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Summary Report: Testing the Feasibility of an Interactive, Mentor-Based, Text Messaging Program to Increase Fathers' Engagement in Home Visitation

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# **Executive Summary**

The Text4Dad program was implemented as an add-on module in conjunction with a larger, multisite fatherhood program, called the Healthy Start Engaged Father program, which uses a home visiting intervention to increase father involvement. The larger, multi-site evaluation examines the implementation of the Engaged Father program, delivered by fatherhood Community Health Workers (F-CHWs), in Healthy Start home visitation programs in urban and rural areas in Michigan. Text4Dad was implemented in three of the six Healthy Start Engaged Father program sites in a 16-month implementation evaluation study funded by the Fatherhood Research Practice Network (FRPN).



Text4Dad is a text messaging program to facilitate communication, interaction, and social support between F-CHWs and the clients on their caseload. The clients enrolled in Text4Dad are low-income fathers with at least one young child, most of whom were participants in the Healthy Start Engaged Father program. The FRPN pilot study evaluation of Text4Dad had two primary objectives. First, the team examined the process of implementing Text4Dad in community settings. A key question was whether the F-CHWs would use Text4Dad, and, if so, to what degree it would be beneficial in supplementing the home visiting and group-based programs carried about by the F-CHWs. To examine this objective, the research team conducted interviews with F-CHWs and fathers who used Text4Dad to understand how well the content of Text4Dad met their needs as community health workers and program participants. Second, the team examined the usage of Text4Dad. To carry out this objective, the team conducted content analysis of the exchanges between F-CHWs and fathers to better understand the topics that are most important and engaging to men.

There are several conclusions from this short-term implementation evaluation. First, the F-CHWs found Text4Dad relatively easy to use. Second, the F-CHWs used Text4Dad to push out content to fathers on a weekly basis. Third, both the F-CHWs and fathers had positive views of Text4Dad content and felt the content was acceptable and relevant to their parenting experiences. Overall, the data suggested that Text4Dad could be implemented in community fatherhood programs, and qualitative data supported the notion that Text4Dad helped fathers stay connected to and engaged with the fatherhood program (e.g., scheduling and rescheduling appointments, staying up to date on community-based events).

Although Text4Dad was viewed to be useful and relatively easy to use, F-CHWs nevertheless required ongoing technical assistance and support from the University of Michigan (UM) research team. Although the F-CHWs used Text4Dad to push out information to fathers, there was a lower than expected level of interactivity or mentorship between the F-CHWs and fathers through Text4Dad. Content analysis of exchanges indicated that, even with coaching from the UM research team, for the most part the F-CHWs did not use Text4Dad to elicit information or interaction with fathers. Only one of the three F-CHWs used the program to provide interactive support or encouragement to fathers. In follow-up interviews, two F-CHWs indicated that they felt that social support was more appropriately delivered during the in-home visitation components of the program. One important step moving forward from the FRPN pilot study is to consider how to support the F-CHWs to fully implement the mentorship and social support components of Text4Dad. More intensive initial training in the theory and rationale of Text4Dad may be necessary to accomplish this goal.

## **Background**

The current study is an evaluation of the Text4Dad program. This project was a collaboration of the University of Michigan (UM) research team and several Healthy Start programs in Michigan. Healthy Start is a national, home visitation program that serves low-income mothers and children. Like most maternal and child health (MCH) programs, Healthy Start focuses on mothers and children. However, in 2019, the Health Resources and Services Administration (HRSA) began to require that Healthy Start programs engage 100 fathers or father surrogates per year in services and activities.

In Michigan, the Engaged Father program was created to promote inclusion of fathers in Healthy Start. The program has three primary components: (1) needs assessment and home visitation with fathers; (2) group-based fatherhood intervention; and (3) training to Healthy Start staff on reducing barriers to father involvement within home visitation services. Text4Dad was developed to supplement the activities provided by the Engaged Father program. Text4Dad was based on a similar approach used with new mothers.<sup>1</sup>

Text4Dad uses text messages to provide information and support to fathers. Text4Dad communication is done via a web-based portal that allows users to send messages either to an individual or to a group of individuals who are enrolled within the system. Text4Dad is interactive, in that the F-CHW mentors can disseminate text messages and engage in follow-up conversation with fathers. Fathers can reply to the messages by texting from their mobile phones. The F-CHW can reply to fathers' messages via logging into the Text4Dad system, but they are not able to send Text4Dad texts from their mobile phones.

