



**Deploying the Pay for Success Model to Help Address the Opioid Epidemic in
the United States: An Opportunity for State and Local Action**

A Resource Guide

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Acknowledgments

As part of the Office of National Drug Control Policy's (ONDCP's) broader work on Pay for Success and the opioid crisis, ONDCP engaged the Abdul Latif Jameel Poverty Action Lab (J-PAL) North America and Urban Institute. J-PAL North America, led by Mireille Jacobson and Tiffany Cho, and the Urban Institute contributed to this effort for an extended period of time to conduct and review respectively a literature review of select interventions that stand to improve opioid outcomes and opioid-related outcomes (e.g., rate of HIV transmission). This literature review informed a presentation by Dr. Jacobson at a Convening on Pay for Success and the Opioid Crisis at the White House, hosted by ONDCP on November 3, 2016. J-PAL and the Urban Institute also reviewed and provided feedback on a draft of this resource guide. ONDCP is grateful to both organizations for their contributions.

Note that the policy statements expressed in this resource guide do not necessarily reflect the views of the researchers at J-PAL North America or the Urban Institute, and none of the statements in this resource guide should be taken as an endorsement by ONDCP of any particular product, service, or enterprise.

TABLE OF CONTENTS

Section I: Introduction	4
Section II: Overview of the Opioid Epidemic	5
Section III: Overview of the Pay for Success Model as a Tool to Improve Outcomes	7
Section IV: Case Studies: Tapping the Pay for Success Model for Substance Use Disorders in Connecticut and Louisville, Kentucky	17
Section V: Conclusion and Proposed Next Steps	20
Appendix I: Bibliography of Reviews and Studies on the Effectiveness of Select Interventions to Address Opioid Outcomes and Opioid-Related Outcomes	22

SECTION I: INTRODUCTION

The United States' opioid epidemic is a public health crisis, exacting a high toll across the country and prompting leaders from all sectors to ask what they can do to help individuals with opioid use disorders get the treatment they need and help prevent others from initiating heroin use or misuse of opioid medications. State and local government leaders in particular face significant budget constraints and scrutiny over the results of their public spending. This can leave little flexibility to expand services that are likely to prove effective in helping to address the opioid epidemic in their communities – or to try innovative approaches that lack the same evidence base as that of those more proven interventions but still hold promise.

The Pay for Success (PFS) model offers state and local policymakers in partnership with their communities a novel approach to finance and implement such programs while overcoming these and other challenges. This resource guide is meant to introduce PFS to those concerned with the opioid epidemic and illustrate ways that state and local governments, in partnership with other stakeholders, may tap PFS as another tool in their toolbox.

This resource guide begins with an overview of the epidemiology of opioid misuse, use disorder, and overdose in the United States. It proceeds to explain the PFS model, including how it works, where it has been deployed to date, and the broad, bipartisan support for these strategies. The resource guide turns next to explore the first PFS project in the country that is working to improve (and pay on the basis of) outcomes for individuals with substance use disorders, including opioid use disorders, as well as a budding PFS project in development with a similar focus but for a different population. The resource guide concludes with a sampling of next steps for communities to consider.

SECTION II: OVERVIEW OF THE OPIOID EPIDEMIC

Opioids refers to a class of drugs that target the opioid receptors in the brain and are used to reduce pain. They include prescription opioids such as hydrocodone and oxycodone as well as illicit drugs like heroin.

The ongoing opioid epidemic has claimed American lives and torn families apart across the country. More than 33,000 people died in 2015 – an average of 91 per day – from drug overdoses involving opioids.¹ Between 2000 and 2015, the rate of drug overdose deaths rose 163 percent, and the rate of drug overdose deaths involving opioids (including prescription opioids and heroin) rose by 247 percent and accounted for 63 percent (33,091) of all drug overdose deaths.² These deaths are part of a more than 16 year trajectory of increasing opioid overdose deaths that began with non-medical use of prescription opioids and recently has been punctuated by a surge in deaths involving heroin, as well as illicitly manufactured fentanyl and its analogs.³

Of the 52,404 drug overdose deaths in 2015, heroin was involved in 12,990 drug overdose deaths, while opioid analgesics were involved in 24,508 drug overdose deaths. Within the opioid analgesic category, there were 9,580 drug overdose deaths involving synthetic narcotics other than methadone, which includes fentanyl. This number has more than tripled from three years earlier (2,628 in 2012).⁴

Data from the 2015 National Survey on Drug Use and Health (NSDUH) showed prescription drugs used non-medically among persons age 12 and older were the second most used illicit substance in the United States in 2015, with 2.4 percent of Americans reporting past month use.⁵ Survey data suggest that many people who use prescription opioids non-medically initially obtain them from friends or family.⁶ However, those obtaining prescription drugs through a health care provider for misuse are just as vulnerable to overdose as those obtaining prescription opioids through illegal sources.⁷

As people who misuse these medications become tolerant to the opioid's effects, they need more of it over time to achieve the same effect. Research shows that people who use these drugs chronically are more likely than those who used them less frequently to purchase these drugs from dealers.⁸ People who use these drugs chronically and who have a need for stronger medicines and larger doses often spend large sums of money to obtain a sufficient supply of opioids to avoid and prevent painful withdrawal symptoms.⁹ Because of their growing dependence on prescription opioids, such individuals may be tempted for economic reasons to try these drugs via non-oral routes such as through snorting or injecting or to try cheaper illicitly produced opioids like heroin.¹⁰

