

Embedding Language Promotion in Primary Care:Feasibility & Preliminary Efficacy of Talk With Me Baby Intervention



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Background

- The home language environment (HLE) is a primary public health consideration for promoting healthy child outcomes.¹
- Primary well-child care (WCC) is ideal for language promotion for HLE it reaches 91-98% of all families of infants/toddlers.²
- There is a gap in efficient and evidence-based tools to promote HLE in WCC.

Talk With Me Baby (TWMB)

- Embeds evidence-based language promotion in WCC anticipatory guidance.³
- Deployed to 3,000+ healthcare providers, but not yet evaluated for efficacy in RCT.

Study Objectives

- The goal of this study is to demonstrate TWMB feasibility and preliminary efficacy.
- Objectives are to:
 - 1. Examine provider/parent perceptions of TWMB usability/ acceptability in WCC.
 - 2. Examine gains in parents' language promotion behaviors after TWMB in WCC.
 - 3. Examine reliability of TWMB Checklist as adherence measure for intervention.

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Methods

- 2 urban primary care clinics with racially/ethnically diverse (40% African American, 27% Hispanic) and low-income (78% Medicaid/uninsured) patients.
- Healthcare teams trained (2 hrs education with practice-based instruction) to use TWMB at 1-36m WCCs during 9-month trial (Figure 1).
- TWMB implemented with acceptable adherence (75%) during WCCs.
- Parent-child participants enrolled at their 1-2m
 WCC and followed at 4m and 6m WCC.

TWMB + WCC

Figure 1. TWMB Workflow During WCC



Participants

- 12 residents, 12 nurses, 9 care assistants.
- 62 parent-child dyads (mean child age=1.7 months; 32 male).
- Dyads were racially/ethnically (n=33, 52% historically-marginalized racial groups); and socio-economically diverse (n=54, 86% receiving WIC and/or SNAP; n=36, 57% parent High School graduation or less).

Measures

- TWMB Survey: Completed post-trial by healthcare teams and parents to assess usability/accessibility of TWMB during WCCs.
- Caregiver Report of Infant Behaviors (CRIB)⁴: Survey about quantity and quality of caregiver language interaction behaviors with children 0-36m completed at 1-2m, 4m, and 6m WCCs.
- <u>TWMB Checklist</u>: Intervention tool completed jointly by provider and parent during WCC visit; copy collected to for research purposes to measure TWMB adherence.

TWMB Checklist Critical Components: Modeling; Sharing; Encouraging; Giving Language Nutrition Prescription).

Results

Usability/Acceptability (RQ1)

Table 1. TWMB Usability/Acceptability for Healthcare Teams

TWMB Healthcare Team Survey	% Agree/Strongly Agree		
	Care Assistants (n=9)	Nurses (n=12)	Physicians (n=12)
TWMB is reasonable to deliver in WCC timeframe	90%	100%	90%
I am confident in my ability to deliver TWMB	100%	100%	90%
TWMB is important for child development	100%	100%	100%
TWMB is important for me professionally	100%	100%	100%
I would recommend TWMB to colleagues	100%	100%	100%

Table 2. TWMB Acceptability for Families

TWMB Family Survey	% Agree/Strongly Agree
I understand the importance of talking with my child	98%
Learning about language nutrition was helpful	98%
Practicing language nutrition during visits was helpful	96%
I am confident using language nutrition with my child	93%
I would recommend TWMB to other families	96%

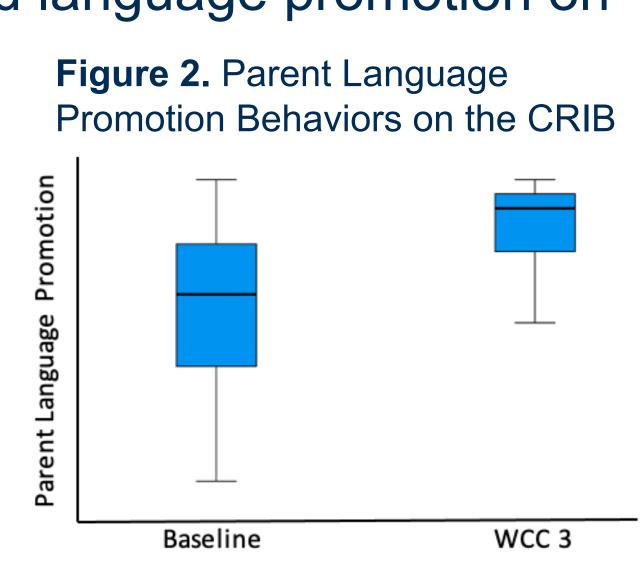
• TWMB added <2 minutes on average to careas-usual WCC on check in/check out times.

Parent Language Promotion (RQ2)

 Parents (n=51) receiving TWMB intervention had significant improvement in their self-reported language promotion on

behavior score, t(50)=7.74, p<.0002, with large effects (d=1.08) after 3 WCC visits (Figure 2).

the CRIB



Reliability of Adherence Measure (RQ3)

- WCC visits (n=70) with TWMB were coded by trained observers for completion of TWMB critical components.
- 96% agreement between healthcare team completion of TWMB Checklists (i.e., selfreport) and observer WCC coding.

Conclusions

- Preliminary trials in 2 primary care clinics including diverse and low-income families support the feasibility of TWMB delivery within standard of care WCC visits.
- Healthcare teams and parents endorsed TWMB as acceptable.
- Strong concordance between coded and healthcare completed TWMB Checklists supports use as low-cost adherence measure, consistent with previous work.⁵
- Preliminary evidence for future RCT of TWMB efficacy in WCC for parent language promotion behaviors.

