

healthpolicybrief



What is “population health”?

“It is no longer sufficient to expect that reforms in the medical care delivery system (for example, changes in payment, access and quality) alone will improve the public’s health.”

— Institute of Medicine (IOM)¹

Purpose

The emergence of “population health” as a significant component of healthcare reform reflects widespread recognition that factors outside of the healthcare system, such as the social, economic and physical environment, must be addressed in order to improve the health of the overall population. While there is growing agreement on the importance of population health, there is a lack of consensus on a single, actionable definition of the term. Healthcare system and public health stakeholders tend to define population health differently, which has hampered efforts to work across sectors to improve population health.

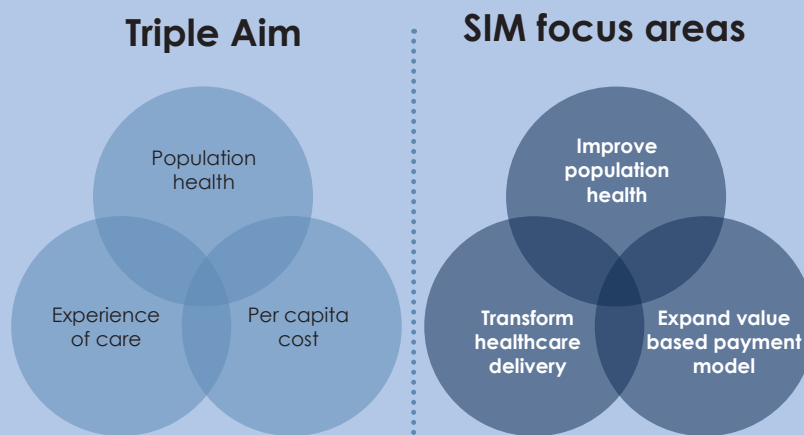
In 2014, with support from the National Network of Public Health Institutes (NNPHI) through a Robert Wood Johnson Foundation-funded project, the Health Policy Institute of Ohio convened a group of healthcare and public health stakeholders to develop a consensus definition of population health for Ohio. The purpose of this work is to operationalize the concept of population health in a way that is useful to Ohio’s health leaders in designing population health improvement strategies, such as state-level health improvement plans and local improvement plans led by nonprofit hospitals, local health departments, United Ways and others.

This brief describes the consensus understanding of population health that resulted from discussions among members of the HPIO Population Health Definition Workgroup.

Population health in the Triple Aim and State Innovation Models (SIM)

Population health is one of the components of the Institute for Healthcare Improvement’s (IHI) widely-used Triple Aim framework (see Figure 1). Echoing the Triple Aim, the US Centers for Medicare and Medicaid Services (CMS) includes population health as one of the three focus areas for the Innovation Center State Innovation Models (SIM) initiative which provides funding for states to design and test new payment and healthcare delivery models. Ohio was one of 16 states to receive a design grant in 2013 for Round One of the SIM. In July 2014, the Ohio Governor’s Office of Health Transformation (OHT) applied for SIM Round Two funding to accelerate health system transformation in Ohio. SIM Round Two requires grantee states to develop a statewide Population Health Improvement Plan. Funding decisions for SIM Round Two are expected by the end of 2014.

Figure 1. Triple Aim and State Innovation Model (SIM) focus areas



Defining population health in Ohio

The HPIO Population Health Definition Workgroup reviewed several existing definitions of population health,² including the Kindig and Stoddart definition referenced by CMS for the SIM initiative and by the IOM's Roundtable on Population Health Improvement: "The health outcomes of a group of individuals, including the distribution of such outcomes within the group."³

The workgroup identified four common elements that emerged from the review of existing definitions. These included an emphasis on:

1. **Multiple determinants of health**, including factors outside the healthcare system
2. The distribution of outcomes or **health disparities and health equity**;
3. Population defined as **groups of people and geographic areas**; and
4. **Measurement of outcomes and health status**, rather than process, output or quality indicators.

The workgroup then identified a fifth element that is not emphasized in many of the existing definitions—the **authority of the individual** to take actions to improve their own health. The group agreed that population health is largely the product of individual behaviors, collectively, and that population health strategies must acknowledge the importance of personal health practices and individual knowledge, skills and ability, as well as the social, economic and physical environments that "make health more likely." As a result, population health strategies work to create the conditions in which individuals and families can be healthy.

As a result of this discussion, the workgroup developed the following definition of population health:

definition Population health is the distribution of health outcomes across a geographically-defined group which result from the interaction between individual biology and behaviors; the social, familial, cultural, economic and physical environments that support or hinder wellbeing; and the effectiveness of the public health and healthcare systems.

Terms used in the population health definition

Distribution of health outcomes refers to variation in health outcomes by gender or geographic area, or for different groups, such as socio-economic, racial/ethnic or age groups.

Geographically-defined refers to areas such as a neighborhood, county, region, state or country, or to a specific group within a geographic area, such as low-income families, employees, students, or racial or ethnic groups within a state.

Individual biology refers to biologically-determined factors that impact health, such as genetic dispositions for specific types of cancer. Although genetics have traditionally been considered to be "non-modifiable," emerging evidence suggests that environmental conditions can impact genes.

Individual behavior refers to actions that people take to keep themselves and others healthy (such as eating nutritious food and driving safely) or actions people take that harm their health or the health of others (such as smoking or domestic violence perpetration).

Social, familial, cultural, economic and physical environments refer to the conditions in which people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality-of-life outcomes and risks.

- **Social factors** include patterns of social engagement, social-emotional support, racism, violence, trauma and toxic stress, access to education, and sense of belonging and cohesion in one's community.
- **Economic factors** include employment, poverty, economic/social mobility, and income inequality.
- **Familial factors** include marriage and family formation, parenting and intergenerational relationships. Familial factors are particularly important for the health of children and adolescents, and early childhood experiences have a significant impact on health outcomes across the lifespan.
- **Cultural factors** include religious beliefs and practices, values, language, media influences, social norms and ethnic customs.
- **Physical environments** include air and water quality, toxic substances and pollution, food access, housing, weather and natural disasters, and transportation systems and other aspects of the built environment.

Public health is the science and art of promoting health, preventing disease, and prolonging life through the organized efforts of society. Public health organizations include government agencies at the federal, state, and local levels, as well as nongovernmental organizations that are working to promote health and prevent disease and injury within entire communities or population groups.⁴

Healthcare system The system that pays for and delivers clinical health care services to individual patients.⁵

Note that this definition refers to *the what* and *the why* of population health:

- *What is population health?* The health outcomes of a population;
- *Why are health outcomes good or bad, or unevenly distributed in the population?* Because of the presence of factors such as individual genetics and behaviors; social, familial, cultural, and economic factors; the physical environment; and the effectiveness of the public health and health care systems.

The definition does not describe *how* population health improvements are achieved. For this reason, the workgroup also discussed key characteristics of population health strategies, which are presented in the next section.

From definition to action: Key characteristics of population health strategies

To move towards improved population health for Ohioans, healthcare and public health stakeholders must work together to design and implement effective population health strategies. Population health strategies are distinguished from “business as usual” in health care by the following characteristics, described in more detail in Figure 2:

1. **Beyond the patient population**
2. **Beyond medical care**
3. **Measuring outcomes**
4. **Reducing disparities and promoting health equity**
5. **Shared accountability**

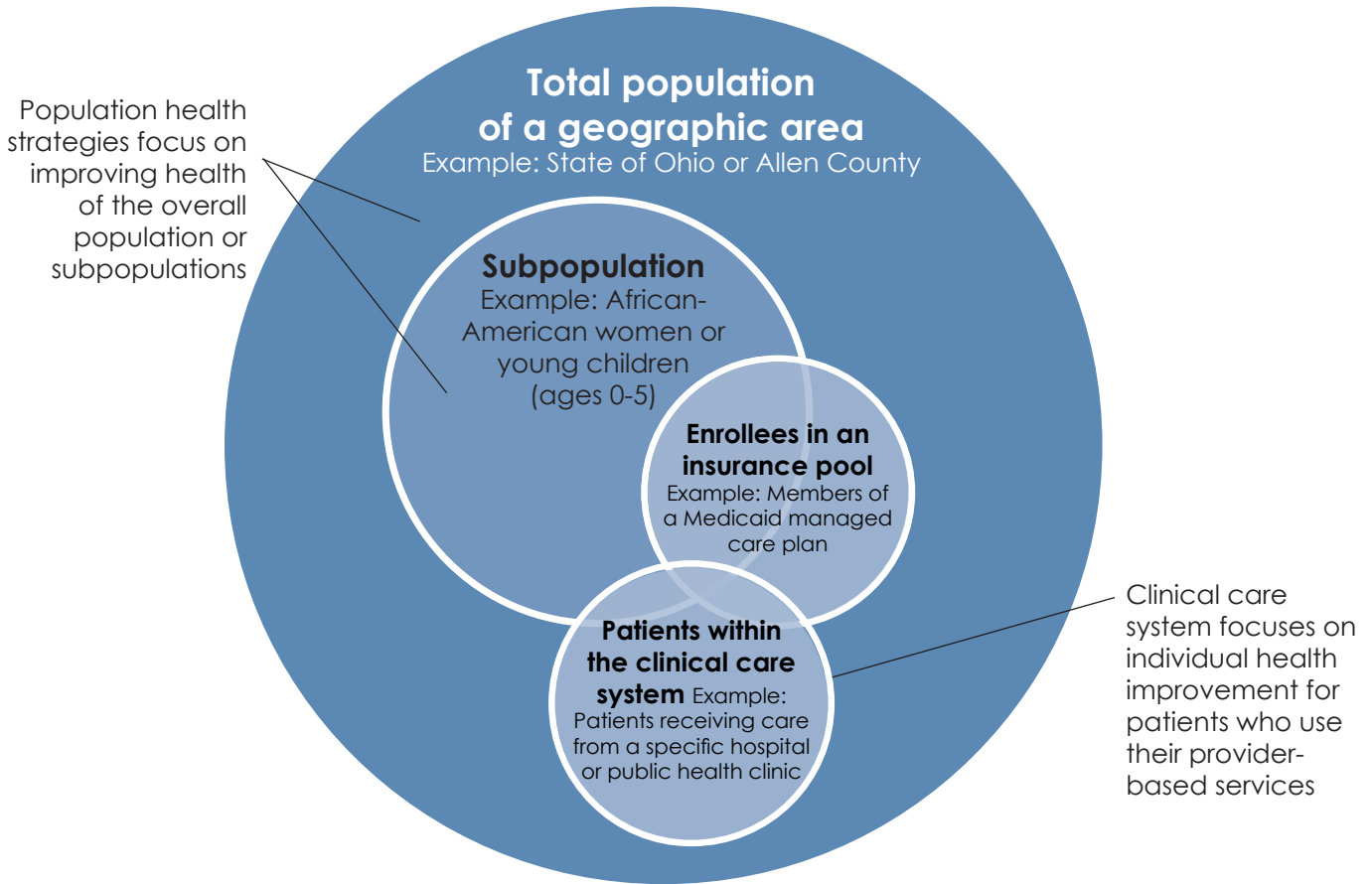
Figure 2. Key characteristics of population health strategies

