Request for Information (RFI) September 17, 2013 Instructions for Responses

- 1. The South Carolina Department of Health and Human Services (SCDHHS) would like to receive responses to this RFI by **November 1, 2013**. Please send your response via e-mail to <<u>fbo@scdhhs.gov</u>>.
- 2. SCDHHS may copy your response to other storage media to facilitate review by its staff.
- 3. Respondents may mark portions of their responses as confidential in accordance with South Carolina Code of Laws and Regulations. Guidance on the proper marking of your response can be found at:

http://www.mmo.sc.gov/MMO/webfiles/MMO_Legal/Documents/FOIA_page.pdf.

While the referenced document is intended for vendor bids, the general guidance and references to statutes and rules are relevant to an RFI response. If you submit a response containing confidential material, *please submit a redacted version* that the State can use to respond to Freedom of Information Act requests.

- 4. This RFI is issued solely for research, planning, and informational purposes and is not to be construed as a commitment by the State to acquire any product or service or to enter into a contractual agreement.
- 5. Any costs incurred by a party in preparing or submitting information in response to the RFI are the sole responsibility of the submitting party.

1 Purpose

The South Carolina Department of Health and Human Services (SCDHHS) is seeking information regarding the design and development of a Social Impact Bond program focused on controlling costs and improving health and other outcomes of mothers and newborns in South Carolina's Medicaid Program.

SCDHHS encourages interested parties both within and outside the state to provide feedback in response to this RFI or any part thereof.

This document is not a Request for Proposals (RFP). The State is not seeking proposals at this time.

2 Background

SCDHHS is developing the state's first Social Impact Bond (SIB) program in order to scale interventions that improve health and other social outcomes of mothers and newborns in South Carolina's Medicaid Program.

As part of a national competition involving 28 state and local governments, SCDHHS was awarded pro bono technical assistance from the Harvard Kennedy School's Social Impact Bond Technical Assistance Lab, supported by a grant from the Rockefeller Foundation. This award will help the department conduct analysis and coordinate the development of the Social Impact Bond program over the next 12 months.

2.1 About Social Impact Bonds

Social Impact Bonds (SIB), also known as Pay-for-Success contracts, are an innovative approach to improving outcomes and reducing costs for contracted government services. SIBs are contracts in which a substantial portion of the payment is conditioned on the achievement of specific outcomes based on defined performance targets. Unlike typical pay-for-performance contracts, SIBs often ask contracted parties to raise upfront capital and only reimburse such upfront capital expenses if an independent evaluator determines that performance targets have been achieved. If outcomes are achieved, the initial investors are reimbursed for the entire cost of the program plus risk premium payments. Ideally, these payments are made when government and/or societal savings are realized due to the program's effectiveness. Programs in which potential governmental savings are larger than the cost of the program are strong candidates for the SIB model.

While there are many different structures that satisfy the principles of a SIB, the common characteristics include:

- Rigorous measurement of desired goals and outcomes, validated by an outside party;
- Performance-based payments made by the government, only if outcomes are met; and
- Private-sector and/or philanthropic financing.

For more information about SIB programs, please refer to the Harvard Kennedy School's Social Impact Bond Technical Assistance Lab (http://hks-siblab.org) or the Nonprofit Finance Fund Pay for Success Learning Hub (http://payforsuccess.org).

2.2 Current and Related Efforts

The following efforts have been central to the State's initial and continued exploration of a SIB program focused on improving health and other outcomes of mothers and newborns in South Carolina's Medicaid Program. South Carolina's Medicaid Program currently provides pregnant woman with access to health coverage (up to 185% of FPL) during pregnancy and for a short period thereafter. As a state that has elected to not expand the Medicaid Program, depending on their financial circumstances, many women will not have continuous enrollment in the program following their pregnancy and/or between births.

2.2.1 Birth Outcomes Initiative (BOI)

There is particular interest in the feasibility of using the SIB program to scale interventions that support the State's Birth Outcomes Initiative (BOI). BOI is a collaborative effort by SCDHHS, South Carolina Hospital Association, March of Dimes, Blue Cross Blue Shield of South Carolina, and over 100 stakeholders to improve the health outcomes of newborns not only in the Medicaid Program but throughout the state's population. Please refer to **Appendix A** for detailed information about BOI, including core objectives and accomplishments to date.

2.2.2 *Nurse-Family Partnership Feasibility Study*

Initial efforts assessing the feasibility of utilizing a SIB to improve health and other social outcomes of mothers and newborns in South Carolina's Medicaid Program have focused on individual prenatal/early childhood interventions, including the Nurse-Family Partnership program (NFP). Accordingly, SCDHHS supported a feasibility study, led by the Institute for Child Success, to determine whether or not SIBs would be an appropriate instrument for scaling NFP, a research-based, high-quality, voluntary nurse home visiting program for first-time, low-income mothers and their children. Please refer to **Appendix B** for the complete feasibility study and **Appendix C** for the state profile of NFP in South Carolina.

2.3 <u>South Carolina's Social Impact Bond Program Development</u>

In developing the SIB program, SCDHHS is exploring the range of prenatal, postpartum, and early childhood interventions that have been shown to improve pregnancy outcomes and maternal health, improve child health, development, and school readiness, bolster family self-sufficiency, and prevent child abuse and neglect. SCDHHS is also exploring the range of governance and financial structures that could support the SIB program. Responses to this RFI will support and inform SCDHHS's effort to develop the most effective service delivery model and governance and financial structures for the SIB program.

2.3.1 Service Delivery Model

In developing a service delivery model for the SIB program, SCDHHS is particularly interested in learning about how the following challenges can be addressed:

- Providing intervention(s) to mothers and newborns in South Carolina's Medicaid Program who are located in both urban and rural settings
- Providing intervention(s) to mothers and newborns in South Carolina's Medicaid Program who are at highest risk of poor health and other adverse outcomes
- Ensuring that service provision reaches a very large portion of individuals included in the SIB target population and not just those individuals who are most receptive to services

Initial efforts to explore potential service delivery models for the SIB program have focused on individual interventions. In addition to exploring singular, evidence-based interventions, SCDHHS would also like to explore a holistic SIB model that could incorporate multiple interventions and/or multiple service providers and that could match clients with the services that are best suited to meeting their needs.

2.3.2 Governance Structure

In developing a governance structure for the SIB program, SCDHHS is interested in exploring the roles of potential intermediaries and/or other advisors, service providers, investors, and evaluators, and the available processes for selecting and establishing relationships between the department and each of these types of entities (and each other, where appropriate).

2.3.3 Financial Structure

In addition to exploring various service delivery models and governance structures, SCDHHS is also considering the range of financial structures that could be utilized to support the SIB program. SCDHHS is interested in the feasibility of using of an incentive structure to Managed Care Plans for each member enrolled in the program throughout the duration of the SIB. Additionally, other financial structures, particularly those that could leverage federal funds, are of interest to SCDHHS.

3 Research and Procurement

SCDHHS will carefully consider responses to this RFI when establishing its strategy for the SIB program. In addition, SCDHHS may conduct interviews with select respondents. If these interviews are initiated, they will likely occur in November 2013.

If respondents have specific questions related to this RFI, they should be submitted via email and SCDHHS may respond at its sole discretion.

4 Submission Request

SCDHHS requests that entities respond to any or all of the following items in writing by **November 1, 2013**:

4.1 <u>Description of Programs and Potential Service Delivery Model</u>

Please describe the range of interventions (social service programs) that could target improved health and/or social outcomes of mothers and newborns in South Carolina's Medicaid Program and explain how these interventions could be incorporated into the SIB program. Explain how SCDHHS can address the challenges listed in Section 2.3.1 (*Service Delivery Model*) as it develops an appropriate service delivery model for the SIB program. In particular, please address the following points:

- 4.1.1 What evidence-based interventions currently exist, whether validated through a randomized controlled trial, quasi-experimental design, or some other means? Have these interventions demonstrated success on a measurable scale? Do these interventions have the potential to be implemented more broadly through a SIB program?
- 4.1.2 Are there innovative interventions that may lack a strong evidence base (for example due to nascent program models or models that are currently undergoing evaluations) but that may be appropriate for incorporation in the SIB program? Describe the intervention(s) in detail, including the target population, program goals, existing evidence of success, and current implementation strategies.
- 4.1.3 Could the interventions listed above be effectively incorporated into a holistic service delivery model (one that includes multiple interventions and/or multiple service providers)? If so, please address the following points. If not, please explain why the interventions listed above could not be effectively incorporated into a holistic service delivery model.
 - i. Describe the interventions to be included in the model.
 - ii. Describe the number and type(s) of service providers to be included in the model.
 - iii. Describe a strategy for identifying the target population and assigning interventions to individuals.

