

“Talking is Teaching: Talk, Read, Sing” Early Literacy Intervention at Zuckerberg San Francisco General Hospital

September 2018

EVALUATION REPORT



**TOO SMALL
TO FAIL**



About Too Small to Fail

Too Small to Fail, the Clinton Foundation's early childhood initiative, promotes early brain and language development by supporting parents and caregivers with tools to talk, read, and sing with their young children from birth. Today, almost 60 percent of children in the United States start kindergarten unprepared, lagging behind their peers in critical literacy skills. Through partnerships with pediatricians, hospitals, faith-based leaders, community-based organizations, businesses, entertainment industry leaders, and others, *Too Small to Fail* is meeting parents where they are to help them prepare their children for success in school and beyond. Whether at the pediatrician's office or the playground, *Too Small to Fail* aims to make small moments big by creating opportunities for meaningful interactions anytime, anywhere.

Learn more at www.toosmall.org. Find resources for parents and caregivers at www.talkingisteaching.org or on Facebook (www.facebook.com/2smalltofail), Twitter (@2SmalltoFail), and Instagram (www.instagram.com/2smalltofail).



“Talking is Teaching: Talk, Read, Sing” is a public awareness and action campaign led by *Too Small to Fail*. This evaluation was conducted by UCSF Philip R. Lee Institute for Health Studies, based on a partnership with Zuckerberg San Francisco General Hospital



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Executive Summary

Too Small to Fail is leading a public awareness and action campaign, “Talking is Teaching: Talk, Read, Sing” (referred to as the “Talking is Teaching intervention” in this report) to promote the importance of early brain and language development and to support parents with tools to talk, read and sing with their young children from birth.

This report summarizes the evaluation of an intervention at the Zuckerberg San Francisco General Hospital, in which pediatricians and nurse practitioners talked with parents of children ages 0-3 about the importance of talking, reading and singing with young children. Practitioners provided a tote bag with a children’s book and CD, clothing, *text4baby* postcard¹ and a resource guide to parents as part of the intervention.

The study included interviews with 370 English-speaking (31%) and Spanish-speaking (69%) parents immediately before and immediately after the Talking is Teaching intervention and again 8-12 weeks later. The study team also conducted focus groups in English and in Spanish with a subset of study participants to better understand how parents responded to the information and materials. The large number of Spanish-speaking parents included in this study enabled us to explore statistically significant differences in their experiences with Talking is Teaching. The intervention is based on a model developed at Benioff Children’s Hospital Oakland; we make select comparisons to the findings of that study.

This study, conducted by the Philip R. Lee Institute for Health Policy Studies at the University of California, San Francisco found the following:

Early Literacy Awareness, Attitudes and Behaviors Before Receiving the Toolkit

Parents in the study report talking, reading and singing with their young children and have heard about the importance of early literacy in their community.

- About half of all parents reported talking (53%), singing songs (51%) and reading (51%) with their young children before participating in the Talking is Teaching intervention.
- All parents in the study were most likely to report that they talk (87%) and sing (81%) with their children often; they are less likely to report frequently reading with their child (47%). Forty-one percent (41%) of Spanish-speaking parents report reading frequently with their child, compared to 59% of English-speaking parents; a statistically significant difference.
- Three-quarters of parents in the study (73%) had heard about talking, reading and singing from at least one other source, including family and friends (30%), TV (28%), and doctors, nurses or midwives (27%). English-speaking parents were significantly more likely to rely on family and friends (39%) than their Spanish-speaking peers (25%).

Usefulness of the Toolkit and Educational Session Immediately After the Visit

Spanish-speaking parents were more likely than English-speaking parents to report learning something new and planning to use the toolkit. Nearly all parents reported that they planned to use the toolkit and to do something different because of the intervention.

- Immediately after their visit, eight in ten parents (80%) reported that their doctor gave them suggestions about how to help their child's development.
- About half (49%) of all parents agreed that they learned something new from their doctor. Spanish-speaking parents were substantially more likely to report learning something new (59%) than English-speaking parents (28%).
- Similarly, Spanish-speaking parents (67%) were more likely to report planning to do something different as a result of the intervention than English-speaking parents (52%).
- Nearly all parents (94%) reported that they planned to use the Talking is Teaching toolkit at home, though Spanish-speaking parents were more likely than English-speaking parents.

