



# West Virginia Pay for Success

Recommendations from the  
Pay for Success Working Group  
to the West Virginia Early  
Childhood Planning Task Force



WEST VIRGINIA  
Early Childhood  
Planning TASK FORCE

# Pay for Success Financing and Early Intervention Programs: Recommendations from the Pay for Success Working Group to the West Virginia Early Childhood Planning Task Force

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## Overview

The West Virginia Early Childhood Planning Task Force (the “Task Force”) released its findings and recommendations in January of 2014 for developing a final plan for Early Childhood in West Virginia at the end of September. The Task Force recommended that the State “[consider] and pursue the most promising financing options based on national and West Virginia research”, including Pay for Success (PfS) financing.<sup>1</sup> Specifically, the Task Force recommended, “analyzing several easily identifiable and quantifiable savings attainable from increasing funding for identified programs, e.g. prenatal services to reduce low birth weight.” In response to this recommendation, a small working group formed to explore the feasibility of PfS financing by exploring how the approach could be used to scale two promising early intervention programs – the Drug Free Moms and Babies Program (DFMB) and Lily’s Place. Both programs are designed to reduce near term medical costs and increase the long-term health and welfare of infants affected by maternal substance abuse, namely Neonatal Abstinence Syndrome (NAS). NAS is a diagnosis used for infants that are born having been exposed in utero to narcotics (prescribed or illicit), though it is often used to describe exposure to a broad range of substances that can result in infant dependency and withdrawal symptoms.<sup>2</sup>

This brief outlines the findings of the working group and offers related recommendations. Section One provides a broad overview of innovative social financing, focusing on the potential benefits of Pay for Success financing. Section Two investigates the application of the Pay for Success financing to

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<sup>1</sup> “A Development Plan for Early Childhood in West Virginia: Phase I: Findings and Recommendations,” West Virginia Early Childhood Planning Task Force, January 2014, pp-26-27. Accessed June 25, 2014. <http://www.wvecptf.org/docs/WVECPTF-Phase1-Report.pdf>

<sup>2</sup> Hospitals in WV do not yet have a harmonized methodology for diagnosing NAS-affected infants and associated costs. Some may diagnose only opiate-related cases, others may include infants with exposure to other prescription drugs, marijuana, nicotine, and other harmful substances.

NAS-related screening and intervention programs are likely to address multiple categories of substance use but treatment may focus on narcotic use. Estimated state savings will vary based on how an intervention program is designed, including the breadth and duration of treatment services offered.

address the growing problem of NAS in WV. The last section concludes with specific recommendations to the Task Force on how the state can pursue PfS financing for early childhood programs.

Below are key recommendations from the working group discussed in this brief:

- **Pay for Success financing could be a good fit** for funding early childhood programs that demonstrate a significant “bang for the buck”—near term state financial savings that significantly exceed program costs – when state budgets are constrained.
- **Pay for Success financing could help scale pilot NAS interventions to achieve state-wide coverage**, but additional data and state-driven analysis are needed to improve PfS “readiness” and increase investors’ confidence in existing intervention programs.
- **Improve public access to baseline data** to understand actual NAS trends, costs, and potential for costs avoided.
- **Conduct a government-led policy and legal review** of how specific PfS structures or models could work in the West Virginia legal context.
- **Engage stakeholders to develop and test the tool** for at least one program and learn how it can be applied to other social programs.
- **Collect and evaluate performance data to strengthen leading interventions and implementers’** ability to scale programs statewide.
- **Consider starting with performance contracting** in the absence of external private financing tools or evidence.
- **Strengthen the enabling environment** for NAS-related intervention programs by continuing to implement extensively researched policy recommendations of the Perinatal Partnership’s Committee on Drug Use During Pregnancy,<sup>3</sup> many of which are cost neutral or cost negligible.

## SECTION 1:

### Social Innovative Financing: Pay for Success & Other Models

**A**s state budgets have tightened and governments have been forced to “do more with less,” policymakers have begun exploring and implementing new ways to finance preventive social services that yield large savings to government budgets but require significant up-front planning and investment.

Stretching limited budgets in the context of growing social need can be accomplished in three ways: 1) improving the effectiveness of existing programs, 2) investing in cost-saving preventative measures, and 3) attracting new funding streams.