- iv. Describe potential outcome(s) that could be measured and used to evaluate the success of the interventions, along with a process for collecting the required data.
- v. Describe potential evaluation strategies, including the identification of counterfactuals.
- 4.1.4 Describe the type and amount of any governmental savings that could be achieved as a result of implementing the SIB program outlined above.

4.2 Description of Potential Governance Structure

Please describe a potential governance structure for the SIB program. In particular, please address the following points and where appropriate, contrast your recommended model with other alternatives:

- 4.2.1 Describe the use of intermediaries and/or other advisors, service providers, investors, and evaluators, and the process for selecting and establishing relationships between SCDHHS and each of these types of entities. Explain the role that each entity would play during the development and implementation of the SIB program.
- 4.2.2 Are there alternative models that are consistent with SIB principles that SCDHHS should consider, including contracting directly with service providers? How would this approach be executed if multiple interventions and/or multiple service providers are included in the SIB program?

4.3 Description of Potential Financial Structure

Please describe a potential financial structure for the SIB program. In particular, please address the following points:

- 4.3.1 Describe any appropriate financial structures for the state to consider, noting whether each could potentially accommodate multiple interventions and/or multiple service providers. Explain how these structures could account for the uncertainty associated with multiple interventions and the achievement of target outcomes.
- 4.3.2 Describe ideas and/or recommendations for leveraging federal funds for inclusion in the SIB project, including the use of FMAP rates.

4.4 Description of Challenges and Other Considerations

Please describe any challenges and/or other concerns that SCDHHS should consider when exploring a SIB program that could potentially incorporate multiple interventions and/or multiple service providers. In particular, please address the following points:

4.4.1 Describe what you believe to be major strengths and weaknesses associated with a holistic service delivery model.

- 4.4.2 Describe the capacity of existing service providers to be involved in the SIB program if it is structured as a holistic model. Do existing service providers in-state have the ability to implement the interventions outlined above? What additional capacity would need to be developed in-state in order to execute the strategy outlined above?
- 4.4.3 Describe any challenges associated with attracting investors to a SIB model that incorporates multiple interventions and/or multiple service providers and explain how any such challenges could be addressed.

4.5 <u>Organizational Information</u>

Please describe your organization by addressing the following points:

- 4.5.1 General Information: including name of organization, entity type (i.e. government, non-profit, private company) and services provided
- 4.5.2 Overview of organization's interest in South Carolina's SIB program
- 4.5.3 Detailed explanation of any role(s) that your organization would be interested in fulfilling as part of the SIB program (i.e. service provider, intermediary, investor, evaluator)

Please note: Points 4.5.4 and 4.5.5 below are optional

- 4.5.4 Provide a brief overview of your organization's experience with similar initiatives that directly relate to South Carolina's SIB project
- 4.5.5 Provide the resumes of up to three leadership personnel within your organization that would be involved with South Carolina's SIB project in the event of your entity's involvement

4.6 Other Questions

- 4.6.1 Describe any other issues or considerations not otherwise covered in this RFI that can assist SCDHHS in developing and implementing the SIB program.
- 4.6.2 What approach would you recommend for SCDHHS in its design and implementation of the SIB program?
- 4.6.3 Is there any other information that you think is important for SCDHHS to know?

Appendix A

South Carolina Birth Outcomes Initiative (BOI)

SCBOI Core Objectives

South Carolina Birth Outcomes Initiative (BOI) is an effort by the South Carolina Department of Health and Human Services (SCDHHS), South Carolina Hospital Association, March of Dimes, Blue Cross Blue Shield of South Carolina and over 100 stakeholders to improve the health outcomes for newborns not only in the Medicaid program but throughout the state's population. Launched in July 2011, SCBOI has these core objectives:

- Elimination of elective inductions for non-medically indicated deliveries prior to 39 weeks gestation
- Reducing the number of admissions and the average length of stay in neonatal intensive care units Reducing health disparities
- Making 17P, a compound that helps prevent pre-term births, available to all at-risk pregnant women with no "hassle factor"
- Implementing a universal screening and referral tool (SBIRT) in the physician's office to screen pregnant women and 12 months post-delivery for tobacco use, substance abuse, alcohol, depression and domestic violence
- Promoting Baby Friendly Certified Hospitals and Breast Feeding

SC BOI has added objectives since its inception to include:

- Promote healthier moms and babies by supporting the Centering Pregnancy Model
- Assist Medicaid beneficiaries with unwanted pregnancy by allowing inpatient insertion of Long Acting Reversible Contraceptive (LARCs)

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39 weeks

A. Objective/Goal

In September of 2011, through the Birth Outcomes Initiative (BOI) and South Carolina Hospital Association (SCHA), all 43 birthing hospitals in South Carolina signed a pledge to stop early elective deliveries. In July of this year, physicians were notified that as of August 1, 2012, all claims submitted for deliveries and inductions had to contain a specific modifier (GB or CG)

Effective January 1, 2013, the South Carolina Department of Health and Human Services (SCDHHS) stopped reimbursement for elective inductions or non–medically indicated deliveries prior to 39 weeks to hospitals and to physicians. This change is a result of an extensive effort and partnership by SCDHHS, South Carolina Hospital Association, and South Carolina Chapter of the American Congress of Obstetricians & Gynecologists, Maternal Fetal Medicine physicians, BlueCross BlueShield of SC, and March of Dimes.

- Through SCBOI, SCDHHS has documented a 50 % reduction in non-medically necessary deliveries prior to 39 weeks from second quarter 2011 to second quarter 2012
- January 2013, South Carolina was the first state in the nation for public (Medicaid) and private (BCBS) entities to implement the same non-payment policy for early deliveries
- For the first quarter of FY 2013, SCDHHS's actuary, Milliman, has estimated that the 39 week initiative has saved the state and the federal government a total of \$6 million dollars in large part due to the decreased admissions and Average Length of Stay (ALOS) to the NICU of premature babies born to Medicaid mothers

Screening Brief Intervention and Referral to Treatment (SBIRT)

SBIRT is an evidenced based, integrated and comprehensive approach to the Identification, Intervention and Treatment of Substance (Drug and Alcohol) Usage, Domestic Violence, Depression, and Tobacco Usage. The South Carolina program is specific to pregnant women to include 12 months post-partum, and provides a much needed universal approach to prevention, early identification and interventions necessary to address the far reaching problem and subsequent consequences of substance abuse. Effective treatment not only cuts healthcare costs but more importantly allows patients to resume their productive lives and give birth to a healthier baby population in South Carolina.

SBIRT is performed in a clinical setting by a trained clinician. The patient is asked 8 yes or no behavioral health questions and the responses are documented on the SBIRT specific screening tool sheet. If a patient is identified to have a behavioral health problem, the clinician then begins a brief intervention. The brief intervention is done using motivational interviewing to educate the patient on their specific behavioral health problems with the ultimate goal of making a referral to one of the treatment resources.

The South Carolina Department of Health and Human Services (SCDHHS) is the sponsoring agency for the SBIRT initiative and has created the following codes to reimburse provider offices for their time spent on SBIRT:

- H0002 U1 Billed for completion of Screening and reimburses at the rate of \$24.00 once per fiscal year
- H0004 U1 Billed for completion of a Brief Intervention and reimburses at the rate of \$48.00 twice per fiscal year

A. Goal

The goal is to have 100% participation from all OB/GYN Medicaid enrolled provider offices

- SCDHHS has partnered with the South Carolina department of Alcohol and other Drug Abuse Services, the South Carolina Department of Health and Environmental Control, the South Carolina Department of Mental Health and the seven South Carolina Medicaid health plans
- Thus far SCDHHS has reached out and offered customized training to every OB/GYN
 office in the State. Currently we have 379 Medicaid enrolled OB/GYN providers actively
 billing SBIRT

Baby Friendly Hospitals-Race to the Date

Race to the Date is a South Carolina Department of Health and Human Services (SCDHHS) program through our Birth Outcomes Initiative to incentivize hospitals to become "Baby-Friendly" by promoting breast milk as the standard for infant feeding.