Text4Dad content focuses on domains men identified as being important to them, including infant development, father-infant interaction, father-mother interactions, and father self-care messages; and local services and events messages. Separately, the UM research team curated an extensive set of web-based links to existing father-friendly, evidence-based resources on parenting, infant care, fathering, and self-care. These links "live" within Text4Dad as resources that F-CHW mentors can attach to Text4Dad messages and push out to fathers.

# **Text4Dad FRPN Pilot Study Objectives**

FRPN provided \$25,000 for a pilot study of Text4Dad. The subaward agreement ran from June 1, 2018, through September 15, 2019. For the purposes of completing the final report, we analyzed Text4Dad data available through July 31, 2019, resulting in a study period of 14 months.

#### **Study Objectives**

**Objective 1:** To describe the nature of engagement with the Text4Dad program, such as how long fathers use the program, how often F-CHW mentors and fathers exchange messages, and who (F-CHW mentor or father) most commonly initiates interactions.

**Objective 2**: To describe the content of the exchanges, for example, what are the most common topics of the text messaging exchanges and how often and what kinds of resource links the F-CHW texted to fathers.

**Objective 3:** To describe the results of semi-structured interviews with F-CHW mentors and fathers related to their experiences in the program.

<sup>&</sup>lt;sup>1</sup>Martin, E., Weiland, C., & Page, L. C. (2018). Text-based mentoring for postpartum mothers: a feasibility study. Early Child Development and Care. do i:10.1080/03004430.2018.1540984

## C. Methods

#### C1. Description of Sites

Three Engaged Father program sites agreed to participate in the Text4Dad FRPN pilot study. Participation required that the F-CHW at each site agree to use Text4Dad in conjunction with the other fatherhood services being offered, and to participate in Text4Dad training and supervision by the University of Michigan research team. Hereafter, these sites are referred to as Site 1 (small urban), Site 2 (large urban), and Site 3 (small urban).

#### C2. Description of Text4Dad Implementation

The first three months of the project involved activities such as finalizing content for the Text4Dad platform, developing the Text4Dad mentor training manual, and establishing procedures for recruitment and incentives for the participants at each of the three Text4Dad sites. Text4Dad F-CHW training took place in fall 2018, and Text4Dad was launched at Sites 1 and 2 in October 2018. Site 3 did not begin implementing Text4Dad until late spring 2019, with the first message sent out in June 2019. This report includes data from all three sites, noting that the start dates varied across site (see Table 2, row 2, "number of days of use of Text4dad").

### **C3. F-CHW Training Protocol**

There were four main components to the F-CHW training protocol: (1) a mentor training manual, created by the UM research team; (2) in-person training sessions, conducted by the UM research team; (3) ongoing monthly CHW learning community meetings with UM research team and F-CHWs; and (4) weekly "reminder" emails sent by the UM research team to the F-CHWs on Monday morning, suggesting Text4Dad content that could be sent to fathers.

### C4. Participant Recruitment

The research team sought to have each F-CHW recruit 30 fathers to participate in the Text4Dad program. Table 1 shows the study enrollment sample size based on the data analyzed for this report. The F-CWHs achieved that goal with a total enrollment of 108 fathers.

Table 1. Study Enrollment Sample Size

	Site 1	Site 2	Site 3
Analysis of mentor—mentee exchanges	n = 32	n = 45	n = 31
Semi-structured interviews with selected mentees *Conducted with fathers selected from row above	n = 0	n = 0	n = 3*
Semi-structured interviews with mentor F-CHWs	1	1	1

## D. Methods and Procedures of Analysis

## D1. Objective 1. Descriptive Analysis of Mentor-Mentee Exchanges

To conduct descriptive analysis of the F-CHW-father exchanges, the research team used the administrative or "backend" user data stored in the Text4Dad platform. The research team used de-identified transcripts for analysis of the exchanges to code the nature, timing, and duration of exchanges. Names were removed from the transcripts. Coders were blind to the site and to the F-CHW.