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<sup>3</sup> Blueprint to Improve West Virginia Perinatal Health Final Report. West Virginia Perinatal Wellness Study. December 2007. 91-95. [http://www.wvperinatal.org/downloads/committee\\_reports\\_07/Reports\\_on-Blueprint\\_for-Perinatal-Health01\\_2008.pdf](http://www.wvperinatal.org/downloads/committee_reports_07/Reports_on-Blueprint_for-Perinatal-Health01_2008.pdf)

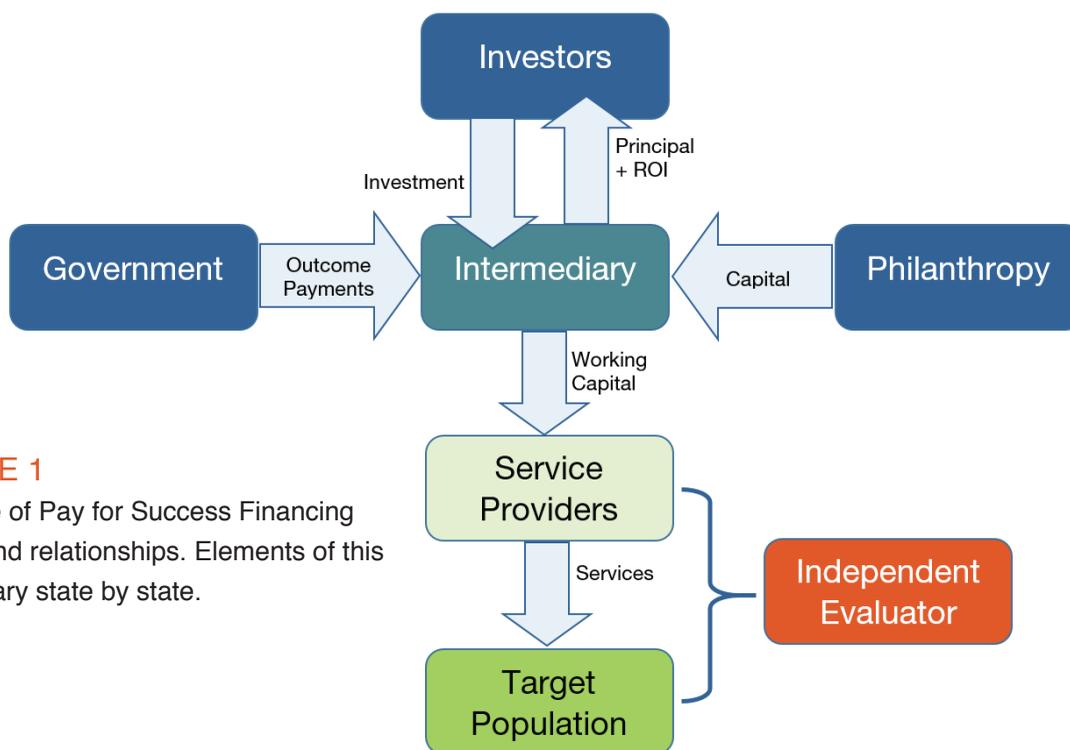
#### Types of Programs Appropriate for PFS Financing

- **preventive** and evidence-based intervention
- filling a **defined, unmet need** for a high-risk population
- **at scale**, can reduce government costs over the short-term by amounts significantly exceeding the cost of providing the program
- **buy-in** from relevant government agencies, policy makers, and related service providers and their representing organizations

This working group focused on a new approach to accomplish all three of these goals, which is increasingly known as “Pay for Success (PfS) Financing”.

Under a PfS model, an investor finances the implementation of a “proven” or evidence-based social intervention program that is expected to improve social welfare and save government money in excess of the program implementation costs. Government repays the investment only after the program can measurably reduce state expenditures as a result of its successful implementation.<sup>4</sup> So far, the model has been used to fund “interventions” or preventative programs at the state and local level to reduce costs associated with adult and juvenile recidivism, homelessness, children’s health, and early childhood education.

**Pay for Success** financing is similar to **performance-based contracting** where an entity is contracted to deliver a good or service. Payments are a function of a provider achieving actual outcomes rather than the cost of inputs. For example, a government agency may pay an employment services contractor based on the number of unemployed workers placed in jobs (outcomes) rather than paying for the (input) costs of providing job training or placement services that theoretically improve employment levels. PfS financing differs from performance contracting in that it offers independent



**FIGURE 1**  
 Example of Pay for Success Financing actors and relationships. Elements of this model vary state by state.

