

# CHARTING THE COURSE:

Reflections on the South Carolina  
Nurse-Family Partnership  
Pay for Success Pilot





**Harvard T.H. Chan School of Public Health**  
**J-PAL North America**  
**Nurse-Family Partnership**  
**Social Finance**  
**South Carolina Department of Health and**  
**Human Services**

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## **ACKNOWLEDGEMENTS**

This pilot program was generously supported by the Laura and John Arnold Foundation and The Duke Endowment. The State of South Carolina received extensive pro bono technical assistance on this project from the Harvard Kennedy School Government Performance Lab (GPL), which is continuing to support the state during the implementation phase of the project. The project would not have been feasible without the support of the Nurse-Family Partnership, Social Finance, J-PAL North America, and the Children's Trust of South Carolina.

**The Harvard T.H. Chan School of Public Health** brings together dedicated experts from many disciplines to educate new generations of global health leaders and produce powerful ideas that improve the lives and health of people everywhere. We work together as a community of leading scientists, educators, and students to take innovative ideas from the laboratory to people's lives, not only making scientific breakthroughs, but also working to change individual behaviors, public policies, and health care practices.

**J-PAL North America**, which is based at MIT, seeks to reduce poverty by ensuring that policy is informed by scientific evidence. We do this by conducting randomized evaluations, sharing policy lessons, and building evaluation capacity.

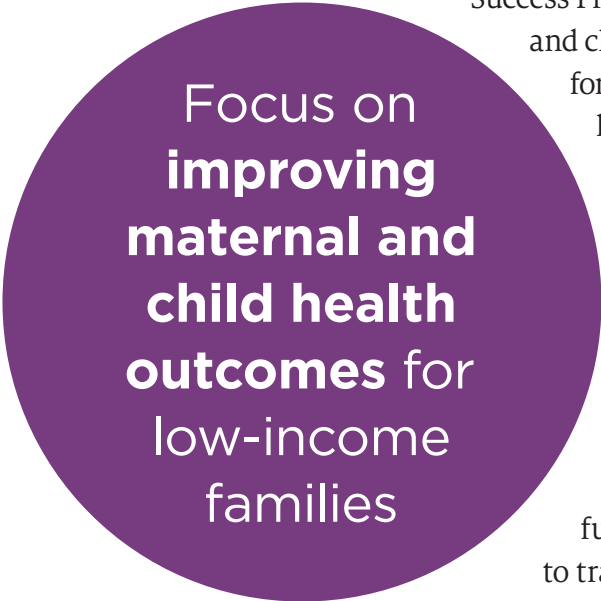
**Nurse-Family Partnership**® changes the future for the most vulnerable babies born into poverty by giving a first-time mom trusted support from her own expert nurse throughout the first 1,000 days, from pregnancy until the child's second birthday. Nurse-Family Partnership is backed by over 39 years of scientifically-proven outcomes for both mom and baby, and currently serves over 32,500 moms in 42 states, the U.S. Virgin Islands and six Tribal communities.

**Social Finance** is a nonprofit organization dedicated to mobilizing capital to drive social progress. We believe that everyone deserves the opportunity to thrive, and that social impact financing can play a catalytic role in creating these opportunities. We design and manage public-private partnerships that tackle complex social challenges, such as achievement gaps, health disparities, and prisoner recidivism.

**The South Carolina Department of Health and Human Services** is the state's healthcare policy and financing agency. Through Medicaid, CHIP, and other programs, its mission is to purchase the most health for citizens in need, at the least possible cost to the taxpayer.

# INTRODUCTION

More than 280,000 children in South Carolina — or about 27 percent — live in families struggling with poverty<sup>1</sup>. More than half of the babies born each year in South Carolina are born to low-income mothers who qualify for public health insurance. Young mothers living in poverty are at greater risk for poor birth outcomes, including delivering babies who are premature or weigh too little at birth. Growing up in poverty can be harmful to a child's cognitive development, health, school performance, and social and emotional well-being. But research shows that home-visiting programs can have positive effects on both the health and development of mothers and children, and South Carolina is taking steps to see if one provider, Nurse-Family Partnership® (NFP), can significantly improve outcomes for mothers and children in their state.