The impact of opioid use is severe. Along with fatalities, other serious medical consequences of non-medical use of prescription drugs are significant. Non-fatal overdoses can require hospital treatment. Newborns showing signs of withdrawal from drugs taken by their mothers during pregnancy, a condition called neonatal abstinence syndrome (NAS) or neonatal opioid withdrawal syndrome (NOWS), can result in costly hospitalization and child welfare involvement. Substance use disorders can require specialty substance use disorder treatment. People using prescription opioids non-medically and who transition to injection drug use increase their risk of contracting a chronic major blood-borne infectious disease such as human immunodeficiency virus (HIV) or viral hepatitis, from contaminated injection supplies and equipment. A tragic example comes from Indiana, where, as of November 1, 2015, the Indiana State Department of Health documented 181 HIV positive patients related to an outbreak in a rural county.¹¹ Most of these cases were linked to people who injected

drugs and were using the extended-release formulation of the prescription opioid oxycodone, which when taken orally is approximately three times as potent as morphine.^{12 13}

Much work remains to be done on this critical issue. While preventing substance use in the first place is ideal, there are millions of people today who need treatment for a substance use disorder so they can enter recovery and live healthy and productive lives. Specific to opioid use disorders, a person who has become opioid dependent as a result of opioid misuse is unlikely to stop using opioids without medical help. This is because cessation of opioid use produces extremely painful and disruptive acute withdrawal symptoms that are extinguished by taking a dose of opioid. Even after acute withdrawal, opioids can cause longstanding craving and uncomfortable psychological symptoms akin to clinical depression and anxiety. Unfortunately, in 2015, only 11 percent of people who needed treatment for a substance use disorder obtained it.¹⁴ The problem is even worse in rural areas – facilities and providers are few and far between,¹⁵ and people often have to drive hours and wait weeks or months to see a provider.¹⁶

It is clear, then: the opioid epidemic in the United States is serious, growing, and necessitates a response that includes both proven and novel approaches, policies and programs. Since 2010, ONDCP and partners across the Federal government have supported expansion of a number of critical policy interventions. In brief, strategies focus on:

- Preventing access to opioids for populations at risk to initiate non-medical use and improving prescribing of opioids as part of comprehensive pain management,
- Expanding access to tools to help prevent overdose for providers, first responders and family members, and
- Caring for people with a developing or existing opioid use disorder by expanding access to effective forms of treatment, including medication-assisted treatment (MAT) that combines one of three types of FDA-approved medicines with a variety of services including counseling; and preventing medical issues like blood-borne infections that result from injection; and reducing the impact of opioids on children of women with opioid use disorders.

SECTION III: OVERVIEW OF THE PAY FOR SUCCESS MODEL AS A TOOL TO IMPROVE OUTCOMES

As part of its commitment to evidence-based policy and practice, the Obama Administration has embraced the exploration of a relatively new model that is increasingly gaining traction across the country: Pay for Success (PFS) contracts with PFS financing. While this model in its early years has been deployed to date primarily in service of reducing recidivism in the criminal justice system, tackling homelessness, and expanding access to early education, it also has the potential to help address the opioid epidemic.

Overview of PFS

Some interventions are already proven by rigorous evaluation to be effective; others hint at tremendous promise to effect change, but lack the supporting evidence base. Unfortunately, such proven and promising solutions are too often left on the shelf, under-deployed or under-investigated, despite the cost-effective impact they could generate.

PFS can be a solution. It advances proven interventions or tests promising ones, while paying only for successful outcomes for individuals, families, and communities, including natural resources.

Here's how. Through PFS, government and/or other entities enter into a contract to pay for concrete, measurable outcomes after they are achieved for specific people or communities in need. Instead of funding services regardless of the results, payments are made only if interventions actually achieve the outcomes agreed upon in advance. For example, instead of paying for job training simply to be provided, a community might use PFS to pay only when individuals gain stable employment in good jobs. Where government employs PFS strategies, taxpayers no longer bear the risk of paying for services that are ineffective because resources are not expended until the services have produced a specific benefit.

Because PFS projects often last multiple years, a primary challenge is lack of upfront resources to fund the intervention before outcomes are measured and outcomes payments are released if warranted. For this reason, PFS contracts often incorporate PFS financing to cover the costs of service delivery until success is achieved and payments for outcomes are triggered. Investors providing this financing take on the risk of failure. Where PFS financing is used, the government or other entity typically makes outcomes payments covering the cost of services and offers investors a modest return on their investment in the case of successful outcomes. PFS financing is sometimes referred to as a social impact bond.

PFS has enjoyed broad, bipartisan support. PFS projects have taken place in red states and blue states, and at the Federal level, President Obama has included PFS in several Budget Proposals while Speaker Paul Ryan has endorsed PFS publicly.

KEY TERMS

Pay for Success (PFS): Strategy of procuring positive social or environmental outcomes by paying, in part or in whole, for an intervention only once it produces those outcomes.

PFS Contracts: Contracts that provide payment only when an intervention achieves positive outcomes at pre-set target levels.

PFS Financing: Mission-driven capital that covers the upfront costs of service provision and potentially other project costs (e.g., cost of an evaluation).

