# Pay for Success and Social Impact Bonds

Funding the Infrastructure for Evidence-Based Change

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## A Blueprint for Pay for Success (PFS)

- Defining PFS
- PFS opportunities in criminal justice
- PFS advantages and disadvantage
- PFS strategic planning in four parts
- Five steps to developing PFS-financed projects
- 6. The future of PFS



### What is Pay for Success?

### New financial instrument to support discretionary social programming

• Brings evidence-based programs to the necessary scale

### Brings together nonprofits, for profits, government

- Financial intermediary solicits private capital
- Knowledge intermediary identifies programs, performance targets, and price
- Private funds are invested to support the program
- Independent evaluator determines if targets are met
- Government reimburses investors plus profit if targets are met
  - Investment is lost if the project fails



### PFS as a Solution

**Problem:** Lack of infrastructure (social services, digital infrastructure, human capital) because some social programs are underfunded:

- Programs with large up-front costs
- Programs that serve large numbers of people
- Operationally or politically risky programs

Solution: Use private capital to finance these projects



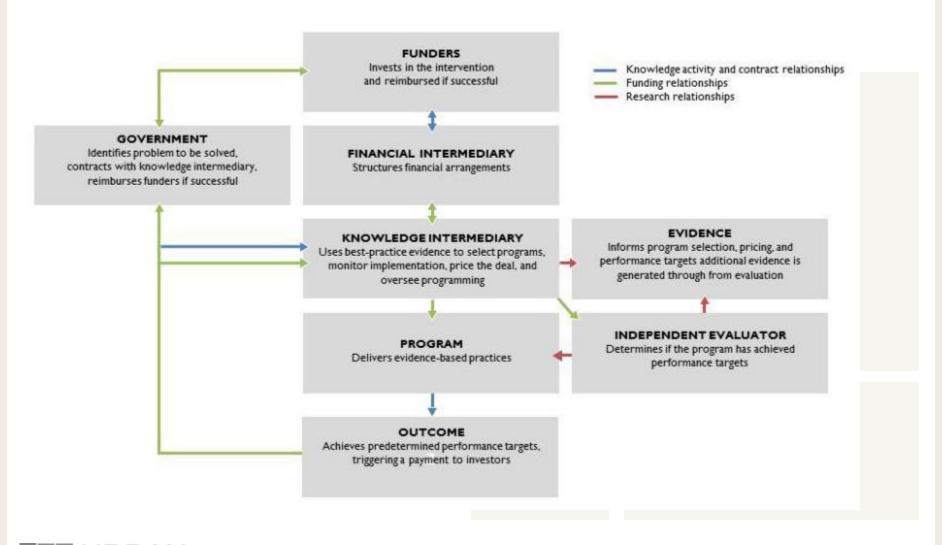
### The Structure of Pay for Success

### PFS Actors and Roles

- Governments: Identify problems to target and pay for the successful attainment of project goals
- Funders: Provide program capital on the promise of a return if the program is successful
- Financial Intermediaries: Structure the financial deal and solicits investors
- Knowledge Intermediaries: Use evidence to find highperforming programs, price the PFS instrument, and oversee implementation
- Independent Evaluators: Determine if the project meets its targets



### Pay for Success Model Framework





## PFS Inside and Outside the US Federal Government

### Outside: Social Impact Bonds (SIBs)

- First SIB: Peterborough Prison (UK)
- NYC Rikers Island
- Planning underway in many other states
- Under study in Canada, Australia, Israel, and elsewhere

### Inside: Pay for Success

- White House Office of Social Innovation and Civic Participation
- Office of Management and Budget
- Bureau of Justice Assistance
- Department of Labor



### SIBs and PFS Are Not Bonds

- Traditional bonds are usually paid off from a dedicated revenue stream
- The issuing government's credit rating is affected by it's ability to pay off the bond
- PFS pays off as a result of client outcomes—monetized estimates of the costs and benefits of changes in human behavior

Hence, 'Pay for Success' as opposed to the confusing 'Social Impact Bond'



## The Peterborough Prison Pilot

The Peterborough Prison is housing in the UK for shortterm prisoners. The project goal is to provide reentry services to prisoners leaving Peterborough Prison:

- Raised £5 million from private investors
- Target is a 10% reduction in recidivism
- Will pay out up to £7 million if the reduction in recidivism is greater than 10% (13% return on investment possible)
- If recidivism reduction is less than 10 percent, principal is lost
- Began in 2010, first payout in 2013, final results in 2016



### Rikers Island Social Impact Bond

Rikers Island is home to NYC's jail system. Sought funds to provide reentry services to youth prisoners:

- Goldman Sachs invested \$9.6M
  - o \$7.2M insured by the Bloomberg Foundation
- Funds are directed to the Adolescent Behavioral Learning Experience with 3,400 young men participating
- Will pay out reimbursement and profit on a sliding scale for recidivism reductions greater than or equal to 8.5%
  - No return for 8.4% or less in recidivism reduction
- As of early 2013, project and research are underway



### Opportunities in Justice

### Pretrial processing

- Pretrial risk assessments can save money by diverting low-risk offenders from jail
- Upfront investment is needed to train officials on assessment tools

### Reentry

- The therapeutic community programs can have beneficial effects on recidivism and substance abuse
  - o Start-up requires developing counseling, employment, and job training services



## Opportunities in the Adult Justice System

#### Probation

- Electronic monitoring can save money and reduce victimizations
  - o Implementation infrastructure (e.g., equipment, IT support) is costly

### Adult diversion programs

- Drug courts and community supervision can preserve public safety while reducing costly secure confinement
- The training, additional technical assistance, and staff are required to effectively implement diversion programs' significant upfront costs



### Opportunities in Juvenile Justice

#### Juvenile Justice

- Family-based intervention and prevention programs can prevent delinquent conduct and reduce recidivism
- Implementing these programs requires start-up investment to train local staff

#### Adolescent diversion

- Adolescent diversion from secure confinement has been found to have a large cost-benefit ratio
- Training and project implementation impose significant upfront costs



## Advantages of PFS Compared with Traditional Government Financing

- Increases reliance on programs with a track record of success by using evidence to identify programs
- Sets reasonable performance targets to determine success, rather than ad hoc or subjective judgments
- Funds social programs that would otherwise not be funded

## Advantages of PFS Compared with Traditional Government Financing

- Governments transfer risk
- May make governments more willing to fund politically risky programs
- Might increase community-based service infrastructure
  - o PFS will likely focus on services delivered by the private nonprofit sector



## Advantages of PFS Compared with Traditional Government Financing

- Solves the "wrong pockets problem"
- Allows agencies to pool resources and knowledge
- May be a mechanism for funding regional initiatives across jurisdictions that are impossible today
- Flexibility allows for virtually any type of intervention:
  - ✓ Justice
  - ✓ Public health
  - ✓ Homelessness
  - ✓ Employment
  - ✓ Urban blight



## Disadvantages of PFS Compared with Traditional Government Financing

- PFS requires complex legal, empirical, institutional, and financial arrangements
- May be limited to programs with a demonstrable evidence base, which can discourage innovation
- May substitute private services for public services

## Disadvantages of PFS Compared with Traditional Government Financing

- Private sector may prefer profit to pro-social goals
- Private market may prefer to serve low-risk, low-need, low-reward populations instead of high-risk, high-need, high-reward populations
- May substitute for other Community Reinvestment Act activities

## Launching a High-Quality PFS Project

PFS projects launched prematurely—before the complexities are addressed—may fail without a fair trial

Before PFS can succeed, a project must overcome endemic uncertainty to efforts to change individual behavior

How can research inform the selection of PFS interventions and bond pricing to overcome this uncertainty?



### 5 Steps to Pay for Success

- Strategic planning
  - o Drivers of criminal justice system populations and costs, gaps in infrastructure, evidence on interventions, PFS suitability diagnostic
- Steps 1 to 3: Develop the PFS transaction and infrastructure
  - o Identify the population to be served, costs, expected benefits, recoverable benefits, price, and performance targets
- Steps 4 and 5: Deliver service and evaluate success
  - o Service provision and training and technical assistance (TTA), and evaluation



## Strategic Planning

PFS, a four-part process, relies on good strategic planning to maximize cost effectiveness

Government should identify a research partner to assist with this process

Strategic planning is a four part process:

- Identify the population and cost drivers
- Identify the target problem
- Find evidence-based solutions
- Assess PFS suitability



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## Part 1: Identify the Population and Cost Drivers

Identify drivers of criminal justice system population and costs

### Two approaches:

- Comprehensive (such as BJA's Justice Reinvestment Initiative)
- Targeted to a particular problem



## Part 2: Identify the Target Problem

### Identify problem and gaps in infrastructure:

- Digital infrastructure (exchange of data and knowledge)
- Human capital (lack of capacity or capabilities)
- Social service (treatment or entitlements)



## Part 3: Find Evidence-Based **Solutions**

Identify evidence-based programs to solve the problem

Justice program databases can inform implementation:

- ✓ OJP's Crime Solutions
- ✓ Washington State Institute of Public Policy
- ✓ <u>Vanderbilt University (juvenile programs)</u>
- **Blueprints for Violence Prevention**
- ✓ <u>Campbell Collaborative</u>
- ✓ Urban Institute's Bayesian, Meta-CBA model
- ✓ National Reentry Resource Center



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## Part 3: Find Evidence-Based Solutions

A large body of empirical evidence about effective programs has not been adopted

PFS projects must be chosen objectively

Focus is on probability of program success, not necessarily the average treatment effect

Determine if PFS is the best way to implement the evidence-based solution identified:

PFS may fund the solution

PFS mechanism may be solution itself

PFS may be inefficient



To be evaluable, PFS-funded interventions must have

- <u>Measurable outcomes</u>
- Available data
- Rigorous evaluation method
- <u>Definable costs</u>
- Evidence base



PFS-funded interventions must have these project safeguards to protect the government, investors, and the treatment population:

- <u>Treatment safeguards</u>
- Focus on prevention
- <u>Public/private partnership</u>
- Need for capital



PFS should be the most applicable financing tool for funding the program:

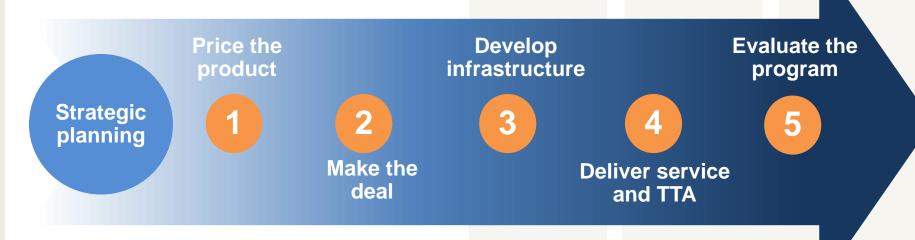
- Cost-beneficial
- Fixes "wrong pocket problem"
- <u>High upfront costs</u>
- Reasonable duration
- <u>Least expensive source of capital</u>



### PFS in 5 Steps

PFS projects should target justice system "inefficiencies"

Once drivers are identified, PFS is developed in 5 steps:





## Steps 1-3: Develop the PFS transaction and infrastructure

Step 1:Price the PFS product and set performance targets

Step 2: Develop the deal

Step 3: Create new infrastructure

### Step 1: Price the Product

- Use cost-benefit analysis (CBA) to determine the following
  - Service infrastructure and capital needs
  - Performance targets
  - Probability of program success (e.g., return rates)
  - Government savings (recoverable and nonrecoverable)
- Meta-CBA provides the best estimates
  - Uncertainty deters investors, risk does not
  - Meta-CBA Models
    - Urban's District of Columbia Crime Policy Institute model
    - The Washington State Institute of Public Policy model
    - Pew-MacArther Results First Initiative



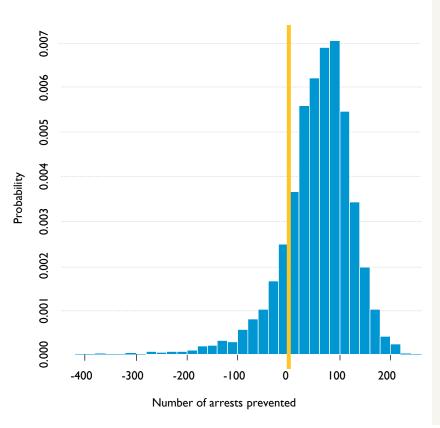
### Step 1: Price the Product

- Risk is the observable variation—uncertainty is unobservable
- Investors are typically willing to invest in risky propositions if risks can be scored
  - Investors are less likely to invest as uncertainty increases
- Selected programs must have an evidence base, allowing researchers to observe risk
- Development of a model that maximizes observable risk and minimizes uncertainty is critical to the success of PFS