Focus on  
**improving  
maternal and  
child health  
outcomes for  
low-income  
families**

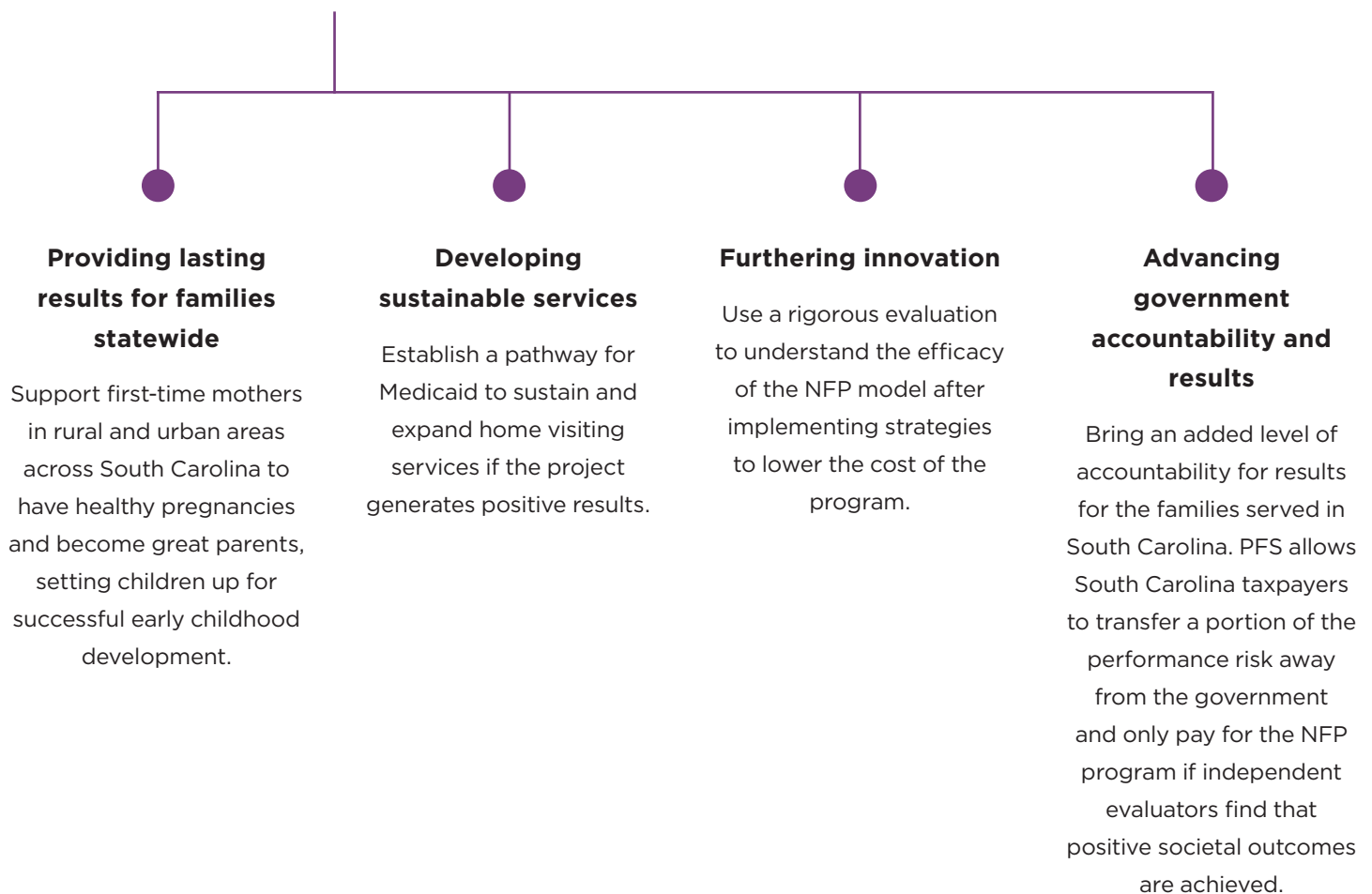
Launched in April 2016, the South Carolina Nurse-Family Partnership Pay for Success Project (SC NFP Project) focuses on improving maternal and child health outcomes for low-income families. This Pay for Success (PFS) project expands NFP, an evidence-based home-visiting program that pairs vulnerable, first-time mothers with specially trained nurses (referred to as nurse home visitors) to support healthy pregnancies and positive child development. The project aims to provide NFP services to an additional 3,200 first-time, low-income mothers across South Carolina over the next six years.