Changes in Early Literacy Awareness, Attitudes and Behaviors 8-12 Weeks after Receiving the Toolkit

Parents remembered the Talking is Teaching toolkit and reported using the materials 8-12 weeks later; eight in ten parents report talking, reading and singing more often after the intervention.

- Eight to twelve weeks after their visit, 79% of parents reported that they were talking, reading and singing more often. Spanish-speaking parents were more likely to report talking, reading or singing more often (84%) than English-speaking parents (71%).
- Nearly all parents (99%) who participated in the follow-up interview said they remembered talking with their doctor about the importance of talking, reading and singing with their child; nearly all (96%) reported using the toolkit 8-12 weeks later.
- Most parents (84%) reported that they noticed a change in their child's behavior since receiving the Talking is Teaching toolkit, such as their child talking more, being more interactive, and reading more. Spanish-speaking parents were somewhat more likely to notice changes (89%) than their English-speaking peers (81%).

¹The postcard explained how to sign up for text messages from text4baby with tips about promoting early brain development.

Introduction

This report summarizes the evaluation of an intervention intended to boost early literacy awareness, attitudes and behaviors among parents of young children in San Francisco, California. “Talking is Teaching: Talk, Read, Sing” is a public awareness and action campaign intended to equip parents and caregivers with tools and resources to promote early brain and language development among children ages 0 to 5. One strategy of the campaign is to enlist the help of trusted messengers to relay information about early literacy and brain development, and to motivate parents and caregivers to engage in more language-rich interactions with their young children starting at birth.

Between August 2016 and May 2017, parents and caregivers of children ages 0 to 3 who had a well-baby visit at the pediatric primary care clinic at the Zuckerberg San Francisco General Hospital (ZSFG) were invited to participate in a study of early literacy awareness and behavior. Consenting individuals were interviewed before their child’s doctor visit about their awareness of the importance of early literacy and their regular activities with their child. During the medical appointment, their child’s pediatrician relayed messages and gave them tote bags with a range of materials focused on parent-child interaction and early literacy activities. Kits were available in English and in Spanish; families received materials in their preferred language. A second interview was conducted with these parents at the conclusion of the visit. Finally, parents and caregivers were contacted 8 to 12 weeks later to complete a third interview. In all, 370 parents and caregivers participated in the interviews. Sixty-nine percent (69%) of interviewees were Spanish speakers, and 31% were English speakers. The research team conducted four in-person focus groups with parents who also completed the interviews; 26 parents participated. See the appendix for more information about the study methodology.

The Talking is Teaching toolkit shared with parents included a canvas bag and a baby blanket and t-shirt with campaign messaging and prompts for parents, a children’s book, a Talking is Teaching Sesame Street Family Resource Guide, a “Caramba Kids” bilingual CD, and a text4baby postcard.

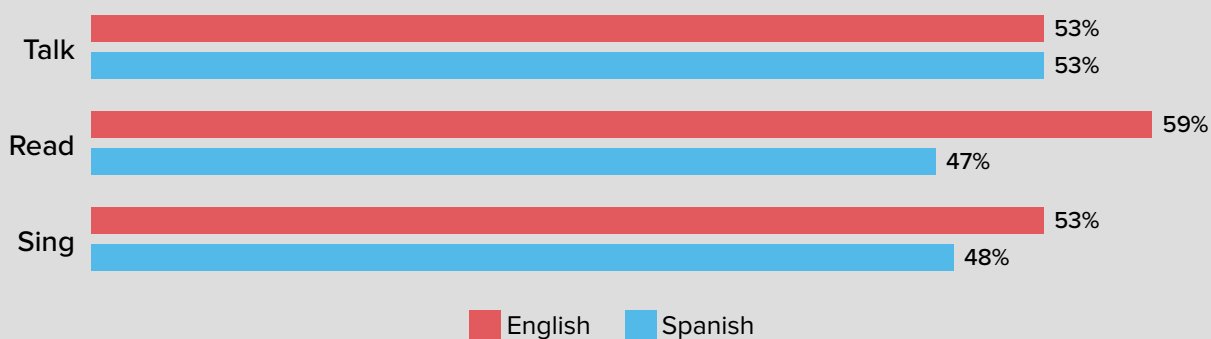
The large sample size of 370 parents in this study enables more robust comparisons among family groups, and offers a greater chance of finding statistically significant results. The large number of Spanish-speaking parents included in this study enables us to explore statistically significant differences in their experiences with the Talking is Teaching intervention. However, the study is based on a sample of families that sought pediatric care at ZSFG during a particular time period, and is therefore not necessarily generalizable to all families of young children.

