

## GETTING TO GOAL MAMA CO-CREATING TECHNOLOGY TO IMPROVE THE LIVES OF AT-RISK MOMS & BABIES





**Nurse-Family Partnership®** (NFP) is a program that changes the future for the most vulnerable babies born into poverty by giving a first-time mom trusted support from her own expert nurse from pregnancy until her child's second birthday.

HOPELAB

**Hopelab** is a social innovation lab focused on designing science-based technologies to improve the health and well-being of teens and young adults.



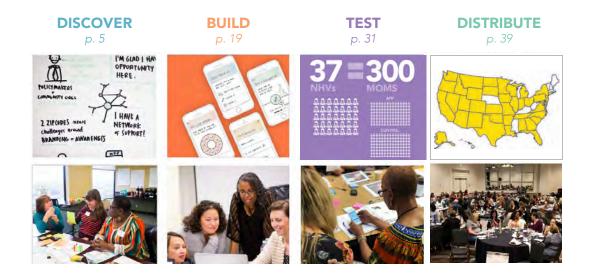
**Ayogo** is a digital health company drawing on behavioral economics, design thinking, and psychology to activate patients for better health outcomes.

WE TEAMED UP
TO ANSWER
THE QUESTION:
HOW MIGHT WE
USE TECHNOLOGY
TO AMPLIFY THE
IMPACT OF THE
NFP PROGRAM?

### GETTING TO GOAL MAMA

Nurse-Family Partnership recognized that technology had the potential to strengthen the connection between moms and their nurses, and better serve their families. Although the program serves many young mothers who are digital natives, it rarely leveraged technology with those clients—until now. NFP partnered with Hopelab, Ayogo, moms, and nurses to build something that could enhance the power of the program and stay relevant to today's young moms. This is the story of our innovation journey.

#### THE GOAL MAMA INNOVATION PROCESS



"Goal Mama was built to support the NFP model. It takes many components of what NFP nurses do every day—goal setting, celebrating small steps, encouraging behavior change—and puts them into an easy-to-use digital solution. I'm excited to see this be adopted and used by nurses and families around the country!"



David Olds, Ph.D. Founder Nurse-Family Partnership "Our goal was to see if technology could help amplify the magic that happens between moms and their nurses."



Margaret Laws President & CEO Hopelab

"The spirit of NFP is innovation—identifying problems and developing and implementing solutions to enrich people's lives. Goal Mama continues the innovative legacy of NFP."



Director of Program Innovations
Nurse-Family Partnership

# DISCOVER FIRST, WE SOUGHT TO UNDERSTAND THE NEEDS OF NFP MOMS AND NURSES

## NFP WORKS FOR MOMS & COMMUNITIES

For over 40 years, NFP has improved the lives of families and communities. The program is free for eligible first-time, low income moms. A first-time pregnant mom is paired with a nurse home visitor who meets with her regularly until her child turns two. The nurse uses a mom-centered approach to customize the program to the mom's unique values, needs, and priorities.

280,000+ FAMILIES

41
STATES

the U.S. Virgin Islands and six Tribal communities

served since replication began in 1996

5X \$ RETURN

every \$1 invested in NFP saves \$5.70 in future costs for the highest risk families served

## THE IMPACT OF NFP

NFP has proven to have a dramatic impact on moms, children, and their communities, with over four decades of research demonstrating it to have life-changing effects, including:

18%

reduction in preterm deliveries

82%

increase in maternal employment

**68**%

increase in father's presence in household

48%

reduction in child abuse and neglect

67%

reduction in behavioral and intellectual problems at age 6

**59**%

reduction in child arrests at age 15

## DEEP LISTENING & LEARNING

Hopelab led the discovery process by listening to stories and gathering insights from NFP moms, nurses, nurse supervisors, researchers, funders, and national leadership to understand the needs and to unearth opportunities we could explore.



## GATHERING INSIGHTS

Our first step was to get into the field and hear from moms and nurses. Through a combination of in-home interviews, focus groups, and home visit shadows we had inspiring conversations with:



We also gathered insights from:

1,000

moms in an anonymous survey conducted by the NFP National Service Office

1,500

nurses in a web-based survey conducted by the University of Colorado Prevention Research Center

800

nurses through qualitative interviews conducted by the University of Colorado Prevention Research Center

## 5 KEY AREAS OF OPPORTUNITY

Following our initial human-centered design research, Hopelab presented 5 opportunity areas to NFP leaders, and together we chose mom engagement and retention as the primary challenge to pursue. Why? Because moms who stayed with the NFP program through graduation experienced the full benefits of the program in their lives.