Pay for Success projects, also called Social Impact Bonds, combine nonprofit expertise, private sector funding, and rigorous measurement and evaluation to transform the way government and society respond to chronic social problems. In a Pay for Success project, private funders provide upfront capital to expand social services, and the government pays for the program only if it measurably improves the lives of participants. The first Pay for Success project was launched in 2010 by Social Finance UK. Since then, there have been over 60 projects launched worldwide<sup>2</sup>. In some Pay for Success projects, investors can earn a small return on their investment. In the South Carolina PFS project, the funders have agreed to reinvest 100% of PFS success payments back into NFP in order to provide the NFP program to more mothers and families in South Carolina.

<sup>1</sup> "Kids Count: 2015 Data Book, State Trends in Child Well-Being," The Annie E. Casey Foundation, <http://www.aecf.org/m/resourcedoc/aecf-2015kidscountdatabook-2015.pdf>

<sup>2</sup> "Social Impact Bonds, The Early Years" Social Finance, July 2016

## THE GOALS OF THE SC NFP PROJECT INCLUDE:



A three month pilot preceded the formal launch of the SC NFP Project in April 2016.

**This brief provides background on the purpose of including a pilot for this project, the “lessons learned” from the pilot, and why incorporating a pilot can improve the launch and operations of complex Pay for Success projects.**

# SOUTH CAROLINA NURSE-FAMILY PARTNERSHIP PAY FOR SUCCESS PILOT



PFS projects are collaborations unified by a singular goal: to measurably improve the lives of those most in need. In South Carolina, the goal is to measurably improve birth and health outcomes for low-income mothers and their babies. Effective PFS projects require multiple organizations from different sectors to work collaboratively. In a PFS project as complex as this, it is essential that project partners have the time to develop, establish, and refine key systems and operational workflows in order to meet the project's objectives.

## PARTNERS FOR THIS PROJECT INCLUDE:



**South Carolina state offices**, with leadership from the South Carolina Department of Health and Human Services and the Department of Health and Environmental Controls



**The Nurse-Family Partnership National Service Office** and nine NFP implementing agencies in South Carolina



**Philanthropic donors**, comprised of four foundations and a national philanthropic collaboration



**The Harvard Kennedy School Government Performance Lab**, the technical assistance provider



**The Abdul Latif Jameel Poverty Action Lab (J-PAL) and Harvard T.H. Chan School of Public Health**, the independent evaluators



**Social Finance**, the intermediary organization bringing these different groups together

Partners in the SC NFP Project agreed to measure the impact of NFP on select metrics using a randomized controlled trial (RCT). RCTs are widely considered the best design to measure causal impacts because they ensure that any differences in outcomes between program participants and the group they are compared to are the effects of the program itself, rather than other confounding factors. Comparing families enrolled in NFP to a randomized control group provides the most accurate measure of how NFP affects maternal and child outcomes relative to the status quo. The ability to accurately measure the impact of the NFP program hinges on the successful implementation of this RCT.

To ensure a smooth project launch and generate high-quality, robust estimates of the NFP program's impact, the SC NFP project incorporated a pilot period into the project timeline. The pilot allowed project partners to have time to adapt, test, and modify critical operational elements of the project; to tackle unforeseen challenges in data collection; to establish clear communication mechanisms and reporting routines; and to implement a rigorous study enrollment training for nurses to meet the requirements of the RCT.

The main goals of the pilot period were the following:

- Establish effective recruitment channels, including the South Carolina Medicaid referral process, to ensure eligible mothers could access the NFP program;
- Build and test effective systems to collect and transfer data from NFP to the independent evaluator;
- Integrate the study enrollment process into NFP's traditional enrollment process; and
- Develop and test Medicaid billing protocols associated with the recently implemented 1915(b) waiver.<sup>3</sup>



The pilot  
allowed project  
partners time to  
**adapt, test and  
modify**

Because the PFS market is still in its early stages, many pilot periods are still supported by philanthropic funders. However, the goal is to shift the responsibility of pilot period investments from the philanthropic funders to the PFS funders and government entities. In order to do this, further education on the importance of pilot periods within PFS projects and their attribution to a successful project is vital. In the case of the SC NFP Project, The Laura and John Arnold Foundation and The Duke Endowment provided the necessary capital to support the critical project pilot period. However, it is worth noting, that philanthropic funds to support pilot periods are scarce and may not always be available despite the benefits they provide to projects.