A. Goal

To increase the number of Baby-Friendly hospitals in South Carolina. All infants in the facility should be considered to be breastfeeding infants unless, after giving birth and being offered help to breastfeed, the mother has specifically stated that she has no plans to breastfeed.

- SCDHHS has created an incentive pool of \$1,000,000 with a maximum payout of \$200,000 to individual hospitals that submit a letter of intent to SCDHHS and achieve a Baby-Friendly Hospital designation through Baby-Friendly USA by September 30, 2013
- Incentive payments will be available to qualified hospitals with the opportunity for incremental increases up to \$200,000 depending upon the number of hospitals that achieve the Baby-Friendly Hospital designation by September 30, 2013
- As of June 1, 2013 one hospital has received official Baby Friendly Designation

LARCs available in the hospital setting

On March 1, 2012 SCDHHS, through recommendations from BOI, changed their policy to allow LARCs to be reimbursed outside of the Diagnosis Related Group (DRG) when inserted inpatient post-delivery. Prior to this action, most hospitals weren't willing to stock LARCs due to the cost. Physician providers had to rely on the patient scheduling an outpatient clinic/office visit after discharge for the contraceptive. This proved to be challenging since Medicaid beneficiaries very often missed their post-partum appointment which resulted in unplanned pregnancies. The new policy has been praised by the OBGYN community as a continuing commitment by SCDHHS.

A. Goal

To remove barriers to treatment and to help reduce the number of unwanted pregnancies.

B. Background

Codes associated with the new LARC policy as stated in the Medicaid Bulletin:

HCPCS:

- J7300 Intrauterine copper contraceptive (Paragard®)
- J7302 Levonorgestrel release IU contraceptive 52 mg (Mirena®)
- J7307 Etonogestrel (contraceptive) implant system, including implant and supplies. (Implanon®/Nexplanon®)
- *A4264 Permanent implantable contraceptive intra-tubal occlusion device(s) and delivery system. (Essure®). This requires a sterilization request form to be signed thirty days prior to the procedure.

ICD-9 Surgical Code:

- 69.7 Insertion of IUD
- 66.29 Other bilateral endoscopic destruction or occlusion of fallopian tubes (Essure®).

ICD-9 Diagnosis Code:

- V25.02 Initiate Contraceptive NEC
- V25.1 Insertion of IUD
- V25.2 Sterilization (Essure® only).
- Through SCBOI, SCDHHS has documented a 50 % reduction in non-medically necessary deliveries prior to 39 weeks from second quarter 2011 to second quarter 2012
- In January 2013, South Carolina was the first state in the nation for public (Medicaid) and private (BCBS) entities to implement the same non-payment policy for early deliveries.

 In addition to changing LARC policy, DHHS also updated its reimbursement rates to provide further incentive to utilize this method of birth control.

Revised Reimbursement Rate for LARCs:		
Code	Revised Reimbursement Rate	
A4264	\$1674.00	
J7300	\$588.43	
J7307	\$712.17	
J7302	\$759.29	

More information can be found in the South Carolina Medicaid Bulletin, "Long Acting Birth Control Device Provided in a Hospital Setting." https://www.scdhhs.gov/press-release/long-acting-birth-control-device-provided-hospital-setting

CenteringPregnancy

Centering Pregnancy is a multifaceted model of group care that integrates the three major components of care: health assessment, education, and support, into a unified program within a group setting. Eight to twelve women with similar gestational ages meet together, learning care skills, participating in a facilitated discussion, and developing a support network with other group members. Each Pregnancy group meets for a total of 10 sessions throughout pregnancy and early postpartum. The practitioner, within the group space, completes standard physical health assessments.

A. Goal

Through this unique model of care, women are empowered to choose health-promoting behaviors. Health outcomes for pregnancies, specifically increased birth weight and gestational age of mothers that deliver preterm, and the satisfaction expressed by both the women and their providers, support the effectiveness of this model for the delivery of care.

- In 2013, incentive payments will be available for selected providers offering CenteringPregnancy, a group model of prenatal care shown to decrease rates of preterm birth by 40 percent
- The recipients include: AnMed Health Family Medicine Residency Program, Anderson, SC; Carolina OBGYN, Georgetown, SC; Sumter OBGYN, Sumter, SC; USC OBGYN, Columbia, SC; and MUSC Women's Health, Charleston, SC
- Recipients were selected by a five-member panel committee that evaluated each
 practice's readiness score from the Centering Healthcare Institute (CHI) and the number
 of Medicaid patients they serve, among other criteria in accordance with those
 established by CHI

Neonatal Abstinence Syndrome

A model of care providing palliative methadone therapy to Level I newborns at highest risk for NAS has been pioneered at Greenville Memorial Hospital for approximately 8 years. This combined inpatient/outpatient treatment model is anticipated to be proven safe, lower cost, and more family-centered than the traditional model of prolonged NICU care. Robust retrospective analysis of patient outcomes data (approximately 350 patients) will be used to define the safety profile and potential cost savings of this treatment model.

A. Goal

The aim of is model program is to provide multidisciplinary and coordinated care to families with newborns at risk for or diagnosed with neonatal abstinence syndrome, in order to achieve a cost-effective, family-centered experience with best potential outcomes for mothers with narcotic dependence and their exposed and/or treated infants. Support from SC DHHS will allow development of program training and education materials, formal program evaluation and improvement so that it may ultimately be replicated for pilots in other regional and state nurseries.

This project has the potential to provide both powerful retrospective evidence and an innovative care model for replication for SC. The cost savings to SC Medicaid will be substantial if a subset of otherwise healthy newborns that have traditionally been managed by intensive care nurseries can instead be managed safely in lower-acuity settings.

Using Pay for Success Financing to Improve Outcomes for South Carolina's Children:

i(cs)

Results of a Feasibility Study
September 2013

INSTITUTE for CHILD SUCCESS

The Institute for Child Success, with funding from The Duke Endowment and South Carolina's Department of Health and Human Services, studied the feasibility of using Pay for Success, an innovative new financing mechanism, to improve outcomes for South Carolina's youth. The study found that it is feasible for the state to use this mechanism to scale up proven early childhood programs such as the Nurse-Family Partnership, a home visiting program for low-income first-time mothers. Pay for Success could improve the health and prospects of the state's youth and use public-private partnerships to make government more accountable and efficient.

(introduction and background)

The Institute for Child Success is a research and policy organization dedicated to ensuring that South Carolina's youngest children—from the prenatal stage through age five—succeed. By fostering public and private partnerships, ICS aligns and improves resources for young children, working toward its overall goal of a culture that enables all children to thrive.

The need is great. A child born in poverty in South Carolina faces a challenging future; the state ranks 45th in the country in child well-being, according to the Annie E. Casey Foundation's analysis of data on health, education, economic well-being, and family and community.¹

There are proven methods to improve such outcomes. Home visiting programs are one example: trained professionals provide services and support to pregnant women and families with young children, primarily during visits to families' homes. Research shows that these programs yield many benefits to the health and development of both mothers and children.

South Carolina has implemented many of these effective programs, but not at a scale sufficient to make a big impact for the state. The Nurse-Family Partnership (NFP), for example, only serves about 568 of 11,500 eligible high-risk mothers each year.

1 KIDS COUNT Databook, 2013. This and all other citations can be found in the more detailed PowerPoint presentation that this narrative summarizes.

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Conclusion

(led by) Megan Golden

(with assistance from) Joe Waters Kevin Seok-Hyun Mun Here's the problem: Government in South Carolina-like governments in the rest of the country—is stretched thin remediating the problems of low-birth-weight babies, maltreatment of children, learning disabilities, and crime. The state simply does not have funds available to scale up the early childhood programs that can help prevent those crises in the first place. What's more, the costs of implementing programs that help on a large scale are immediate, while the benefits are longer term and diffuse, so both the financial and the political payback are delayed.