Parents' Early Literacy Awareness, Attitudes and Behaviors Before Receiving the Toolkit

Before the intervention, about half of parents reported talking, reading and singing with their young child to support their development

In their initial interviews, parents reported that they already talk, read and sing with their children. When asked, “What activities do you do to help with your child’s brain development?” parents described a variety of activities, the majority of which can be categorized as talking (53%), singing songs (51%) and reading (51%). There were no statistically significant differences between English-speaking and Spanish-speaking parents for these measures.

Figure 1: English-and Spanish- speaking parents reported similar early literacy activities with their children before meeting with their health care provider.¹



Source: ZSFG Early Literacy study, English n=116, Spanish n=254.

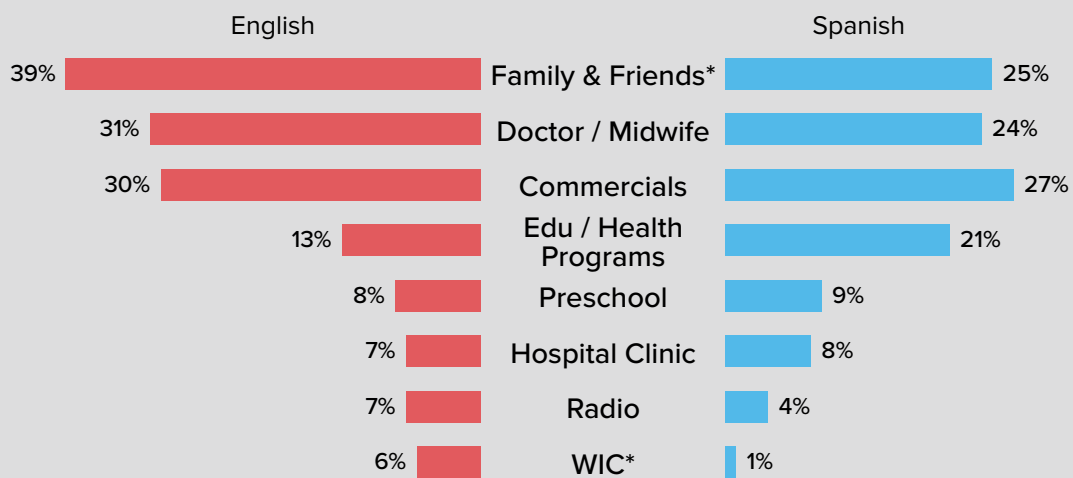
Parents learn about talking, reading, and singing from friends and family, the media and other healthcare providers

Parents were asked if they have heard about the importance of talking, reading and singing with young children from any other sources besides their pediatrician. About three-quarters (73%) reported that that they had heard similar messages from family and friends (30%), TV commercials (28%) and doctors, nurses or midwives (27%).

¹Parents were asked an open-ended question, “What activities do you do to help with your child’s brain development?” Their responses were grouped by theme, shown in this figure.

English-speaking parents were more likely to cite family and friends (39%) as information sources than were Spanish-speakers (25%). Similarly, six percent (6%) of English-speakers said they learned about the importance of talking, reading and singing from the Women, Infants and Children (WIC) program, while almost no Spanish-speakers did so (.5%). These differences are statistically significant in both cases. On the other hand, Spanish-speakers were more likely to cite learning the importance of talking, reading and singing from education and health programs (21%) than were English-speakers (13%).