Partners Involved in PFS Projects with PFS Financing

PFS contracting and financing require partnership among multiple stakeholders. Partners typically include:

- One or more “outcomes payors,” generally local, state, tribal, or Federal government entities or other organizations (such as a health insurance company or a charitable foundation) that contract to pay for outcomes when achieved;
- Service provider(s), which deliver the intervention intended to achieve the outcomes;
- Investor(s), which cover the up-front cost of implementing the intervention and at times other associated costs (e.g., outcomes evaluation) for the PFS project; and
- An independent evaluator, which determines, through a rigorous evaluation, whether the intervention achieved the outcome(s) sought.

Most PFS projects to date have also included a project coordinator or intermediary, an entity that facilitates and manages the contracting process and project.

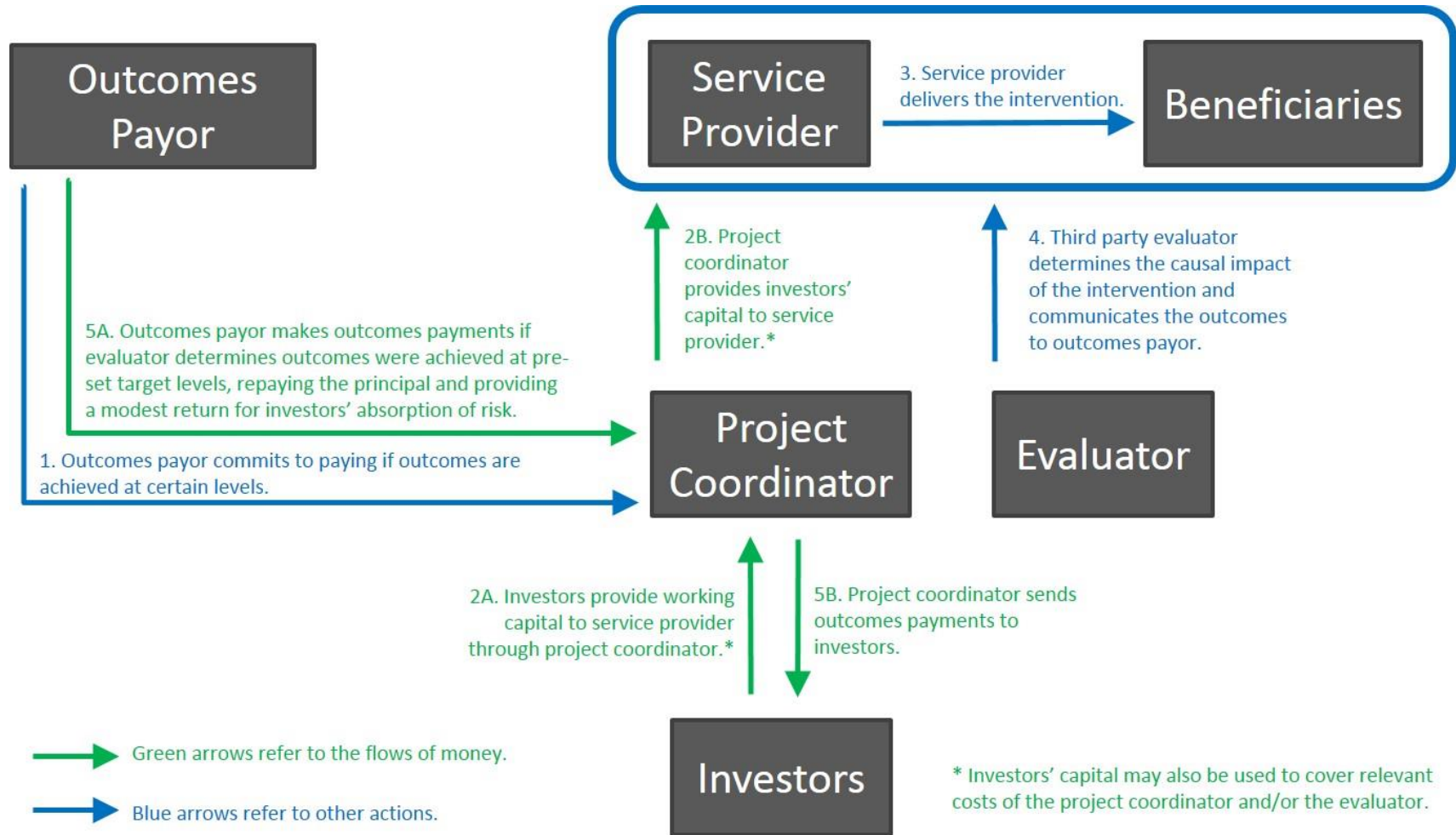
See Figure 1 for an example of how these parties can work together in PFS contract involving PFS financing.

Benefits of PFS Projects with PFS Financing

- Government or other payors can responsibly test the effectiveness of interventions – including long-standing models, promising innovations, or adaptations of existing models. They can also expand or even scale proven interventions whose reach might not otherwise be increased, due to funding restrictions or other limitations. Either goal can be achieved without putting taxpayer (or, for other entities, stakeholder) dollars at risk until the intervention actually achieves results. This benefit is particularly relevant for governments that are facing budget constraints. Government can also benefit by the cross-sector collaboration that PFS facilitates. Finally, through the potential PFS allows to develop strong evidence for certain interventions, government is also able to identify models to directly fund on a long-term basis.
- Service providers can benefit from rigorous research measuring the impact of their interventions while also accessing a steady stream of funding for the life of the PFS project. They also are typically freed from the strings of most grants that prescribe what specific activities they may conduct with grant funding. Instead, service providers are empowered to develop an intervention that stands to advance their mission and achieve specific outcomes.
- Investors can pursue a double bottom line, creating positive social or environmental impact and earning a reasonable return if outcomes are achieved.
- People and communities in need can benefit from additional services and clear results provided through PFS projects, at no risk to taxpayer dollars where government employs PFS. In addition, results of rigorous evaluation of PFS projects will strengthen the field’s knowledge about effective practices in order to drive better outcomes in the future.

