



United Way
of Central Jersey

Pay for Success:
*Improving Outcomes for At-Risk Children
with Nurse Family Partnership and
Parent Child Home Program*

NJ Dept. of Children & Families
NJ Task Force on Child Abuse and Neglect
2017 Biennial Conference

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Profile of New Jersey's and Middlesex County's Children

CHILDREN LIVING IN **EXTREME POVERTY**

100 % of Federal Poverty Level

	Total Number	Percent
United States	15,000,000	21%
<u>New Jersey</u>	<u>308,000</u>	<u>16 %</u>
(100% of Poverty Level)		
Asian / Pacific Islander	12,000	6 %
Black or African American	74,000	27 %
Hispanic or Latino	139,000	28 %
White / Non-Hispanic	76,000	8 %
Two or More Races	23,000	20 %
Middlesex County	<u>18,932</u>	<u>10 %</u>
Asian / Pacific Islander	2,833	15 %
Black or African American	3,118	16 %
Hispanic or Latino	9,916	52 %
White / Non-Hispanic	3,085	16 %

2015 Partnership for Assessment of Readiness for College and Careers (PARCC)

PARCC Tests: Third Grade Language (Reading Scores)

In 10 of 23 Reporting Districts: Over 50% of Children Failed to Meet Expectations

Including:

<u>District</u>	<u>Percent Failing to Meet Expectations</u>
New Brunswick	86.4%
Perth Amboy	74.2%
Jamesburg	72.0%
South River	65.0%
Carteret	59.2%
Dunellen	56.5%
Woodbridge	55.2%
North Brunswick	55.0%
South Amboy	52.4%
Milltown	50.6%

Great News!

- ✓ Both NFP and PCHP outcomes specifically address decreasing number of 3rd graders reading below grade level
- ✓ “Children in 3rd grade and below learn to read; children in 4th grade and above read to learn”

Nurse-Family Partnership (NFP)

Evidence-based community health program serving low-income women pregnant with their first child

- Registered nurses paired with families for home visits
- Program: Pre-natal to child's 2nd birthday
- Goals
 - Improve pregnancy outcomes
 - Improve health/development of child
 - Improve economic self-sufficiency of family
- Results
 - 260,000 US families served in 42 states
 - ROI purported to be \$5.70 for every \$1 spent

Parent- Child Home Program(PCHP)

Evidence-based early literacy, parenting, and school readiness model serving low-income families

- Early literacy specialists paired with families for home visits
- Program: Age 16 months to 4th birthday
- Goals
 - Improve language and literacy skills
 - Improve social-emotional skills of child
 - Improve parent-child interactions
- Results
 - Over 80% of families served earn less than \$25K
 - Variety of studies demonstrating positive outcomes

NFP- Data on families served

Program	Static Capacity	Moms Served Since Inception In 2005	Middlesex Births to Eligible Moms Per Annum/ Since 2005
Nurse Family Partnership	163	800	750*/8,250*

*estimated statistics

Great News!

✓ On an interim basis, we plan to increase NFP capacity to 200

PCHP – Data on families served

Program	Static Capacity	Children Served Since Inception In 2008	Eligible “Graduates” From NFP per Annum
Parent-Child Home Program	30	256	90

Great News!

✓ Longer term, we plan to increase PCHP capacity to 100

NFP and PCHP – History of successful outcomes

- Improved birth outcomes – gestational period; birth weight
- Increased spacing between pregnancies
- Better health outcomes for child (generally)
- Fewer visits to the emergency room for trauma
- Reduced incidence of abuse/neglect
- Better prepared for preschool/ kindergarten
- Less likely to need costly special education
- More likely to be reading on 3rd grade level
- Less likely to get pregnant in adolescence
- More likely to graduate from high school
- More likely to go to college
- More likely to get a good job
- Less likely to go to prison

Integrating NFP and PCHP – What it means for Middlesex County families

The Concept:

- NFP – 12th to 28th week of pregnancy to 2nd birthday
- PCHP – 2nd birthday for one year
- Successively delivered programs will increase outcomes

Challenges :

- Voluntary and “invasive” – some families non-receptive
- Transient population – long term follow-up difficult
- Longitudinal research is costly
- Scaling up – increased staffing (i.e. RN level nurses for NFP)
- Monetizing outcomes – reducing incidence of child abuse neglect? Increasing 3rd grade reading scores?