<sup>4</sup> States have implemented variations on this model. Different financing structures manage and allocate risk differently across stakeholders. For example, Minnesota uses a “bond” to make low-interest loans to service providers who take on performance risk, but benefit directly from performance incentives. In the UK, private investors take on all risk and benefit from the performance incentives. In NY, the private investors benefit from performance incentives, but they share risk with a philanthropic organization that has guaranteed a large portion of the investment. New structures continue to emerge to suit stakeholders, policy environments and the programs being funded. Risk Trade-off Continuum for Different Structural Approaches to Pay-for-Success Financing. Nonprofit Finance Fund. April 2014. Accessed July 1, 2014. <http://payforsuccess.org/resources/risk-trade-continuum-different-structural-approaches-pay-success-financing>

private finance for the up-front costs of the intervention. “Performance payments” to the investor are contingent upon the program achieving contracted outcomes and related savings. As such the financial risk rests with the investors and not the taxpayers.<sup>5</sup>

In general, a PfS contract engages government, an intermediary, investors, service providers, and an independent evaluator (See Figure 1). All of these entities contractually agree to a set of targeted outcomes. Government makes “success payments” as performance targets are met and cost savings are realized usually over a short period of time (incrementally over four to eight years). An intermediary structures financial agreements, raises capital from investors, oversees program implementation, hires an independent program evaluator, contracts with the non-profit service providers, and disburses payments to investors. The investors (foundations, banks, hedge funds, or bond funds) provide the working capital and generally assume outcome risk. In some PfS structures, the service providers or philanthropic partners carry or share the risk with investors.

There are distinct advantages of PFS contracting as opposed to traditional government financing of social programs, but some clear disadvantages as well. Figure 2 below summarizes these.

**FIGURE 2** Key Advantages and Disadvantages to Using Pay for Success Financing for Social Programs:

**ADVANTAGES**

- Financing innovative prevention programs that provide critical savings to government and benefits to society even (especially) when state budgets are otherwise tight.
- Alternative to doing nothing in times of fiscal austerity, even if there are added costs relative to direct government financing.
- Government shifts “outcome risk” (that is, the cost of paying for ineffective programs) to investors. Government pays only for outcomes achieved.
- Required baseline data and evaluations generate valuable knowledge about the social challenge and existing programs’ performance, even before signing a PfS contract.
- Performance incentives and evaluation data help providers invest in and inform innovation to improve program effectiveness in addition to improving financial savings.
- Allows implementers to allocate resources flexibly to achieve set outcomes rather than on a strict formulaic input “recipe.”

**DISADVANTAGES**

- Few projects generate enough direct, near term cost savings to repay investors with a return and cover associated set up and on-going evaluation costs.
- For-profit investors are wary of principal risk so deals may require investment guarantee by the philanthropy sector, which may divert charitable funds away from other social needs.
- Requires a fixed multi-year budget commitment, regardless of future economic conditions.
- Payments tied to evaluation data may lead to a prioritization of programs or activities that generate short-term savings over those that generate longer term sustained outcomes.
- Complicated, sometimes political, nature of PfS contracts makes it hard to truly shift risk to investors and distracts government time and resources from other tasks.

*Source: Adapted from Center on Budget and Policy Priorities Primer*

<sup>5</sup>Third Sector Capital Partners, Frequently Asked Questions, Accessed July 25, 2014. <http://www.thirdsectorcap.org/pay-for-success/faq/>

Government commitment to using evidence and evaluation data to determine the value of preventative interventions and programs is a prerequisite for performance contracts or PfS financing. Without quality performance data, states cannot provide investors with an informed valuation of an intervention or negotiate appropriate performance payments. Underinvesting in data management and analysis comes at a tremendous cost to the state in terms of expenditure efficiency. Equally valuable, performance data equips service providers to learn and adjust in order to improve the quality and effectiveness of the services they offer.

## SECTION 2:

### Applying Pay for Success Finance to Early Childhood Intervention Programs that Address Neonatal Abstinence Syndrome

Given its short timetable, the working group chose to focus NAS, a costly and growing challenge in West Virginia. The working group recommended a review of the Drug Free Moms and Babies Program as a case study for understanding how PfS financing could be applied to scaling a promising evidence-based prevention program. To a lesser extent the group was also able to review the Huntington-based Lily's Place as a second case study given that it is not yet in operation. This section summarizes the NAS challenge in West Virginia and how PfS financing could be used to scale two promising perinatal interventions to reduce NAS incidence rates and medical costs. We then assess the appropriateness of the DFMB Program and Lily's Place for PfS financing and suggest actions to make these programs more attractive to potential social impact investors.