Pay for Success financing (PFS) is a new approach that addresses both issues: the need to scale up proven programs that have a positive social impact and the scarcity of government funds to pay the up-front costs of expansion. (We use Pay for Success instead of the original name for this mechanism, Social Impact Bonds, because it better conveys how the process works.)

PFS is a partnership in which philanthropic funders and private "impact investors"—not governments—provide the initial capital to scale these programs. Nonprofits deliver the actual program services. The government pays only for the outcomes (which produce net long-term savings), but only if an impartial evaluator determines that the program has achieved agreedupon measures of success. An intermediary organization typically manages the PFS project, through contracts with the government (which pays for the outcomes), the investors (who provide the capital), and the service providers (which implement the program.

In other words, PFS overcomes a major obstacle in expanding successful programs government's lack of financial resources—by securing capital from nongovernmental investors. If successful, a PFS-expanded program eventually produces cost savings for government, which can be used to repay investors, in addition to its benefits to society. It also increases accountability for government spending and uses public-private partnerships to achieve the state's goals—two priorities of the current governor's administration.

challenge of scaling effective early childhood programs. Accordingly, with support from The Duke Endowment and South Carolina's Department of Health and Human Services, the Institute for Child

For these reasons, PFS financing 66 It is feasible to use Pay for Success financing to scale up early childhood programs such as the Nurse-Family Partnership in South Carolina. 99

Success undertook a feasibility study to determine whether South Carolina could use PFS financing to improve outcomes for the state's youth. Led by Megan Golden, a fellow at New York University's Wagner Graduate School of Public Service, the feasibility study focused on the Nurse-Family Partnership, a voluntary nurse home visiting program for first-time, lowincome mothers that has been thoroughly evaluated and shown to improve newborn and child health and produce several other positive outcomes for children and their mothers.

This document summarizes the key findings of the feasibility study, which are detailed in the accompanying slides. We hope our analysis will be helpful to others interested in scaling effective early childhood interventions or in pursuing Pay for Success financing.

(key findings)

After six months of consulting with stakeholders, reviewing research, observing programs, and analyzing data, the study concluded that it is feasible to use Pay for Success financing to scale up early childhood programs such as the Nurse-Family Partnership in South Carolina.

The feasibility analysis found that using Pay for Success financing to fund a dramatic expansion of the Nurse-Family Partnership in South Carolina is feasible because

- The program model has an evidence base indicating that it is highly likely to produce positive outcomes, that those outcomes produce net savings to government, and that net benefits to the state far exceed the costs.
- Only a small fraction of the population in need is currently being served and the program has the capacity to expand substantially with fidelity to its proven model.
- It is possible to come up with a viable financing model with reasonable time frames and returns for a mix of commercial and philanthropic investors.

Although the focus of this study was on NFP, we also believe that similar, in-depth analyses would show that PFS financing is appropriate for some other early childhood interventions.

Thus, the Institute for Child Success concludes that South Carolina should pursue Pay for Success financing to improve outcomes for the state's children.

The Evidence Base for the Nurse-Family Partnership

The Nurse-Family Partnership has been evaluated in five randomized controlled trials in a variety of jurisdictions around the country. This type of evaluation uses the most rigorous design and is typically used to assess medical treatments. NFP has also been the subject of numerous other credible evaluations by impartial researchers using established social science research techniques, such as quasi-experimental designs. Although there is variation in the results of these studies, overall NFP has been shown to produce

- Fewer preterm births
- Fewer injury-related visits to the emergency room
- Reductions in child maltreatment
- Children more ready for kindergarten
- Fewer closely spaced second births and fewer preterm second births
- More economically independent mothers
- Less youth crime

In addition, at least three cost-benefit analyses have indicated that the net societal benefits of NFP far exceed its costs. In addition, a new study by economist Timothy Bartik shows different benefits—in this case, to economic development—that were not included in these analyses. Further, though little work has been done to document government savings (in the form of remedial services avoided) resulting from NFP and similar interventions, one thorough analysis indicates that government (rather than societal) savings from NFP's outcomes exceed the cost of program in South Carolina.

The Unmet Need for NFP's Services and Its Capacity to Scale

The Nurse-Family Partnership provides services to low-income women who are pregnant with their first child. Each year, approximately 11,500 Medicaid-eligible women give birth to their first child; however, in 2012, NFP was able to serve only 568 new families in South Carolina. Thus, there are many families in need who are not getting NFP's services; expanding NFP to

serve a greater portion of the eligible population would improve outcomes for many high-risk children.

However, an unmet need is not enough to justify use of the Pay for Success model. A program must also have the operational capacity to expand while maintaining fidelity to the evidence-based program model, as well as the capacity to track relevant data. The Nurse-Family Partnership meets those criteria: it has the infrastructure, through its National Service Office, to support implementation with fidelity, evaluation, and data tracking. It has decades of experience in these areas.

A Viable Financing Model

The feasibility study also aimed to determine whether one or more viable financial structures for the PFS project could be developed. Despite the strength of the NFP intervention and its suitability for PFS financing, because this financing mechanism is so new, there is still significant risk to the investors. Government is unlikely to pay returns commensurate with that risk. Therefore, philanthropic capital would be needed to mitigate the risk in the early transactions.

Fortunately, there are multiple ways the financing could be structured using a combination of commercial and philanthropic capital. To this end, the author shared a set of assumptions regarding a PFS contract for NFP with two organizations devoted to Pay for Success financing: Social Finance U.S. and Third Sector Capital Partners. The two organizations proposed a total of three financial models with viable terms, investment and payment schedules, and returns. Finance expert Professor Steven Mann of the University of South Carolina's Darla Moore School of Business reviewed one of the illustrative models, agreed that it was viable, and suggested that still other financing models were possible.

The Challenge of Multiple Outcomes and Government Systems

Pay for Success for the Nurse-Family Partnership also faces an additional challenge, one that the original PFS deals did not have to address. The first-ever Pay for Success financing deal, in the United Kingdom, and the first such deal in the United States both finance services that reduce recidivism among people leaving incarceration. While decreasing recidivism has many human and societal benefits, those programs focus on one main outcome: preventing

reconviction (for the UK program) or reincarceration (in New York). The vast majority of cost savings from that outcome accrue to one system—the prison or jail system—which is funded by one level of government. (Reducing recidivism does require police, prosecutors, courts, and probation offices to handle fewer cases, but the savings from those reductions are minimal.)

This is where NFP, like other home visiting programs, is different: It produces multiple outcomes that produce savings in multiple systems funded by multiple levels of government.

This is where NFP, like other home visiting programs, is different: It produces multiple outcomes that produce savings in multiple systems funded by multiple levels of government (federal, state, and local):

- Health/Medicaid
- Food Stamps
- Child Welfare

- Special Education
- Criminal Justice

With NFP, no single outcome would produce enough savings to cover the cost of the entire program. But the design of a PFS financing mechanism must include a specific, clear metric of success on which to hinge payment. It is possible to base payment on more than one outcome, but the fewer the better, since investors need predictability, simplicity, and clarity. Thus, the study determined that it was not feasible to condition payment on achievement of all of NFP's outcomes.

Instead, the study considered whether a subset of the program's outcomes could determine payment. The authors chose health outcomes, for several reasons. First, the South Carolina government is especially interested in improving early childhood health. In addition, although NFP has multiple outcomes, several of them produce savings within the health system,



specifically for Medicaid. fact, almost In thirds of the savings NFP generates in South Carolina come from Medicaid, a program for which the state is eager to reduce expenses. Another plus: health outcomes can be measured easily, using data already collected by the state, in a relatively short time.

The state has a particular interest in improving birth outcomes. Thus, the feasibility study analyzed preterm birth rates as a potential payment term,

showing the baseline rates in proposed expansion sites and expected reductions, based on research, if NFP is implemented at scale. This outcome has the advantage of occurring quickly—three to six months after program enrollment—and enabling an evaluation of a large number of participants in a timeframe that is attractive to investors

This single outcome—a reduction in preterm birth rates—would not be enough to cover the cost of the program. Yet despite this challenge, it still makes sense to move forward with Pay for Success financing to expand NFP. According to a consensus report of the federal Institute of Medicine, preterm birth is a predictor of several longer-term outcomes, including medical problems, learning disabilities, behavioral problems, and academic performance.² Thus, it can be considered a fair bellwether of a wider range of longer-term outcomes.