### Step 1: Price the Product

### Hypothetical Program: Electronic Monitoring

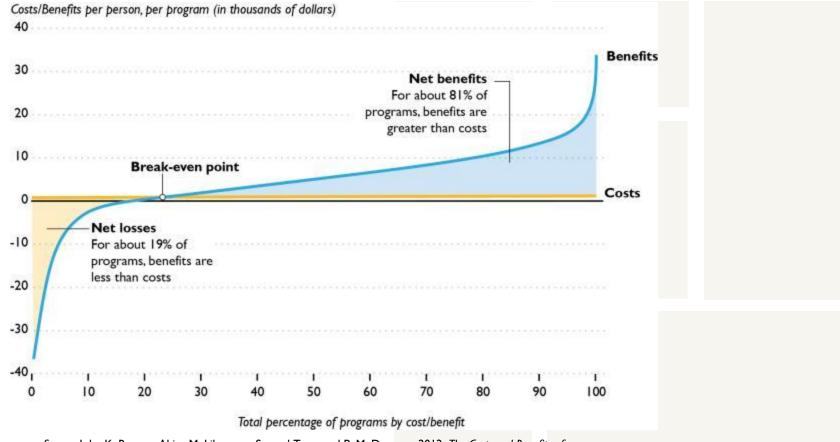


- Arrests prevented by electronic monitoring programs serving 800 people
- From a meta-analysis of 7 rigorous studies
- Despite average success, there is a possibility of increases in arrest



## Step 1: Price the PFS Product

Hypothetical Program: Electronic Monitoring



Source: John K. Roman, Akiva M. Liberman, Samuel Taxy, and P. M. Downey. 2012. The Costs and Benefits of Electronic Monitoring for Washington, D.C. Washington, D.C. Urban Institute.



### Step 2: Make the Deal

- Identify investors, providers, and government partner
  - Negotiate PFS contract
  - o Get all partners to sign on
- Determine if sufficient infrastructure exists to deliver the intervention
  - Nonprofits are often key justice system service providers
- Determine project management and incentive structure
  - o Formulate the project management for the service portion of the project
  - o Determine if other performance incentives can be built into the project for the service providers



## Step 3: Develop Infrastructure

#### Coordinate direct service

- Develop service infrastructure (e.g., staff knowledge and IT)
- Determine if project requires building new infrastructure or enhancing existing infrastructure

#### Determine TTA needs

• For sites with limited service capacity, it may be important to engage trainers and consultants to facilitate service infrastructure development



# Steps 4 and 5: Deliver Service and Evaluate Success

Step 4: Deliver service and TTA

Step 5: Evaluation



## Step 4: Deliver Service and TTA

- Deliver TTA and services to the target population
- Knowledge intermediary will ensure fidelity to the program model
  - o TTA helps providers sustain services beyond the life of the project
- The PFS contracts provide safeguards so that PFS does not interrupt service delivery
  - This is important to preserving the legitimacy of PFS



## Step 5: Evaluation

- Evaluate the program and determine success
  - o Determine if local organizations can perform the evaluation
  - Find ways to promote evaluation transparency
- For initial evaluations a randomized control trial experiment is the best design
  - o Randomized control trial experiments build knowledge about what works in criminal justice
  - Evaluation costs are primarily a function of data availability, not evaluation design



## Two Phases of PFS Research

#### Phase I: Building the National Blueprint

- Create a 5-step PFS development process
- Identify types of PFS fundable projects
- Develop tools to implement PFS in criminal justice

#### Phase II: After the Blueprint

- Integrate and monetize large amounts of evidence (criminal justice outcomes)
- Move from single PFS projects to PFS-financed project portfolios
- Move beyond criminal justice
- Integrate scorecards (programming outputs)?
- Secondary market-place for PFS instruments?



# Creating Cross-Domain Portfolios of **Evidence-Based Programming**

- Use meta-analysis to undertake studies of studies
- Integrate local costs and monetized benefits
- Use results to price PFS, identify risks, quantify uncertainty, identify performance targets
- In the criminal justice system, two examples of these models:
  - Washington State Institute of Public Policy and Results First
  - o Urban Institute Bayesian, meta-cost-benefit analysis model



## What is the Future for PFS?

- Will research inform the selection of PFS interventions in the presence of the uncertainty endemic to efforts to change individual behavior?
  - o Will evidence be used to identify programs, set targets, identify costs and benefits, and price the instrument?
  - Will rigorous research designs be used to evaluate PFS projects?
  - o Will research be used to identify and price risk or will uncertainty dominate?



## What is the Future for PFS?

- Will governments demand that PFS funding be limited to programs with recoverable or cashable benefits?
  - o Initial programs, mainly reentry-oriented, and the benefits are not cashable
- Can the research identify enough candidate programs?
  - o Nonresearchers think there is an a la carte menu of evidence-based programs
- What about new and relatively untested substantive areas?



## What is the Future for PFS?

- Can government procurement rules be changed to allow for PFS?
  - o PFS requires multiple years of program implementation before outcomes can be observed and payments made
  - o Paying a profit for performance may be problematic
- What will the challenges of integrating the operations of the non- and for-profit sectors be?
  - Will governments be willing to pay risk premiums investors demanded?
  - Can PFS support a secondary resale market, like other investment vehicles?
  - Can governments, for-profits, and nonprofits collaborate effectively?