01

increase mom engagement and retention 02

increase new mom enrollment 03

reduce the costs of the program

04

increase nurse engagement and retention

05

produce even stronger program outcomes

## STAYING UNTIL BABY IS TWO

Asking a mom to commit to a program for 2+ years of her life is a big deal, but we've seen that staying in the NFP program until the baby is two has benefits for both mom and baby.

During the 1-2 year (toddler) phase, nurses look for warning signs of developmental disorders, work on babies' language and motor skills, and show moms how to manage difficult behaviors, reducing the risk of child abuse and neglect.











## GENERATING PROMISING IDEAS

We collaborated with the NFP Innovations Advisory Committee—32 nurses from around the country—to brainstorm ideas to boost client engagement and retention and other ways to improve the program. Together we voted on the most promising ideas.

## **200** IDEAS



## KEY INSIGHT EMERGES

As we explored these ideas and talked with moms and nurses further, we found that numerous factors influence mom engagement, but one bright spot stood out:

At NFP Network Partner agencies with strong retention rates, nurses consistently engaged moms in working towards their personal goals.



## MOM GOALS

"I'm working on getting more rest and getting up and out of the house with my baby."

"I want to have a good life for my child, to have a house that I can afford that is mine where my son has his own room."

"My goal is to lose 100 pounds. I do workouts from YouTube and Pinterest."

"I'm in a Dental Assistant training program. I want to finish it while I'm still pregnant."

"Both me and my boyfriend had addiction issues in the past so my big goal is to stay clean and sober."

"At first my goal was housing.
I was homeless when I found out
I was pregnant."

"My pregnancy wasn't planned.
I still want to finish high school and get a career."

"I want to be a good mom, but I don't know where to start."

"I want to learn how to drive and get my license so I can have more work opportunities."

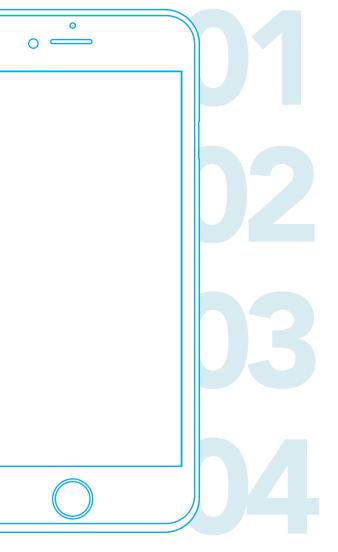
### WINNING IDEA

After synthesizing this research data and running the top ideas through feedback cycles with nurses, moms, and leaders, the winning concept emerged:

A MOBILE APP & COMPANION
NURSE DASHBOARD THAT NFP MOMS
AND NURSES CAN USE TOGETHER TO
SET, TRACK, & REACH MOMS' GOALS.



#### WHY AN APP?



### Meet moms where they are.

The vast majority of NFP moms are already using mobile devices.

#### Put it in mom's hands.

An app literally puts mom's goals in her hands. This is in harmony with our joint mission to empower moms.

## Keep goals top of mind.

We can leverage reminders and communication tools to keep moms on track with their goals.

#### Rely less on paper.

Tracking goals and tasks on paper is cumbersome, and papers can get lost in the shuffle.



"Moms and nurses designed Goal Mama; Hopelab, Ayogo and NFP built it to meet their needs and requirements. Impact begins with listening; it comes full circle when those who we serve can hear and see their voices reflected in products and programs aimed at improving their lives."



Benilda Samuels Chief Operating Officer Nurse-Family Partnership

"I am in awe of the nurses and moms in this program and what they are able to achieve together. It has been a great privilege to work alongside them to build a digital solution that can support this life-changing program."



Fred Dillon Senior Director, Strategy & Design Hopelab

# BUILD WE BROUGHT IN MOMS & NURSES TO HELP CO-CREATE THE PRODUCT

## IDENTIFYING WHAT MOMS & NURSES NEED

To kick off this phase, Hopelab mapped out what moms and nurses needed to set and achieve mom's goals—and determined how technology could help.



#### WHAT WE HEARD

Through a series of co-design sessions, we honed in on what moms and nurses needed and wanted from a goal-setting app:



#### **MOM NEEDS**

NFP moms want help staying prepared and organized.

NFP moms want nurses involved in the app with them.

Moms like reminders to help stay on top of their goals & to-dos.



#### **NURSE NEEDS**

Nurses want to be better prepared for visits.

Nurses want to help moms reach their goals & heart's desires.

Nurses want the most effective tools to engage & retain moms.

## **GETTING INPUT EARLY & OFTEN**

We also brought nurses and moms together through a series of focus groups and brainstorms to help us generate ideas for the app. This gave us insight into what's involved in the goal process and what nurses hoped the future app could offer.