In other words, if a particular outcome is important enough to the government, it may select that outcome as a payment term, even if that outcome alone will not cover the full cost of the program. (This was not the case with the New York City PFS deal, which required that the outcome on which payment was based cover all program costs). The case for using a particular outcome to determine payment is strengthened if that outcome is a good predictor of longer-term benefits. So far, this seems to be the case with birth/early childhood health outcomes in South Carolina. Of course, even if it used only birth outcomes as a payment term, the state could also measure other, longer-term outcomes to test their viability for future PFS contracts.

There are other potential solutions to the challenge of NFP's multiple outcomes with savings in multiple systems. For instance, one option would be to have a longer-term PFS contract that pays for several outcomes that are sufficient to cover program cost. The state could also seek federal contributions to outcome payments.

How a Pay for Success Deal Could Work with the Nurse-Family Partnership

Through examining current NFP locations and capacity, reviewing data on the number of first-time Medicaid-eligible mothers by county, and consulting with multiple stakeholders, we determined that an expanded NFP could serve 2,750 new families over three years by expanding existing program sites in the state's three main population centers and adding one or two new program sites in underserved areas. (Details of possible expansion sites and projections of number of new families per site are in the attached slides.) The program would add half of its new capacity in the first year and serve the full number of new families in the second and third years. The state could choose one or two health outcomes and pay for improvements in those outcomes. The contract could be four or six years long, depending on the outcome or outcomes chosen.

Such an expansion would require a \$24 million investment from a combination of commercial

and philanthropic investors. This amount covers the cost of providing up to two and a half years of nurse home visiting services for each family plus the cost of an intermediary and an evaluator. (Details on the cost calculation can be found in the presentation that follows.) Outcomes would be determined through existing state databases with experimental or quasiexperimental research design. If the government would pay out up to \$30 million for the agreed-upon outcomes, South Carolina could structure a deal that has acceptable terms for all parties.

Possible Pay for Success Contract Structure

- 2,750 new families, phased in over 3 years
- Government pays for percentage reductions in 1 or 2 outcomes
- Outcomes measured compared to a control group or matched comparison group
- 4- or 6-year contract term

(steps needed to implement a Pay for Success program)

Preparing to implement a Pay for Success transaction would involve these key tasks

- Finalize the outcomes and target population for the PFS project
- Educate and secure support from the legislature and other officials and pass any required legislation
- Identify the process and sources for government to pay for outcomes (in several years); take steps necessary to commit future funding
- Identify commercial and philanthropic investors
- Identify an intermediary, service providers, and evaluator through appropriate procurement processes

- Construct detailed budgets for services, intermediation, and evaluation and implementation plans for expansion sites
- Finalize outcomes, payment terms, and financing structure for PFS contract
- Negotiate contracts among government, investors, intermediary, service providers and evaluator.

(conclusion)

Pay for Success could benefit South Carolina's children. This study shows that Pay for Success is a feasible and promising way to improve outcomes for South Carolina's youth. The analysis demonstrates that South Carolina could readily use PFS to scale up the Nurse-Family Partnership. PFS also may be appropriate for other early childhood interventions.

Pioneering Pay for Success financing for proven early childhood interventions such as the Nurse-Family Partnership in South Carolina could result in

- Improved outcomes for South Carolina's youth
- A positive impact on the state's economy
- New public-private partnerships to advance South Carolina's policy goals
- An innovative way to increase government accountability and efficiency that can be applied in other areas.

The Institute for Child Success thus recommends that South Carolina pursue Pay for Success financing. With government, the private sector, foundations, and nonprofits mobilized to help the next generation succeed, the future will be bright.

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POWERED BY





The Institute for Child Success is a non-profit, non-partisan research and policy organization that fosters public and private partnerships to align and improve resources for the success of young children in South Carolina. A partnership of the Children's Hospital of the Greenville Health System and the United Way of Greenville County, ICS supports service providers, policy makers, and advocates focused on early childhood development, healthcare, and education to build a sustainable system that ensures the success of all children, pre-natal through age five.

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Key Features of Pay for Success Financing



Investors front capital to implement proven, cost-effective programs on a large scale



Government contracts to pay only for agreed-on, measurable RESULTS; payments repay investors



An impartial evaluator assesses whether results are achieved. An intermediary may contract with the government & investors, then subcontract with providers

Who Benefits?

Communities & Individuals

- More effective services
- Better results

Nonprofits

Up-front funding to scale programs

Government

- More cost-effective services
- Better results

Investors

- Modest returns
- Ability to make a positive impact

Criteria for Pay for Success Projects



Evidence that program produces positive outcomes for the state



Program produces net benefits to society and net savings to government



Significant unmet need



Program has capacity to expand with fidelity to its proven model



Financing model can be developed that is acceptable to investors, government, and providers

Pay for Success Transactions Completed



- US New York City Recidivism Reduction
- US Salt Lake City, Utah Early Childhood Education
- 3 UK Peterborough Recidivism Reduction
- UK West Midlands
 Workforce Development
- UK Manchester Workforce Development
- 6 UK London Homelessness
- Australia New South Wales
 Child Maltreatment/Foster Care Prevention

& 30+ Projects in Development

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Outcomes for South Carolina Youth

SC ranked **45**th in overall child well-being

Economic Well-Being

- Children in poverty
- Children with a high housing cost burden
- Children with parents lacking secure employment
- · Teens not in school and not working

Health

- Low-birth-weight babies
- Child and teen deaths/100,000
- Children without health insurance
- Teens who abuse alcohol or drugs

Education

- Children not attending preschool
- Eighth graders not proficient in math
- Fourth graders not proficient in reading
- High school students not graduating on time

Family & Community

- Children in single-parent families
- Children living in high-poverty areas
- Children in families where the household head lacks a high school diploma
- Teen births per 1,000

Overall Rank New Hampshire Vermont Massachusetts Minnesota New Jersey North Dakota lowa Nebraska Connecticut Maryland Virginia Wisconsin Maine Utah 15 Wyoming

	• • •	
43	Georgia	
 44	Alabama	
45	South Carolina	
46	Louisiana	
47	Arizona	
48	Nevada	
49	Mississippi	
50	New Mexico	

Source: KIDS COUNT Databook, 2013

Early Childhood Home Visiting Programs

 Trained professionals provide services and support to pregnant women and families with young children, primarily during visits to families' homes

 Address maternal and child health, parenting practices, education, and economic self sufficiency

Home Visiting Programs Improve Outcomes

Home Visiting Programs Have Been Shown to

- I) Improve birth outcomes
- 2) Improve child health and development
- 3) Reduce child maltreatment
- 4) Improve maternal selfsufficiency



Home Visiting Programs in SC

- Nurse-Family Partnership
- Healthy Families America
- Parent Child Home Program
- Parents as Teachers
- Early Head Start
- Early Steps to School Success
- Healthy Start
- Healthy Steps
- Family Check-Up











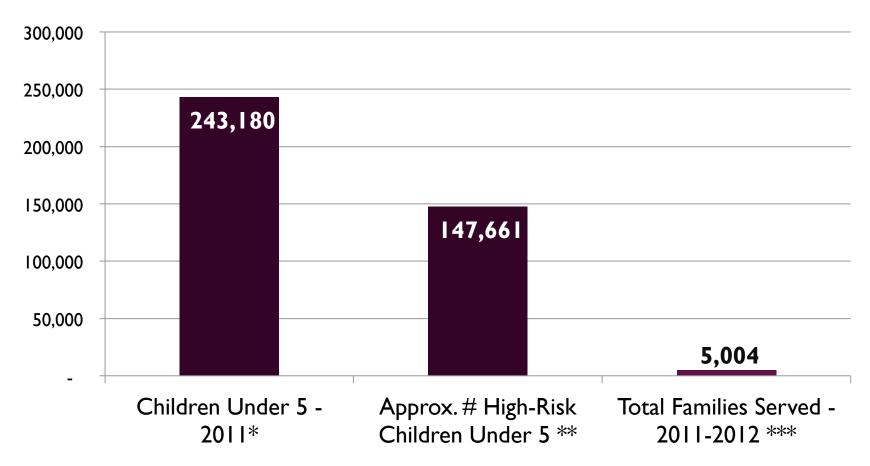








Current SC Home Visiting Programs Do Not Meet Need



Source: * 2011 Data; DHEC Population Database

^{** 2007-2011} Data - # of Medicaid births; DHEC SCAN Database

^{*** 2011-2012} Data; Children's Trust (Including EarlyHS, ESSS, HFA, NFP, PCHP, H.Steps, and PAT)