Figure 2: Spanish-speaking and English-speaking parents relied on different sources of information about talking, reading, and singing.



Source: ZSFG Early Literacy study, English n=116, Spanish n=254.

* Statistically significant difference.

Parents' comments in focus groups offer some insights into why Spanish-speaking parents are less likely to hear about talking, reading, and singing from friends and family members. Spanish-speaking parents described their early educational experiences in their home countries, which didn't emphasize literacy skills as much as current American schools.

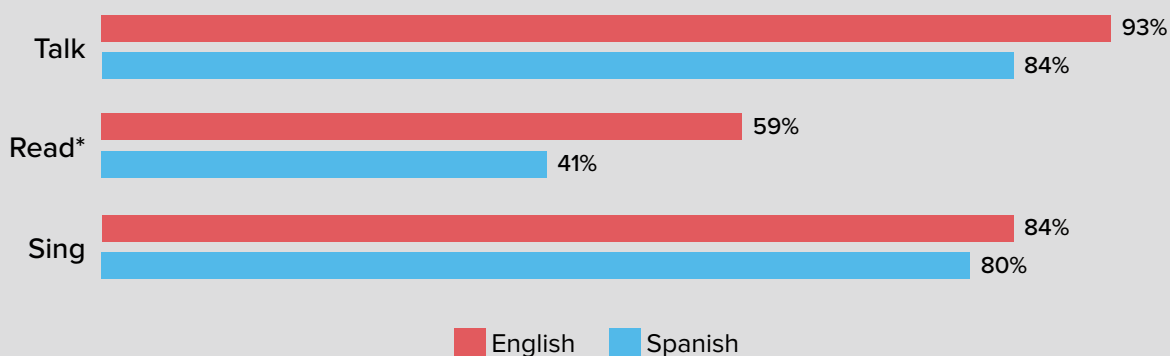
"In our countries we grew [up] very different. In kindergarten, which is when one is already four or five years, it is only for coloring, painting and they do not teach them to read books."

"I was surprised that when I get here that wherever you go, a book is very easy to get for children, the doctor brings you a book for your baby, right? In our country it is very difficult to give you the book."

Parents are most likely to talk and sing with their children on a regular basis; they are much less likely to read with their child daily

All parents in the study were most likely to report that they talk (87%) and sing (81%) with their child often; they are less likely to report frequently reading with their child (47%).

Figure 3: Parents report they talk and sing to their children often.



Source: ZSFG Early Literacy study, English n=116, Spanish n=254.

* Statistically significant difference.

English-speaking parents were more likely to find it challenging to talk with their child (16%) than their Spanish-speaking peers (7%). This difference is statistically significant, though available evidence does not explain why this difference exists.

English-speaking parents were more likely to read daily with their children (59%) than their Spanish-speaking peers (41%). About one in five parents in the study report that they find it challenging to read to children (22%), citing children's short attention span as the primary reason.

English- and Spanish-speaking parents are equally likely to report singing with their child often (80% among Spanish speakers and 84% among English speakers). Just 7% of parents report it is difficult to sing with their child, largely because they don't know what to sing.

Parents' Experiences with the Talking Is Teaching Intervention

Findings about parents' experiences with the Talking is Teaching toolkit and in-clinic intervention come from the surveys conducted immediately after the educational session with a pediatrician. Additional insights are drawn from the focus groups with parents.

Eight in ten parents reported talking with their doctor about their child's development

Immediately after their visit, eight in ten parents (80%) reported that their doctor gave them suggestions about how to help their child's development. Parents remembered their pediatricians talking about the importance of talking, reading and singing (53%), about how to talk, read and sing (29%), about the toolkit (28%), and that it is important to engage in these activities often (20%). Spanish-speaking parents were more likely to recall that their doctor talked with them about the importance of talking, reading and singing. English-speaking parents were more likely to recall talking with their doctor about how to talk, read and sing (99% compared to 95%). These differences are statistically significant.