# Appendix A: Diagnostic Criteria

The feasibility of a prospective program for PFS adoption is based on a two part diagnostic:

- Evaluability and program safeguards ask a series of binary questions
  - o Any "no" answer to a question in these sections disqualifies a program from PFS financing
- PFS suitability asks a series of questions supported by weighted scores
  - o Higher scores on this diagnostic indicate a program is more suitable for PFS



# **Evaluability Suitability**

Is the PFS project amenable to rigorous outcome measurement and evaluation?

- Technical feasibility consists of five yes or no questions
- If the answer to any question is "no", the program is unsuitable for PFS

#### Measurable Outcomes

Can the PFS program be evaluated on clear and agreed-upon outcomes?

- Yes: PFS program has clear and measurable outcomes.
- No: PFS program outcomes are unclear or not specified.

## Data Availability

#### Can appropriate and complete data for the PFS program be collected?

- Yes: Data for the program is either already collected in a format suitable for analysis, or sufficient resources are available to collect it.
- No: Data is not currently collected and the proposed PFS program does not have sufficient resources to support collection.

## **Evaluation Method**

Will PFS outcomes be rigorously measured with sound research methods?

- Yes: The PFS program will be evaluated using either a randomized control trial experiment, or with a comparison between two or more groups, controlling for differences between these groups.
- No: The PFS-funded program will be evaluated through methods besides a randomized control trial experiment or a controlled comparison between multiple groups.

## **Definable Costs**

Are there clear costs associated with the issue the PFS project is intended to address?

- **Yes:** The costs associated with both "business as usual" and program operation are clear or readily definable.
- No: The cost associated with "business as usual" operation or program operation is vague or contentious.



#### **Evidence Base**

Does the proposed PFS program have an evidence base that suggests it can achieve the performance goals

- Yes: There is a strong research base, including peerreviewed studies, suggesting that the program can achieve the performance targets.
- No: The evidence base for the program is weak or nonexistent, and does not include peer-reviewed research.

# **Project Safeguards**

Is the project suitable for financing through the mechanism of PFS?

- Program safeguards consist of four yes or no questions
- If the answer to any question is "no", the program is unsuitable for PFS

# Treatment Safeguards

Does the program provide a supplemental service?

- Yes: The program provides a supplemental service.
- No: The program provides a core government service.

#### Focus on Prevention

Is the PFS program focused on preventing negative outcomes?

- Yes: The PFS program focuses on preventing negative outcomes (e.g. victimization, morbidity) from occurring.
- No: The PFS program focuses on remedial business as usual.

## Public-Private Partnership

Can public, private, and nonprofit operations be integrated in the PFS system?

- Yes: Public and private activities in the program have been or can be easily integrated.
- No: There are significant legal, political, or operational barriers to the public and private partnership in the proposed program.

## Need for Capital

Does PFS financing direct capital to an under-provided service?

- **Yes:** PFS financing is supporting the delivery of underprovided services addressing an identified need in a jurisdiction.
- No: The PFS-supported program is not directing capital to undersupported services that address an identified need.



# PFS Applicability

PFS applicability explores whether PFS is the most suitable financing mechanism for a project.

 PFS suitability is determined by a weighted set of scores that are added to create a total ranging from 0−10, with higher scores indicating more suitable PFS projects.

## Cost-Beneficial

#### Is the proposed program cost-beneficial?

- 4: The program is cost-beneficial.
- **o**: The program is not cost-beneficial or no cost-benefit ratio has been calculated for this program.

# Fixes "Wrong Pocket Problem"

Are PFS program costs and benefits distributed across a variety of agencies?

- 1: Program costs and savings are distributed across different or disparate government agencies.
- o: Components and savings are concentrated in a single agency.



## **High Upfront Costs**

Are there barriers to entry from large initial investment requirements?

- 1: There are high upfront costs that could not be met with available agency resources or that could be met only with significant difficulty.
- **o**: Upfront costs could be met with existing agency resources.



## Reasonable Duration

Is the PFS-transaction funding an intervention with proximal outcomes?

- 2: The PFS mechanism is supporting a short-term (2–5 years) or one-time project or program.
- 1: The PFS mechanism is supporting a medium-term (6–8 years) program.
- o: PFS is used to support programming over 9 years or more or is intended to provide permanent program funding.



# Least Expensive Source of Capital

#### Is PFS the least costly available for funding the program?

- 2: PFS mechanics are the least costly or only available tool for raising capital to support a program.
- o: PFS mechanisms are one of many feasible methods of raising capital for a project or program.