#### D2. Objective 2. Content Analysis of Mentor-Mentee Exchanges

Content analysis of transcripts of the backend user data examined the types of issues that were addressed in the exchanges; whether mentors provided evidence-based guidance on parenting issues; and whether mentors offered support and resources to fathers, and, if so, what types of support and resources were offered to fathers.

#### D3. Objective 3. Interviews with F-CHWs (n = 3) and fathers (n = 3)

The research team conducted interviews with the F-CHWs to assess F-CHWs motivation to use Text4Dad, and whether they felt Text4Dad enhanced fathers' participation in other components of the Engaged Father program. Based on the content analysis results showing low levels of F-CHW and father interactivity through the Text4Dad platform, the research team also asked questions of the F-CHWs' perceptions of Text4Dad as a way to provide social support to fathers and how they saw Text4Dad facilitating the other services delivered through the Engaged Father program.

## E. Results

### E1. Content Analysis of Text4Dad Exchanges between F-CHWs and Fathers

#### Table 2. Summary of F-CHWs-Father Exchanges

	Total	Site 1	Site 2	Site 3
1. Number of days of use of Text4Dad, from enrollment of first father to July 31, 2019 (day that data was collected for analysis)		288 days*	48 days	275 days
2. Number of fathers enrolled in Text4Dad	108	32	45	31
3. Total number of exchanges, initiated by F-CHW	1,241	411	315	515
4. Average number of exchanges, for each father	12.1	12.8	7	16.6
5. Total number of exchanges, initiated by father	11	0	0	11
6. Topic of exchange, initiated by father	Scheduling and discussing community events; physical needs**.	N/A	N/A	Clarification about events; confirm meeting times; ask for a pair of dress shoes; father told mentor that he was able to get a housing voucher, mentor said congrats; asking for bus tokens; father mentioned being sick and mentor offered emotional support.
7. Number of online resources offered	7	1 (paternal postpartum depression link)	2 (flyer for event; registration for focus group)	4 (bedtime routines, self-care and work/life balance, bonding with new baby, and infant massage)

8. Most common topics	Local or community- based events	1. Local or community events	1. Local or community events	Local or community events
		2. Attachment and bonding	2. Coparenting	2. Check-in or scheduling home visitations
		3. Self-care	3. Development	3. Development

<sup>\*</sup> Note: This F-CHW was on paternity leave from his job for 12 weeks in the middle of this project.

Table 2 summarizes the primary analyses conducted for this report. As described in Appendix I, the Text4Dad codebook, exchanges are the initiation of an interaction via sending a first text message. An exchange can consist of one message, i.e., the F-CHW sends a message and there is no response. An exchange can consist of multiple messages, i.e., the F-CHW sends a message and the father responds, or the F-CHW follows up with an additional prompt or question. The first row shows the number of days that F-CHWs utilized Text4Dad, beginning with the first day that the site implemented the program and ending on the day that data was pulled for the analyses reported herein. As mentioned elsewhere in this report, the mentor at Site 2 started implementation of Text4Dad at a later date than the other two sites, thus resulting in fewer days of implementation overall. As seen in row 2, 108 fathers were enrolled across all three sites. Even though Site 2 started enrollment later than the other two sites, Site 2 was able to enroll more fathers, possibly because this site is located in a larger urban area compared to the other two sites. Row 3 indicates the total number of exchanges (i.e., initiation of a contact by sending a first Text4Dad message to participant). Site 3 enrolled fewer fathers but initiated a larger number of interactions with the fathers who enrolled in the program. This is supported by the data in line 4, which shows that Site 3 had on average of 16.6 exchanges per father, as compared to 12.8 at Site 1 and 7 at Site 2. The lower number of exchanges per father at Site 2 can be explained in part by the fact that they implemented Text4Dad later than the other sites. As discussed in more detail below, at Sites 1 and 2, no fathers initiated any exchanges with their F-CHW through Text4Dad, whereas 11 exchanges were initiated by the F-CHW at Site 3. Row 6 shows the topics of exchanges initiated by fathers. Row 7 shows that the F-CHWs overall did not offer many resources through the resource links embedded within Text4Dad. Row 8 shows the most common topics about which the F-CHWs texted their fathers. Again, Appendix I shows the categories of the topics of exchanges, based on the messaging content that the research team created for Text4Dad.