These two programs were selected based on their potential to generate near-term cost savings, their focus on an unmet and growing need of a high risk population, and their potential to be replicated across the state. Both programs were modelled on evidence-based programs elsewhere and have nascent but funded evaluation programs. Given these factors, they provided useful case studies for helping the working group to understand how PfS financing could be used to address the NAS challenge.

#### The Challenge

The state's substance abuse epidemic has not spared expecting mothers and newly born infants. Estimates indicate that exposure to harmful drugs in utero is 20 percent or higher in West Virginia, and growing—opiate and pain medication exposure appears to be growing at disproportionate rates.<sup>6</sup> The state faces high and growing medical and societal costs accordingly.

Estimates based on research incorporating umbilical cord testing in West Virginia in 2009 indicated that at least 800 infants per year are born with a dependence that required an extended stay in the hospital for

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<sup>6</sup> Stitely, et al. Prevalence of Drug Use in Pregnant West Virginia Patients. West Virginia Medical Journal 2010; 106, 48-52.

Baxter, FR, Nerhood R, Chaffin DG. Characterization of babies discharged from Cabell Huntington Hospital during the calendar year 2005 with the diagnosis of neonatal abstinence syndrome. West Virginia Medical Journal 2009;105:16-21.

observation and/or treatment for withdrawal and related complications.<sup>7</sup> On average, neonatal intensive care unit (NICU) treatment costs for babies born with NAS are estimated to be between \$50,000 and \$60,000 per affected child.<sup>8</sup> This brings the estimated annual costs of just NAS-related hospitalizations at birth to an estimated \$44 million/year. An estimated 70-80 percent of the infants affected are Medicaid patients, indicating a bill to the state of \$33M per year.<sup>9 10</sup> At the time of this report, we have requested but not yet received actual costs billed and paid by Medicaid.

The following table illustrates the scale of medical costs and potential savings that could be realized by interventions during pregnancy that reduce medical costs associated with NAS births.

**TABLE 1** Immediate Medical Costs of NAS Birth and Tiers of Savings Potential

	<b>NAS deliveries needing in-patient hospitalization</b>	<b>Estimated Total Costs Annually \$55,000 average/per child</b>	<b>Estimated Costs Billed to Medicaid assuming 75% eligibility</b>	<b>Gross Savings Potential / year Medicaid and other payers</b>
<b>WV Estimate 2009</b>	800	\$44,000,000	\$33,000,000	---
<b>10% Reduction<sup>1</sup></b>	720	\$39,600,000	\$29,700,000	\$4,400,000
<b>30% Reduction</b>	560	\$30,800,000	\$23,100,000	\$13,200,000
<b>50% Reduction</b>	400	\$22,000,000	\$16,500,000	\$22,000,000

Other unhealthy trends in West Virginia exacerbate the costs of NAS. West Virginia is ranked 45th in teen pregnancy birth rates, a problem that continues to grow.<sup>12</sup> Teen mothers—already prone to birth complications—are more than twice as likely to be using illicit drugs.<sup>13</sup> These girls are also likely to have additional children early in their lives. Likewise, maternal smoking and alcohol abuse adds to the severity of NAS symptoms and cost of treatment. Over 30 percent of expecting mothers in West Virginia smoke during pregnancy, resulting in low birth weight, premature delivery, and a host of other short and long term health and developmental problems.

<sup>7</sup> Dr. Stefan Maxwell. Presentation to Public Hearing on Governor’s Bill on Addiction on February 16, 2012.

Note: These figures do not include tobacco exposure which is associated with both short and long term health and development problems; just over 30% WV newborns are exposed to nicotine during pregnancy relative to the national average of just over 1 in 10.

Tong VT, Jones JR, Dietz PM, et al. Trends in smoking before, during and after pregnancy – Pregnancy Risk Assessment Monitoring System (PRAMS), United States, 2000-2005. MMWR. 2009; 58(SS-4): 1-30.

<sup>8</sup> Massatti, R., Falb, M., Yors, A., Potts, L., Beeghly, C. & Starr, S. (2013, November). Neonatal abstinence syndrome and drug use among pregnant women in Ohio, 2004-2011. Columbus, OH: Ohio Department of Mental Health and Addiction Services.

<sup>9</sup> Ibid.