Assessing Suitability for PFS

Home visiting programs meet first criterion:

✓ Evidence that program produces positive outcomes for the state

Additional criteria need to be assessed for each program model:

- ☐Program produces net benefits to society and net savings to government
- □Substantial unmet need
- ☐ Program has capacity to expand with fidelity to its proven model
- ☐ Financing model can be developed that is acceptable for

investors, government, and providers

This feasibility study focuses on the Nurse-Family Partnership

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Nurse-Family Partnership

- Targets high-risk (low-income) mothers' first pregnancies
- Home visitation by registered nurses from pregnancy through age 2
- Effectiveness proven in 5 randomized controlled trials plus > 20 other rigorous evaluations
- Cost-benefit analyses showing positive ROI
- NFP infrastructure supports expansion with fidelity to its service model





Suitability for PFS: Conclusion

NFP program model is well suited to PFS financing

•SC has unmet need and NFP can grow to meet it

 Savings and outcomes sufficient to attract private investment and government support

Proven Benefits of Expanding NFP

- Fewer preterm births
- Fewer injury-related visits to the emergency room
- Reductions in child abuse and neglect
- Children more ready for kindergarten
- Fewer closely spaced 2nd births → lower risk
- More economically independent mothers
- Less youth crime

NFP Benefits Far Exceed Costs

RAND Corporation*	Pacific Institute for Research and Evaluation**	Washington State Institute for Public Policy***
\$5.70 return for every dollar invested on high- risk families (current NFP target population); \$1.26 return for lower-risk families	Net return of \$44,510 per family; benefit-cost ratio of 6.2 to 1	Long-term net return of \$13,181 per person; \$2.37 return per dollar (does not include any health benefits or Medicaid savings)

Source: * RAND Corporation, Early Childhood Interventions: Proven Results Future Promise (2005), p 109

^{**} Miller, Cost Savings of Nurse-Family Partnership Home Visitation: Costs, Outcomes, and Return on Investment, April 2013, Executive Summary, p 4

^{***} Washington St. Inst. For Public Policy, Nurse-Family Partnership for Low-Income Families (April 2012)

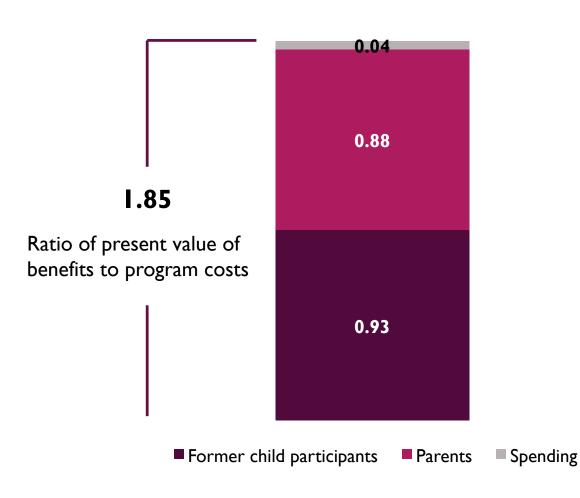
Economic Development Benefits of NFP

Economic analysis shows expanding NFP would improve South Carolina's economy.



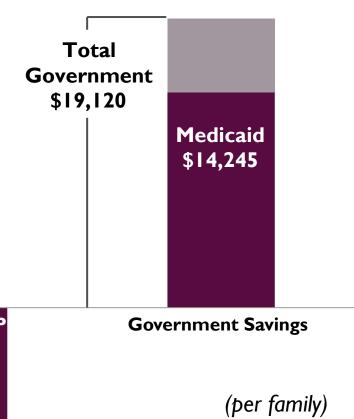
Economic Development Benefits of NFP

Economic benefits alone produce an 85% return on investment



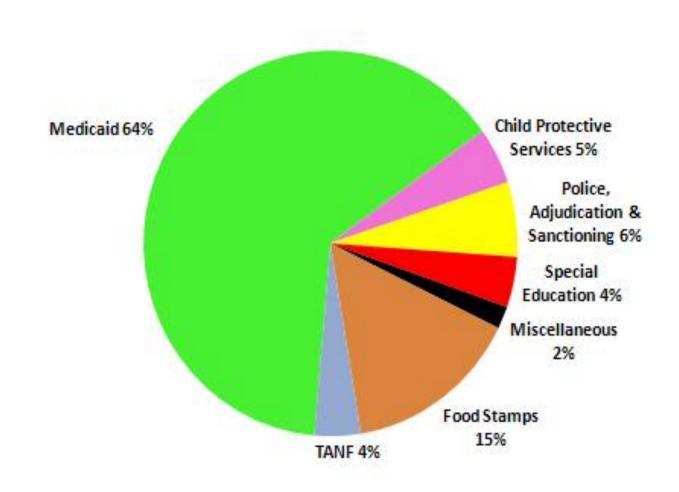
Government Savings* More Than Cover Cost

- Cost of NFP = \$7,754
- Government saves \$19,120
 over 18 years
- Medicaid saves \$14,245
- Savings shared by state and federal governments



Cost of NFP \$7,754

Government Savings/Cost Avoidance from NFP

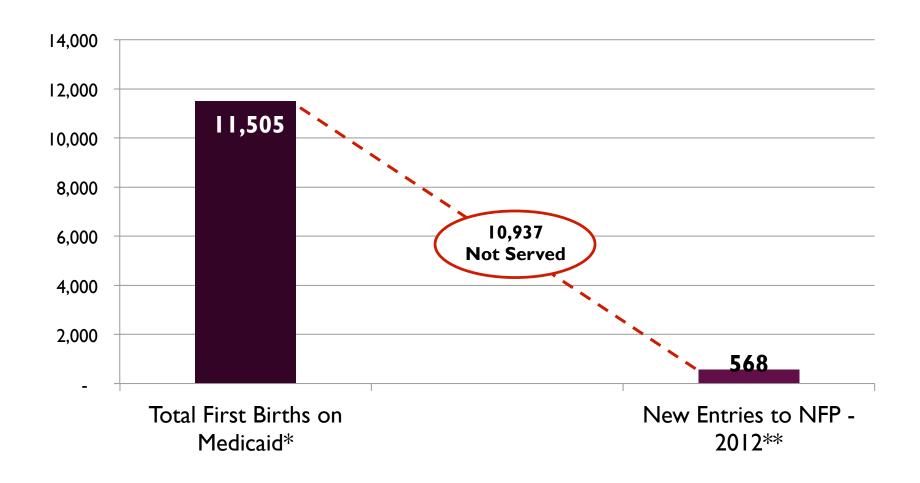


Current NFP Sites



Region	# of Nurse Home Visitors
Anderson	4
Charleston	6
Greenwood	3
Horry	4
Richland	4
Greenville	7
Spartanburg	5
Total	33

Unmet Need for NFP in SC



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Potential NFP Expansion Strategy

Expand three current locations:

- Greenville
- Richland
- Charleston

Add new location(s):

- Orangeburg?
- Florence?