<sup>3</sup> Medicaid will fund approximately \$13 million of the PFS Project via a 1915(b) Medicaid Waiver, which was awarded to the South Carolina Department of Health and Human Services by the federal Centers for Medicare and Medicaid Services.

# WHAT CAN WE LEARN FROM THE SOUTH CAROLINA NURSE-FAMILY PARTNERSHIP PILOT PROGRAM?



The three month pilot period gave project partners the time to make improvements and move towards consistent implementation of the protocols. The opportunity to engage in this preparatory work allowed the team to identify four project elements that needed finalization prior to the launch of the formal PFS project:



expansion of program capacity



development of data-sharing protocols,



construction of working relationships and communications channels with project partners, and



refinement of the evaluation procedures within the project.

## LESSON LEARNED



### **Building program capacity prior to project launch is essential**

Scaling evidence-based programs to serve a greater proportion of societal need is one of the main goals of PFS. Depending on the context of the program and environment, service providers often need ramp up time to build capacity and achieve desired scale. Furthermore, providers may need to augment their operational models in order to integrate rigorous evaluation methods, such as RCTs.



In South Carolina, the NFP implementing agencies are pre-existing public health institutions that offer the NFP program model to designated areas of the state. While intensive ground work with NFP implementing agencies was required throughout the project development period to lay the foundation for expansion under PFS, the pilot period provided the NFP team with time to focus on ramping up operations after all the terms and conditions of the PFS contract were finalized. Below are concrete examples of how the pilot period enabled NFP to expand capacity prior to project launch:

#### **Allow for ample time to integrate scaling efforts.**

- Hiring the outreach team and additional nurse home visitors during the pilot period was critical to meeting the enrollment targets for the project. The pilot period provided the time needed to hire program staff, which would have otherwise needed to be completed in the short time period between the PFS contract execution and project start date. NFP could have tried to hire additional staff prior to signing the PFS contract, but that would have introduced additional risk. Without the pilot, it is likely that there would not have been enough time to hire adequate staff to support the predetermined enrollment schedule, and the project would have fallen behind on enrollment targets.

## NFP WAS ABLE TO FURTHER DEVELOP THEIR SCALING EFFORTS BY:



Creating a geographic targeting strategy to focus on outreach in communities with high concentrations of poverty;

Operationalizing best practices around average nurse caseload (i.e. supporting nurse home visitors to stay consistently at full caseload, and working with them to increase the volume above 25 clients per nurse);

Understanding the hiring process at the implementing agencies, addressing hurdles to hiring, and identifying any needed support for the agencies.

### **Invest in resources needed to strengthen referral pipelines.**

- Meeting project enrollment targets is highly contingent on creating a robust and consistent referral pipeline. In order to create this kind of pipeline, NFP dedicated ample time to strengthening relationships and communicating with existing referral partners, as well as identifying and cultivating relationships with new referral partners. Additionally, NFP built a marketing and outreach campaign to identify outreach strategies to reach low-income communities and test the collaborative nature between the newly hired outreach workers and the NFP program staff. With the bolstered referral pipelines, the implementing agencies needed time to get accustomed not only to processing the higher referral volumes, but also to processing these referrals faster.

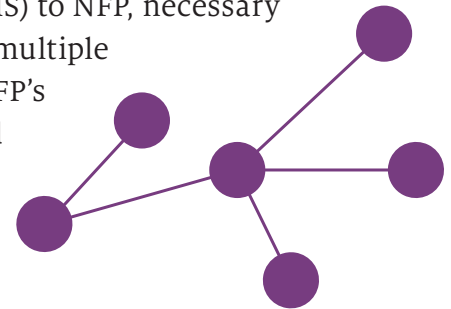
The pilot period provided NFP an opportunity to begin hiring 18 additional nurse home visitors and the five person outreach team, build new referral pipelines to reach more mothers in South Carolina, and develop strategies to reach new areas of the State and further penetrate counties with high concentrations of poverty.