Dr. Stefan Maxwell. Addressing Substance Abuse in Pregnancy. Presentation to the WV Early Childhood Planning Task Force. July 31, 2013

<sup>10</sup> Authors are working to confirm this estimate with the state Medicaid program. Ideally the agency can provide trend data on total NAS costs over the past 5-10 years, as well as trend data for how total NAS costs billed to Medicaid compare to total costs paid by the agency.

<sup>11</sup> Reductions are not likely to be linear given that medical costs are a function of incidence rates and severity of condition. Likewise, fixed costs are associated with each at-risk birth regardless of whether the mother is in treatment, has ultimately quit using during the course of the pregnancy, or duration of stay is reduced.

Haelle, Tara. Neonatal abstinence syndrome weaning worked faster following a protocol. July 27, 2014. Accessed July 28, 2014.

<http://www.dailyrx.com/neonatal-abstinence-syndrome-weaning-worked-faster-following-protocol>

<sup>12</sup> National Campaign to Prevent Teen and Unplanned Pregnancy, West Virginia ranked 45th in teen birth rate in 2012. See for example: <http://thenationalcampaign.org/data/state/west-virginia>

<sup>13</sup> Patrick, Stephen W. et al. Neonatal Abstinence Syndrome and Associated Health Care Expenditures United States, 2000-2009. JAMA. 2012;307 (18):1934-1940.

Related research on societal causes and costs of parental substance abuse underscores the need to incorporate sustained cessation and integrated follow up programming in order to achieve the greatest public benefit and savings.<sup>14</sup> An estimated 50-90 percent of women in treatment for substance abuse report having been current or past victims of physical, sexual or emotional abuse, complicating addiction treatment and recovery strategies.<sup>15</sup> Infants born with NAS or prenatal substance exposure are directly or indirectly more likely to face the following challenges—and associated costs—through life:

- 1) health, psychological, and behavioral treatment (ranging from possible neonatal intensive care to other care throughout a newborn’s lifetime);
- 2) developmental supports such as early intervention and special education;
- 3) residential and/or other institutional care throughout the lifetime;
- 4) productivity losses, including lost earnings for caregivers;
- 5) juvenile and criminal justice involvement;
- 6) child welfare system involvement such as foster care;
- 7) entitlements such as Supplemental Security Income; and
- 8) substance abuse treatment if the child goes on to misuse substances.<sup>16</sup>

Children exposed to parental substance abuse are also 81 percent more likely to experience one additional adverse childhood event (parental separation, domestic violence, child abuse or neglect and household criminal activity), and 29 percent more likely to experience three or more adverse childhood events. Such adverse events, particularly in multiples, are, in turn, correlated with increased incidence rates and severity of many of the challenges listed above. The long-term costs of these compounding problems has, to our knowledge, not yet been estimated.<sup>17</sup>

### **Promising interventions**

Outlined on the following page is a “PfS Readiness” assessment of the Drug Free Moms and Babies Program and Lily’s Place that describes their program goals, activities, and coverage in West Virginia, and the steps suggested to make each program more attractive to potential social impact investors.

***Drug Free Moms and Babies:*** The West Virginia Perinatal Partnership’s Drug Free Moms and Babies Program (DFMB) seeks to help substance-abusing expectant mothers to deliver drug free babies and/or lessen the effects of maternal exposure. The program has three active pilot sites, the longest having

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<sup>14</sup> Cessation programs should be designed to address the likelihood that women who successfully abstain from abusing substances during pregnancy are likely to relapse postpartum due to the number of “triggers” they face during this period.

United States Department of Health and Human Services (DHHS). Substance Abuse and Mental Health Services Administration (SAMHSA). Center for Substance Abuse Treatment (CSAT), Substance Abuse Treatment: Addressing the Specific Needs of Women. Treatment Improvement Protocol (TIP) Series 51. 2009, Substance Abuse and Mental Health Services Administration: Rockville, MD.

<sup>15</sup> Finkelstein, Norma (1993). Using the Relational Model as a Context for Treating Pregnant and Parenting Chemically Dependent Women. In *Chemical Dependency: Women at Risk*. Brenda Underhill & Dada Finnegan, eds. Binghamton, N.Y., Haworth Press, 1996.