Further, at the systems level, PFS can catalyze data sharing across sectors and build durable collective impact strategies backed by contracts, both of which benefits reach multiple stakeholders.

Figure 1: Example of a PFS Contract with PFS Financing



Stages of Development of a PFS Project

A PFS project requires several phases of development that, to date, usually occur sequentially. See Figure 2. (An outcomes payor could, for example, set outcomes targets during the feasibility study instead of transaction structuring, but this is less common.)

Figure 2: Stages of Development



The first stage – Exploration & Education – is dedicated to understanding PFS and the first projects, identifying one or more areas where a government or other entity would like to potentially apply PFS, and digging deeply into the entity’s data to understand what data is available (and ideally what it indicates) about the target population.

The second stage – a Feasibility Study – is dedicated to answering the question, “Is PFS a feasible strategy to help this particular community help address this particular issue at this particular moment?” For a hypothetical PFS project, a target population is identified if not already and refined; possible interventions are identified and analyzed for effectiveness, any savings they could produce, and fit with existing service providers; and more. This second stage concludes with an answer to the driving question of feasibility. If the report concludes PFS is indeed a viable strategy in the context studied, then the report often recommends a path forward (e.g., articulating a specific intervention be deployed through a PFS project, issuing a Request for Proposals (RFP) for service providers to deliver the intervention). If the answer to the question of feasibility is “no,” typically the report will explore other strategies as viable options to improve outcomes.

The third stage – Transaction Structuring – is dedicated to developing a specific PFS project once a community has identified that PFS is viable and some institutions interested in participating, desire moving forward. In this phase, an evaluator, any investors, lawyers, program staff, and others from multiple stakeholders are identified, commit to the project, and negotiate the terms of the PFS contract.

Finally, the fourth stage – Implementation – is dedicated to actually executing the PFS contract. The intervention is delivered to people or communities in need. An independent evaluator measures the

impact of the intervention, and outcomes payments are released if the intervention achieved pre-set outcomes target(s) defining success.

Note that stakeholders in the PFS field debate what lines distinguish Education & Exploration from a Feasibility Study as well as what specific activities fall into the Feasibility Study instead of Transaction Structuring. Generally, though, major tasks of each stage can be conceived as outlined here.

Note too that the length of each stage depends on many factors, including the number of partners, commitment of the outcomes payor, resources available to fund each stage, and the complexity of the potential project. But at this early stage of the PFS field, it is typical for these projects, carefully construed, to develop over the course of one or multiple years. This long timeline may present challenges for communities seeking shorter term options. But for many communities, the benefits of PFS have outweighed any chilling factor that the longer timeline often needed at this stage to construct a project can present.

Multiple Ways PFS Can Take Shape

To date, conversations about PFS sometimes assume the form of the first 10 PFS projects in the United States: a government payor, a (typically) single nonprofit service provider, and investors that cover upfront costs. But this arrangement is only one type of PFS. PFS encompasses a wide range of possibilities, including those listed below.

- Purpose. PFS projects may have a primary goal of responsibly testing a promising intervention that currently lacks a robust evidence base or, alternatively, expanding the reach of an intervention that has a more robust evidence base. Any investors involved may demand a higher rate of return on their investment if the PFS project involves a “riskier” intervention, but PFS is certainly still possible and valuable to help learn more about the effectiveness of less-studied interventions. In particular, foundations may be interested in testing innovative solutions and participate as an investor at low rates of return.
- Financing. PFS projects may involve PFS financing or, alternatively, no PFS financing. If a service provider has sufficient resources to cover the costs of service delivery, PFS financing may be unnecessary.
- Payment on Outcomes. PFS projects may base all payment on achievement of certain pre-set outcome targets or, alternatively, only partial payment on the achievement of certain pre-set outcome targets. The movement toward paying on the basis of positive impact achieved through improved outcomes follows a spectrum. It may be difficult, though is certainly possible, for service providers to be evaluated 100 percent on the basis of outcomes if it has traditionally focused on outputs, for example. (An example of an output is the number of people who enter a treatment program, whereas an outcome is abstinence rates of people who underwent a treatment program.) Transitioning more gradually to a 100 percent focus on outcomes may be more realistic. Given that PFS is the procurement of positive outcomes by paying in part or in whole on those outcomes, PFS projects can involve 60 percent of government funding provided as usual without a tie to achieving certain outcome targets and hold the remaining 40 percent for release only if the intervention achieved certain outcomes, for example. PFS can also involve a bonus payment upon the achievement of outcomes

targets, whereas the core funding would be provided upfront irrespective of outcomes. The mix of traditional and PFS financing would typically be determined by the unique needs of each project.