## LESSON LEARNED



### Integrating and transferring data is an iterative process

Establishing data agreements and determining how sensitive data will flow between partners are two key elements of any PFS project. In the SC NFP Project, partners transfer data in many ways: direct Medicaid referrals from South Carolina's Department of Health and Human Services (DHHS) to NFP, necessary client data from NFP to J-PAL, and outcomes data between multiple South Carolina government agencies to J-PAL to evaluate NFP's impact. Planning for the secure transfer of information and getting the necessary data use agreements in place took considerable time and attention by all parties before and during the pilot period.



#### **Allow for sufficient time to draft agreements and to adapt the information flowing between partners.**

- Data sharing agreements needed to be in place between J-PAL, NFP and DHHS in order to transfer critical client information between partners, and special data security provisions were needed to meet HIPAA regulations. Establishing data sharing agreements and systems for securely transferring data involves a significant amount of coordination among project partners and their respective legal teams. Having these agreements prior to the pilot period would be ideal, but may not be feasible. Many times these data sharing agreements cannot be executed before the PFS contract, so a pilot period allows time to establish these critical contracts.
- When clients enroll in the NFP study, their data is shared across project partners in a variety of forms and differing levels of detail, as necessary and within HIPAA security protocols. During the pilot, J-PAL and DHHS

worked through the transfer of client and Medicaid system information. The pilot period provided DHHS and J-PAL several iterations of reports to hone in on the right format and level of information to transfer between entities.

**Combine project partner data for improved results.**

- South Carolina DHHS agreed to supply a weekly referral list of newly enrolled Medicaid-eligible mothers to NFP to help identify additional mothers and families in need of services. The pilot period allowed DHHS to develop a process for the creation of the referral list and a schedule for securely transferring the information to NFP.

When the data integration processes and data agreements were completed the benefits of coalescing project partner data were immediately obvious to the team. The pilot period granted the team an opportunity to test and refine new pathways for sharing information that were critical to tracking outcomes and long-term project success.



## LESSON LEARNED



### **Pilot periods allow the PFS project partners to build crucial working relationships and communications channels that will set the stage for success**

The power of the South Carolina PFS project is its ability to bring many different stakeholders to the table to work collaboratively to achieve a common goal. The success of the SC NFP project will be determined in part by the stakeholders' abilities to combine their distinct cultures and working styles into effective working relationships.

#### **Create an environment that encourages open communication and direct feedback between all project partners.**

- It is critical to have transparent and open lines of communication with all the project partners. The pilot period helped achieve this by creating an environment that simulated full project launch for each project partner – each mother that was enrolled during the pilot was done so to test project processes, with no effect on payments or measures of outcome success. This environment allowed for collaborative relationships to form that focused on finding solutions, rather than pointing fingers. Additionally, the practice of open communication led to greater trust amongst the project partners.



#### **Develop a unified, concise message amongst all project partners when dealing with difficult conversations.**


- Clearly explaining the study and its importance to existing referral partners was critical to maintaining their continued support. J-PAL and NFP NSO worked together to produce an introductory study overview for referral partners that included an in-depth review of the randomization process. Given the level of communication and continued follow-up with the existing

referrals partners, the majority have been supportive of the study and the SC NFP project.

- NFP's nurse home visitors faced the challenge of communicating randomization results to potential project enrollees. This message was especially difficult to communicate when the enrollee was assigned to the control group. With feedback from the pilot, NFP found that providing continued support and training on communication to nurse home visitors—as well as tweaking the structure and language of the enrollment survey—helped the delivery of this potentially disappointing news become easier to manage.

#### **Develop a regular cadence for project partner meetings.**

- Establishing timely and manageable communications between NSO, the implementing agencies, SC DHHS, the J-PAL evaluation team, HKS GPL and Social Finance was an important accomplishment of the pilot. Currently, there are weekly calls with the implementing agencies to gather updates from the field and collect feedback from the NFP staff. Weekly enrollment reports are created and shared with the project partners to keep everyone updated on current progress. Other channels for collecting feedback include a toll-free number and a dedicated email account managed by J-PAL to provide technical assistance, updates, and support for the NFP staff conducting study enrollment.



