Early Childhood “Pay for Success” Social Impact Finance: Feasibility, Operations and Implementation

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Washington D.C. 20036
March 13, 2014
1. Investing in young children has large economic and health benefits

2. Quality prenatal to age-five programs lead to stronger economic growth. Business leaders understands this, and their advocacy is strengthening

3. Pay for success (PFS) finance: How it works

4. First US PFS project: Teen Recidivism – Rikers Island

5. First US early childhood project: Prekindergarten – Salt Lake City

6. Special focus on the first step: Feasibility Analysis
You already know that cost/benefit analyses show positive returns for proven early childhood strategies:

- **Abecedarian Project** (early care and education aged 0-5): $3.23
- **Nurse Family Partnership** (home visiting prenatal – age 2 for high risk group): $5.70
- **Perry Preschool** (early education age 3-4): $9.20

**Total Return per $1 Invested**: $9.20

Data Sources: Center on the Developing Child at Harvard University, Karoly et al. 2005, Heckman et al. 2009.
You also know that the cost-effectiveness of child health and of educational interventions are increasingly important.

**Avoidable annual costs exceed $500 billion**

- Violence (Cohen, 1998)
- School dropouts (Levin et al. 2007)
- Substance abuse, and mental health problems (O’Connell et al., 2009; Greenberg et al., 2003).


You even know that quality early care and education improve adult health

Children in high-quality early education with strong parental involvement

✔ Are more likely to go to a doctor, receive appropriate screenings and immunizations, and receive dental care

✔ Learn about health and nutrition which can reduce obesity and malnutrition.

✔ Experience less abuse, neglect, and injury at home.


Nurse Family Partnership

- 56% reduction in emergency room visits for accidents and poisonings in the second year of the child’s life
- 50% reduction in behavioral problems when the children enter school.
- 48% reduction in state-verified reports of child abuse and neglect by child age 15
- 39% fewer healthcare encounters for injuries or ingestions in the first two years of life
- 5 point increase in language scores on a test with a mean of 100 and standard deviation of 15 among 4-year-old children born to mothers with low psychological resources

“Nurse-Family Partnership”, Early Childhood, Social Programs That Work, Coalition for Evidence-Based Policy
http://evidencebasedprograms.org/wordpress/?page_id=57
Healthy Families

Healthy Families mothers receive bi-weekly home-visitation services that encouraged healthy prenatal behavior, offered social support, and provided a linkage to medical and other community services. An RCT study of the Healthy Families New York (HFNY) program found that:

- **Low birth weight frequency was cut in half** – LBW deliveries was significantly lower for the HFNY group (5.1%) than for the control group (9.8%) (AOR=0.43; 95% CI=0.21, 0.89).

- **LBW risk was further reduced** for mothers who were exposed to HFNY at a gestational age of ≤24 weeks (AOR=0.32; 95% CI=0.14, 0.74).


http://www.ajpmonline.org/article/S0749-3797(08)00845-3/abstract
But here’s something new -- Abecedarian reduces heart disease risk

A long-term follow-up evaluation of children in the Abecedarian Project early care and education program finds that they have significantly lower prevalence of risk factors for cardiovascular and metabolic diseases in their mid-30s.

✓ The evidence is especially strong for males. The mean systolic blood pressure among the control males is 143, while only 126 among the treated

✓ One in four males in the control group is affected by metabolic syndrome, while none in the treatment group is

“Early Childhood Investments Substantially Boost Adult Health” F Campbell, G Conti, J. Heckman, S H Moon, R Pinto, E Pungello, and Y Pan. *Science, 2014*
Increasing attention is being given to Medicaid Managed Care. It has mixed results, except ...

An intervention for high-risk pregnant mothers produced a 1.26 to 1 return on investment.

This may be enough to pay for the intervention and pay back lenders who fund the prenatal care with interest.

http://journals.lww.com/hcmrjournal/Abstract/2008/10000/Searching_for_a_business_case_for_quality_in.9.aspx
Business and local government are beginning to understand that early childhood investment strengthens parent productivity and local economies.

Timothy Bartik at the Upjohn Institute, documents why investing in early childhood raises regional per capita income as well as or better than standard infrastructure and tax-concession strategies.
Business now “gets” early childhood

After years of effort, in almost every state in the US, Business Roundtables and Chambers of Commerce now support early childhood investment
Experts are realizing that we don’t have to wait 15 years to begin to earn high returns on early childhood investments...

- Low birth-weight births cost can as much as $100,000. Normal births cost about $5,000. The return on early health prenatal programs is evident within days.