## DEFINING THE MUST-HAVE FEATURES

We started with 30+ feature ideas, so we needed to identify the must-haves. We grouped features into these 6 categories, and asked moms to rank them. A version of all these features were built and evolved from the first prototype to the current application.

9etting stuff done

Help organizing and staying on top of tasks and goals was #1. 02

#### sharing with my nurse

Moms saw this as a big differentiator from other task and pregnancy apps. 03

#### hearing from NFP moms

Moms actually added this one; this would motivate them to use the app.

04

#### building better daily habits

Daily challenges and habit-building fell in the middle for moms. 05

#### knowing myself

Self-discovery quizzes are a nice-to-have, but ranked lower.

06

#### getting information

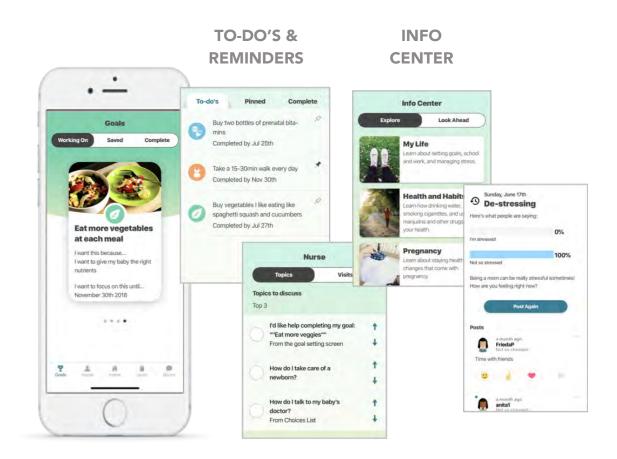
Moms can get information elsewhere, so this ranked lowest.

### BUILDING THE PRODUCT

Based on the features moms and nurses were most excited about, Hopelab and NFP selected Ayogo, a behavioral-science based software developer that creates HIPAA-compliant digital tools, to build a first version of the product—and we named it Goal Mama! The initial version is available in English, with a Spanish version likely to follow.



### KEY FEATURES DESIGNED & BUILT



SMART GOAL SETTING & TRACKING VISIT TOPICS, REMINDERS, & NURSE SHOUT OUTS MOM COMMUNITY

## INDIVIDUAL VIEWS FOR MOMS & NURSES

Goal Mama was developed to enhance the relationship between client and nurse.







#### **MOM APP VIEW**

The client app that moms use supports personal creation and ownership of their goals and planning for next visits with their nurse. (mobile)

#### **NURSE DASHBOARD VIEW**

To help nurses encourage moms as they progress or need support, a separate Nurse Dashboard gives NFP nurses a view into their client's Goal Mama activity. (mobile + computer)

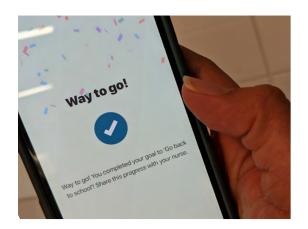
## HOW CAN MOMS & NURSES USE GOAL MAMA?



During a home visit to review and set mom's personal goals together



At the end of the visit to set the next visit and record to-do's



Between visits for mom to track goals, to-dos, access information and more



Nurse uses the Nurse Dashboard to prepare for upcoming visits

## GETTING NURSE FEEDBACK

We went back to nurses to show them how the app was taking shape and to get their impressions and feedback.



"Love it. Love it!
Thanks for listening to the clients;
the different app features are awesome."

"You nailed the essence of goal setting and the nurse-client relationship. Thank you for making this happen!"

"The work you are doing on this app is amazing. It will truly revolutionize the way the nurses are able to communicate and supply information to the clients."

"I think this app is a positive transformation in NFP. We are catering the program to this generation. Even if 1/3rd of our clients use the app that is 1/3 more clients receiving more evidence based information and assistance with goal setting."

"This is bringing something to our field that we've never had, which is a home-visiting app that's focused on cultivating goal setting and developing tools that we can use to enhance client engagement."



Dawn Dailey, Ph.D., RN, PHCNS-BC Nurse Manager Contra Costa Nurse-Family Partnership

"We have a deep passion for supporting emotional connection between people as a way of improving health around the world. There's no better example of this than Goal Mama."



Michael Fergusson Chief Executive Officer Ayogo

# AFTER BUILDING THE EARLY VERSIONS OF GOAL MAMA, WE CONDUCTED USABILITY AND PILOT STUDIES

## TESTING THE WATERS: USABILITY STUDY

Starting in late 2017, we ran a small usability study with Contra Costa NFP in California to see what worked and what didn't with Goal Mama for nurse home visitors (NHVs) and clients. We asked their team to recruit 40 moms, 20 who would receive the app and 20 who would receive NFP services as usual.