It is easy to underestimate the importance of **building collaborative relationships**

When developing PFS projects, it is easy to get absorbed in the project design and implementation planning and underestimate the importance of building collaborative and trusting relationships. Instituting a pilot period offers the time to develop these relationships in the midst of the designing and planning for the project launch.

## LESSON LEARNED



### **It is critical to build in ample time within the project plan to test, refine, and finalize the integration of an RCT with a PFS project**

RCTs are the gold standard for rigorous, scientific evaluation of a program's impact. Careful design and thoughtful execution of an RCT is critical to effective and valid measurement and there were many elements of the project's RCT design that were important to test and refine during the pilot period:

#### **Adhere to the enrollment protocol.**

- Implementation of the study involved multiple steps that were new to NFP nurse home visitors, including assessing eligibility for the study; processing Medicaid referrals; obtaining informed consent for the study; fielding the baseline survey; and communicating the outcome of random assignment to study participants. Initially, adherence to the protocols varied, some data were inaccurately or incompletely recorded, and additional guidance and clarity were needed. J-PAL and NFP NSO developed ongoing staff training and support tools during the pilot period to quickly detect and resolve any issues that may arise during the course of the project.
- The pilot period also allowed for identification of several unanticipated issues. For example, study staff had not contemplated protocols for enrolling minors in “lock-down” facilities that were not part of the criminal justice system. Through Internal Review Board discernment, these mothers were ultimately determined to be ineligible for the study (but eligible for NFP services). Other novel situations will surely arise as study fielding continues, but the pilot period brought to the surface several issues for which processes have now been developed, and helped to establish protocols through which future issues will be addressed.



**Monitor the randomization of study subjects.**

- Randomization of potential participants into treatment and control arms of the study is the linchpin of the evaluation. If randomization is not properly implemented, the validity of the entire study can be jeopardized. Monitoring the random assignment function throughout the pilot period confirmed that the process was working as intended and ensured that staff were successfully implementing procedures in the field.

**Adhere to protocols for the protection of human subjects.**

- Protection of the rights of study subjects is of paramount importance to all study partners. Study protocols, which are overseen by Harvard's Institutional Review Board (IRB), include a careful explanation to potential participants of the nature of the study and their rights and require the obtaining of informed consent to participate. Nurse home visitors were trained in these protocols during the pilot, and study and evaluation staff were able to develop strategies and support mechanisms for their faithful implementation.
- All study materials must also be approved by the IRB prior to use in the study. The pilot period provided time to develop and refine these materials before the full project launch.

# IMPORTANCE OF PILOT PERIODS IN PFS PROJECTS



PFS projects are intense collaborations between diverse stakeholders to achieve a common goal. Pilot periods ease the transition into a complex project by affording stakeholders time to pilot, test, and refine key operational, project management, and evaluation functions prior to launch, while also providing space for the partners to build strong working relationships. The complexity of PFS projects will dictate if pilot periods are warranted. For this project, the pilot period was a critical component to ensure success.

The pilot period for this PFS project was successful across multiple dimensions and provided valuable insight that helped to develop strong protocols and highlight areas of needed improvement. The pilot period allowed the project partners to:

- Finalize and start to execute operations by solidifying internal processes and building referral partner relationships.
- Build and refine the data integration systems to securely share data between project partners.
- Develop strong working relationships, effective communication practices, and a productive forum to voice issues and concerns.
- Test the evaluation plan, including all study protocols, enrollment processes, and the random assignment functions.

As the PFS landscape continues to change and grow, so too will the strategies used to develop these projects. The lessons learned from this PFS project will certainly be carried over into future PFS projects that Social Finance, NFP, South Carolina, HKS GPL and J-PAL are a part of, and we hope other organizations developing PFS projects will also embed these learnings into their decisions.

## WE ARE GRATEFUL TO OUR PARTNERS:



**Blue Meridian  
Partners**



**Harvard Kennedy  
School's Government  
Performance Lab**



**PHOTO CREDIT:** Nurse Family Partnership