Potential NFP Expansion Strategy

Counties included in each region

Greenville	Richland	Charleston
Greenville	Barnwell	Berkeley
Oconee	Kershaw	Charleston
Pickens	Lexington	Colleton
	Richland	Dorchester

Orangeburg
Allendale
Bamberg
Calhoun
Orangeburg

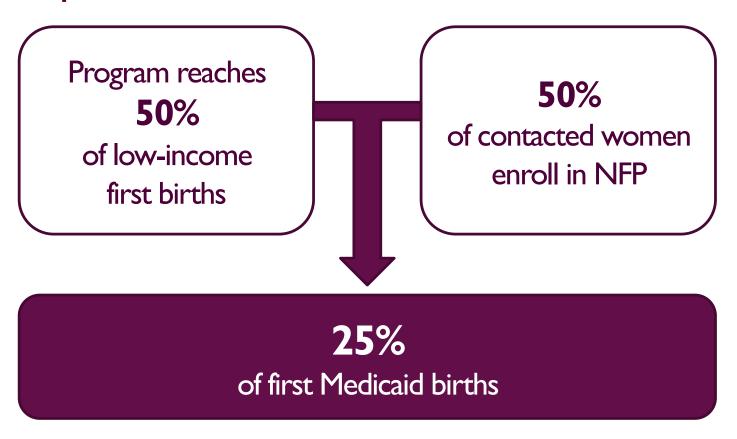
Florence
Clarendon
Darlington
Dillon
Florence
Lee
Marlboro
Sumter

Rationale

- Greenville, Richland, Charleston
 - >Highest numbers of people in need
 - ➤ Existing NFP sites → efficient expansion
- Florence
 - ➤ High number of people in need
 - ➤ Potential for hospital-based site (McLeod hospital)
- Orangeburg
 - >Underserved geographic region

Expected New NFP Clients Calculation

Assumption:



25% of first births paid by Medicaid = 10% of all SC births to low-income women

Expected New NFP Clients by Site

Region	First Births Paid by Medicaid*	Number Expected to Enroll in NFP per Y ear	Current Capacity**	Number of New Clients from Expansion
Greenville	1,548	387	94	293
Richland	1,793	448	79	369
Charleston	1,352	338	95	243
Orangeburg	477	119	-	119
Florence	1,153	288	-	288



A Feasible Expansion Plan

- If NFP expanded in Greenville, Richland, Charleston & Orangeburg, it could serve 1,024 new families per year
- If NFP expanded in Greenville, Richland, Charleston & Florence, it could serve 1,194 new families per year
- Since we do not know which new site(s) SC will choose, we assume NFP could add 1,100 families per year
- Would serve fewer new families in first year of scale-up, while building staff and caseload

Actual expansion sites and numbers to be determined!

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Possible Scale-Up Plan for PFS Project

- Project must fund intake for multiple years to achieve efficient caseload and warrant investments in capacity
- But more years of intake funded → higher cost and longer wait for investors
- One possible scenario: fund 3 years of expanded intake, paying for outcomes of those groups; add more years of expansion if warranted by initial results
- Under expansion scenario proposed:
 - Expand to 50% of 1,100 capacity in 1st year (550 new families)
 - Add I,100 new families in 2nd year
 - Add 1,100 new families in 3rd year
- = 2,750 new families added over 3 years

Estimated Costs of Expansion

Number of New Clients

2,750

Average Cost of NFP per Family*

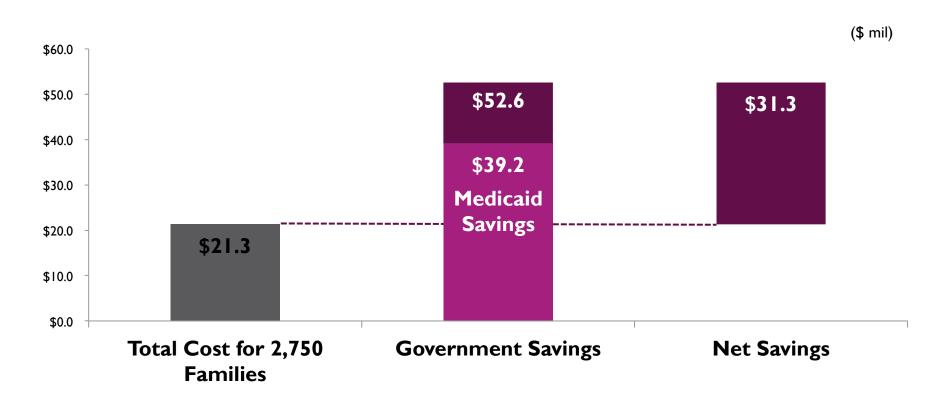
\$ 7,754

Cost Over Length of Program

\$ 21.3 million

Expected Savings for 2,750 New Families

For each additional NFP family, government saves \$19,120 at a cost of \$7,754



Source: Miller, Cost Savings of Nurse-Family Partnership in South Carolina, April 2013, p 1

Possible Health Outcomes for PFS Contract

- Fewer preterm births
- Fewer infant deaths
- Fewer child emergency department visits
- Fewer closely spaced second births
- Fewer subsequent births
- Fewer subsequent preterm births
- Increase in children fully immunized through age 2

Possible Other Outcomes for PFS Contract

Child welfare

• Fewer incidences of child abuse or neglect

Education

• Fewer remedial school services through age 6

Criminal justice

Fewer youth crimes through age 17

Maternal life-course

• Increased employment, decreased TANF use

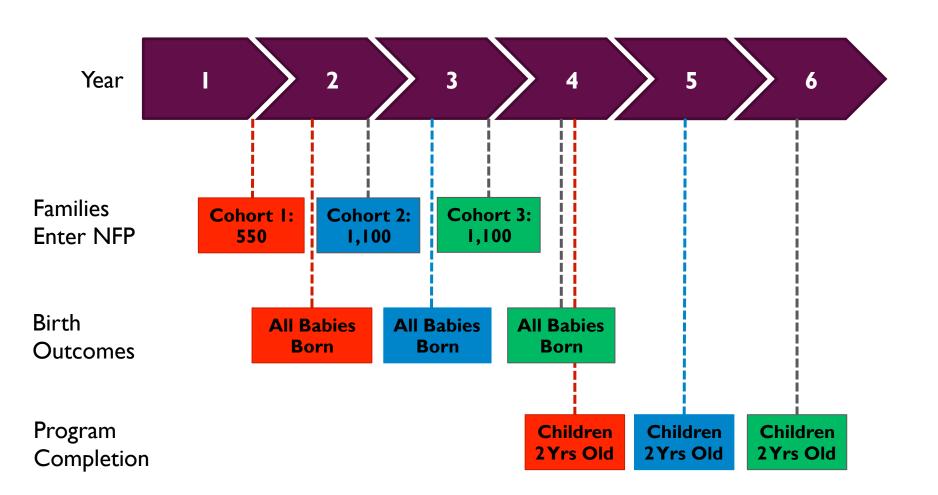
Proposal: Base PFS Contract on Health Outcomes

- Health outcomes happen relatively quickly
 - At birth/in first 2 years
 - Can do 4- or 6-year deal
- Government interest in using Medicaid dollars more efficiently

Most promising health outcomes

- > Reduce preterm births
- ➤ Reduce ER visits for injuries in first 2 years
- Improve spacing of second birth to lower risk

Possible PFS Timeline: Health Outcomes



Potential PFS Outcome: Fewer Preterm Births

• SC has 4th highest preterm birth rate in the US*

• In 2011, 11.2% of SC Medicaid-paid first births were pre-term**

 Costs include medical care, early intervention services, special education, TANF***

Analysis of Evaluations from Around US: NFP Can Reduce Pre-term Births by 27.4%

- Most reliable of 7 studies of NFP effect on pre-term birth:
 Among 5,239 unmarried mothers in Oklahoma, preterm births
 decreased by 29% (Carabin et al. 2005)
- NFP National Service Office tracking data for 2005-2007: mothers in NFP reported 9.3% preterm birth rate, while age-matched national average was 13.3% (30% lower)
- Miller multiplies 30% expected reduction by 94% replication factor to adjust for average # visits in S.C. NFP programs

SC Preliminary Analysis Shows Similar Reduction

- SC DHEC compared birth outcomes for 354 NFP participants (from DHEC sites only) to matched comparison groups*
- 8.8% of women in NFP had premature births, compared with 12.7% of women outside the program
- NFP reduced preterm births by 30.7% in SC compared to target population
- Reduced 52.6% compared to subset matched on race, education, WIC status

Expected Preterm Birth Reduction by Site

Assuming NFP reduces preterm births by 27.4%*

Region	Current Rate	Post-NFP Expansion Rate
Greenville	11.2%	8.1%
Richland	11.1%	8.1%
Charleston	10.9%	7.9%
Orangeburg	9.7%	7.0%
Florence	13.8%	10.0%

Possible PFS Contract Structure

- 2,750 new families, phased in over 3 years
- Choose I or 2 health outcomes
- Pay for percentage reductions in I or both outcomes compared to a control or matched comparison group
 - Greater percentage reduction → higher payment
 - · Recognize savings from these outcomes alone do not cover full cost
- Interim payments after each cohort (group entering NFP in I year) reaches outcomes
- 4- or 6-year contract term
- Measure other, longer-term outcomes to test viability for future PFS contracts