Defining characteristics of population health strategies	Examples of population health strategies	How are population health strategies different from “business as usual” in health care?
<p>1. Beyond the patient population. Population health strategies move beyond a specific patient population and define their target audience as all people living within a geographic area, or all people within a group (such as low-income families, employees, or ethnic groups) (sometimes referred to as a “sub-population”). See Figure 3.</p>	<ul style="list-style-type: none"> • In Dayton, the Good Samaritan Hospital’s Phoenix Project is an example of a hospital investing in their surrounding geographic area to improve health and wellbeing for everyone in the community, not just for patients of the hospital. The hospital has partnered with the City of Dayton to invest in a revitalization project in two neighborhoods adjacent to the hospital that includes a park, a playground, community gardens and a new school. • The goal of Ohio’s Plan to Prevent and Reduce Chronic Disease is to reduce the burden of chronic disease for all Ohioans, not just for specific patient populations. 	<p>Population health strategies are for the overall population or sub-populations, rather than only for patients of a specific hospital or provider practice or enrollees of a health insurance plan.</p> <p>Illness or risk is typically the “trigger” for receiving clinical care. In population health, the trigger for inclusion is not related to specific diseases or conditions, but to any opportunity to prevent illness from occurring in the first place.</p>
<p>2. Beyond medical care. The population health approach acknowledges that many factors outside the healthcare system impact health, including the social, economic and physical environment. Population health strategies address these factors—referred to as the “social determinants of health”—by going “upstream” to address causes of health problems, rather than just the “downstream” symptoms. As a result, population health strategies often:</p> <ol style="list-style-type: none"> a. Are implemented in community settings (rather than clinical healthcare settings), b. Involve partnerships with sectors such as transportation, regional planning, education, etc., and/or c. Aim to prevent health problems (primary and secondary prevention) by addressing the causes of poor health and creating optimal conditions for health for all groups, including sub-populations. See Figure 4. 	<ul style="list-style-type: none"> • The Cincinnati Children’s Hospital works with Legal Aid services to address housing code violations that lead to asthma triggers like mold. • In order to promote active living, Columbus Public Health works with the city’s Zoning Commission and developers to ensure that new developments include sidewalks, pedestrian access and bike racks. • The Cuyahoga County Board of Health is conducting a Health Impact Assessment of a proposed regional trail network (East Side Greenway Project) to provide recommendations on how to maximize positive impacts on health and equity, such as improved access to parks, healthy food and active transportation for low-income neighborhoods. • In Columbus, Nationwide Children’s Hospital’s Healthy Neighborhoods, Healthy Families initiative is going upstream to improve housing quality, early childhood education and workforce development within a three-zip code area near the hospital. Their SPARK home visiting program, for example, helps to improve kindergarten readiness for preschool-age children, and their FastPath workforce development project connects unemployed adults with training and job placement through a partnership with Columbus State Community College. 	<p>Healthcare system activities occur in settings such as hospitals, health practitioner’s offices, and nursing homes. By contrast, population health activities are implemented in the community (such as in neighborhoods, homes or schools) or involve some kind of partnership between a healthcare provider and a community-based organization or social service provider.</p> <p>While healthcare providers typically address medical problems and symptoms such as pain or loss of function, population health strategies address the wider range of needs that are influencing the health problems, including housing, food access, and safety from violence.</p>

Figure 2. **Key characteristics of population health strategies** (cont.)

Defining characteristics of population health strategies	Examples of population health strategies	How are population health strategies different from “business as usual” in health care?
<p>3. Measuring outcomes. Population health strategies aim to improve outcomes, such as morbidity and mortality, rather than focusing on process, output or quality measures. The effectiveness of a population health strategy is measured by changes in health outcomes for the population.</p>	<p>Programs and policies that address and measure indicators such as:</p> <ul style="list-style-type: none"> • Prevalence of obesity among Ohio youth • Average number of days of limited activity due to mental or physical health difficulties, among adults in Ohio • Self-reported health status of adults in Franklin County • Life expectancy at birth 	<p>Population health outcomes differ from indicators of the “patient experience of care” component of the Triple Aim, which is often measured through process metrics such as, “Would you recommend your health care provider?”</p> <p>Population health outcomes also differ from indicators of healthcare “effectiveness,” “quality,” or “appropriateness,” such as HEDIS measures. For example, a healthcare provider might track the percent of their female patients who have received a Chlamydia screening, while a population health strategy will track changes in the prevalence of Chlamydia in the overall population.</p>
<p>4. Reducing disparities and promoting health equity. The development of a population health strategy starts with an understanding of the distribution of health outcomes within the population. “Distribution” refers to differences in health outcomes for different groups, such as socio-economic, racial/ethnic, or age groups. Population health strategies aim to improve opportunities for all to achieve optimal health and to prevent and reduce disparities among groups. The effectiveness of a population health strategy is measured by the health outcomes for different groups of residents as well as for the overall population. Collection and meaningful use of data by race, ethnicity, language, income level and other characteristics is therefore a critically important aspect of population health.</p>	<ul style="list-style-type: none"> • One of the desired outcomes of the Greater Columbus Infant Mortality Task Force is to “cut the disparity gap between white and black infant mortality in half.” • Ohio’s School Report Cards display high school graduation rates by race/ethnicity, limited English proficiency and economic disadvantage. Schools must demonstrate progress improving this and other outcomes for each subgroup of students, not just for the overall student body. 	<p>Health data are often reported as an average, rate or percent for an overall group of patients or health plan enrollees. This type of reporting can sometimes mask troubling health disparities.</p> <p>The population health approach emphasizes the importance of using data to identify health disparities and inequities and selecting strategies that will improve health for all groups.</p>
<p>5. Shared accountability. Population health strategies should provide opportunities for individuals to improve their own health and wellbeing in ways that are meaningful to them. Population health strategies also attribute accountability to both healthcare and public health organizations, and to policy decisions that impact the social, economic and physical environment. The population health approach broadens the range of entities that are held accountable for improving health to include education and social service organizations, as well as policymaking bodies that shape the economic and physical environment.</p>	<ul style="list-style-type: none"> • Motivational Interviewing, a practice often used in substance abuse counseling to help individuals identify their own motivations for change, is an example of restoring the authority of the individual to improve their own health. A population health approach would be to incentivize and support behavioral health providers and school counselors to implement Motivational Interviewing on a more widespread and routine basis. • The Accountable Care Community (ACC) model builds upon the Accountable Care Organization (ACO) model in which a network of providers collectively assume responsibility for the care of a defined patient population and share in payer savings if performance metrics are met. An ACC extends accountability to entities outside the healthcare system, such as community-based organizations and local health departments. The Live Healthy Summit County ACC, for example, includes local YMCA Diabetes Prevention Programs as entities accountable for helping people diagnosed with pre-diabetes to adopt healthy eating and physical activity habits. 	<p>Various payment reform mechanisms, such as Episode-Based Payments and ACOs, are beginning to make provider accountability for improved health more explicit by tying payment to performance on various health metrics. Efforts to empower patients to play a more active role in their care or to get consumers to pay attention to the cost of care and the value of prevention through mechanisms such as high-deductible health plans or employee wellness programs reflect the shift toward more shared accountability between patients, providers and insurers.</p>

Figure 3. **Beyond the patient population**



Source: Adapted from "An Environmental Scan of Integrated Approaches for Defining and Measuring Total Population Health by the clinical care system, the government public health system, and stakeholder organizations." Public Health Institute and County of Los Angeles Public Health, 2012.

Figure 4. **Beyond medical care**



Transition to population health

Public health and healthcare leaders describe an ongoing shift from focusing on specific disease and condition silos toward a broader focus on wellness, and from serving clinical populations toward reaching out to broader geographic populations. For healthcare entities like hospitals and managed care organizations, the speed and extent of this transition to population health depends on changes in the healthcare payment system. Within the fee-for-service model, more sickness has led to more revenue for some healthcare entities. However, in order to improve the health of the population, the payment system needs to incentivize providers, payers and consumers to achieve and maintain wellness. The goal is to “rig the system” so that it rewards individual and collective actions that lead to better health outcomes.

Health stakeholders are at various places along the continuum from patient care to population health. At the patient care end of the spectrum, providers typically encounter individuals once they are already sick. Activities toward the population health end of the spectrum are for broader groups of people, including many people who are well. The purpose of these activities is to help people stay well.

It is important to note that the goal of population health is not to replace individual patient care, but rather to supplement and integrate it with a comprehensive range of strategies that help all people live longer, healthier lives. High-quality patient care remains the cornerstone of an effective health system.

Everyone has a role to play

Because they reach beyond medical care to address the multiple determinants of health, population health strategies require partnerships between the healthcare and public health sectors and other entities including schools, employers, social service agencies, community-based and faith-based organizations, and regional planners to effectively improve the health of Ohioans.

There are a number of opportunities to leverage alignment between the public health and

healthcare sectors and other partners in Ohio, such as:

- Improved collaboration between hospitals and local health departments in conducting community health assessments, identifying community health priorities and implementing evidence-based population health strategies as part of their local health improvement plans
- Leveraging ACO and ACC models in Ohio that bring together multiple sectors, including local public health, healthcare providers, employers, and other partners to share financial responsibility for the health of an overall community
- Aligning Ohio’s SIM Population Health Improvement Plan led by the Governor’s Office of Health Transformation with the State Health Improvement Plan (SHIP) led by the Ohio Department of Health
- Improving data collection and sharing capabilities across health care and public health sectors and other partners

Reaching large numbers of people

The focus on groups of people across geographic areas rather than on patients means that population health strategies are designed to reach much larger numbers of people than are typically seen by providers within the healthcare system. Population health activities often reach those who are not currently receiving healthcare services, such as people who lack health insurance or adequate access to care, or those who are well and do not need frequent medical care. The population health approach encourages providers and insurers to consider the health of tomorrow’s potential patients, in addition to today’s patients. This broadens the time horizon for measuring outcomes and greatly increases the number of people included in health improvement initiatives.