- Savings. PFS projects may generate cashable savings for the outcomes payor that exceed the cost of the intervention or, alternatively, do not generate such savings (either because no savings accrue or because the savings do not exceed the cost of the intervention). While cashable savings can provide a ready source of funds with which the outcomes payor can pay for the outcomes achieved, outcomes payors may be willing to pay for improvements in their communities, even when not generating savings. Many government expenditures do not deliver corresponding savings but are still valuable for the positive results they produce or functions they serve.
- Type of Payor. PFS projects may include a public or, alternatively, a non-public outcomes payor. Though government has served as a payor in all of the first 10 PFS projects with PFS financing in the United States, foundations, individuals, employers, and others could also enter PFS contracts to pay for outcomes.
- Type of Service Provider. PFS projects may include a public or, alternatively, non-public service provider. Similarly, service providers may be government entities (e.g., the Chicago Public Schools in the Chicago PFS project launched in 2014), or they may be for-profit or non-profit organizations. PFS is primarily concerned with outcomes, not the process (or the type of legal entity involved therein) for achieving them.
- Number of Payors. PFS projects may include one or, alternatively, multiple outcomes payors. Where resources are in high demand, it may be helpful to pool funds from multiple government agencies, or a government entity and a foundation, for example to develop a sufficient pool for outcomes payments for the project. This strategy of engaging multiple outcomes payors may also prove particularly helpful when PFS projects are designed on the basis of savings that an intervention produces and the savings accrue to multiple entities. Imagine an intervention that saved \$0.50 in corrections costs, \$0.35 in unemployment benefits costs, and \$0.20, totaling \$1.05 in public health care costs for every \$1.00 that was spent to deliver the intervention. The government agencies to which those costs and thus savings accrue may not have economic incentive alone on their own to pay for the positive outcomes generated by the intervention. But together, the savings accrued exceed the cost of the intervention (and thus likely the cost of outcomes payments) and thus they would collectively benefit economically on net.
- Number of Service Providers. PFS projects may include one or, alternatively, multiple service providers. Improving outcomes can be difficult given the complexity and number of factors that determine any given outcome. So it may be helpful, although not always necessary, to include multiple services in what constitutes “the intervention” to be held accountable for improving those outcomes. Sometimes a given service provider may be able to offer multiple services itself, but other times engaging several service providers may be more effective and efficient to achieve this goal. In addition, multiple service providers may be necessary in order to have sufficient capacity to serve a certain number of beneficiaries, even if only one type of intervention is chosen for the project.

- Evaluation. PFS projects may ascertain whether the intervention improved outcomes on the basis of different evaluation designs. Randomized controlled trials (RCTs) are the gold standard and should be pursued wherever possible, given their level of rigor and thus level of certainty that the intervention produced the outcomes observed. But for various reasons, RCTs are not always possible. In those cases, quasi-experimental studies may provide sufficient rigor to allow outcomes to be attributed to the intervention and not due to, for example, the motivation of participants who sought out the intervention, or other external factors.
- Course Corrections. Similarly, PFS projects may, or may not, allow for course corrections during service delivery. This may depend on the primary interest of the outcomes payor. If the goal is to learn about the effectiveness of the specific intervention as envisioned before implementation through the project began, then the project might not allow the service provider to adapt the intervention if it sees early indications of lackluster results. However, if the primary interest is to generate the best possible outcomes for the target population, the project might allow course corrections, even though the results will not speak to the original model of the intervention.

Launched PFS Projects to Date

The first project with PFS financing launched only four years ago. Since then, the field has grown tremendously: 14 other PFS projects have launched since the first in 2012, and the Federal government has funded nearly 80 awards for PFS feasibility analysis. The 15 launched projects are summarized here in the order of their launch or announcement dates.

- New York, New York. The first PFS contract closed and project launched in 2012 with \$9.6 million of PFS financing. The Osborne Academy and Friends of Island Academy sought to reduce recidivism among 3,400 young men of color leaving Rikers Island. Although the outcomes were not achieved at pre-set target levels, PFS served its intended purpose because taxpayers did not pay for service delivery. Also, those in the field learned this intervention had not proved effective.¹⁷
- Utah. A project launched in 2013 with \$7.0 million of PFS financing. The Park City School District, Granite School District and private providers offer high-quality pre-Kindergarten to 3,500 children to reduce need for later special education and remedial services.¹⁸ Of 120 children identified in preschool as being at-risk for later special education, only one actually needed it in kindergarten, according to the evaluator.¹⁹
- New York State. A project launched in 2013 with \$13.5 million of PFS financing. The Center for Employment Opportunities (CEO) is working in New York City and Rochester to reduce recidivism and increase employment for 2,000 formerly incarcerated men.²⁰
- Massachusetts. A project launched in 2014 with \$21.7 million of PFS financing. Roca will provide intensive services to about 1,000 young men to reduce recidivism and increase employment. The focus has been on areas surrounding Chelsea, Springfield, and Boston and is ongoing.²¹