- Special-ed children cost about $25,000 per year. Regular-ed cost about $12,000. Children are assigned to special-ed usually by 2nd grade. The return on pre-k programs is evident within 36 months.
“Pay for Success” Social Impact Finance

- “Pay for Success” refers to performance-based contracting between Government and Providers of social services arranged by an Intermediary. Government pays when results are achieved as opposed to providing up-front and on-going payments for services.

- “Performance” has two meanings -- “cost avoidance” and “outcome improvement”. Cost avoidance refers to actual reductions in governments operating costs that are the result of an intervention. Outcome improvement refers to measured changes in outcomes in desired directions that are the result of an intervention.
Three Biggest Challenges

(1) Obtaining *sound statistical research* that firmly establishes an economic linkage between an intervention and an early childhood benefit,

(2) Devising *contracts between the parties* which capture the benefit monetarily and which all parties are willing to sign, and

(3) And, *monetizing the returns* within a timeframe acceptable to investors.
Main Participants in a Pay for Success Project

1. Organizers study Feasibility Research and decide whether to move forward.

2. Private, Philanthropic, Government & Provider PFS Organizers

3. Pay for Success Investment Intermediary

4. Early Health or Education Service Providers

5. Government Health or Education Agency

6. Third Party PFS Project Evaluation and Certification

7. Third Party Feasibility Research
Flow of Funds in a PFS Project (arrows)

1. Investors acquire PFS assets and provide working capital
2. Operating funds paid to Service Providers
3. Cost Avoidance or Outcome Improvement Achieved
4. Evaluator certifies performance
5. Success Payment for Outcome Improvement or Cost Avoidance
6. Intermediary Issuer repays investors

Private, Philanthropic and Government PFS Investors

Government Health or Education Agency

Third Party PFS Project Evaluation and Certification

Early Health or Education Service Providers

Third Party Feasibility Study
Putting it all together -- A PFS Project

1. Investors acquire PFS assets and provide working capital

2. Operating funds paid to Service Providers

3. Cost Avoidance or Outcome Improvement Achieved

4. Evaluator certifies performance

5. Part of Government savings paid to Intermediary

6. Intermediary Issuer repays investors

Private, Philanthropic and Government PFS Investors

State PFS Social Impact Finance Law and Regulations

Third Party Feasibility Study

Early Health or Education Service Providers

Intermediary and Service Provider Contract

Intermediary Government Agency Contract

Pay for Success Investment Intermediary

PFS Asset Investor Terms & Conditions

Third Party PFS Project Evaluation and Certification
Establishment and Funding Time Line

State Law and Regulation Enactment: Unknown
Establishment and Fundraising Phase: 18 Months

- Stakeholders agree to organize an Early Childhood Social Impact Enterprise
- Third Party Feasibility Study Done
- Early Child Social Impact Enterprise Established
- Contracts with Service Providers, Government Agencies & 3rd Party Certifier Completed
- Social Impact Assets Issued and Funds Received by ECSIE

2 months  6 months  2 months  6 months  2 months

Total: 18 months
Intervention Service and Investment Success Time Line

Intervention Service Delivery and Initial Success Indication

- 8 months for prenatal (5 mo average prenatal + 3 mo postpartum)
- 60 months for pre-k (2 yrs pre-k, 3 yrs k-2nd grade when 90% of special-ed assignments completed)

Operating funds paid to Service Providers

Early Health or Education Service Provided

Cost savings generated and confirmed by initial evidence

3rd Party Evaluator Certifies Savings to Government Agency, Intermediary & Service Providers

Government Health or Education Agency pays large portion of savings to Intermediary

Intermediary repays investors

✓ 5 months for prenatal health
✓ 2 years for pre-k

✓ 3 months for prenatal health
✓ 3 years for pre-k

1 month

10 to 62 months total

20
1. Goldman Sachs funds the project’s delivery and operations through a $9.6 million loan to MDRC;

2. Bloomberg Philanthropies provides a $7.2 million grant to MDRC to guarantee a portion of the investment;

3. MDRC oversees the day-to-day implementation of the project and manages the Osborne Association and Friends of Island Academy, the two non-profit service providers that deliver the intervention;

4. The Vera Institute of Justice, an independent evaluator, determines whether the project achieves the targeted reductions in re-incarceration;

5. The Department of Correction pays MDRC based on reduced re-admissions and the associated cost savings and MDRC then pays the private investor.
Rikers Island: Addressing NYC Adolescent Incarceration

1. Investors acquire PFS assets and provide working capital

2. Operating funds paid to service providers

3. Cost Avoidance or Outcome Improvement Achieved

4. Evaluator certifies performance

5. Success Payment for Outcome Improvement or Cost Avoidance

6. Intermediary Issuer repays investors

Goldman Sachs Loan Bloomberg Philanthropies Guarantee

Vera Institute of Justice

Department of Correction

MDRC

Osborne Association and Friends of Island Academy

Third Party Feasibility Study
Early education research shows that public school elementary 3rd grade achievement gaps and special education assignment rates of socially and economically disadvantaged children can be significantly reduced by providing the children quality prekindergarten (pre-k) educations.
Voices for Utah Children study shows that Granite City public school special-ed cost avoidance resulting from the lower special-ed assignment rates will be large enough to pay for the pre-k sustainably using “pay for success” social impact finance.