Parents' input during focus groups suggest that the Talking is Teaching intervention was implemented differently among physicians and across the study period, which may explain why some parents don't recall the interaction. About half of focus group participants described their session as "rushed," especially near lunchtime and later in the day. Some parents noted that their pediatricians did not speak with them about the toolkit or campaign messages, as they were primarily focused on the child's physical examination.

On the other hand, about half of parents in focus groups described in-depth interactions with their pediatricians. One parent recalled the session vividly:

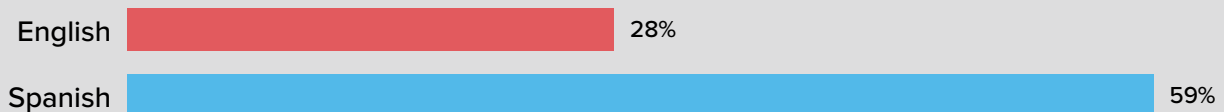
"My son's pediatrician did take the time to take everything out of the bag, and he told my son that it was for him, and he said, 'Look, it brings a book for you to read with your mom, brings a CD to dance with your mom or dad or your brothers, and brings a blanket and a shirt,' and in fact, the shirt was put on the boy at the time."

Both the survey and focus group results suggest that future initiatives may want to take greater care to assure consistency among providers to review items in the toolkit and relay the messages to parents about the importance of talking, reading and singing with their children.

About half of parents report learning something new; Spanish-speaking parents were more likely to report learning something new than their English-speaking peers

About half (49%) of parents reported that they learned something new from their doctor. Spanish-speaking parents were substantially more likely to report learning something new (59%) than English-speaking parents (28%), a statistically significant difference. This pattern reflects similar results from a study of an early literacy intervention at the primary care clinic Benioff Children's Hospital Oakland, in which Spanish-speaking parents were much more likely to report learning something new. This pattern may reflect differences in Spanish-speaking parents' own early childhood experiences, based on insights they shared during the focus groups (discussed earlier in this report).

Figure 4: More Spanish-speaking parents than English-speaking parents report learning something new.



Source: ZSFG Early Literacy study, English n=116, Spanish n=254.

Among parents who did report learning something new, the plurality reported that they learned that it is important to talk, read and sing with their child and how to do it and that engaging in these activities often is beneficial.

About six in ten parents report that they plan to use the toolkit and to do something new or different

When asked if they plan to do “anything new or different based on the information the doctor gave you,” 63% of parents said yes. Spanish-speaking parents (67%) were more likely to report planning to do something different after the session than English-speaking parents (52%). This difference is statistically significant.

Nearly all parents (94%) planned to use the toolkit when they returned home. There was no statistically significant difference between English-speaking (96%) and Spanish-speaking (93%) respondents about their plans. Parents were most likely to plan to use the children's book (87%), blanket (41%), t-shirt (38%) and “Caramba Kids” CD (38%).



Among parents who planned to do something new or different, parents were most likely to report that they were going to read more often with their child (62%), followed by singing (38%) and talking (37%). This pattern suggests that parents are more likely to increase an infrequent activity – reading – than singing and talking, which parents reported doing more often.

Figure 5: Most parents plan to read with their child more often.



Source: ZSFG Early Literacy study, n=370

When asked what they needed to meet their goals to talk, read or sing more often to their child, parents sought more books and materials (45%), along with more time (41%) and parent resources (19%).