Integrating NFP and PCHP – What it means for Middlesex County families

Great News!

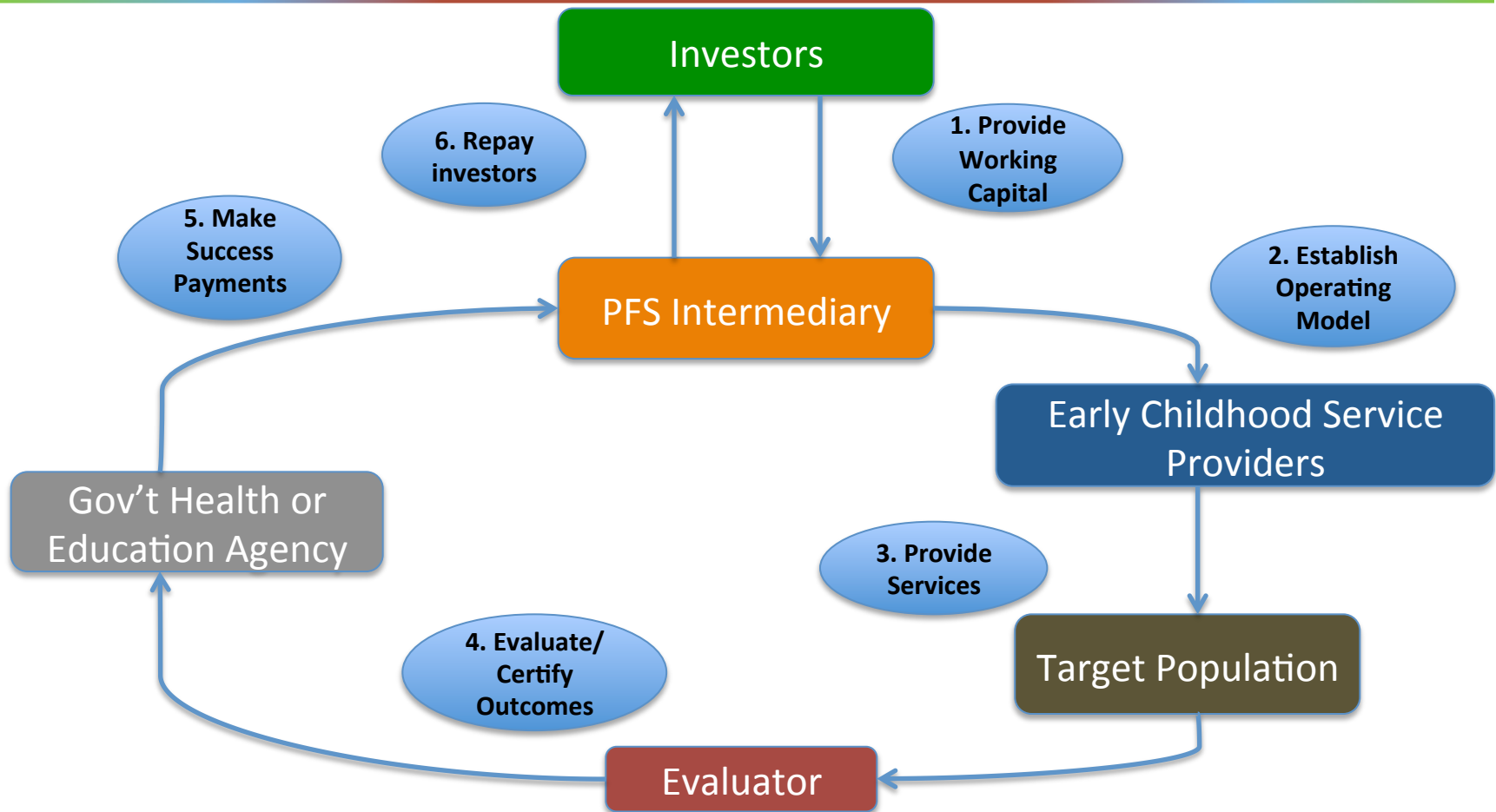
- ✓ UWCJ is in the process of completing a PFS feasibility study which will serve as a prerequisite for:
 - Committing government stakeholders to “paying for success” on behalf of taxpayers and program clients
 - Securing program funding and operations capitalization from investors