Some are concerned that reaching everyone may lead to inefficient allocation of resources or “watered down” interventions. Understanding the distribution of health problems within a population and prioritizing services for at-risk areas, such as high-poverty zip codes, is one way to address this challenge. Another way to address this challenge is to implement policy and systems changes that reach everyone

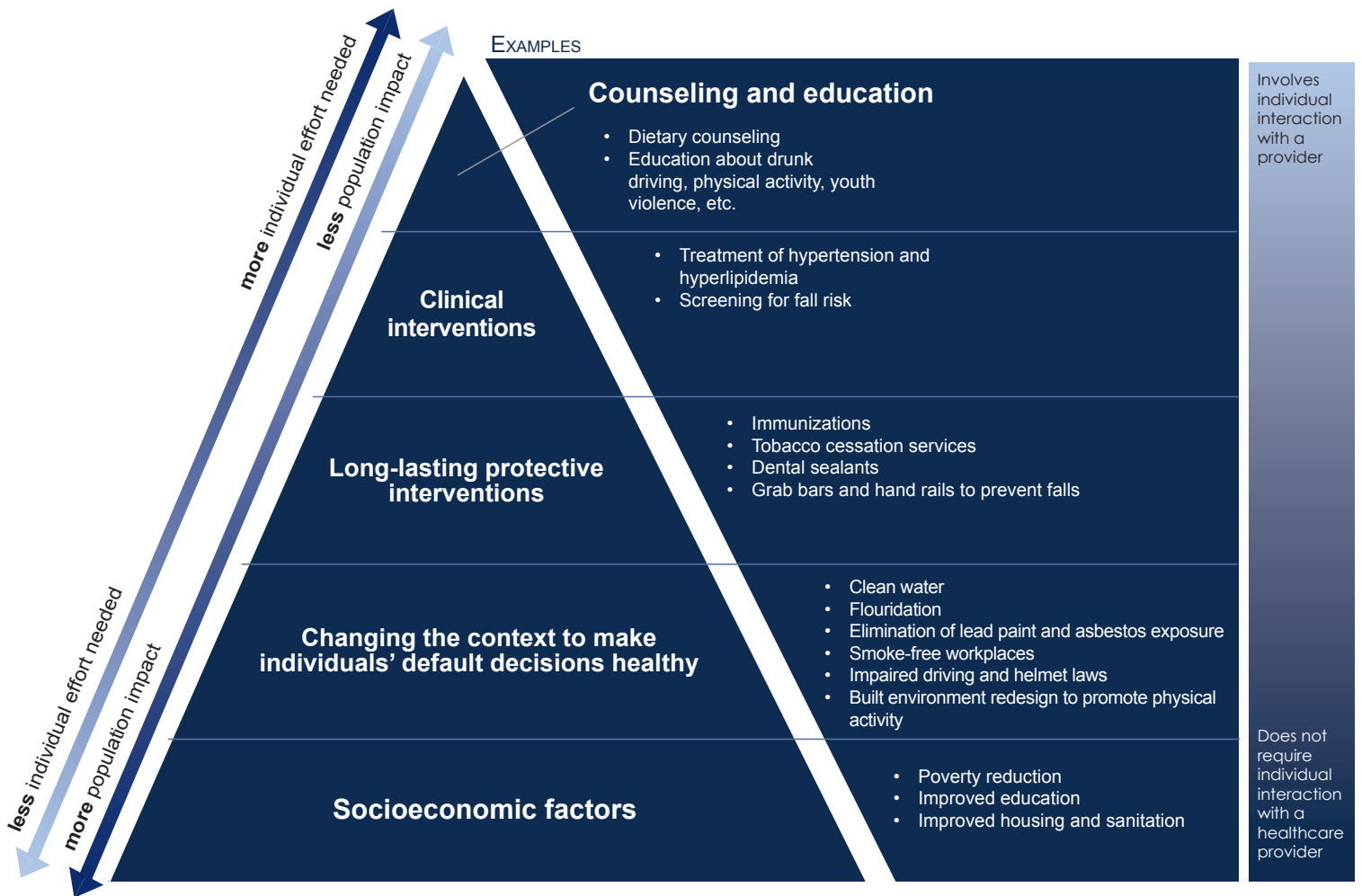
in the community. Policies such as Ohio's smoke-free workplace law, for example, impact all Ohioans by changing social norms about tobacco and reducing exposure to secondhand smoke.

The Health Impact Pyramid is a useful framework for identifying a balanced set of population health strategies that include interventions delivered directly to individuals, as well as policy and system changes that impact larger numbers of people. As shown in Figure 5, activities toward the base of the pyramid require minimal individual effort and have the greatest leverage for improving health for large numbers of people, while activities toward the top of the pyramid require increased individual effort and reach smaller segments of the population.⁶

For example, interventions toward the top of the pyramid include educational sessions about how to

reduce fall hazards in the home and fitness classes such as A Matter of Balance which help older people make changes to protect themselves from falls. These types of programs can be highly effective for individuals who follow through and make changes in their behavior and home environment, but they only reach those with access to the program. Toward the base of the pyramid, general improvements to housing conditions for low-income seniors, policies requiring grab bars and hand rails, and built environments that make it easy for seniors to remain active in their daily lives (such as safe sidewalks and crosswalks near grocery stores), are examples of strategies that impact a broader population. These types of strategies do not necessarily require individuals to be connected or compliant with a specific service or program. Comprehensive approaches that include strategies at each level of the pyramid are most likely to achieve sustainable improvements in population health.

Figure 5. Health Impact Pyramid

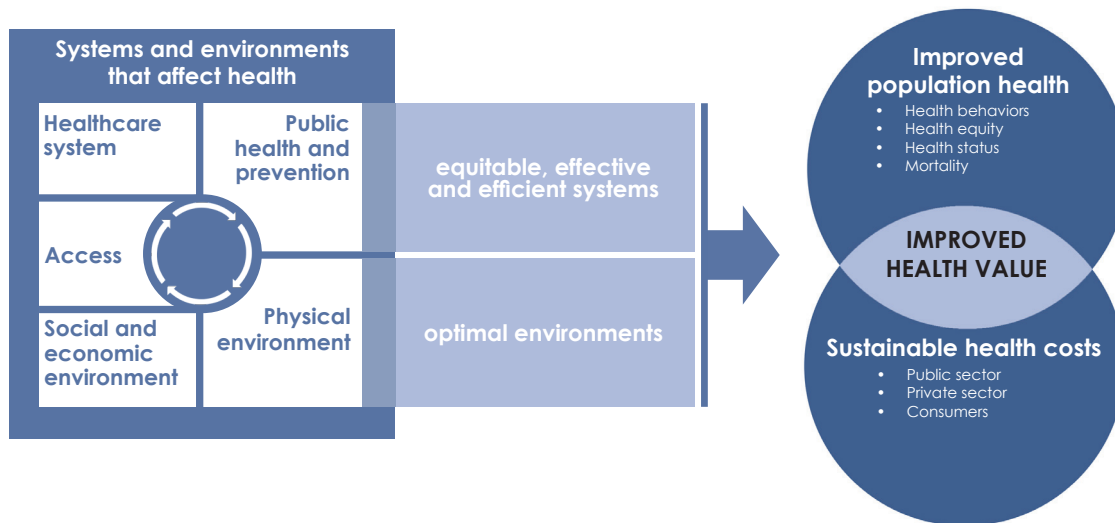


Source: Adapted from Frieden, Thomas R., "A framework for public health action: The Health Impact Pyramid." *American Journal of Public Health* 100, no. 4 (2010).

How is population health measured?

Length of life, as measured by mortality, and quality of life, as measured by health status and morbidity, are the ultimate population health outcomes. Researchers have identified many sets of indicators for measuring health behavior, the prevalence of disease and injury, overall wellbeing and health status, functioning, and mortality among geographically-defined populations.⁷ Through the multi-stakeholder Health Measurement Initiative, HPIO has built upon existing measurement frameworks to develop the *Pathway to Improved Health Value* framework shown in Figure 6. The framework defines health value as the intersection of improved population health and sustainable health costs.

Figure 6. Pathway to improved health value: A conceptual framework



In 2013 and 2014, HPIO convened workgroups to select metrics for each domain in this framework. Figure 7 lists the metrics selected for the Population Health domain. HPIO will be reporting state-level data for these metrics in a Health Value Dashboard later in 2014.

Figure 7. Population health metrics from the HPIO Health Value Dashboard

Health behaviors	<ol style="list-style-type: none"> Adult binge drinking. Percent of adults who self-report having 4 or more (women) or 5 or more (men) alcoholic beverages on at least 1 occasion in the past 30 days (Behavioral Risk Factor Surveillance System) Adult insufficient physical activity. Percent of adults 18 years and older not meeting physical activity guidelines for muscle strength and aerobic activity (Behavioral Risk Factor Surveillance System) Tobacco use <ol style="list-style-type: none"> Youth all-tobacco use. Percent of high school students who smoked cigarettes, cigars, cigarillos, or little cigars, or used chewing tobacco, snuff, or dip during past 30 days (Youth Risk Behavior Surveillance System) Adult smoking. Percent of population age 18 and older that are current smokers (Behavioral Risk Factor Surveillance System)
Conditions and diseases	<ol style="list-style-type: none"> Infant mortality. Number of infant deaths per 1,000 live births (within 1 year) (CDC vital statistics) Cardiovascular disease mortality. Number of deaths due to all cardiovascular diseases, including heart disease and strokes, per 100,000 population (CDC vital statistics) Youth obesity. Percent of high school students who are obese (grades 9-12) (Youth Risk Behavior Surveillance System) Adult diabetes. Percent of adults who have been told by a health professional that they have diabetes (Behavioral Risk Factor Surveillance System) Poor mental health. Average number of days in the previous 30 days when a person indicates their mental health was not good (includes stress, depression, and problems with emotions; adults only) (Behavioral Risk Factor Surveillance System) Suicide deaths. Number of deaths due to suicide per 100,000 population (CDC vital statistics) Drug overdose deaths. Number of deaths due to drug overdoses per 100,000 population (CDC vital statistics) Poor oral health. Percent of adults who have lost teeth due to decay, infection, or disease (Behavioral Risk Factor Surveillance System)
Overall health and wellbeing	<ol style="list-style-type: none"> Overall health status. Percent of adults that report fair or poor health (Behavioral Risk Factor Surveillance System) Limited activity due to health problems. Average number of days in the last 30 days in which a person reports limited activity due to mental or physical health difficulties (ages 18 and older) (Behavioral Risk Factor Surveillance System) Premature death. Years of Potential Life Lost before age 75 (YPLL-75) (CDC vital statistics)
Health equity	<ol style="list-style-type: none"> Life expectancy by race/ethnicity. Life expectancy at birth based upon current mortality rates (CDC vital statistics, as reported by Robert Wood Johnson Foundation DataHub)

Note that the denominator for each of these metrics is all Ohioans, or Ohioans in specific age groups, rather than specific patient populations. Population health indicators are characterized by *numerators* that reflect “ultimate destinations” like death or overall health status (rather than outputs or process measures), and *denominators* that encompass all residents of a geographic area, or groups that are defined by demographic characteristics (such as age or race/ethnicity) rather than by use of a healthcare service or enrollment in an insurance plan.

Glossary of additional terms

Accountable Care Community (ACC) A broadened concept of accountable care organizations (see below) that includes other entities, such as community-based prevention organizations, local health departments, or social service providers, in addition to health care providers, in the group held accountable for performance .

Accountable Care Organization (ACO) A network of providers that collectively assumes responsibility for the care of a defined patient population and shares in payer savings if set quality and cost performance metrics are met. The provider network may also be at risk and bear financial responsibility for spending that exceeds target metrics.

Government public health system A network of administrative or service units of local, state, or the federal government as well as tribes and territories concerned with health and carrying responsibility for the health of a geopolitical jurisdiction. This governmental system is a central player within the public health system, but relies on an array of stakeholders to achieve total population health improvement .

Health A state of complete physical, social, and mental wellbeing, and not merely the absence of disease or infirmity .

Health disparities Differences in health status among distinct segments of the population including differences that occur by gender, race or ethnicity, education or income, disability, or living in various geographic localities .

Health equity The absence of differences in health that are caused by social and economic factors. Achieving health equity means that all people have the opportunity to achieve their full health potential, with no one at a disadvantage because of social or economic circumstances .

Health inequity A subset of health disparities that are a result of systemic, avoidable and unjust social and economic policies and practices that create barriers to opportunity .

Health value The combination of improved population health outcomes and sustainable health costs. Population health outcomes include: health behaviors, conditions and diseases, overall health and wellbeing and health equity. Health costs include: total costs and costs paid by employers, consumers, Medicare, Medicaid, and the public health and mental health systems.