NYC Payment Terms, 4-Year Investment

(for comparison)

Reduction in Reincarceration	City Payment to MDRC (Intermediary)
<u>≥</u> 20.0%	\$11,712,000
<u>></u> 16.0%	\$10,944,000
<u>></u> 13.0%	\$10,368,000
<u>></u> 12.5%	\$10,272,000
<u>≥</u> I2.0%	\$10,176,000
<u>></u> I I.0%	\$10,080,000
> 10.0%(breakeven)	\$9,600,000
<u>≥</u> 8.5%	\$4,800,000

Possible Financing Structures

- Several possibilities for mixing private, philanthropic & government financing to create a viable deal
- Tolerance for risk, required returns vary by funder type
- Government may need to make some non-outcome-based payments to limit down-side risk (i.e. risk that funders lose everything if outcome not achieved)
- The two largest intermediary organizations have prepared proposed structures to consider in Phase 2





Illustrative Term Sheet

Investment Required	\$24 million (\$21.3 m for program + \$2.7 m for intermediary and evaluation)
Term of Financing	6 Years
Total Lifetime Government Savings ¹	\$52.6 million
Government Payout	Up to \$30 million
Commercial Investment	\$12 million
Philanthropic Investment	\$12 million (first loss position)
Investor IRR/Rate of Return	6.0%-10% ²
Philanthropic IRR/Rate of Return	0%-4% ²
Outcomes metrics	Reduction in pre-term births (illustrative)
Evaluation Methodology	TBD
Service Provider	Nurse-Family Partnership Implementation Agencies
Individuals Served	2,750 low-income, first time mothers and their families in South Carolina
Intervention Model	Nurse home visitation during pregnancy and after birth up to age 2

Represents federal and state savings. Source: Miller, Cost Savings of Nurse-Family Partnership in South Carolina, April 2013, p. 1

² Investment return dependent on various assumptions, including capital drawdown schedule and timing of investor returns

Option I for Assessing Whether Outcomes Are Achieved: Randomized Controlled Trial

 Eligible women randomly assigned to NFP or control group at each site, ideally AFTER they consent to participate in the program

- Track outcomes through state Medicaid database for program and control groups
- Analyze differences between program and control group in preterm birth rates and other outcomes

Advantages and Disadvantages of Option I

Advantages

 High level of confidence that program caused changes in outcomes

Disadvantages

- More complicated and expensive
- Serves fewer families since some go into control group
- Takes longer to reach efficient caseload
- Randomization process can be difficult for staff

Option 2 for Assessing Whether Outcomes Are Achieved: Quasi-Experimental Design

- NFP recruits all eligible women at each site and accepts all who agree to participate
- Using state databases, identify a group of women who gave birth at the same time who match those served by NFP on key demographic characteristics, using propensity score matching (women in this group should not have refused NFP)
- Track outcomes through state Medicaid database for program and comparison groups
- Analyze differences between program and comparison group in preterm birth rates and other outcomes

Advantages and Disadvantages of Option 2

Advantages

- Can serve all families in need
- Less expensive and easier to implement (DHEC already using similar methodology)

Disadvantages

- Possibility that differences between program and comparison group contributed to changes in outcomes
- May be difficult to find comparison group that did not refuse NFP or participate in another program

Implementation Challenges for NFP PFS Project

 Need procedures to systematically identify low-income women pregnant with first child in all sites

 Need to build proper infrastructure to achieve results at scale

Raising substantial philanthropic capital in SC is difficult;
 will need national foundations

 Service provider in at least 2 expansion sites is government agency (DHEC) = unusual for PFS model

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Conclusion



Pay for Success is a feasible and promising way to improve outcomes for South Carolina children



Analysis shows PFS could be used to scale up Nurse-Family Partnership; it also may be appropriate for other early childhood interventions



South Carolina should pursue Pay for Success financing for early childhood programs

Benefits for South Carolina

Better outcomes for SC children Positive impact on SC economy International leader in PFS financing Test new, efficient use of Medicaid \$



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Appendix C







STATE PROFILE 2013



NURSE-FAMILY PARTNERSHIP IN SOUTH CAROLINA

Nurse-Family Partnership® (NFP) is an evidence-based, community health program that helps transform the lives of vulnerable mothers pregnant with their first child. Each mother served by NFP is partnered with a registered nurse early in her pregnancy and receives ongoing nurse home visits that continue through her child's second birthday. Independent research proves that communities benefit from this relationship — every dollar invested in Nurse-Family Partnership can yield more than five dollars in return.

NURSE-FAMILY PARTNERSHIP GOALS

- 1. Improve pregnancy outcomes by helping women engage in good preventive health practices, including thorough prenatal care from their healthcare providers, improving their diets, and reducing their use of cigarettes, alcohol and illegal substances;
- 2. Improve child health and development by helping parents provide responsible and competent care; and
- 3. Improve the economic self-sufficiency of the family by helping parents develop a vision for their own future, plan future pregnancies, continue their education and find work.

Positive Outcomes for Clients Served by South Carolina's Nurse-Family Partnership

90% of babies were born full term

89% of babies were born at a healthy weight - at or above 2500 g (5.5 lbs)

68% of mothers initiated breastfeeding

 $23_{\text{0/0}}$ reduction in smoking during pregnancy

CLIENT DEMOGRAPHICS

At intake

Median age: 19

93% Unmarried

75% Medicaid recipients

Cumulative data as of Sept. 30, 2012

Race

53% Black or African American

34% White

9% Declined to self-identify/No response

1% Multi-racial

1% American Indian/Alaska Native

1% Native Hawaiian/Pacific Islander

1% Asian

Ethnicity

88% Non-Hispanic/Latina

7% Hispanic/Latina

5% Declined to self-identify/

No response

Data Oct. 1, 2010 - Sept. 30, 2012. All data is client self-identified.



IMPLEMENTING AGENCY CONTEXT

In South Carolina, Nurse-Family Partnership is currently serving clients in 19 counties: Abbeville, Anderson, Berkeley, Charleston, Colleton, Dorchester, Edgefield, Georgetown, Greenville, Greenwood, Horry, Lexington, McCormick, Pickens, Richland, Saluda, Spartanburg, Union and Williamsburg.

FUNDING AND POLITICAL CONTEXT

The Duke Endowment, South Carolina First Steps to School Readiness, and BlueCross Blue Shield South Carolina Foundation are the leading funding partners for establishing Nurse-Family Partnership in the state.

Other organizations lending leadership and additional financial support in this effort include the South Carolina Department of Health and Environmental Control (SC DHEC), the Children's Trust Fund of South Carolina, and other state and community partners.

PUBLIC HEALTH PROGRAM WITH PROVEN AND MEASURABLE RESULTS

Societal Benefits

Nurse-Family Partnership is a rare community health program that has been documented to achieve lasting significant effects through multiple, well-designed randomized, controlled trials. More than 35 years of research proves that it works. This evidence shows our clients – first-time, low-income mothers – that if they follow the program and work with their nurse, they can transform their lives and the lives of their children. Moreover, independent policy research makes clear that every public health

dollar policymakers and communities invest in Nurse-Family Partnership could realize up to five dollars in return.

National Recognition

 The Washington State Institute for Public Policy, The RAND Corporation and The Brookings Institution have concluded that investments in Nurse-Family Partnership lead to significant returns to society and government, giving taxpayers a \$2.88-5.70 return per dollar invested in the program.



- The Partnership for America's Economic Success finds investments in early childhood programs, such as Nurse-Family Partnership, to be stronger investments than state business subsidies when viewed from a long-term, national perspective.
- The non-profit, non-partisan Coalition for Evidence-Based Policy finds "strong evidence of effects on life outcomes of children and mothers" by Nurse-Family Partnership.
- The Center for the Study and Prevention of Violence reviewed over 650 programs with published research in peer-reviewed literature. Nurse-Family Partnership was found to be one of 11, or 6% of the programs, that clearly work or even appear promising. The Center fully supports and endorses NFP as one of its "Blueprints" programs.

ESTABLISHED: 2009 FAMILIES SERVED: 1,160



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