Pay for Success (PFS)

- What is it?

Social impact contractual arrangement that enables local, state and federal governments to scale up an early childhood program that has a proven record for improving desired outcomes and reducing government costs, at minimal financial risk to payers

Mechanics of PFS



Why PFS? – The problem

- At-risk children unable to access high quality early childhood services
- Government has limited capacity
- High quality service providers have limited resources in ability to scale

Why PFS? - The solution

- Find additional non-governmental financial resources to help more at-risk kids
- Ensure that high quality service providers have working capital to scale evidence-based services
- Create proof of sustainable success in demonstrating that at-risk kids can succeed, resulting in lower societal costs
- Construct public-private partnership where government takes little or minimal risk if successful outcomes are not realized

Why PFS? – Challenges

- Foundations and trusts alone cannot fill the financial resources gap
- To attract other non-governmental investment, investors must have high likelihood that they will be repaid
- Construct and implement accountability measures for success that are mutually agreeable, contractually binding, and independently certified

Why PFS? – Potential

PFS encourages investments in cost-saving preventive services to:

- Reduce need for more costly remediation
- Establish framework for sustained multi-year collaboration between public, private and non-profit actors to help solve complex social problems
- Encourage performance-based investment mindset in government
- Bring market discipline to government decisions about which programs to expand

PFS outcomes – Salt Lake County

- Granite School District (GSD) with high quality pre-school
- Only 4% of children who attended the GSD program needed special education by 3rd grade
- 95% of at-risk children who tested poorly before pre-school entry expected to need special education
- Less than 1% of that group of children actually needed special education – 1 of 110 children

Success payment made reflecting special education monies saved

PFS outcomes – City of Chicago/Chicago Public Schools

- Chicago Parent-Child Center program extended to 2,600+ at-risk 4-year olds over four years
- Three primary success outcomes being tracked:
 - Reductions in special education
 - Kindergarten readiness
 - 3rd grade literacy
- 2/3 of first cohort students scored above 50th percentile on four of six domains (baseline success threshold for CPC) for K-readiness

Success payment made reflecting achievement of K-readiness outcome

PFS – Success payments are based on outcomes

- Outcomes come in two flavors:
 - *Cost avoidance* – monetizable, assignable savings that governments enjoy as a result of PFS outcome achievement
 - *Condition improvements* – less tangible/assignable benefits to individual, government and society of successful behaviors and achievements by PFS target participants;
- *Condition improvements* are more impactful than *cost avoidance*

PFS – Examples of outcomes

- Cost avoidance
 - Less need for special education
 - Lower health costs to public health system
 - Reduced grade retention
- Condition improvement
 - Measurably healthier children
 - Kindergarten-ready
 - Less abuse/neglect
 - Less maternal depression
 - Reading at grade level

PFS – Data is critical

- PFS cannot work without access to quality program data
 - Data must be regularly generated and cleaned
 - Data flow linkages between disparate databases need to be established
 - Dataset to be developed should be housed in central repository
 - Data sharing agreements must be in place
- PFS project data needs to directly support outcomes
 - Outcomes must be material and measurable
 - Data definitions and specifications should be clearly established based on those outcomes

PFS – Selecting outcomes

- Outcomes for successive programs should reflect goals and benefits of both programs
 - Basing outcome on only one program could compromise measurable impact of other program
- Outcomes selected can be proven or aspirational – depending on data to support them
- Outcomes can be amalgam of individual program outcomes that are not directly proven by either

Example: Childhood health measures that are suspected to enhance child's ability to learn, be socially/emotionally adaptive, etc.