HEDIS measures Healthcare Effectiveness Data and Information Set (HEDIS) measures are used by health plans to measure performance on important dimensions of health care and service including effectiveness of care, access/availability of care, experience of care, and service/resource utilization.

Policy, systems, and environmental change (PSEC) Policy, systems, and environmental change is a way to modify the environment to make healthy choices practical and available to all community members .

Prevention A systematic process that promotes healthy behaviors and reduces the likelihood or frequency of an incident, condition, or illness. Ideally, prevention addresses health problems before they occur, rather than after people have shown signs of disease or injury.

Primary prevention Efforts to prevent a disease, injury, or other health problem from occurring in the first place.

Secondary prevention Efforts to detect health problems at an early stage and/or to slow or halt the progress of an existing disease, injury, or other problem.

Social determinants of health Conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. In addition to the social, economic, and physical conditions of a person's environment, social determinants also include patterns of social engagement and sense of security and well-being. Examples of resources that can influence (or, “determine”) health outcomes include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins .

Sub-population A group of individuals that is a smaller part of a population. Sub-populations can be defined by age, race, ethnicity, disabilities, gender, socio-economic status or other shared characteristics.

Tertiary prevention Prevention activities targeted to the person who already has symptoms and seeks to reduce further complications, increasing pain, or death.

Triple Aim A term used to describe an approach for enhancing health system performance. The goals of the Triple Aim, as conceptualized by the Institute for Healthcare Improvement are: improve the patient experience of care, improve health of populations, and reduce the per capita cost of health care .

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HPIO thanks the members of the Population Health Definition Workgroup who contributed to the development of this publication:

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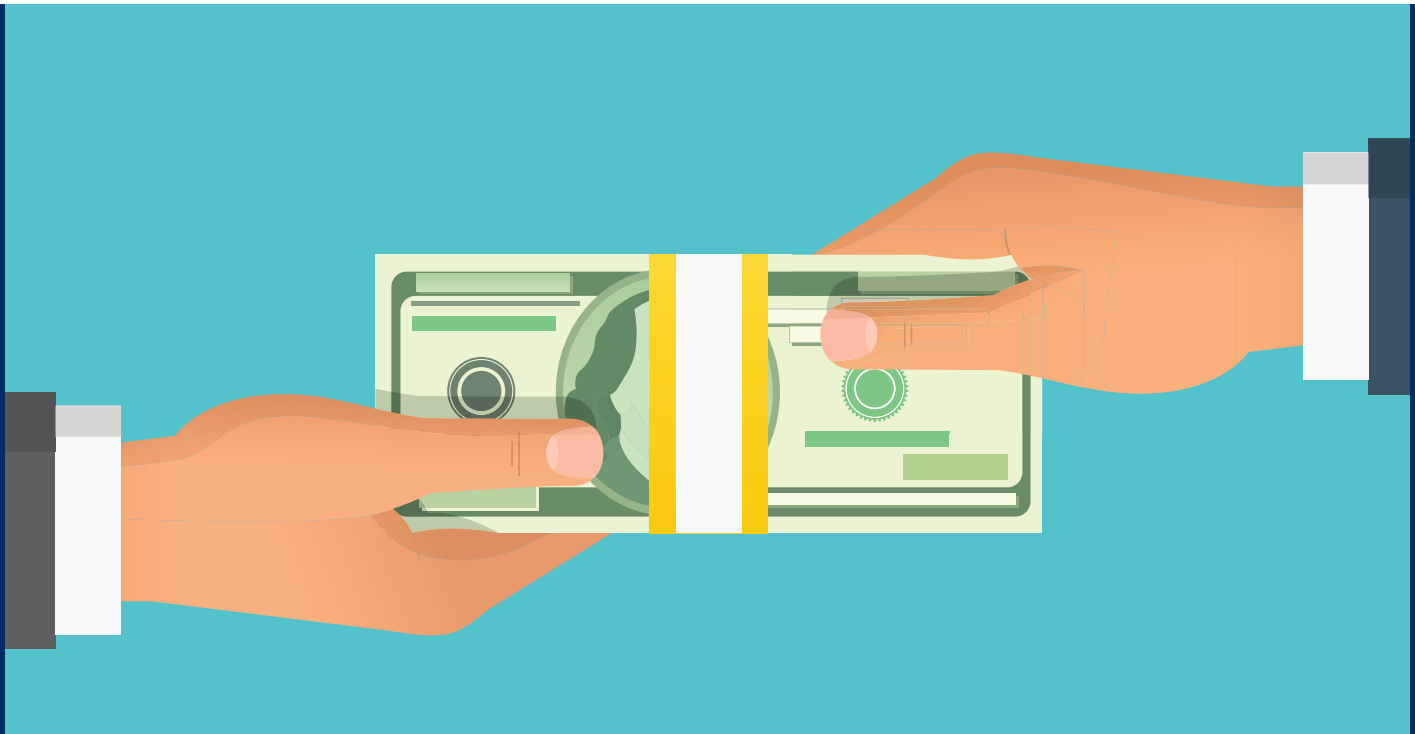
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Notes

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PAY FOR SUCCESS: PRIVATE SECTOR INVESTMENT WITH PUBLIC SECTOR PAYBACK FOR ACHIEVEMENT OF IMPROVED SOCIAL OUTCOMES

December 2017 Issue Brief

in collaboration with

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FOREWORD

The Center for Health Affairs constantly strives to stay ahead of the curve as the healthcare landscape evolves. We do this so that we can effectively keep our member hospitals apprised of key policy changes and opportunities that exist to achieve the Institute for Healthcare Improvement's Triple Aim of improving the patient experience of care, improving the health of populations and reducing the per capita cost of health care.

To improve the health of populations, focusing on clinical care alone is not sufficient. Increasingly, there is a growing recognition that conditions in the environments in which people are born, live, learn, work, play, worship and age – referred to as the social determinants of health¹ – must be addressed if we are to achieve improvements in the health of populations.

As healthcare and other leaders focus their attention on the social determinants of health, the question about who pays to finance promising programs and initiatives always arises. There are new and emerging innovative payment mechanisms that can be considered. To learn more and share this knowledge with our members, we were thrilled to partner with Case Western Reserve University's Center for Community Health Integration, on this Issue Brief which explores the Pay for Success model.

ACKNOWLEDGEMENTS

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PAY FOR SUCCESS: PRIVATE SECTOR INVESTMENT WITH PUBLIC SECTOR PAYBACK FOR ACHIEVEMENT OF IMPROVED SOCIAL OUTCOMES



The multitude and complexity of social issues such as homelessness, poverty, unemployment, health disparities, and recidivism facing the developed world is daunting. The cost of social issues is extremely high both in terms of human capital loss to society and the social service programs that strive to put Band-Aids on them. Social services are traditionally funded through government agencies that finance direct services to treat, but rarely solve, root causes.

FUNDING SOCIAL PROGRAMS

The traditional funding mechanisms themselves present systems challenges to addressing seemingly intransigent social issues.² Most of the money allocated for social services fund organizations to deliver direct services, and the programs are assessed on the quantity of services provided rather than outcomes, so governments have little or no idea how effective (or not) the programs are.³ In the post-economic crisis world many governments are struggling to reduce deficits, which in turn means increased pressure on public budgets, and chronically underfunded social interventions are even further underfunded. This fiscal pressure has been applied disproportionately to prevention, even though remediation carries a higher cost. The problem lies partly in the political system where political leadership changes, new priorities are identified, and fiscal realities make it challenging to invest in a long term goal when attention is focused on more immediate issues. Adding to this, government budgets are based on previous years' funding, so the same things get funded year to year, and there is no system to test, and possibly scale up innovative new approaches to chronic social issues.⁴

INNOVATIVE FUNDING – PAY FOR SUCCESS

This environment has provided an opportunity to rethink approaches and funding for societal challenges – moving interventions upstream to address root causes, engaging non-traditional partners, and looking for alternative non-traditional sources of funding. Social impact investment (also known as social enterprise financing) is a non-traditional funding stream for positive social change, using private investment capital to generate societal benefit and financial return. The most common form of social impact investment is Pay for Success (PFS), also known as social impact bonds (SIB) or Pay for Results (PFR). PFS is a mechanism that overcomes the challenges of traditional funding; it focuses on prevention, tests the effectiveness of innovative approaches, is designed to scale up successful interventions, provides upfront funding from private investors, and carries no financial risk for government agencies.

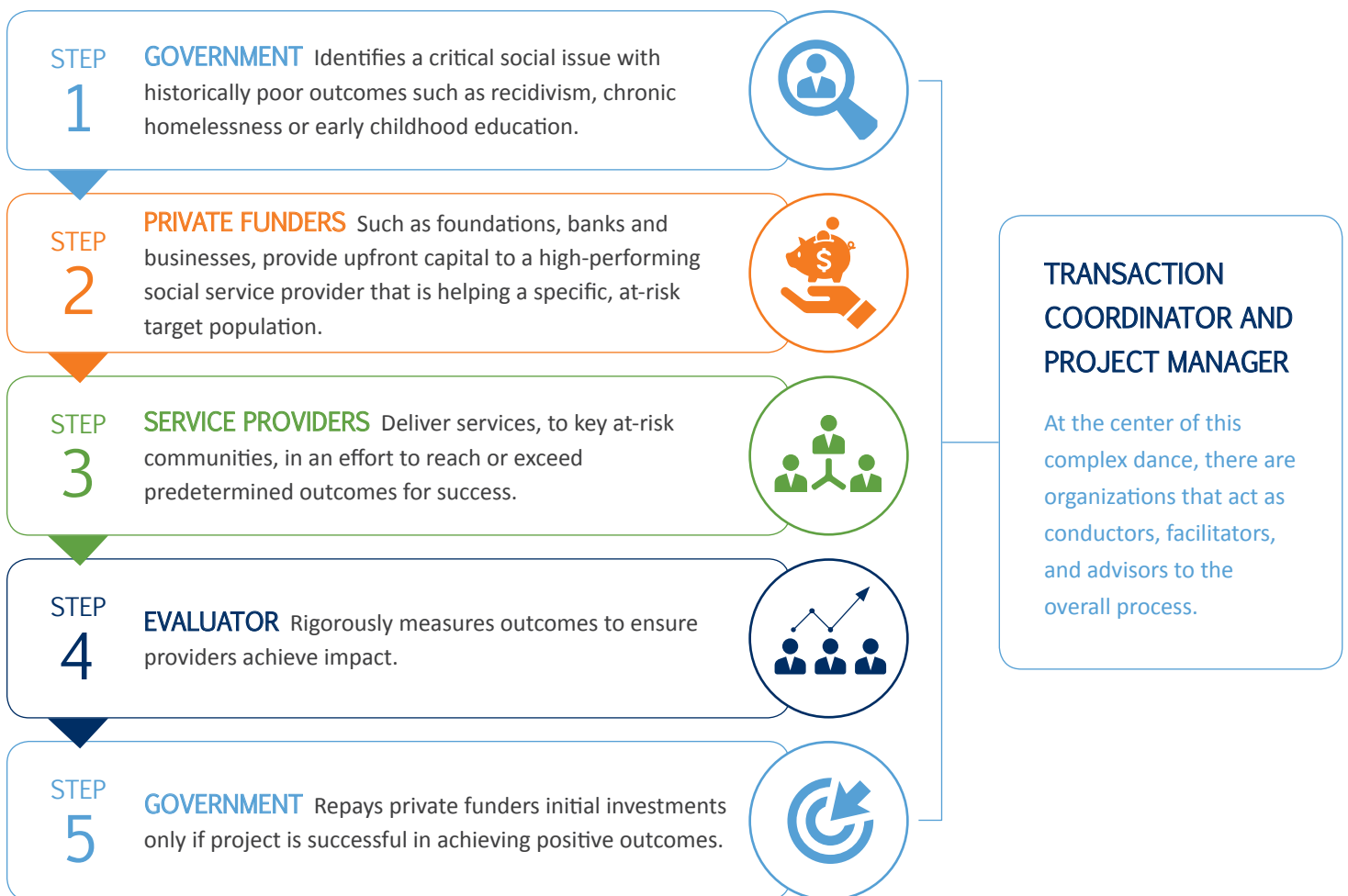
In 2015, the Brookings Institution published findings from an extensive study of the first five years of the impact bond market, “The Potential and Limitations of Impact Bonds: Lessons from the First Five Years of Experience Worldwide.”⁵ A subsequent publication “Policy Recommendations for the Applications of Impact Bonds” identified impact bonds as being used to solve at least one of the following problems all of which are relatable to so called intransigent social issues:⁶

- ❑ **LACK OF** knowledge about the most effective intervention model.
- ❑ **LACK OF** political will to invest in a service.
- ❑ **LACK OF** upfront funding for a program that leads to later savings or value to society.
- ❑ **LACK OF** government or service provider capacity to provide a necessary combination of services, manage services, or connect data across agencies.