- Chicago. A project launched in 2014 with \$16.6 million of PFS financing. The Chicago Public School District will provide high-quality pre-K (half day and full day) for over 2,600 children to increase Kindergarten readiness, reduce the need for special education, and increase third grade literacy.²² Early results indicate the project is already making a difference.²³
- Cuyahoga County, Ohio. A project launched in 2014 with \$4.0 million of PFS financing. Frontline Services is providing services to reduce out-of-home foster care placement and the length of stay in foster care, providing services to 135 families.²⁴
- Massachusetts. A project launched in 2014 with \$3.5 million of PFS financing. Massachusetts Housing and Shelter Alliance is working with providers to secure housing, job training, and medical care for tenants to reduce chronic homelessness by providing 500 units of supportive housing to up to 800 people.²⁵
- Santa Clara County, California. A project launched in 2015 with \$6.9 million of PFS financing. Abode will serve 150-200 chronically homeless individuals who are also frequent users of the County's emergency rooms, acute mental health facilities, and jail to reduce chronic homelessness.²⁶
- South Carolina. A project launched in 2016 with \$17 million of PFS financing (though outcomes payments are capped at \$7.5M) in addition to traditional upfront Medicaid funding. Nurse Family Partnership and its implementing agencies will serve 3,200 low-income mothers and their children with home visiting to help improve their health and developmental outcomes.²⁷
- Denver, Colorado. A project launched in 2016 with \$8.7 million of PFS financing. The Colorado Coalition for the Homeless and Mental Health Center of Denver will serve 250 of the highest utilizers of services in order to help increase housing stability and decrease recidivism.²⁸
- Connecticut. See Section IV.
- Washington, D.C. A project launched in 2016 with \$25 million of PFS financing. DC Water and Sewer Authority will install green infrastructure to reduce storm water runoff that pollutes water quality and can produce harmful health effects.²⁹
- Santa Clara County, California. A project launched in 2016 that includes no PFS financing but links a portion of the \$11.2 million PFS contract to outcomes. Telecare will provide additional services for 250 people experiencing mental health challenges to help them avoid incarceration and reduce reliance on psychiatric emergency and inpatient services.^{30, 31}
- Salt Lake County, Utah. Two projects launched as part of the same PFS transaction in 2016 with \$11.7 million of PFS financing.³² First Step House will provide services to at least 225 male criminal offenders to help reduce recidivism, and The Road Home will provide services and rental assistance to 315 persistently homeless individuals to increase access to housing.³³

To learn more about many of these projects, consider reading “Pay for Success: the First Generation,” a Federally-supported report on the first 10 PFS financing projects launched in the United States by Nonprofit Finance Fund, a Federal grantee. As of December 2016, the report can be found at http://www.payforsuccess.org/sites/default/files/Pay%20for%20Success_The%20First%20Generation_0.pdf.

Major PFS Initiatives among Federal Agencies to Date

As part of the Obama Administration, Federal agencies have supported several of the PFS projects already launched and is increasingly supporting PFS activity. Examples include:

- Since September 2014, the Corporation for National and Community Service's (CNCS) Social Innovation Fund (SIF) has awarded grants to 10 organizations to help communities conduct feasibility studies and transaction structuring. The goal of these activities is to tackle social problems ranging from childhood asthma to chronic homelessness. As of September 2016, the SIF has funded 59 feasibility studies and supported transaction structuring for 13 PFS projects, with more awards to come. Additionally, in Fall 2016, SIF issued seven grant awards to provide support to PFS projects for accessing administrative data, help state and local governments improve their use of administrative data, and provide further resources to PFS projects in development that have received SIF support in the past.
- The Department of Labor awarded in 2013 almost \$24 million in grants to pay for outcomes in PFS projects focused on reducing recidivism and increasing employment in New York State and Massachusetts.
- The Department of Housing and Urban Development, in partnership with the Department of Justice, awarded in 2016 nearly \$9 million to pay for feasibility analysis, transaction structuring, evaluation, and outcomes payments for PFS projects focused on individuals continuously cycling between homelessness and the criminal justice system who have high-cost service needs.
- The Department of Education funded in October 2016 feasibility studies and transaction structuring for career/technical/adult education PFS projects and, in December 2016, announced grant awards for eight feasibility studies for early education PFS projects. The Department also issued a contract for a feasibility study to explore expanding evidence-based early childhood dual language programs through PFS. Additionally, the Department launched in 2016 a PFS capacity building initiative with early childhood Technical Assistance centers to build capacity to improve or expand special education services for children with disabilities using the PFS model.
- The Department of Veterans Affairs, in partnership with CNCS, funded in Fall 2016 a grant of \$3 million to pay for outcomes in a PFS project focused on improving employment for Veterans with a service-connected disability of Post-Traumatic Stress Disorder.

SECTION IV: CASE STUDIES: TAPPING THE PAY FOR SUCCESS MODEL FOR SUBSTANCE USE DISORDERS IN CONNECTICUT AND LOUISVILLE, KENTUCKY

Connecticut

Substance use disorders are not just crippling individual lives; they are also exacting high tolls on children and families. According to the Connecticut Department of Children and Families (DCF), about half of all cases it investigated in 2013 involved an indication of parental substance use,³⁴ and those cases contribute to costs for the state and others. DCF reports spending more than \$600 million each year to address child abuse and neglect, and the lifetime cost of just one case of child maltreatment have been estimated to exceed \$210,000 in health, child welfare, criminal justice, and special education costs and losses in productivity.³⁵

In response, Connecticut has taken decisive action to help protect its children from the effects of substance use disorders. On February 16, 2016, the Director of National Drug Control Policy, Michael Botticelli and Director of the White House Office of Social Innovation David Wilkinson, joined Governor Dannel Malloy, DCF Commissioner Joette Katz, and other officials to announce a new PFS project promoting family stability in homes where a parent is experiencing a substance use issue and one or more children is at risk for removal from the home.