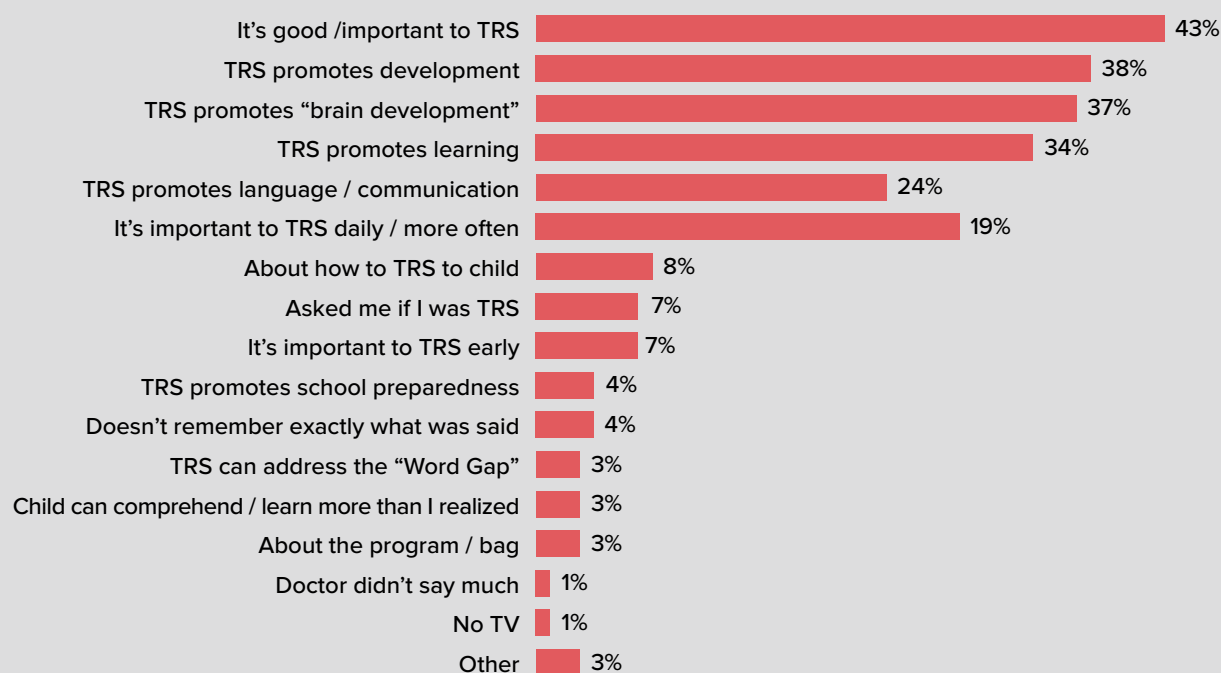
Changes in Parents' Early Literary Awareness, Attitudes and Behaviors 8-12 Weeks After Receiving the Toolkit

Parents remembered talking with their child's health care provider about talking, reading and singing

Nearly all parents (99%) who participated in the follow-up interview said they remembered talking with their doctor about the importance of talking, reading and singing with their child.

When asked what topics they remember discussing, parents reported talking about the importance of talking, reading and singing, that it promotes children's development and that it helps children's brains develop.

Figure 6: Most parents remember learning that it is important to talk, read and sing with their child.



Source: ZSFG Early Literacy study, n=370.

**TRS" stands for Talk, Read, Sing

Nearly all parents used the toolkit when they returned home

Nearly all parents (99%) who participated in the follow-up interview remembered receiving the toolkit during their visit. Parents were most likely to remember the children's book (96%), t-shirt (79%) and blanket (73%).

Nearly all parents (96%) reported using the toolkit eight to twelve weeks later. Parents reported that they used the children's book (89%), blanket (38%), t-shirt (31%), and "Caramba Kids CD" (29%).

Eight in ten parents with more than one child (79%) reported that they used items from the toolkit with other children in their home. English- and Spanish-speaking parents were equally likely to report sharing the toolkit materials among children. The children's book and CD were the most commonly used items with other children.

Eighty percent of parents report talking, reading and singing with their child more often

Eight in ten parents (79%) reported that they were talking, reading and singing more since meeting with their health care provider and receiving the toolkit. Spanish-speaking parents were more likely to report talking, reading, or singing more often (84%) than English-speaking parents (71%). This is a statistically significant difference.

Parents report behavioral changes in their children since meeting with the pediatrician

Eighty four percent (84%) of parents reported that they noticed a change in their child's behavior since receiving the Talking is Teaching toolkit, such as their child talking more, being more interactive, and reading more. Spanish-speaking parents were somewhat more likely to notice changes (89%) than their English-speaking peers (81%). This is a statistically significant difference. Parents who reported talking, reading and singing more often were more likely to report seeing changes in their children's behaviors, a statistically significant relationship.