WHAT IS PAY FOR SUCCESS?

In its simplest form, Pay for Success is a partnership between private investors, a public authority, service providers, and a managing organization. Although the PFS model refers to the sale of bonds, PFS is really not a bond, but rather a private loan with the potential for a return on the investment. The PFS investors are paid a return *only* if the social change goals are achieved within a set timeframe. As with all investment vehicles there is an element of risk, including the risk of total loss of the funds. It is essential therefore for all partners to be actively engaged in development of the model, specifically, defining the intended outcomes and being aware there will probably be unintended outcomes, all of which contribute to defining the success of the model.

Capital provided by the investors is used to finance services that will benefit the identified target population and may ultimately reduce public spending on service programs. The return on investment (sometimes referred to as success payment) for meeting predetermined impact metrics is then distributed to the investors by the public authorities. The managing organization brings the stakeholders together and sets up the structure of the partnerships in return for a fee.



Source: 2015 Third Sector Capital Partners, Inc.

A survey of 125 investors conducted in 2014 by The Brookings Institution showed the social impact investment market to be substantial in financial terms, with \$14 billion invested in projects in developed countries, and 32 billion in developing countries.⁷ The survey also documented the rapid growth of social impact investing over the previous decade and expectations are for its continued growth. Millennial investors particularly are increasingly looking for a double bottom line of social and financial returns, promising a future growth market for this type of investment.

HISTORY

The first PFS project was started in 2010 in Peterborough, United Kingdom through a program called One Service, which implemented a project to reduce recidivism in Peterborough Prison.

2010

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THE PETERBOROUGH PRISON PROJECT⁸

The goal of the Peterborough Prison PFS project was to reduce re-imprisonment in a population of male prisoners serving sentences of less than 12 months. This population was known to have high reoffending rates, and probation services were not specifically aligned to the needs of this population. The Peterborough One Service PFS contract was issued by the Ministry of Justice to monitor three cohorts of 1,000 prisoners over a five-year term. The contract would pay principal plus interest if the re-offending rate was reduced by more than 7.5 percent across all three cohorts, compared to average rates across the United Kingdom prison service.

The Peterborough project provided an integrated delivery service model using already existing service providers. The St. Giles Trust's "through the door" program, which provides support in prison and after release, was combined with the Ormiston Trust program providing support for the prisoner's families. Part way through the project services providing mental health support were added through a charity called Mind. Other additions to the program included a "drop-in" service and courses on maintaining family ties while in prison. Much of the success of the program is due to the coordination and integration of services previously delivered through siloed departments.

An independent evaluator analyzed results for the first cohort and showed there was an 8.6 percent reduction in the re-offending rates. The program was intended for three cohorts but was suspended after two, because the United Kingdom government introduced a policy "Transforming Rehabilitation" which covered all prisons in the United Kingdom and used a pay for success contract, which outsourced the program. The investors in the Peterborough Social Impact Bond received a single payment of their initial capital plus an amount that represents just over 3% per annum for the period of their investment.⁹

FEASIBILITY OF PFS PROJECTS

There is a growing interest in PFS projects to address chronic social challenges that require a long-term lens, and with potentially significant but long-term societal benefits. Along with growing interest is a growing body of knowledge about PFS as the initial projects mature and more are developed. There is no standard format for a PFS project. Each PFS project has unique characteristics that evolve as the contracts are negotiated between the parties involved.¹⁰ Constructing a PFS project requires significant time, resources, and commitment, and is not appropriate for every situation. From the current body of knowledge about PFS projects, there is general agreement about the core criteria for assessing the suitability and feasibility of a SIB.¹¹



LEADERSHIP STAKEHOLDER COMMITMENT

PFS projects can be complex – developing the budgets, contracts, and the roles and responsibilities requires a significant amount of time and effort. The set-up time for developed PFS projects varies from six months to two years. The partnership consists of multiple stakeholders with diverse priorities, cultures, and timelines. To establish and nurture the partnership requires a committed and enthusiastic team of leaders with decision making authority that can solve logistical challenges such as government agencies paying for outcomes rather than service inputs, and making payments beyond the fiscal year in which the contract is made.



INVESTORS

PFS projects are seen as a mechanism to attract more funding for social services from private sources such as banks, foundations, and individuals. It is important in the pre-development phase for the coordinating organization to assess the level of interest of potential investors to gauge the scale of possible financing. PFS projects are seen as a driver for cost efficiency, which is particularly important when faced with challenging social issues in times of fiscal restraint. However, while private investors are more open to supporting innovative approaches to challenging issues, evidence of achieving the identified outcomes is usually required to secure financing. Thus, the innovation is often within the service delivery itself – different service providers, better or new coordination of services, different settings, and different methods of service delivery.



OUTCOMES AND TIMELINES

Measurable and meaningful outcomes must be identified. The outcomes may be the foundation for longer-term social improvement and the subsequent financial savings in reduced use of social services. In the earliest use of PFS projects, topics were chosen that had a clearly defined population, had outcomes that were easy to measure, and had a high political and government commitment, such as criminal justice and recidivism where cross sector interventions are necessary, and are usually provided by non-government organizations. In other areas such as education, the outcomes may be more difficult to identify and measure, and may involve a longer timeline to show effect. When the PFS project is developed, the timeline must be acceptable to all parties, especially the investors who provide the upfront capital and frequently require a relatively short timeline to avoid tying up the capital investment. Establishing a timeline for outcomes to be achieved should come from reviewing evaluations of similar interventions to that of the PFS project.



SCALE UP

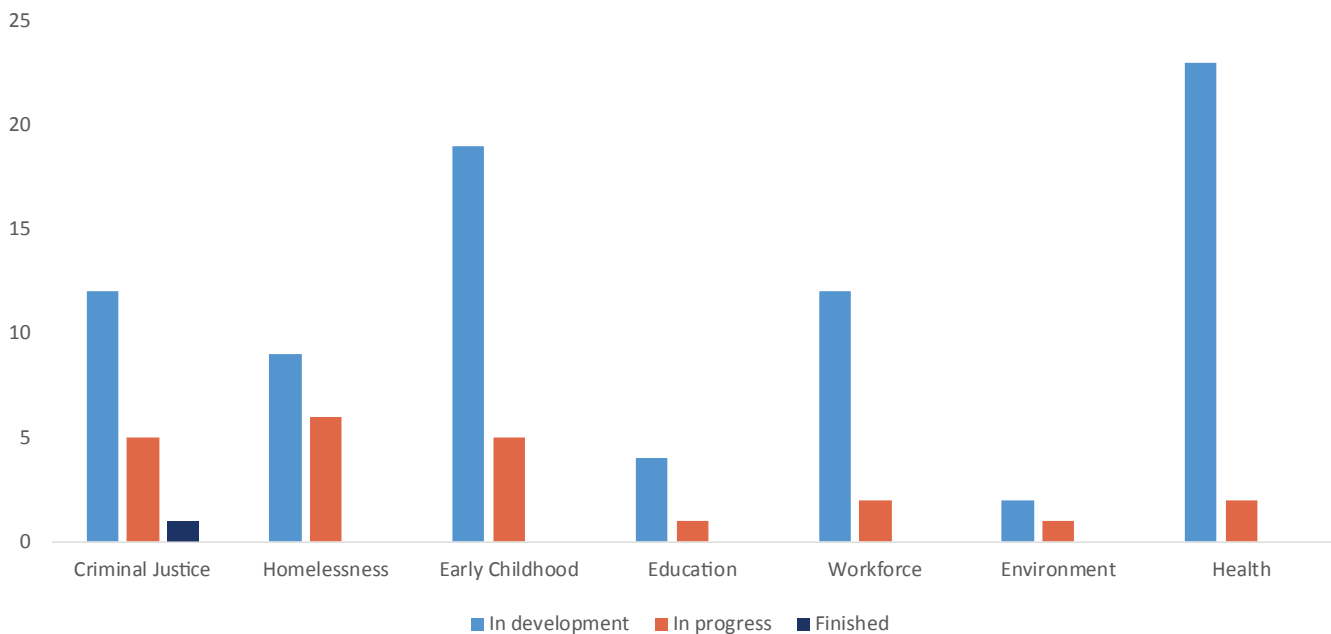
Given the effort and the transaction costs to set up a PFS project there is an assumption that if the intervention is successful it will then be scaled up to benefit a much larger population. A rigorous non-biased evaluation is an essential part of a PFS project and will help to determine the feasibility of scaling up a successful intervention. Defining measures of success in a social service model can prove challenging, especially when the outcomes are directly linked to the payments back to the investors, and the payments may be based not only on immediate savings, but also on the potential financial savings and benefits to society which may be years or decades in the future and cross many institutions. Pay for Success projects that include a process evaluation as well as an outcomes evaluation provide further insight into improving the delivery of services and increasing the positive impact, which is especially important when approaching a larger target population.

OVERVIEW OF PAY FOR SUCCESS PROJECTS IN THE U.S.¹²

Following the initial program in the United Kingdom, PFS models have spread around the world. In the United States there are 18 in progress, a further 58 in various stages of development, and one that has been completed.¹³

The landscape of PFS is growing and evolving quickly in terms of geography, social and economic environment, and sectors being addressed. Thus far, social impact bonds have been used mainly in youth unemployment, homelessness, early childhood education, and recidivism, although interest is growing in applying this type of financing to other areas. For example, the number of PFS projects being developed to impact health issues has increased drastically in recent years.

