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Final Grant Report: Team-Based Vaccine Communication in Pediatric Primary Care

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Project Summary

This project aimed to explore the roles, barriers, and facilitators for all pediatric primary care team members in delivering high-quality vaccine communication. The goal was to inform future interventions that engage not just clinicians but also medical assistants and front office staff in team-based vaccine promotion. Over the course of the grant, we conducted 174 direct observations of medical assistants (MAs) and front office staff and 24 semi-structured interviews of MAs and clinicians at two pediatric practices in the Denver metro area. Major accomplishments include identifying unique communication roles for non-clinician staff, characterizing barriers to team-wide vaccine messaging, and developing a preliminary framework for a team-based vaccine communication training intervention.

Goals & Objectives

The primary aim of describing roles and barriers/facilitators to team-based vaccine communication was fully met. Minor adjustments were made to optimize participant recruitment and ensure data saturation. Additional effort was invested in tailoring observation tools for front-office staff and interview guides for MAs, groups often underrepresented in existing literature but shown to have relevant preventive care communication touchpoints.

Activities & Outcomes

Stage 1 (Direct Observations): Observed 174 encounters across two practices, including 127 medical assistant-parent interactions and 47 receptionist-parent interactions. Identified different communication strategies, missed opportunities for vaccine conversations, and captured workflow patterns where communication could be integrated. Key observations included variable use of the presumptive approach to initiate vaccine communication and differences in communication styles for non-influenza and influenza vaccines. Additionally, MA vaccine communication was often limited to offering vaccines.

Stage 2 (Interviews): Conducted 22 interviews with clinicians (10) and clinical support staff (12). Themes included staff role clarity, knowledge gaps, differing vaccine attitudes, and workflow constraints. Many MAs and clinicians expressed a desire for training tailored to the role of MAs and ideas for implementing this type of training.

Dissemination

- Abstract presented at the Pediatric Academic Societies (PAS) annual meeting in Hawaii on April 26, 2025.
- Slide presentation given at HRSA/NRSA research forum October, 2024.
- Two manuscripts in preparation for peer-reviewed publication.
- Data used to obtain further pilot funding and currently being integrated into the development and administration of a survey of MAs in 22 clinics involved in a larger trial to triangulate and further explore the findings from this project.
- Data included in the AHRQ career development award application for the Principal Investigator, Dr. Higgins

Partnerships

The study was conducted in collaboration with two community pediatric practices in the Denver metro area. Existing relationships facilitated successful recruitment and implementation. Ongoing input from site managers and staff informed design adaptations and strengthened findings' relevance.

Budget Summary

Funds were spent as proposed on personnel (PI, qualitative analyst, research assistant), participant incentives (interviews and surveys), and transcription services. No major variances from the original plan occurred and all funds were spent.

Lessons Learned & Sustainability

Challenges included recruiting clinicians for interviews due to time constraints and tailoring observation and interview guide tools to diverse staff roles. Adaptations included multiple contact methods, flexible observation times, incentives, and extensive pre-testing of observational and interview tools. These findings will inform several follow-on grant proposals to pilot a team-based vaccine communication training module, including a career development award and other pilot funding.

Post-funding, the relationships built and knowledge gained will support sustained engagement with partners, with potential for long-term impact on pediatric vaccine delivery models.