These changes are likely the result both of changes in parents' early literacy behaviors and the natural developmental progression for children ages 0-3.

Suggestions to improve the toolkit

Parents suggested that more books be included in the toolkit, ideally bilingual books. A few asked for sturdier books with thicker pages, which are better suited to younger readers. Parents also asked for a CD with more songs, or possibly more CDs in the toolkit.

A few parent responses suggested that the toolkits were missing materials or not in their preferred language, which may speak to the need for greater quality control for the toolkits shared with families.

Conclusion

This study shows that the trusted messenger strategy used by Too Small to Fail is an effective way to encourage parents to talk, read and sing more often with their young children. Most parents in the study started with positive attitudes toward talking, reading, and singing with their young child; the meeting with a health care provider, and the materials in the toolkit, helped parents to talk, read, and sing more often with their child.

Findings suggest that before meeting with a health care provider, about half of parents in the study were talking, reading and singing with their young children. Three-quarters of parents in the study (73%) had heard about talking, reading and singing from at least one other source, including family and friends, TV, and doctors, nurses or midwives. The educational session with a healthcare provider helps to re-emphasize these messages, while the toolkit provides materials parents use with children in the household.

Follow-up conversations 8-12 weeks later show that nearly all parents (99%) remembered the conversation with their health care provider; they were most likely to recall that it's important to talk, read and sing with young children, and that it promotes development and learning. Eight in ten parents (79%) reported talking, reading and singing with their child more often after the Talking is Teaching intervention, a notable shift in behavior.

There are notable differences among Spanish-speaking and English-speaking parents in the study. Spanish-speaking parents were substantially more likely to report learning something new from their health care provider, and were more likely to plan to do something differently with their child after receiving the toolkit. Similarly, Spanish-speaking parents were more likely to report talking, reading and singing with their child more often 8-12 weeks after meeting with their doctor. These differences may stem from parents' own early educational experiences, and suggest that this community in particular may benefit from similar initiatives in the future.

Acknowledgements

Our sincere thanks to all those who supported the work involved in conducting the “Talking is Teaching: Talk, Read, Sing” intervention and evaluation at Zuckerberg San Francisco General Hospital (ZSFG). This would not be possible without the dedicated leadership and residents at ZSFG, researchers at the UCSF Philip R. Lee Institute for Health Policy Studies (IHPS) and the participating families whose children received care at ZSFG. We are especially grateful to the following people for their commitment and support: Dr. Elena Fuentes-Afflick, Drs. Shonul Jain and Eliza Bakken and Drs. Neeti Doshi and Eleanor Chung; and Dr. Dana Hughes, Jasmine Pettis Marquez, Antonio Hernandez and Silvia Arabia at IHPS. We are extraordinarily grateful for the generous gift from Lynne and Marc Benioff. Without their support, none of this would be possible.

Appendices

The research excerpted in this brief was completed by Dr. Dana Hughes and Jasmine Marquez of The Philip R. Lee Institute for Health Policy Studies at the University of California, San Francisco. Contact Too Small to Fail for a copy of the full reports submitted by Dr. Hughes and Ms. Marquez.

Appendix A: Study Design

Interviews

On a daily basis, SFGH staff identified families scheduled for well-child visits who were potentially eligible to participate in the evaluation. ZSFG provided the research assistants (RA's) with these lists; RA's then approached parents/caregivers as they waited to register for their appointments, introducing themselves and the study.

All parents/caregivers who met the study criteria (has/cares for a child age 0-3, between 18-64 years old, and speaks either English or Spanish) were invited to be interviewed by RA's. Only parents who formally consented to participate were interviewed.

Among those consenting, RA's conducted a total of three interviews per parent/caregiver: 1) at the beginning of the well-child visit, 2) immediately following that visit; and 3) 8-12 weeks following the first two interviews. Interviews 1 and 2 were conducted in person; interview 3 was conducted over the phone.