U.S. PAY FOR SUCCESS PROJECTS BY SECTOR AND STAGE OF DEVELOPMENT

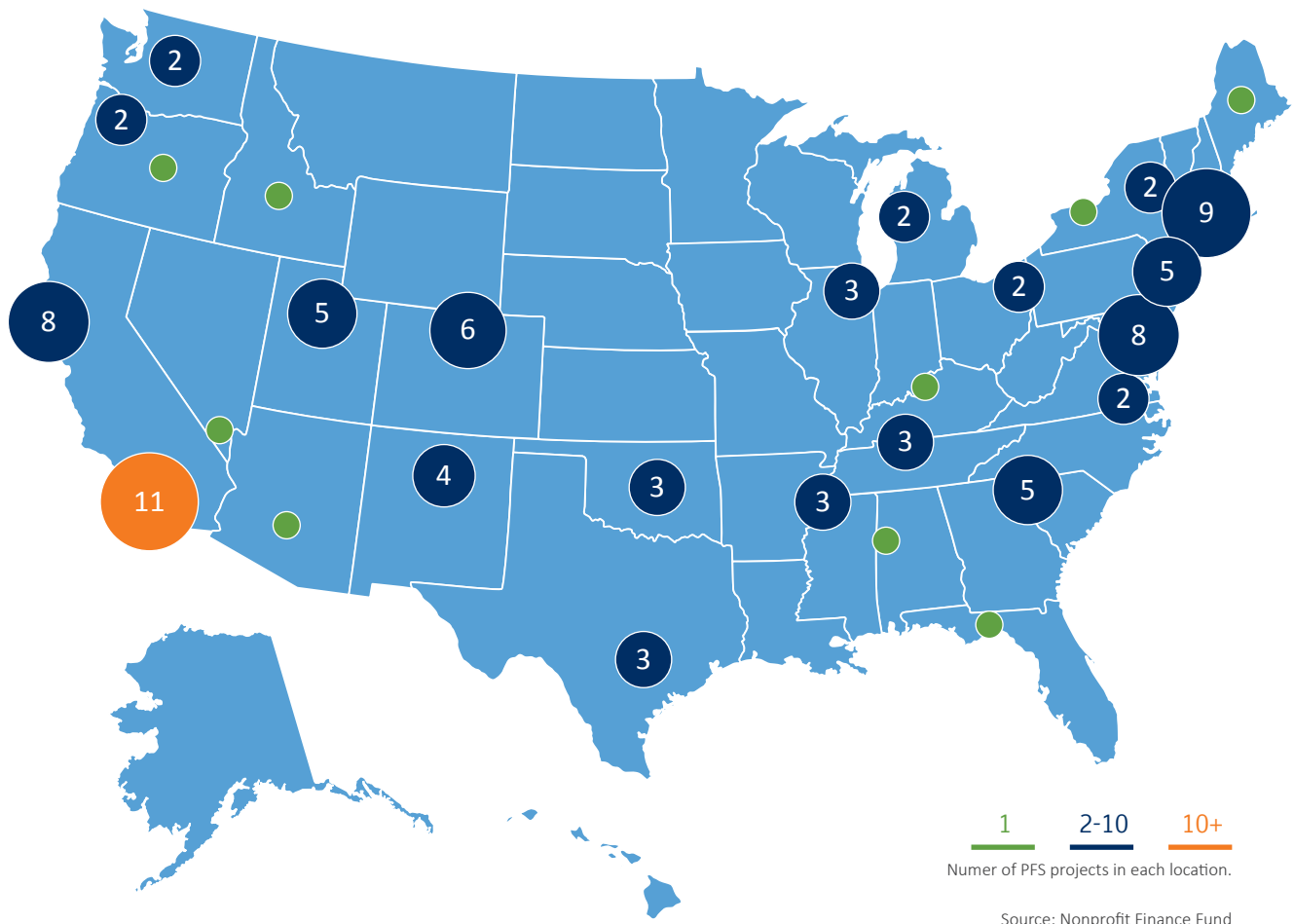


Source: Nonprofit Finance Fund

Note: Many PFS projects address more than one sector. Therefore, while there are approximately 77 PFS projects currently at some stage of development in the U.S., the numbers in the above chart will add up to more than 77.

The Nonprofit Finance Fund's [Pay for Success website](#)¹⁴ contains a wealth of information on PFS projects that are currently being explored, designed and implemented across the United States. While the majority of PFS projects in the U.S. are currently in the design phase, important information can be gleaned from both those projects that are in the design phase and those that have moved into the implementation phase.

NUMER OF PAY FOR SUCCESS INITIATIVES IN THE U.S.



HEALTH

Many PFS projects that focus on improving health outcomes are currently being explored across the U.S., with a few having moved to the implementation phase.

SOUTH CAROLINA’S NURSE-FAMILY PARTNERSHIP

South Carolina, where more than half of children are born to low-income mothers, recognized the opportunity to reduce the risk of poor birth outcomes faced by low-income mothers and their children using the nationally recognized, evidence-based Nurse-Family Partnership program.

The Nurse-Family Partnership pairs first-time mothers with nurses who specialize in providing new parents with education on healthy pregnancies and supporting early childhood development through the child’s second birthday. There are 1,200 families in South Carolina that are currently served by the program, which is being scaled to serve an additional 3,200 mothers and their children through the PFS program.

\$30 million in funding has been leveraged to support the program including \$17 million from philanthropic donors and \$13 million from Medicaid, through a 1915(b) waiver. \$7.5 million in success payments are at stake and philanthropic funders have committed to reinvesting 100% of any success payments achieved back into the delivery of South Carolina’s Nurse-Family Partnership.

There are four outcomes tied to success payments:

- 1 Reduction in preterm births
- 2 Reduction in childhood hospitalizations and emergency department use due to injury
- 3 Increase in healthy birth spacing
- 4 Increase in the number of first-time mothers served in high-poverty ZIP codes.

Several outcomes that aren’t tied to success payments will also be tracked and include: school readiness, academic achievement, high school completion, receipt of government services such as TANF and SNAP, employment and earnings, and crime statistics.

SENIORS – HUNGER

Ensuring that seniors are able to remain living in their homes – safely – is sometimes a challenge. To address this, Baltimore, Maryland is exploring a PFS project that strives to positively impact the lives of vulnerable older adults at risk of needing acute care services. The project, currently in the design phase, includes the national Meals on Wheels America program, Meals on Wheels of Central Maryland and Quantified Ventures as partners. This project also has the distinction of being the first program that includes a local hospital as the payer for successful patient outcomes. With a combination of nutritious meal delivery, case management services, socialization, and in-home safety checks, this project aims to both decrease unnecessary healthcare costs and boost the quality of life of seniors.

ASTHMA

There are several PFS projects that are being explored that aim to improve the health of individuals with asthma.

One project, The Green & Healthy Homes Initiative, targets asthma management for low-income individuals living on Utah’s Wasatch Front. The project includes addressing environmental triggers, monitoring and patient education. Currently in the design phase, this project could be the first PFS project to include an insurance company as an end-payer.

Springfield, Massachusetts has also embarked on a project to better manage asthma for both children and adults, which seeks to decrease emergency department visits and hospitalizations triggered by asthma. Also in the design phase, the approach uses a combination of clinical care and home visitation to determine and remediate environmental asthma triggers present in the home coupled with data management and analysis.

Approximately 13 percent of all children in Alameda County, California consistently suffer from asthma symptoms, placing the county with among the highest pediatric asthma rates in California. The county is studying, with Third Sector Capital Partners, Inc., whether PFS could be useful to scale existing work being done by the Alameda County Public Health Department’s Asthma START Program and the Community Development Agency’s Healthy Homes Department to decrease school absences, emergency department visits and hospitalizations among children in the county. If it moves beyond the design phase, this project would be among the first in the nation to have a managed care plan as an end-payer.

BEHAVIORAL HEALTH

Santa Clara, California has launched the first PFS project focused on mental health in the nation. The project aims to help 250 adults with severe mental illness who are high utilizers of the county’s emergency psychiatric room and other inpatient psychiatric services in Santa Clara County. These individuals are at increased risk of incarceration, homelessness and extended psychiatric hospitalizations. Using a combination of care coordination, supportive social services, and housing connections, the project seeks to decrease expensive hospitalizations and increase the wellness of participants by focusing on community-based mental health services.

HOMELESSNESS

Pay for Success programs that target homelessness frequently have two key goals:

- 1 increasing housing stability, and
- 2 ensuring that necessary social services are available (i.e. behavioral health, financial counseling, job support, and health services).

DENVER’S HOUSING TO HEALTH INITIATIVE

The high cost of providing emergency services to homeless individuals – estimated at \$7 million annually to serve 250 individuals- prompted the creation of Denver’s Housing to Health Initiative. The initiative sprang from the recognition that emergency services spending frequently doesn’t result in permanent solutions to the problem of homelessness and individuals often continue to cycle between being homeless, and spending time in jail, detox programs and emergency rooms.

\$7M / YEAR

The high cost of providing emergency services to homeless individuals – estimated at \$7 million annually to serve 250 individuals - prompted the creation of Denver’s Housing to Health Initiative.

Denver’s initiative aims to solve the problem of temporary solutions to a complex problem by providing stable housing and supportive services. With a 5-year, \$8.7 million social impact bond, the initiative launched in 2016 seeks to help 250 individuals who are frequent utilizers of emergency services through the provision of Assertive Community Treatment. This evidence-based intervention targets individuals with mental health needs and provides them with treatment, rehabilitation and support services. Participants are voluntarily enrolled after being identified by the Denver Police Department, with the Denver Crime Prevention and Control Commission coordinating referrals.

CRIMINAL JUSTICE

The U.S. has long had the highest incarceration rate in the world.¹⁵ Not only do we have high incarceration rates, but recidivism rates are also high with estimates suggesting that two-thirds of released prisoners are re-arrested within 3-years of release from prison.¹⁶ Pay for Success programs that target the criminal justice system frequently seek to impact recidivism rates by:

- 1 reducing the number of individuals who are incarcerated, and
- 2 ensuring supports are available once individuals are released from prison.

MASSACHUSETTS' JUVENILE PAY FOR SUCCESS INITIATIVE

Targeted at 929 men between the ages of 17 to 23, the Massachusetts Juvenile Justice PFS Initiative is using targeted life skills, employment and education programming along with intensive street outreach to decrease incarceration rates by 40 percent and increase job readiness and employment over a seven-year period. The project was implemented in 2014 and targets young men living in Boston, Chelsea and Springfield. Outcomes tied to success payments include:

- 1 number of jail/prison bed-days avoided;
- 2 job readiness; and
- 3 increases in employment.

Massachusetts will make payments of up to \$27 million over the seven-year period.¹⁷ If the project is successful, there is the potential to serve an additional 390 individuals, using federal funds.

EXPERT INSIGHT FROM A LOCAL PAY FOR SUCCESS MODEL: CUYAHOGA COUNTY'S PARTNERING FOR FAMILY SUCCESS PROGRAM

Recognizing that children who end up in foster care because their families are homeless spend longer in foster care than children whose families aren't homeless, Cuyahoga County launched a PFS project in December 2014 that aims to positively impact homelessness and child welfare. This is the first county-level PFS project in the country.¹⁸ The project aims to serve 135 families over a 5-year timeframe with families receiving the intervention over a 12 to 15 month timeframe. In addition to striving to decrease the length of stay that children experience in foster care, additional project goals include achieving permanent housing and family reunification.

INTERVENTION

The main interventions for the PFS project are housing assistance and supportive behavioral health interventions provided to families in the treatment group.