Salt Lake analysis shows an ample margin to repay funders for a 600 child pre-k expansion (34% 3 year olds attending for two years and 66% 4 year olds attending for 1 year)

![Graph showing expected amount of special education cost avoidance](image)

- **PV Cost of the Prek program for 600 children (includes program costs, classroom materials and evaluation):** $1,338,600
- **PV of Expected Total Special Education Cost Avoidance (5% discount rate):** $1,799,864
- **Special Ed Cost Avoidance:** $461,264
- **Special Ed Cost Avoidance:** $1,799,864
Salt Lake’s Granite Preschool Program has been successful in closing the achievement gap between low-income kids and all other Utah children.

The 2006 cohort of at-risk children scored similarly in 3rd grade Language Arts (LA) as all children in the state and outperformed all children in the state in Math. The gap with respect to children without disabilities statewide was 6 percentage points in LA and the achievement gap in Math was eliminated.
The achievement gap in Language Arts was reduced from 22 percentage point to 5 points

The achievement gap between 3rd grade students in the 4 schools least impacted by poverty (28% of students eligible for free and reduced lunch) in the district and the 11 schools most impacted by poverty (80% of students eligible for free and reduced lunch) in LA was reduced from 22 percentage points to 5 points.
The achievement gap in Math was effectively eliminated.

The achievement gap in Math was reduced from 28 percentage points to 2 points.
Goldman Sachs makes a $4.6 million, 5% loan to United Way of Salt Lake

J.B. Pritzker makes a $2.4mm 5% subordinated loan to United Way of Salt Lake, reducing risk to the senior lender if the preschool program proves to be ineffective.

United Way of Salt Lake is the “intermediary” and oversees the implementation of the project and is also responsible for managing repayments to the private investors.

Imprint Capital serves as social investment banker.
Voices for Utah Children provides research and analytic support

Granite School District and others provides the preschool program to low-income 3 and 4 year olds

Early Intervention Research Institute, Utah State University, is the “third-party evaluator”

Park City Community Foundation acts as the Performance Account Manager, providing an independent “performance account” to hold repayment funds
After initial funding, subsequent investments will be made based on the availability of repayment funds from public entities that are realizing cost savings as a result of the program.

Through 6th grade

- Success payments, equal to 95% of special-ed cost avoidance, will be used to pay 5% annual interest and repay senior and subordinate debt principle.

- Success fees, equal to 40% of special-ed cost avoidance, will be paid to investors after debt principle has been repaid.

After 6th grade, 100% of all special-ed cost avoidance will be retained by Utah
Scaling Pre-K for Low-Income Kids in Salt Lake City –4

1. Investors acquire PFS assets and provide working capital

2. Operating funds paid to Service Providers

3. Cost Avoidance or Outcome Improvement Achieved

4. Evaluator certifies performance

5. Success Payment for Outcome Improvement or Cost Avoidance

Granite School District and Park City School District

Voices for Utah Children

United Way of Salt Lake

Goldman Sachs Loan, Pritzker Foundation PRI Loan

Dr. Mark Innocenti, Early Intervention Research Institute, Utah State University

Park City Community Foundation

Granite School District, Park City School District, Guadalupe School, YMCA of Northern Utah, Children’s Express and Lit’l Scholars
South Carolina Institute for Child Success proposes to increase the availability of Nurse Family Partnership and other proven home visiting programs to meet unmet needs in 22 counties. Read -- “Using Pay for Success Financing to Improve Outcomes for South Carolina’s Children: Results of a Feasibility Study.”

Current SC Home Visiting Programs Do Not Meet Need

- Children Under 5 - 2011*: 243,180
- Approx. # High-Risk Children Under 5**: 147,661
- Total Families Served - 2011-2012 ***: 5,004
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

(per family)
Unmet Need for NFP in SC

- Total First Births on Medicaid*: 11,505
- New Entries to NFP - 2012**: 568

10,937 Not Served
Feasibility analysis is the first step...