Here's how it is working. The Family-Based Recovery (FBR) program developed by the Yale Child Study Center, is providing intensive in-home services for four years to approximately 500 families in need who have children who have not yet reached their sixth birthday. Private investors recruited by Social Finance, a nonprofit that specializes in coordinating PFS projects, are providing \$11.2 million to cover the costs of delivering and evaluating these services. The University of Connecticut's Health Center and School of Social Work are serving as the evaluator, assessing the causal impact of the program through a randomized controlled trial. If child welfare outcomes and substance use outcomes improve as a result of the services, then the state will pay the investors, with maximum payments totaling \$14.8 million, providing a return on their investment in recognition of the risk that investors are bearing for taxpayers. If the results sought are not achieved, the State of Connecticut will not pay.^{36,37}

FBR is a home-visiting intervention: FBR Clinicians visit families three times per week, 1) delivering a parenting curriculum (modeled on the Coordinated Intervention for Women and Infants intervention), 2) providing a substance use treatment (leveraging Reinforcement-Based Treatment and Motivational Interviewing techniques), and 3) administering toxicology screens (i.e., urinalysis and, in some cases, also breathalyzer tests) during each home visit. FBR teams provide case management connecting families to additional supports. These teams are managed by the Yale Child Study Center and three community-based health providers – Community Health Resources, United Community and Family Services, and Community Mental Health Affiliates.³⁸

A family participates in the intervention for an average of six months and no more than 12 months.³⁹ Each family's outcomes will be observed for 18 months.⁴⁰

A quasi-experimental study conducted by the University of Connecticut Health Center in 2011 provides evidence FBR is effective in improving child welfare outcomes. The study found that families participating in FBR, compared to families instead referred to intensive outpatient community-based treatment, experienced removal of a child from the home 37.6 percent less often within 12 months of concluding FBR. The FBR participating families also experienced a 52.4 percent reduction in referrals to DCF for possible child neglect or abuse. Both outcomes were statistically significant.⁴¹

The outcomes that will trigger state repayment include these two outcomes (reduction in removals from the home and re-referrals to the state) as well as indication of abstinence from substance use. Specifically, the state will pay investors for:

1. Increased negative toxicology screens, measured by the aggregate number of negative screens of the last 12, administered by a FBR Caregiver during the intervention.
2. Reduced removal of children from the home during the 18 month observation period
3. Reduced re-referrals to DCF during the 18 month observation period. These re-referrals could take the form of a call to the DCF Careline, a 24/7 hotline for reporting suspected child abuse or neglect, or a reopening of a case by a DCF case worker.⁴²

The state will also pay investors on the basis of FBR enrollment as an immediate indication of behavior change, defined as the aggregate number of clients that participate in at least one FBR home visit after the intake meeting.⁴³

Services through this PFS project began on September 28, 2016 – a milestone announced that day by both community leaders – including Governor Malloy, Commissioner Katz, and CEO of Social Finance, Tracy Palandjian – and a member of the Obama Administration, Commissioner Rafael López of the Administration of Children and Families at the U.S. Department of Health and Human Services, who all celebrated Connecticut's leadership and action to help promote the well-being of children and their caregivers. This project stands to not only improve outcomes in the near term for these 500 families – but also to build the evidence base to inform future policy and programming.

The Office of National Drug Control Policy lifts up Connecticut for its leadership under Governor Malloy as the state trail-blazed a state's use of PFS financing to help address substance use disorders.

FAST FACTS ON CONNECTICUT PROJECT

Outcomes Payor:
Connecticut Department
of Children and Families

Maximum Outcomes
Payments: \$14.8 million

Size of Investment: \$11.2
million

Intervention: Family Based
Recovery Program

Service Provider: FBR
Teams managed by Yale
Child Study Center,
Community Health
Resources, United
Community and Family
Services, and Community
Mental Health Affiliates

Families Served:
Approximately 500

Louisville, Kentucky⁴⁴

Substance use disorders also intersect with the criminal justice system.

The Department of Corrections of the Louisville/Jefferson County Metro Government (“Metro Corrections”) in Kentucky is developing a PFS project to help individuals in its jails get the treatment they need to overcome substance use disorders, including opioid use disorder.

Currently, individuals who enter local jails with a substance use disorder are able to enter a detoxification program in the jail. Metro Corrections dubs itself the “largest detox facility in the region” given that up to 100 inmates on any given day are detoxing in its jails. However, some inmates are released before they finish detoxing from drugs (3,658 in 2015, for example), and even those that complete detox before reentering the community often still need long term treatment to sustain their recovery. (Metro Corrections provides inmates with the opportunity to enroll in Medicaid if eligible, but sometimes the inmate’s sentence is sufficiently short or the “Medicaid Connector’s” caseload is sufficiently large that the inmate is released without fully applying for Medicaid. The individual may then face a dangerous gap in treatment.)

Recovery is a particularly important long-term goal for Metro Corrections, given data that a person is more likely to return to jail if currently experiencing a substance use disorder. Recidivism costs taxpayer dollars, as well as continued harm to the individual due to substance use.

Leaders in Louisville believe that PFS can allow the Metro Government to provide treatment services to the reentry population with substance use disorders, while expending taxpayer funds only if that treatment is successful. Specifically, the project – the “Innovative Metro Project in Addiction Care and Treatment” (IMPACT) – will provide upfront dollars from investors to service providers that would provide treatment to individuals recently released from Metro jails. If an independent evaluator determines that those services lowered recidivism, the Metro Government would pay back those investors, along with a modest return.

The project has its origins in a Request for Information issued by Metro Government in October 2015 to gauge interest and capacity among service providers in the community to explore a PFS approach. It then issued a Request for Proposals in March 2016 for a project coordinator/manager, selecting the following month CFO Resource Group to serve in that role. As of August 2016, CFO Resource Group is selecting service providers for the project.