<sup>16</sup> O’Brien ML, Phillips SM. Substance exposed newborns: addressing social costs across the lifespan. Issue Brief Mass Health Policy Forum. 2011 Sep 27;(40):1-49. Accessed June 26, 2014. [http://masshealthpolicyforum.brandeis.edu/forums/Documents/FINAL-SEN-IssueBrief\\_For-Print.pdf](http://masshealthpolicyforum.brandeis.edu/forums/Documents/FINAL-SEN-IssueBrief_For-Print.pdf)

<sup>17</sup> Managed Care Organizations follow Medicaid clients over time and may be in the best position to help compare care costs in the first two years of life between NAS and non-NAS clients. Coventry/Aenta indicated that the company expects invest in a placing a nurse in Huntington-Cabell Hospital’s Obstetrics Department to coordinate interdepartmental medical care and drug treatment for at risk mothers (authors’ phone interview with Coventry representative Kemi King, July 15,2014)

been in place for just under two years, and is funded by the West Virginia Department of Health and Human Services Office of Behavioral Health, Office of Maternal and Child Health, and the Benedum Foundation.<sup>18</sup>

DFMB is implemented differently at each site, but generally funds are used to improve the delivery and coordination of existing comprehensive medical, social, and behavioral health services to pregnant and post-partum women from first visit through the child’s first two years. The program leverages existing but often underutilized medical and social services available to women struggling with addictions. Program funds—\$90,000/year, per site—are used to strengthen implementation of universal screening protocols, referrals for treatment, counseling, recovery coaching, and engagement in post-delivery home visitation programs.

PfS financing could scale DFMB to statewide levels, taking three sites to 30 sites. Evidence on success rates for reducing the incidence and/or severity of NAS through interventions similar to DFMB is mixed.<sup>19</sup> More research and analysis are needed to set reasonable expectations for how DFMB could reduce short and long term state costs. DFMB PfS financing performance payments could be a function of targets such as: proportion of positive moms at screening transitioned to being drug free at birth; increased rate of enrollment in home visitation programs; or reduction of NAS birth costs.

Scaling a program from three to 30 sites would involve some start-up, training, and coordination costs in addition to the program costs per site. PfS financing would also involve interest payments, and a program intermediary, and evaluator. In total, this could be close to \$4.5 million per year. Table 2 below indicates the scale of the potential net savings generated per year. It is reasonable to assume that programs would start with limited success in early years and over time achieve increasingly higher rates of success—and annual returns on investment—up to a point.

**TABLE 2**  
Rough estimate of net birth related savings possible from DFMB programming per year

	<b>NAS deliveries needing in-patient hospitalization</b>	<b>Estimated Total Costs Annually</b> \$55,000 average/per child	<b>Estimated Costs Billed to Medicaid</b> assuming 75% eligibility	<b>Gross Annual Savings Potential</b> All payers	<b>Net Annual Savings</b> All payers, after DFMB costs
<b>WV Estimate 2009</b>	800	\$44,000,000	\$33,000,000	---	--
<b>10% Reduction<sup>2</sup></b>	720	\$39,600,000	\$29,700,000	\$4,400,000	(\$100,000)
<b>30% Reduction</b>	560	\$30,800,000	\$23,100,000	\$13,200,000	\$8,700,000
<b>50% Reduction</b>	400	\$22,000,000	\$16,500,000	\$22,000,000	\$17,500,000

<sup>18</sup> Sites include: Shenandoah Valley Medical Systems, Thomas Memorial Hospital, Greenbrier Valley Medical Center, and an anticipated fourth site at WVU’s Ruby Memorial Ob-Gyn Department.

<sup>19</sup> Center for Substance Abuse Treatment. Substance Abuse Treatment: Addressing the Specific Needs of Women. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2009. (Treatment Improvement Protocol (TIP) Series, No. 51.) Chapter 7: Substance Abuse Treatment for Women. Accessed July 2, 2014. <http://www.ncbi.nlm.nih.gov/books/NBK83257>

<sup>20</sup> Reductions are not likely to be linear given that medical costs are a function of incidence rates and severity of condition. Likewise, fixed costs are associated with each at-risk birth regardless of whether the mother is in treatment, has ultimately quit using during the course of the pregnancy, or duration of stay is reduced.

Haelle, Tara. Neonatal abstinence syndrome weaning worked faster following a protocol. July 27, 2014. Accessed July 28, 2014. <http://www.dailyrx.com/neonatal-abstinence-syndrome-weaning-worked-faster-following-protocol>

**Lily's Place:** Lily's Place is a medical team approach to observing and treating NAS infants in a non-hospital residential health care facility, slated to open in Cabell County September 2014. The center is designed to improve NAS treatment quality and reduce related costs. In the pilot phase, Lily's Place will be supported by a mix of government and philanthropic funds, but long-term sustainability depends on billing for services rendered.