The key result from the analysis of the exchanges between F-CHWs and fathers enrolled in Text4Dad was that, for the most part, two of the F-CHWs (Site 1 and Site 2) did not use Text4Dad to initiate sustained interactions or mentorship with the father. Nearly all of the exchanges for these F-CHWs consist of one text message being sent to a father, with no effort to elicit a response from the recipient and no response received, thus no interactive exchange taking place. F-CHWs from Site 1 and Site 2 used Text4Dad mainly to communicate with fathers in a one-way format. The F-CHWs at Sites 1 and 2 used Text4Dad primarily to provide information on events, as did Site 3. However, Site 3 used the check-in messages to a much greater degree than did Sites 1 and 2. Thus, it was not surprising that the F-CHW at Site 3 had marginally more interactive exchanges, since this F-CHW was using Text4Dad to check in with some of the fathers on his caseload. As discussed in more detail below, interviews with the F-CHWs confirmed that F-CHWs at Sites 1 and 2 mainly saw the purpose of the Text4Dad platform as a useful tool to communicate information to fathers, but not necessarily to engage in interaction or support with fathers.

<sup>\*\*</sup> Physical needs included needing dress shoes, getting a housing voucher, asking for bus token.

<sup>\*\*\*</sup>An exchange is the initiation of an interaction—in other words, when a text message is sent, usually by the F-CHW. It is called an exchange because each message offers the possibility of an interactive exchange between the F-CHW and the father.

#### E2. Qualitative Interviews with F-CHWs

Consistent with the content analysis of the exchanges between F-CHWs and fathers, F-CHWs reported they usually did not receive a response from fathers to the Text4Dad messages, especially in relation to parent education messages. However, only one of the three F-CHWs used the check-in messages to elicit responses. F-CHWs felt that fathers may not respond to the text messages for several reasons. The fathers are working and thus too busy to respond, they received all the information needed and understand without follow-up questions, and the fathers' lives are hectic.

With regard to integrating Text4Dad content into home visits, there were mixed responses. One F-CHW (Site 3) said he uses Text4Dad to introduce a parenting topic that is then discussed during home visits. Another F-CHWs (Site 1) said that there is not necessarily a tie between Text4Dad content and what is discussed during home visits, although he will remind fathers in person to read messages and reach out to him with any follow-up questions.

One F-CHW (Site 1) also said that he communicates regularly with fathers via text using his personal mobile device. In such cases, these exchanges would not be captured within the Text4Dad system. Thus, it may be that F-CHWs are using text messaging as a form of support much more frequently than we were able to capture in our current analysis, but they are doing so with the ease of their personal mobile devices rather than via logging in to the Text4Dad system (as noted earlier, accessed via a web-based portal).

F-CHWs reported that they modified the conversation prompts to make it more personal and customized to the fathers enrolled in their programs. F-CHWs reported and/or displayed (via their use of the platform) different patterns regarding use of resource links. Some F-CHWs regularly embedded resource links whereas others reported not using the resource links.

#### E3. Qualitative Interviews with Fathers

Fathers reported satisfaction with Text4Dad overall. Fathers noted that they learned information that they did not know.

- Father #1: "She's pregnant, we don't have anything, you know, and the program helped with every, uh, two-thirds of what we needed. Nice. That's why we here, you know."
- Father #2: "It kinda taught me what not to do, how to do it 'cause I am more from my child but all heard her. But I don't know how else to explain it but it helped. I mean my, my lady is, well, 'cause there's a few things she didn't know, you know, safe rules and stuff like that. So yeah, it was very helpful."
- Father #3: "Honestly, I mean for, for dads that need a lot of help, like it to me, it helps."