PFS – Informing outcomes

- Research will support or undermine selected outcomes through three-step process:
 1. Early childhood expert input is important to establish framework for outcomes that are prominent and accepted
 2. Literature review of existing research bolsters, but hones expert input
 3. Quantitative analysis of longitudinal data confirms or denies hypothesized impact of selected outcomes
- Outcomes that appear to be in conflict with the above process need to be reconsidered

PFS – Input from experts

- Identified 60 experts within academia, government, and non-profit sectors with knowledge of NFP, PCHP, or home-visiting programs
- Invited 23 experts to participate in telephone interviews to describe their research and solicit feedback about the UWCI PFS initiative
- Held interviews with 11 experts between February & May 2017
- Expert feedback:
 - Unanimous about importance of K readiness as outcome of interest
 - Emphasized improvements in pre-term births, closely-spaced births, and child self-regulation and, to a lesser extent, reductions in special education
 - Cautioned against surveillance effects with respect to Medicaid claims; reports of abuse and neglect

PFS – Literature review

1. Began with core set of well-known studies on NFP and PCHP and with two current research efforts:
 - a. U.S. Department of Health & Human Services Home Visiting Evidence of Effectiveness (HomVEE) program, and
 - b. Washington State Institute for Public Policy (WSIPP) benefit-cost analysis of evidence-based policies
2. Identified additional studies by conducting web-based searches for academic studies, unpublished documents, and relevant websites, and conducted review of bibliographies of new studies published in 2016 & 2017

PFS – Literature review

3. Research evidence regarding home-visitation programs is substantial
 - a. NFP - High-quality studies of the NFP program show consistently positive benefit-cost outcomes.
 - b. PCHP - Relatively thin evidence base (though recent ORS impact study suggests positive program impacts)
4. Literature review provides detailed information about specific program outcomes, including methods for quantifying these outcomes in dollar terms

Information collected and analyzed provides solid foundation for quantitative analysis

PFS – Quantitative analysis

- Child-level integrated database containing information on home visiting program participation matched with demographic, encounter and indicator characteristics:
 - Child/family welfare involvement
 - Educational attainment
 - Kindergarten readiness testing
 - Medical encounters
 - Other outcomes of interest
- Dataset is ideal because it is both “long” -- includes all children born in the state -- and wide – includes hundreds of variables spanning numerous outcomes of interest

PFS – Quantitative analysis

- Dataset is also ideal because it is longitudinal -- multiple observations over time are available for the same child -- allowing for an analysis of pathways between in-home visits and encounters (agency or health care encounters) and testing indicators (kindergarten readiness)
- Dataset also contains information about ethnicity and geographic location, both of which might be important for our study

Next steps:

- *Examine impact of extended participation in home visiting programs on key outcomes of interest*
- *Analyze by holding constant a variety of demographic, social, and economic characteristics*

Summary

- PFS project can only move forward to construction with feasibility study that confirms environmental and research support
 - Target participating and non-participating populations must be adequate in size, need, and make-up
 - Target population must comply with program participation requirements
 - Regulatory issues must be addressed
 - Datasets and system linkages need to be established and usable
 - Research on achievability of proposed outcomes must be clear
 - Short and long-term ROI on expected benefits of program should be sufficient to attract investors and payers

Questions?

- For more information on Pay for Success, email Phil Peterson at phil.peterson100@gmail.com