PfS financing could scale Lily's Place to statewide levels by replicating it in at least 10 sites. Evidence on success rates indicates that most NAS infants will be able to move to the facility immediately or soon after birth. This makes it easier to predict client participation rates (i.e. high participation). Estimates of operating costs and prospective savings for Lily's Place will be more reliable if based on at least one year of operation. In a PfS financing scenario, the Lily's Place performance payments could be a function of targets that are administratively and medically predictable based on availability of the service to women. For example, payments could be based on the reduction of average NAS birth costs per NAS case.

Table 3 below is based on a simple program assessment tool developed by Third Sector Capital Partners. The tool uses three high-level criteria to evaluate a program's PfS "readiness" and to help determine appropriate next steps. We apply the tool here to PfS financing for NAS broadly and then to each of the two programs listed.

**TABLE 3**  
Readiness Assessment  
for DFMB.

	PfS Criteria	Readiness Assessment	How to Close the Gaps
Readiness Criteria	Unmet Tangible Need	<b>STRONG</b> – Clear growing need, under-served at-risk clients, significant avoidable costs to government.	<b>Better baselines:</b> Compile statewide data on NAS cases, costs, use of related services offered. Analyze the Medicaid billing and payment trends over the past five years.  Work with service providers, administrative support/coders, and state agencies to harmonize use of NAS definitions, diagnosis and treatment protocols, and application of Medicaid billing codes within and across service providers.
	Government Champion	<b>PROGRESSING</b> – Early Childhood Task Force requested PfS research; Government co-funding for DFMB and Lily's Place	<b>Stakeholders:</b> Engage all offices with budgets directly affected by the growing NAS problem, help estimate costs and potential savings, and jointly discuss possible PfS structures, targets and budget transfer options. Coordinate next steps with Governor's Advisory Council on Substance Abuse.  <b>Policy/Legal Support:</b> Engage formal support to propose and compare detailed policy options for establishing appropriate PfS financing relationships.
	Evidence-based scalable interventions (DFMB)	<b>PROGRESSING</b> – Evaluation is funded, not yet generating meaningful performance data	<b>Evidence:</b> Assess similar programs to better estimate realistic success and savings rates and understand differences across three existing programs.  <b>Stakeholders:</b> Reach general agreement on performance targets of a DFMB project. Are hospitalization days/costs the most feasible and appropriate indicator or should/can analysis incorporate medical savings achieved over the first 2 years?
	Evidence-based scalable interventions (Lily's Place)	<b>WEAK</b> – Evaluation funded, but program not yet started	<b>Evidence:</b> Support rigorous evaluation of Lily's Place from its earliest stages of operation. Engage Lily's Place leadership to review center's cost, revenue figures after at least one year of operation. Engage the Washington PICC program (model for Lily's Place) to understand what obstacles have factored into lack of expansion across WA after 20 years.

## SECTION 3: Conclusions and Recommendations

Pay for Success financing could not only be a source of funding for evidence-based early childhood intervention programs, but it could also provide government, philanthropy, and social service providers with an excellent framework for understanding the impact and cost-effectiveness they are achieving. It may take additional time and resources to determine the feasibility of this alternative form of financing in West Virginia, but it has the potential to be an important tool for scaling up early intervention pilot programs that are earning a track record success but lack the resources to expand.

The working group is still working to estimate “identifiable and quantifiable savings” from the Drug Free Moms and Babies program and Lily’s Place at the time of this writing. The key findings and recommendations included below could provide a path for completing that objective and offer steps the state can take to use innovative social impact financing to help prevent some of the costs of substance abuse in West Virginia.

1. **PfS financing could be a good fit** for funding early childhood programs that demonstrate a significant “bang for the buck”—near term state financial savings that significantly exceed program costs – especially given the state’s current fiscal constraints and growing social challenges.
2. **PfS financing could help scale pilot NAS interventions to achieve state-wide coverage**, but additional data and state-driven analysis are required to improve PfS “readiness” and increase investors’ confidence in existing intervention programs. These include:
  - a. **Improve public access to baseline data to understand actual NAS trends, costs, and potential for costs avoided:** Aggregate statewide NAS incidence rates, analyze costs billed to Medicaid against costs actually paid. Standardize basic medical approaches to diagnosing, coding, and managing NAS moving forward to improve design and replication of quality intervention programs. For example, strict treatment protocols may yield up to 30% savings immediately, no financing required.<sup>21</sup> Such achievements are being verified and should be replicated.
  - b. **Conduct a government-led policy and legal review** of how specific PfS structures or models could work in the WV legal context and specify what policy actions would be required to implement a PfS initiative. Establishing PfS financing policies and contracts requires high up-front fixed costs. Early efforts should keep in view that, once established, a state’s PfS policy can be used to finance other early childhood programs or even preventative programming in other sectors.
  - c. **Engage stakeholders to develop and test the tool** for at least one program to learn how it can be applied to other social programs that have a dual focus on improving social good and state cost avoidance. Stakeholders must start with a data-driven understanding of the

