- and long-term change objectives based on Health Belief Model (HBM) constructs and community priorities (IM Step 2, Figure 3). Focus group transcripts and field notes will be analyzed using rapid thematic analysis, validated with the CAB. Deliverable: community-validated logic model aligned with EA communities' priorities.

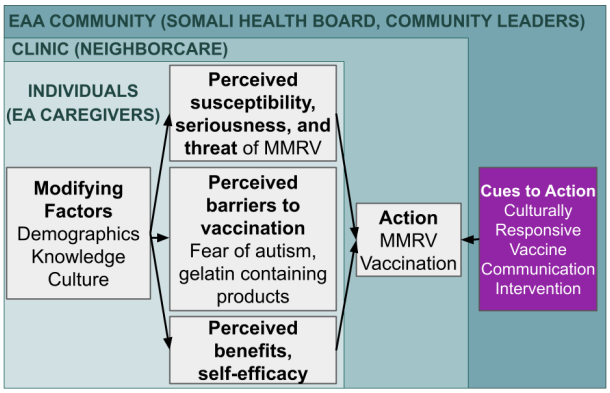

Figure 3. Conceptual Framework of HBM Nested Within the EAA Community

Aim 2 (IM Steps 2–5). The CAB will participate in 2–3 co-development sessions (in-person/virtual) to translate HBM determinants into intervention (Step 3). Sessions will explore communication formats (e.g., paper, video) and culturally-responsive ways to address common concerns. Prototypes will be co-created and refined with CAB feedback on acceptability, cultural relevance, and feasibility, followed by developing an implementation plan (IM Steps 4–5). Deliverable: an implementation-ready intervention and adoption plan.

Implications

This Tier 2 pilot will generate two proof-of-concepts, providing a scalable model for increasing MMRV vaccination in underserved communities in Washington and beyond (Figure 4). Findings will support larger-scale trials to evaluate effectiveness and real-world implementation.

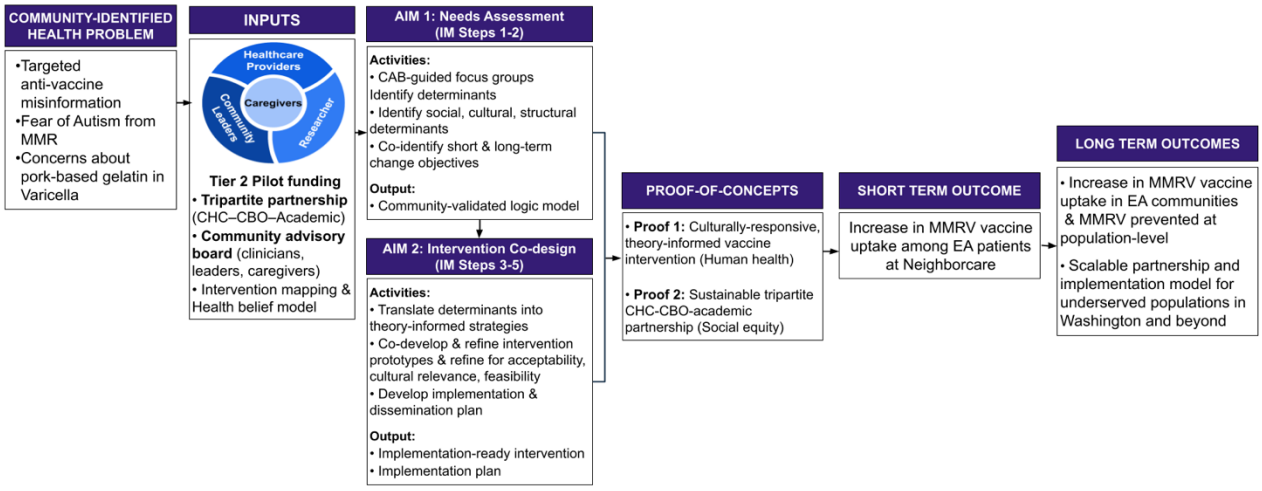

Figure 4. Logic Model of the Potential Population Health Impact

BUDGET JUSTIFICATION

SENIOR/KEY PERSONNEL

Michelle Shin, PhD, MSN, MPH, RN (effort = 1.2 Calendar Months effort). As the Contact PI, Dr. Shin will devote 10% effort during this study and hold responsibility for the overall conduct, scientific and administrative integrity of the project. This includes study design, IRB and regulatory oversight, study organization, coordination, study management, and compliance with the study data sharing, dissemination plans (manuscript development, national conferences), and grant writing. She will perform or oversee all aspects of the research activities, including data collection, management, cleaning, and analysis for quantitative and qualitative data. She will perform administrative functions (e.g., site visits, coordinating activities/meetings) and ensure the protection of human subjects. She will conduct meetings with the investigator team and hold individual meetings with them at least monthly and more as needed. Dr. Shin will hold primary responsibility for interpreting and disseminating the results of the study.

Ahmed Ali, PharmD (effort = 0.6 Calendar Months effort). As a Co-PI, Dr. Ali will devote 5% in-kind effort during this study and oversee recruitment of community leaders. He will appoint a member of Somali Health Board for facilitating the focus groups and contribute his expertise in engaging with the East African American community.

Alyssa Caucci, MHA (effort = 0.36 Calendar Months effort). As a Co-PI, Ms. Caucci will devote in-kind 3% effort during this study. She will lead the clinical engagement with Neighborcare's providers and staff, who will contribute expertise in immunization practices and their experiences with patient education. She will also collaborate with Dr. Shin to recruit clinicians and East African American caregivers.

OTHER PERSONNEL

TBA Research Assistant (effort = 0.9 Calendar Months effort). This individual will assist with focus groups, data collection, data entry, and will aid with preliminary data analyses and manuscript preparation.

OTHER DIRECT COSTS

Participant Payments

Community and Interprofessional Advisory Boards (total cost: $10,000= $800 x 5 CAB members and $2,000 x 3 IAB members): Community and Interprofessional Advisory Board members will be offered to cover cover travel, childcare, time and other costs they may experience as a result of participation.

Focus Group Incentives (total cost: $1,000 = $50 gift-cards x 20). We will conduct focus groups with caregivers and community leaders.

Neighborcare Impact Payment (total cost: $5,000): This covers the cost to offset the disruption and time spent supporting the recruitment of clinicians and caregivers.

Somali Health Board Impact Payment (total cost: $10,000): This covers the cost to offset the disruption and time spent supporting the recruitment of 3-5 community leaders from the East African American community, conducting 60-90-minute focus groups with the selected community leaders, and facilitating the collaborative sessions between Somali Bridge and the study team.

Other Services

Transcription Services (Total Costs: $1,500) Transcription services are requested to transcribe the focus groups with the community advisory board and/or any interviews with community members that will be used for video clips. $75/interview x 20 interviews= $1,500.

Translation Services (Total Costs: $1,350): We plan to have all focus groups and video clips translated for analysis. We will engage a certified translation service for this purpose and vet the translation with community members once it is completed. $75/interview x 18 interviews= $1,350.