Fathers reported that they felt Text4Dad was useful for staying in touch with their F-CHW. The reminders seemed especially useful to fathers, who reported being busy.

- Father #2: "It helped a lot because even if I couldn't make an event, we was still able to keep in contact and he was still able to, you know, lead up with me." [Note: "He" refers to the F-CHW.]
- Father #3: "So, um, I try to, personally, I try to stay in contact with [F-CHW] as much as possible, but yeah. Well, when like there's an event or a job that come up, I get it on the Text4Dad."

Overall, one interpretation is that the fathers found Text4Dad content useful and informative. Based on the analysis of interviews with the F-CHWs and the content analysis of the exchanges between F-CHWs and fathers, the research team tentatively concluded that Text4Dad was useful in keeping the fathers connected to and engaged with services. However, a notable limitation is that this conclusion is drawn based on the perceptions of a small number of fathers who were highly involved with the fatherhood program and willing to do an interview.

## F. Results and Discussion

From an implementation standpoint, the F-CHWs found the technical aspects of Text4Dad relatively straightforward. However, one limitation of Text4Dad is that interaction can be inconvenient because the F-CHW has to log in to the Text4Dad website in order to respond to fathers via Text4Dad. Although logging in to the website could be done via a mobile phone, communication would have to be via the Text4Dad web platform. One F-CHW indicated that they preferred the ease of the personal mobile device for texting with fathers on their caseload. Thus, one recommendation could be to create an app for F-CHWs to more easily and fluidly send out and respond to communications via Text4Dad. In addition, it may be useful to explore ways to support the F-CHWs in accessing the web, for example, via tablets rather than small handheld devices. Such procedures may facilitate ease of use of Text4Dad.

The content analysis of the exchanges between F-CHWs and fathers suggested that the F-CHWs used Text4Dad mainly to push out information to fathers. The most popular topic was community-based events and meetings. Based on the content analysis and the interviews with F-CHWs and fathers, these text communications were perceived to help fathers stay engaged with the in-person fatherhood program activities (e.g., scheduling and rescheduling visits, reminders about fatherhood program events). F-CHWs uniformly felt that Text4Dad was useful and added value to their fatherhood programming.

Importantly, both F-CHWs and fathers had positive views of Text4Dad content and felt the content was acceptable and relevant to fathers' parenting experiences. Yet, it was also evident from interviews and analysis that the F-CHWs were not using all of the features of Text4Dad. For example, the F-CHWs were not making use of the weblinks to resources that are embedded within Text4Dad. Thus, a recommendation for future development of Text4Dad is to implement more examples in weekly reminder messages to F-CHWs about embedding content in the information pushed out to fathers.

Although Text4Dad was relatively easy to use and well regarded by the users and participants, there was a lower than expected level of interactivity through Text4Dad. Only one of the three F-CHWs used the program to provide support or encouragement to fathers. For the most part, the F-CHWs did not use Text4Dad to elicit information or interaction with fathers. In follow-up interviews, two of the F-CHWs indicated that they preferred in-person home visits as the primary mechanism for providing social support.

Moving forward, one important step for the research team is to consider what kind of support would be most useful to help the F-CHWs to fully implement Text4Dad to capitalize on the interactivity of the platform. Another point to consider is identifying more effective ways to elicit responses from fathers to ensure that interactions about parenting are taking place between F-CHWS and fathers. The UM research team is carefully analyzing the Text4Dad messaging content with this in mind. It may be that training the F-CHWs to elicit interaction may be insufficient, and the elicitation of interaction (e.g., ending each message with a question or a prompt for the father to respond) must be embedded within all of the Text4Dad content so that it is "automatic" once a message is sent.

## Conclusion

As of April 2019, Healthy Start programs are required by their federal funding agency to engage 100 fathers and father surrogates in activities and services each year. Thus, Healthy Start programs may be motivated to use a program such as Text4Dad to expand their services to engage harder-to-serve fathers. The research team is actively working with the Healthy Start program sites to bolster Text4Dad implementation and use. The implementation study results reported herein point to numerous important future directions for strengthening Text4Dad, in order to help Healthy Start programs reach their father engagement goals.