Modest resources are enabling this effort, suggesting that communities do not need many millions of dollars to utilize a PFS approach. The local government has set aside \$1 million in outcomes payments, and the Harvard Kennedy School Government Performance Lab is providing technical assistance (valued at less than \$250,000) in the development of this project with funds from the Federal Social Innovation Fund. J-PAL North America also provided the project with a \$50,000 award to help design the plan for rigorously evaluating whether the treatment provided through the PFS project reduces recidivism.

The Office of National Drug Control Policy lifts up Louisville for its leadership under Mayor Greg Fischer as Metro Government stands to pioneer the first local use of PFS financing to help address substance use disorders.

SECTION V: CONCLUSION AND PROPOSED NEXT STEPS

The current use and misuse of opioids in our country is a public health threat, leaving no region of the United States free from devastating impacts on individual lives, families, and communities. Each year, the epidemic worsens, resulting in increased yet preventable morbidity and mortality and resultant health, social, and economic costs. The effects ripple out to children, communities, and the criminal justice system, among others.

The Obama Administration, in a concerted effort with a variety of stakeholders and partners including Federal agencies, private sector, non-governmental organizations and educational institutional partners, has made great strides to address this crisis. Yet, given the depth of need, further efforts must be expended to address and mitigate this public health challenge to prevent further, devastating loss of life and impact on families and communities.

As the state of Connecticut has shown and Louisville, Kentucky, may soon echo, PFS is an additional tool available in the toolbox to help address this crisis. It can bring together philanthropies, other investors, program evaluators, service providers, and policymakers to glean the skills and expertise of each and support and evaluate the efficiency and effectiveness of interventions to address the opioid crisis and its related harms.

The following are suggested “next steps” to pursue when exploring PFS:

- Share this resource guide via social media to spur local interest in the topic.
- Learn more about PFS at www.payforsuccess.org (a website of Nonprofit Finance Fund, a Federal grantee), www.pfs.urban.org (a website of the Urban Institute, also a Federal grantee), and elsewhere.
- Learn more about the opioid crisis by exploring the Department of Health and Human Services’ website at www.hhs.gov/opioids/.
- Explore the evidence for interventions to improve opioid outcomes and outcomes that can be affected by opioid use (e.g., rate of HIV transmission). Appendix I includes a list of studies and reviews that examine the effectiveness of select interventions.
- Exchange ideas with the community of practice created by the Pay for Success Initiative at the Urban Institute. This community is a collection of stakeholders examining the opioid crisis through the lens of the PFS model. It will develop practitioner-informed recommendations on how PFS might align with efforts to address the crisis, consider how best to define and measure success in potential projects, and identify barriers to implementation. To learn more, contact the Pay for Success Initiative at pfssupport@urban.org.
- For State and Local Government:
 - Convene a meeting of department or agency heads to share this resource guide, and help educate your colleagues about the potential of PFS.
 - Determine policy gaps (gaps resulting due to insufficient policy attention), whereby additional cost-effective, evidence-based strategies could effectively target gaps.

- Identify which agencies and levels of government would benefit from a reduction in opioid misuse and form a workgroup to identify relevant data sources (and gaps) and potential sources of economic benefit.
 - Reach out to PFS experts for guidance on how to develop the project, supporting the selected intervention.
 - Issue a Request for Information to gather more information about how PFS could work in a particular geography or a Request for Proposals (RFP) for a PFS project coordinator / intermediary to conduct a feasibility study in partnership with your jurisdiction.
 - Apply for a Federal Social Innovation Fund (SIF) award for PFS “data readiness,” which the SIF defines as “the stage when an entity has access to any necessary data, evaluation tools, and/or personnel to conduct a PFS project.”⁴⁵ These awards will be issued by SIF PFS grantees, who hold open competitions to select winners. See www.nationalservice.gov/sif for more information. Competitions are expected to open in 2017.
- For Service Providers:
 - Add a presentation about PFS to the next meeting of your Board, stakeholders, or partner organizations.
 - Reach out to state and local government officials to share your interest and willingness to explore a PFS project.
 - Prepare a fact sheet demonstrating the evidence of effectiveness or promise of your intervention.
 - Issue an RFP for a PFS project coordinator / intermediary to conduct a feasibility study in partnership with your organization to analyze the evidence base of your intervention(s), among other opportunities.

In sum, PFS has great potential to fill gaps in addressing the opioid epidemic, and other health and social issues, providing evidence-based interventions or testing more innovative ones without risk of taxpayer or other stakeholder dollars unless people’s lives are measurably improved. Further exploration of PFS, with contributing roles available to a variety of stakeholders, is a worthy endeavor as a tool to address, mitigate and eventually overcome, the opioid epidemic in the United States.

APPENDIX I: BIBLIOGRAPHY OF REVIEWS AND STUDIES ON THE EFFECTIVENESS OF SELECT INTERVENTIONS TO ADDRESS OPIOID OUTCOMES AND OPIOID-RELATED OUTCOMES

ONDCP identified several interventions or models that show promise or evidence of effectiveness in addressing the opioid epidemic. Below those interventions or models are listed along with reviews and studies, identified by J-PAL North America, that speak to the evidence of effectiveness for them or similar interventions or models.

Note that ONDCP is not suggesting that these interventions are necessarily strong fits for PFS nor that there are no other interventions worth considering for deployment through PFS to help tackle the crisis. Rather, these interventions are listed here to introduce possible candidates for PFS and to identify where interested parties could look to understand the evidence base of the interventions for vulnerable populations.

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EXTENDED-RELEASE NALTREXONE FOR CRIMINAL JUSTICE POPULATIONS

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