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<sup>21</sup> Hall, Eric S, et al. A Multicenter Cohort Study of Treatments and Hospital Outcomes in Neonatal Abstinence Syndrome. *Pediatrics* 2014; 2013-4036.

problem, and an understanding of the specific challenges and service gaps associated with substance abuse during pregnancy. Likewise, integrated stakeholder discussions must inform definition of performance targets to ensure social benefits are not compromised or crowded out by cost reduction priorities.

Stakeholders should include state agencies currently providing funded intervention and treatment programs, policy makers, the executive office, members of the medical community, social service and addiction management experts, and managed care organizations among others.

- d. **Collect and evaluate performance data to strengthen leading interventions and implementers:** Conduct rigorous evaluations of the DFMB program, Lily's Place programs and other NAS-related interventions. Analyze how perinatal programs interface with related early childhood programs like home visitation.
  - e. **Consider starting with performance contracting** to fund innovative preventative programs and improve programs' effectiveness, even in the absence of external private financing tools or evidence. Contracts could be structured to share risk, paying a portion of input costs, and paying the balance plus incentive options based on meeting performance targets. Such contracts can shift performance incentives. Equally valuable, the rigorous analysis required to calculate payments can also arm providers with performance evaluation data they need to improve their programs. And, the analysis helps to demonstrate state savings. Taking these early steps, in parallel with state efforts to develop policy tools for PfS financing, will improve state readiness and investor confidence in a program.
  - f. **Strengthen the enabling environment** for NAS-related intervention programs by continuing to implement extensively-researched policy recommendations of the Perinatal Partnership's Committee on Drug Use During Pregnancy<sup>22</sup>, many of which are cost neutral or cost negligible.
3. **Scaling effective NAS-related perinatal interventions offer an important opportunity to address the intersection of substance abuse and birth outcomes:** The state's growing substance abuse crisis affects expecting moms and newborns. The effects of NAS and related parental drug abuse through early childhood will result in exponential health and social costs to the state in the short, medium, and long run. Perinatal programs like DFMB and Lily's Place are opportunities to address both issues, improving social welfare and alleviating pressure on an already tight state budget.
  4. **Promising but limited efforts are already underway that if shown to be effective, could be expanded rapidly:** A number of stakeholders are already motivated and/or financially incentivized to test and evaluate small-scale innovations to reduce costs and improve well-being of infants affected by NAS, including managed care companies, foundations, state agencies, and individual medical providers. These groups are finding some promising early results, including up

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<sup>22</sup> Blueprint to Improve West Virginia Perinatal Health Final Report. West Virginia Perinatal Wellness Study. December 2007. Accessed June 14, 2014. [http://www.wyperinatal.org/downloads/committee\\_reports\\_07/Reports\\_on-Blueprint\\_for-Perinatal-Health01\\_2008.pdf](http://www.wyperinatal.org/downloads/committee_reports_07/Reports_on-Blueprint_for-Perinatal-Health01_2008.pdf)

to 30% savings from relatively cost neutral adjustments to treatment protocols. Better data and coordination are needed to understand the actual benefits of those interventions and how the most promising ones can be scaled and/or replicated.

5. **Cost and incidence data are missing or weak, hindering informed investments:** Missing trend data on costs and incidence rates limit the state's ability to understand the nature and costs of the substance abuse problem as it relates to birth outcomes. Data describing current costs associated with specific budgets (Medicaid, hospitals, private insurers, etc.) and evaluations of DFMB, Lily's Place, and other interventions' ability to reduce those costs are either missing or too premature to attract social financing from the private sector.
6. **Limited PfS financing experience with broad geographies or multiple service providers:** To date, most PfS programs focus either on a very limited geography and/or engage only one service provider in a deal. Given West Virginia's rural context, a PfS structure may have to be adapted to account for multiple entities providing services and more expansive coverage areas.