OUTCOMES

The contracted outcome is to decrease the number of days homeless children spend in foster care placement by 25%. Other priority outcomes include housing stability for 3 to 6 months, reducing trauma symptoms and safe reunification of families.

KEY FUNDING PARTNERS

Under this model, foundations and private funders are paying for intervention services for the treatment group. If the treatment group is successful at meeting predetermined success metrics, the funders will be paid back the principle amount of the loan, plus a possible pre-determined interest by the Cuyahoga County Division of Children and Family Services based on savings that arise from preventing future costly services. Funders include both local foundations (The George Gund Foundation, The Cleveland Foundation and the Sisters of Charity Foundation of Cleveland) along with national funders (Reinvestment Fund and the Nonprofit Finance Fund). The Laura and John Arnold Foundation provided separate funding for a pilot phase that is not part of this project financing.



💰 **\$4 MILLION** provided in up-front funding from private and philanthropic funders.

💰 **\$5 MILLION** is the maximum amount of potential success payments from the county.

OTHER KEY PARTNERS

The Cuyahoga County Division of Children and Family Services (DCFS) is charged with investigating child abuse and neglect referrals and aims to assure the safety of children while working towards the goal of stabilizing and reuniting families. DCFS has played a central leadership role in the PFS project in addition to providing data essential to identifying the target population.

Also at the county level, continued leadership support from the Office of the Cuyahoga County Executive has been critical to the PFS project. Furthermore, the City of Cleveland-Cuyahoga County Office of Homeless Services has been key to ensuring local homeless management information system (HMIS) data is accessible.

FrontLine Service is the lead service provider and contracting intermediary. FrontLine Service is the largest homeless provider in the state and services include critical time intervention, child parent psychotherapy, and trauma adapted family connections.

Three housing providers- Cuyahoga Metropolitan Housing Authority, Famicos Foundation and the Emerald Development and Economic Network – ensure that families have several housing options.

The nonprofit advisory firm, Third Sector Capital Partners, Inc, managed the Pay for Success deal construction and initial development of the project. Enterprise Community Partners, Inc. is the fiscal agent and project manager.

The Center on Urban Poverty & Community Development at Case Western Reserve University is the data and evaluation partner for the project.

LESSONS LEARNED

Dave Merriman, Administrator, Cuyahoga County Job & Family Services, has learned many lessons from his involvement in the PFS project since its inception. His breadth of understanding about designing and implementing a PFS project has led him to advise local, national and international partners that are seeking to launch a PFS project. He shared the following lessons learned from Cuyahoga County's PFS project:

- Leadership support from Armond Budish, Cuyahoga County Executive, and Sharon Sobol-Jordon, Chief of Staff in the Cuyahoga County Office of the Executive, has been essential.
- This project helped Cuyahoga County's Division of Children and Family Services match client needs to acuity, which is something they had never been able to do prior.
- Focusing not just on monetized savings but also on other outcomes they are seeking to achieve is critical.
- When talking to funders, it is important to understand whether they are seeking to achieve outcomes, achieve cost savings or something else. Each investor often has a different stake in participating.
 - For example, one investor might want to see government more focused on outcomes using randomized control studies; for others that may not be a key outcome.
- Many PFS projects never get past the design phase, but there are important lessons learned regardless.

PAY FOR SUCCESS AND LEAD HARM REDUCTION IN CLEVELAND

Lead poisoning is an extremely serious and *entirely preventable* health problem that disproportionately affects children living in disinvested low-income neighborhoods with old, deteriorating housing stock of low value. The consequences of lead poisoning are irreversible and can include brain damage resulting in lower IQ, behavioral issues, poor attention span, and lower educational attainment, all of which have a lifelong negative impact. Statistics show that a lead poisoned child is seven times more likely to drop out of school and six times more likely to be in the juvenile justice system.¹⁹



The federal government and local health agencies have made significant progress to reduce lead exposure over the past 40 years. However, there continue to be “hot spots” of lead poisoning around the country that demonstrate the continued serious health inequities suffered by underserved low income communities. City of Cleveland neighborhoods are one of the hot spots with unacceptably high rates of lead poisoning in children. In some neighborhoods in Cleveland more than *one-in-four children suffer from lead poisoning*.

The Centers for Disease Control and Prevention's (CDC) Healthy People 2020 includes an objective to reduce blood lead levels in children ages one to five years old through a housing-based primary prevention approach. However, funding for lead remediation has decreased over the past several years, making this objective increasingly challenging, and alternatives to traditional funding are being sought.

To further explore non-traditional funding for lead remediation, the CDC commissioned a Pay for Success “[How-to Guide](#)”²⁰ focused on lead safe homes in Greater Cleveland. The April 2017 report was produced by Deloitte Consulting with support and input from the Cuyahoga County Board of Health, the City of Cleveland, and the Cleveland Foundation’s Greater University Circle Community Health Initiative. The report provides an in depth analysis of the advantages and challenges of developing a pay for success model to reduce lead poisoning in children in Cleveland.

The Cleveland Foundation, the City of Cleveland, the Cuyahoga County Board of Health, and the Greater University Circle Community Health Initiative are currently working with Third Sector Capital Partners (a non-profit advisory firm with extensive experience with Pay for Success) to develop a feasibility plan for eliminating lead poisoning in Cleveland using a Pay for Success model.

CONCLUSION

PFS holds a lot of promise for addressing some of today’s most difficult social problems; however, it is not a silver bullet. As with any response to a complex social issue, PFS has pros and cons, all of which must be seriously considered before embarking on a project.

INNOVATION AND RISK TRANSFER: The development of a PFS model provides an avenue for innovative approaches to service delivery, which are rigorously evaluated. Governments are usually unwilling to risk trying new and innovative ideas due to budget and political constraints. However, with a PFS model the fiscal risk is transferred to the investors, and public funds are only used when outcomes are achieved. Governments thus benefit from the evaluation of the innovation and can use that knowledge to fund approaches that achieve desired outcomes.

IMPROVED SERVICE DELIVERY: Pay for Success models offer a way to improve low performing public services. The cost of continued high levels of homelessness, children in foster care, recidivism, and poor education outcomes is extremely high both in terms of finance and human capital. The earlier the intervention is in the person’s life, the higher the return on the investment in prevention.

ADDITIVE ROLE: The role of PFS is not to replace traditional funding of social services, but rather complement, enhance and improve them.

COST OF POOR PERFORMING SOCIAL SERVICES: Balanced against the pros and cons of PFS, little has been written of the high cost of social service policy failure. Why aren’t existing approaches and funding streams in many fields working? Pay for Success may play a part in identifying what and how services really work, and how to improve the existing mechanisms.

CHERRY PICKING: Because PFS has a direct link between outcomes and payments, there is a concern that this may drive service providers in a PFS model to “cherry pick” participants to ensure outcomes are achieved, leaving the more challenging cases unresolved.

COMPLEXITY AND EXPENSE OF DEVELOPMENT: Every PFS model is unique and development of multi-stakeholder partnerships with complex legal contracts requires significant resources and commitment. The actual cost of development can be so prohibitive that it prevents further development of the project.

RETURN ON INVESTMENT: Pay for Success models’ focus is on outcomes and improved performance management – but the savings must be greater than the cost of the upfront capital and the cost of development.

INCREASE EFFICIENCY AND EFFECTIVENESS: Government systems providing social services are not user friendly; services fragmented in multiple different departments, complex forms that need to be completed, and copies of supporting documentation necessary for the service applications. Underserved and low-income populations often struggle to meet the demands needed to receive services. Pay for Success could strengthen the efficiency and effectiveness in public service and policy.

CONNECTION TO POPULATION SERVED: In some cases, people distrust government institutions, especially in underserved and disinvested populations. Government systems are not necessarily the best suited to provide social services to the populations that need them most, where trust and social connections to the community are vital. Pay for Success may provide services through organizations more closely connected to and trusted by the communities they serve.

INEQUITIES: Pay for Success may be a useful tool to impact health inequity and decrease racial disparities. In Cuyahoga County's Partnering for Family Success program, 70% of kids receiving services are African American.

MEASUREMENT OF OUTCOMES: While vital to the process of a PFS program, measuring social results can be challenging. It is therefore vital that all partners in a PFS model have a clear understanding of agreed upon outcomes and their measurement.

INVESTORS: Are more likely to provide funding with evidence-based interventions that have a high likelihood of achieving the defined outcomes.

FOCUS ON PREVENTION: Pay for Success models focus on prevention of negative social outcomes and the consequent potentially high remediation costs. Interventions that have the potential to prevent significant and multiple adverse situations across the course of a lifetime also have the potential for the largest savings for society.

OPPORTUNITY TO SCALE: Pay for Success models are often touted as the means to scale up successful interventions. As these models are still relatively new, there is limited evidence currently on PFS programs that have been replicated and applied to larger populations.

COLLABORATION: Pay for Success offers an opportunity for innovative collaborations across public and private sectors and between government departments, potentially leading to increased communication, exchange of ideas, and resulting improvement in service delivery and evaluation.

Pay for Success models are evolving rapidly and embracing the creativity necessary to address the most challenging societal issues we face. They are not the answer in of themselves, but they provide the environment for innovative solutions and rigorous evaluation to drive improved outcomes.

ENDNOTES

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SCALE FINANCE

Industrial-Strength Social Impact Bonds
for Mainstream Investors

Steven H. Goldberg
April 2017

A Special Report from the
Center for Community Development Investments
Federal Reserve Bank of San Francisco

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April 2017

The views expressed in this paper are those of its author and do not necessarily represent those of the Federal Reserve Bank of San Francisco or the Federal Reserve System.

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ABSTRACT

Social Impact Bonds (SIBs) have demonstrated significant growth potential within their defined boundaries, but the standard model has not yet developed “mainstream” investment transactions capable of expanding certified evidence-based programs (CEBPs) commensurate with unmet population needs. This paper proposes an enhanced SIB model called “Scale Finance” in which asset owners and fund managers would work with CEBP developers to expand these proprietary programs at their maximum feasible growth rates. Repayment of principal plus risk-adjusted, market-rate returns would be predicated upon the achievement of agreed social impacts and governmental savings that substantially exceed program and financing costs.

The paper then applies the framework to show how Scale Finance SIBs could dramatically reduce the mass incarceration of juvenile offenders, which dispatches some 60,000 at-risk youth into the “school-to-prison pipeline” every year at an annual cost of approximately \$5.7 billion. A SIB *pro forma* is presented for a prototypical state that currently spends \$100 million annually on juvenile detention and other custodial placements. In this example, by raising \$65.6 million from mainstream investors, a Scale Finance SIB could replicate the successful Florida Redirection project to provide Multisystemic Therapy and other CEBPs to 5,000 at-risk families over five years, cut placements in half, pay investors a 10% annualized return, and return net savings of nearly \$91 million to the state. If successful, Scale Finance would offer a financially self-sustaining way to effectively solve certain pervasive social problems we already know how to fix.

ACKNOWLEDGEMENTS

Special thanks to Tamar Bauer, Erica Brown, Roger Bullen, Laura Callanan, Paul Carttar, Lori Cohen, Dan Edwards, Jed Emerson, Ian Galloway, Steven Godeke, Megan Golden, Isabel Gregory, Andrew Levitt, Alex Nicholls, James Perry, Neil Powling, Karl Richter, John Roman, Karla Sainz, Marya Stark, Keller Strother, Teri Weathers, and Clay Yeager for their spirited comments and obliging feedback, without which this paper would have been much shorter.