1 = 5 = 40

NETWORK NHVs MOMS
PARTNER





APP CONTROL

22222 2222

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## LEARNINGS FROM USABILITY STUDY

- A MAJORITY OF MOMS WHO USED THE APP SET GOALS.
- GOAL SETTING IS THE TOP USED FEATURE, FOLLOWED CLOSELY BY THE MOM COMMUNITY AND VISIT TOPICS.
- BUILT IN AND AUTOMATED REMINDERS HELP KEEP MOMS AND NURSES ON TRACK.
- NURSE SUPERVISORS HAVE A CRITICAL ROLE TO PLAY IN SUPPORTING ADOPTION AND UTILIZATION OF GOAL MAMA.

## LEARNING TO SCALE: PILOT STUDY

In 2018-2019, we conducted a mixed methods pilot study with 5 NFP Network Partners across the country to test the efficacy of Goal Mama while also gathering critical information about implementation.



## HOW THE PILOT WORKED

300 moms were recruited from 5 Network Partners to participate in the study. Over the course of several months, we collected quantitative and qualitative data to understand how the app worked and barriers and facilitators to implementing it in the field. The information collected during the pilot has helped us improve the next version of the app and how it will be rolled out to other NFP Network Partners.

5 = 37 = 300

**NETWORK PARTNERS** 



**NHVs** 



**MOMS** 

## LEARNINGS FROM PILOT STUDY

- PILOT NURSES GENERALLY VIEWED GOAL MAMA AS ACCEPTABLE & FEASIBLE TO USE IN THEIR PRACTICE.
- CLIENT FEEDBACK ON USING GOAL MAMA WAS POSITIVE & ENTHUSIASTIC.
- THE MOST POPULAR & USED FEATURES WERE:
  GOAL-SETTING, VISIT TOPICS, & THE MOM COMMUNITY.
- SEAMLESS INTEGRATION INTO NURSING PRACTICE AND SYSTEMS IS CRITICAL.
- SUPPORT FROM SUPERVISORS & OTHER LOCAL PARTNER LEADERSHIP HELPS NURSES LEVERAGE GOAL MAMA.

We've taken what we learned from the pilot study and have made Goal Mama even better! And more improvements will be coming in the future.

## WHAT MOMS ARE SAYING

"I really liked Goal Mama because it helped me visualize my goals and breaking it down into small steps that I could take to achieve my goal was really helpful."

"Having reputable information at my fingertips has been awesome! Getting a reminder and having that accountability was nice."

"I would for sure recommend it!
It helps me to stay organized
in a very chaotic life and I'm a
huge procrastinator so this has
helped a lot."

"I enjoyed the feature that let me add my next nurse visit and the notifications that went along with it. It helped me feel organized."

"The different articles to look at was a great part of the app.
It helped make it a lot easier to come up with different topics to talk about when meeting with my nurse."

"It was a very cool new experience while using the app.
My favorite part was being able to chat with other moms who had cool and unique ways of helping each other out."

"In an effort to keep up with changing times, the communities we serve and the families we are entrusted to care for we must continue to innovate. Goal Mama is one important response to that call."



Frank Daidone
President & CEO
Nurse-Family Partnership

DISTRIBUTE
NOW IT'S TIME TO
SHARE GOAL MAMA
WITH NFP MOMS &
NURSES AROUND
THE COUNTRY

## 2019-2020 PHASED NATIONAL ROLL-OUT

The state-by-state rollout of Goal Mama as an integrated part of the NFP model kicks-off officially in May during the regional meetings of Texas and Pennsylvania. NFP anticipates rolling out Goal Mama to all 275 Network Partners across the country through 2020, helping 2,000+ Nurse Home Visitors amplify their impact with over 50,000 moms.

**NETWORK PARTNERS** NHVs 50,000 **MOMS** 

## CONTINUING THE JOURNEY TOGETHER

As Goal Mama reaches an even greater number of moms and nurses, we look forward to continuing to learn, improve, and innovate together to help moms, babies, nurses, and communities succeed.



## **THANK YOU**

We have had so many amazing contributors we couldn't list them all! We are incredibly grateful to the NFP moms, nurses, and team supervisors who have helped us reach this milestone. Your stories have humbled, inspired, and amazed us. Thank you.

And to the staff and leaders at the NFP National Service Office, the University of Colorado Prevention Research Center (PRC), Ayogo, and Hopelab—thank you for opening your hearts and minds to this collaboration and for the many hours of work you have contributed.

- The Goal Mama Innovation Team