1. What must feasibility analysis cover? Ten essential items...
2. Are randomized control trials needed? Short answer is no...
3. How do you find interventions worthy of feasibility studies? RFIs, surveys and assessments...
The feasibility study that justifies investing in a PFS project, is like a home mortgage appraisal...

- Mortgage lenders don’t make a loan based on the average value of homes in a neighborhood or city, they make a mortgage on a home based on a careful appraisal of the value of that home.

- PFS feasibility analysis provides information to investors on a specific intervention and its effects on the performance of a specific category of children in a specific region.
Feasibility studies need to evaluate the two main kinds of “success” -- Cost Avoidance and Outcome Improvement

“Success” has two meanings –

**Cost avoidance** actual reductions in government operating costs that are the result of an intervention

**Outcome improvement** measured changes in desired outcomes that are the result of an intervention
And feasibility studies need to address the three main challenges to social impact finance...

Obtaining **sound statistical research** that firmly establishes an economic linkage between an intervention and an early childhood benefit,

Devising **contracts between the parties** which capture the benefit monetarily and which all parties are willing to sign, and

And, **monetizing returns** within a timeframe acceptable to investors.
The ten items feasibility studies must analyze...

1. The intervention and its recipients and non-recipients
2. Other interventions recipients may have been exposed to earlier
3. Data about recipients and non-recipients
4. Longitudinal analyses of recipient and non-recipient, post-intervention performance
5. Cost avoidance by specific government or other entities
6. Outcome improvements sought by county, state, federal & other entities
7. Workability of contracts with agencies, providers & evaluators
8. Ability of third party evaluators to confirm cost avoidance and outcome improvements
9. Likely funding sources and capital structures
10. Likely time path of success payments and return of capital
...but not necessarily all at once. Feasibility studies almost certainly will, and perhaps should, proceed in stages

South Carolina’s home visiting study focuses on 1 and 6, and outlines areas of future analysis

Salt Lake City’s pre-k study analyzed items 1, 3, 4 and 5 three years ago, but the project didn’t fully complete items 6 through 10 until last summer
South Carolina’s 2013 study describes subsequent phases of analysis and identifies seven areas for future work

1. Define the target population and expected immediate and follow-on outcome improvements
2. Project the outcome improvements by state and federal agency and government jurisdiction
3. Obtain support from government officials
4. Identify the process and sources for government outcome improvement payments
5. Identify commercial and philanthropic investors
6. Identify an intermediary, service providers, and evaluator
7. Describe potential contracts and terms

Salt Lake City’s studies spanned 3 years and showed special-ed cost avoidance resulting from specific pre-k curriculum would be enough to pay for the pre-k and achieve many desired outcome improvements

1. Mid-October 2011 paper described the “sustainable financing model”

2. Late-October 2011 paper described closing education achievement gaps

3. 2012 and 2013 testimony on legislation described longer term outcome improvements valued by county and state government

“A Sustainable Financing Model: High Quality Preschool for At-Risk Children...”

“High Quality Preschool Closes the Achievement Gap and Reduces Special Education Costs for At-Risk Children...”
Are randomized control trial (RCT) results needed to support a PFS project?

The short answer is no.

However, careful longitudinal outcome comparisons of the performance of actual local intervention recipients and non-recipients, are absolutely necessary.

Feasibility study statistical findings regarding familiar RCT-backed interventions, need only be strong enough to provide funders with reasonable assurance that they will get their money back.

The statistical standard for PFS is not what’s necessary for scientific proof, only what is needed to satisfy business judgment.
How do we find intervention programs worthy of PFS feasibility analysis?

Issue state and county government “Requests for Information” or Requests for Proposals” (RFIs or RFPs)
- RFIs and RFPs should provide and explain basic data and performance needs and expectations
- Hopeful providers will reply
- Key philanthropies will reply

Conduct surveys of intervention providers – private, church, charity and government
- Surveys should query providers about data and longitudinal demonstrations of performance
- Will identify niche and general providers
- Will provide information for comparisons
From RFI and RFP responses and survey results, compare providers for feasibility analysis

Providers identified via RFI/RFPs and surveys –

- Need to be assessed and compared to determine which of them are most promising and suitable for PFS feasibility evaluations
- At a minimum the selection criteria should include the ten must-analyze items noted earlier
- After the most suitable providers have been identified, local philanthropic, church, business and government leaders need to be found to help underwrite initial feasibility studies
- Feasibility study results will indicate which providers are candidates to be scaled up using PFS finance
To learn more about early childhood “pay for success” finance...

✓ Go to ReadyNation.org
✓ Tab to Working Groups
✓ Click on “Pay-For-Success Working Groups”
COUNCIL FOR A StrongAmerica