The first interview assessed baseline knowledge of the key campaign messages and associated behaviors. Immediately after the visit with the doctor, the second interview assessed what parents/caretakers learned from the pediatrician about the key campaign messages and their plans for applying that knowledge moving forward. The third interview, conducted 8-12 weeks after the initial visit, assessed knowledge retention among parents/caregivers, as well as whether and how it influenced behavior and finally, their opinions about the various modes of messaging (tote bags, physician instructions, etc.). All participants were offered a \$25 gift certificate to a major commercial outlet upon completion of the three interviews.

Four hundred thirty-eight (438) parents completed the in-person interviews; (interviews 1 and 2) 370 parents completed all three.

Focus groups

Four focus groups were conducted with parents/caregivers who participated in the "Talking is Teaching: Talk, Read, Sing" study at Zuckerberg San Francisco General Hospital. The purpose of the focus groups was to obtain parents'/caregivers' opinions about the effectiveness of the clinic intervention, their opinions about the tote bag items, and how they have utilized the items and messages.

Parents/caregivers/caretakers were asked at the conclusion of the final interview if they were interested in attending a focus group and if so, what days of the week and hours of the day worked best for them. Over 100 initial invitations to participate were made by phone to ask if they were interested in participating in a focus group. Focus groups were scheduled based on dates and times most convenient for likely participants, as well as their preferred language.

Three focus groups (one conducted in English and two in Spanish) were held on February 28 and March 1, 2017 and a fourth group (conducted in Spanish) was held on May 2, 2017. The focus groups were conducted at the Homeless Prenatal Program in San Francisco. All were in person; written consent was obtained from each focus group participant.

All focus groups were tape-recorded. Transcripts were prepared of each group. Analysis of the transcripts was supported by a web-based qualitative data analysis software, Dedoose. The transcripts were first read through in their entirety and common themes were identified and made into codes. The transcripts were then imported to Dedoose and a second reading of the transcript was made, this time “tagging” quotations that matched codes. Many of the overall codes were based on the questions that were asked in the focus group (e.g. what motivates parent to talk, read and sing, the importance of talking, reading and singing, where parents have heard about the importance of talking, reading and singing and use of tote bag items). After the transcripts were coded, quotes were organized by code and analyzed.

Each focus group lasted about one hour and for their participation, each parent/caregiver was given a \$25 gift card. Childcare, food and beverages were provided.

Appendix B: Study Participants

Interviews

Total sample sought	400
Completed interviews 1 and 2	438
Completed all three interviews	370

Refusals	38
Lost to follow up between interviews 1 & 2	26
Lost to follow up at interview 3	68

Demographic Characteristics of the Total Sample

Characteristic	Mean	Range
Ages of parents/caregivers	29 years (ENG) N= 115	19 years – 50 years
	32 years (SP) N= 255	18 years – 57 years
Ages of subject child	11 months (ENG) N= 115	1 week – 36 months
	12 months (SP) N= 255	1 week – 36 months

Characteristic	Number	Percent of total sample
San Francisco resident	108 (ENG)	94% (ENG) N=115
	249 (SP)	98% (SP) N=255
	357 (Combined)	96% (Combined) N=370
Race/ethnicity N=370	American Indian or Alaska Native -1	<1%
	Asian - 22	6%
	Black or African American - 28	8%
	Hispanic or Latino - 291	79%
	Native Hawaiian or Other Pacific Islander - 5	1%
	White - 11	11%
	Other – 7	2%
	Declined to answer - 5	1%
Parent/ caregivers sex N= 370	Male - 34	9% Male
	Female - 336	91% Female
Number of children under the age of 18 in the home N=370	1-2 children - 271	73%
	3-4 children - 90	24%
	5-6 children - 7	2%
	7 or more - 2	1%
Elected to take the survey in Spanish	255	69%
Elected to take the survey in English	115	31%

Focus Groups

Focus groups n = 4
Total participants n = 26
English participants n = 7
Spanish participants n = 19

Number of children of focus group participants: n = 25

1 child: 7 (28%)
2-3 children: 13 (52%)
4 or more children: 5 (20%)

City of residence: n = 25

San Francisco: 24 (96%)
Daly City: 1 (4%)

Length of time in current city: n = 24

Less than 4 years: 7 (29%)
5 to 9 years: 3 (13%)
Over 10 years: 14 (58%)