DISCLOSURES

An earlier draft of this paper was partially funded by MST Services, Inc., to which the author has also provided nominal consulting services. The author has also developed unavailing business proposals with MST Services, Inc. and Evidence-Based Associates, and has provided formal and informal advice to some of the other organizations referenced in this paper. The author does not speak on their behalf.

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“While the big money is waiting for scalable opportunities to appear,
the big opportunities are waiting for the big money to arrive.”

Ian Potter, “Getting the Big Money Into Social Impact.”¹

“If not to [government] or to philanthropy, where do we turn? To social
impact bonds, which fund one small initiative at a time, loaded with
transaction costs and contingent on proofs found only in textbooks?”

Stacy Becker, “Is This Any Way to Run a Business?
A Population Health Business, That Is!”²

1. PREFACE

In January 2011, the cover article of the *Harvard Business Review* declared that “the capitalist system is under siege” because “companies are widely perceived to be prospering at the expense of the broader community.”³ That same month, Social Finance, Inc., the U.S. affiliate of the U.K.’s Social Finance, Ltd., which launched the world’s first Social Impact Bond (“SIB”) at Her Majesty’s Prison Peterborough in September of the previous year, opened its doors.

Five years on, some 60 SIBs have raised some \$216 million in 15 countries,⁴ with “hypers, haters and doers”⁵ debating whether SIBs will solve, worsen or possibly chip away (or not) at the crisis of capitalism. What some deride as “a noble way to lose money”⁶ looks to others like a promising future.

We’ve gained enough experience with this financial duckbill platypus to draw some early conclusions about what SIBs can and cannot do. Most SIB projects appear to be fairly well-designed investments in promising social innovations that will likely make good use of greater and more secure funding over a longer time than traditional sources provide. A few pilots have paid out modest returns and a few have fallen by the wayside, while others have called into question whether the benefits are worth the extra effort and expense.

Yet the genius of the original idea remains as sound as ever and, this paper contends, largely unfulfilled. If an ounce of prevention is indeed worth a pound (or so) of cure, then private investment should be able to support exponential growth of social innovation and monetize sizeable governmental savings. This has not happened, however, and it does not appear likely to do so in the near future. At a time of growing misgivings about SIBs, the assumptions, mechanics and expectations underlying this still-nascent financial instrument deserve a more exacting look.

1.1 Social Investment

First principles teach us that the function of financial capital is to expand the production and supply of goods and services deemed valuable or otherwise desirable. The incentive to provide capital is the expectation of remuneration for the temporary deprivation of its use, and to compensate investors for the risks they assume and their perspicacity.

Individuals make “personal” investments, professionals and businesses make “commercial” investments, and fiduciaries make “institutional” investments using aggregated pools of other people’s money. Collectively, commercial, institutional and fiduciary investments are sometimes labeled “mainstream,” and networks organized to match the demand for and supply of investment in business enterprises, and manage its deployment, can be called “mainstream capital markets.” Successful investments often spawn follow-on transactions, creating the potential for self-sustaining capital flows.

One of the primary roles of mainstream capital markets is financing the expansion of innovative solutions to unmet consumer needs. Without mainstream investment, groundbreaking products and services can't become widely available. Industrial levels of production and expansion require industrial quantities of capital, which in turn require corresponding levels of remuneration.

By contrast, providing capital for charitable purposes without expectation of remuneration is called philanthropy. Philanthropy can also be personal, corporate or, in the case of foundations organized for the purpose, institutional. But unlike investment capital, philanthropic funding is not by nature self-sustaining, but instead requires continual replenishment by generous donors.

The relatively new discipline of "social investment" incorporates features of both investment and philanthropy, offering capital providers a "double bottom line" of financial returns and social benefits. One such instrument, Social Impact Bonds, has received considerable attention (some say excessively so: "the rhetoric from government has over-egged the SIB proposition"⁷), albeit not yet from mainstream capital markets. SIBs use non-governmental funding to expand early intervention programs that can prevent or ameliorate serious social problems, with repayment of principal and financial returns dependent upon future government savings or other value produced.

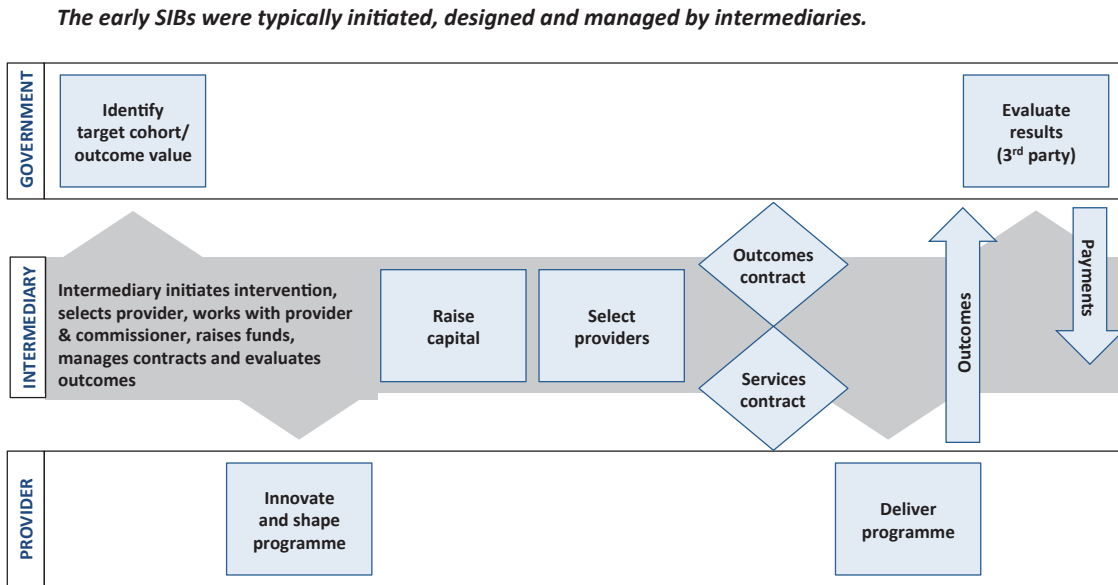
The nomenclature is confusing, though, as definitions are imprecise, overlapping and used haphazardly. The broadest category, "impact investing," includes "investments made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return ... such as sustainable agriculture, clean technology, microfinance, and affordable and accessible basic services including housing, healthcare, and education."⁸ A 2015 Global Impact Investing Network survey reported total impact investment assets under management of \$77.4 billion,⁹ or, cumulatively, \$8.7 trillion.¹⁰ "Social impact investing" or "social investing" is an ill-defined subset of impact investing of indeterminate size that generally applies to "patient capital" for traditional human services organizations and social enterprises addressing problems such as poverty, homelessness, chronic health problems, and educational inequity.

This paper is confined to SIBs, which comprise a small fraction of social impact investments.¹¹ In the U.K., for example, social investment was worth "at least £1,500m [\$1.87B] at the end of 2015," of which "social impact bonds accounted for 1%."¹² (SIBs are also called "Pay for Success" or "PFS" in the U.S., and this paper uses the terms interchangeably.)

1.2 Standard SIBs

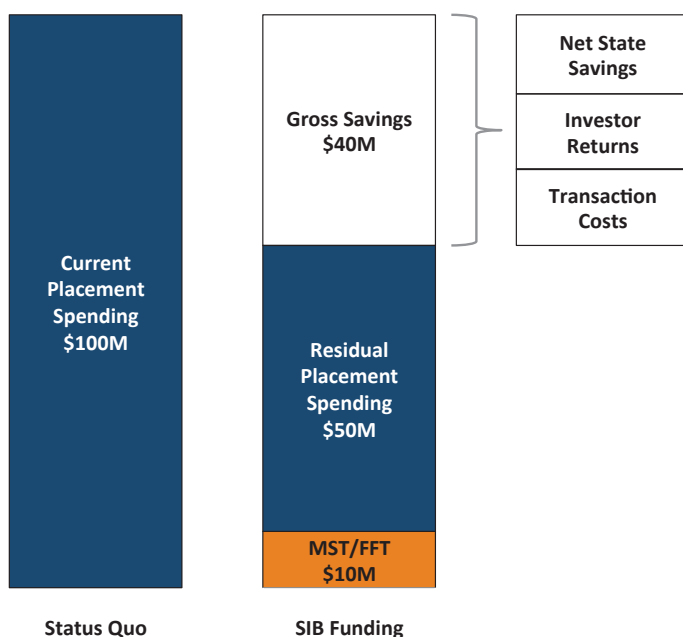
Social Impact Bonds are becoming a viable way to fund prevention and early intervention social programs that government can't afford to pay for directly. Under the guidance of an "intermediary" dedicated to organizing SIBs (Figure 1), social investors agree to provide up-front funding for a cost-effective social program that is expected to prevent more expensive problems that fall to government and philanthropy. The investment is made contingent upon an outcomes-based agreement that government will repay investors their principal plus an additional financial return if, when and to the extent that the social service providers achieve the agreed results and save the government money by reducing future expenditures. The determination of the results and the calculation of success payments to investors are made by an independent evaluator.

Figure 1. Standard SIB Model¹³



The SIB business model entails monetizing future government savings. As shown in Figure 2, suppose a state currently spends \$100 million per year holding 1,000 juvenile offenders in some form of “custodial placement” at an average cost of \$100,000 per youth. Providing intensive family therapies such as Multisystemic Therapy (MST) and Functional Family Therapy (FFT) to those same 1,000 youth at an average cost per family of \$10,000 would total \$10 million. If the programs had a 50% success rate, then 500 adolescents would still require placement at \$100,000 each, so the “residual” placements would cost \$50 million. Total spending would now be \$60 million, yielding gross savings of \$40 million. Those savings would be used to cover SIB transaction costs and investor returns, with the remainder reverting to net state savings.

Figure 2. Illustrative SIB Math



As of the date of writing, the U.S. has launched 11 SIBs since 2012 in 9 states, which have raised a total of \$100 million (Figure 3). The average deal size is \$9.1 million, the average deal size per year is \$1.28 million and the average duration is 7.1 years, all of which are substantially greater than typical philanthropic grants and government contracts for comparable human services programs.¹⁴ Worldwide, 51 SIBs have been launched in 15 countries, of which 38 (75%) are based in the U.K. or the U.S. The projects have raised \$183.6 million in total, bringing the global average to \$3.6 million per transaction or \$820,000 invested per year.¹⁵

Figure 3. SIBs Worldwide (Million US\$ as of Nov. 30, 2016)¹⁶

Country	No. of SIBs	Total Invested	Ave. Investment per Transaction	Ave. Number of Years	Ave. Annual Investment per Transaction
UK	27	\$54.6	\$2.0	3.8	\$0.53
US	11	\$100.0	\$9.1	7.1	\$1.28
Other	13	\$28.9	\$2.2	4.0	\$0.56
Total	51	\$183.6	\$3.6	4.6	\$0.82

The social problems that U.S. SIBs address have primarily clustered around prisoner recidivism, homelessness and early childhood education. To date, two U.S. SIBs have achieved the contracted outcomes and made agreed payments to investors (although the success of one project has been disputed¹⁷), and one SIB has failed to improve results and been closed down. Recent analyses conducted by the Brookings Institution,¹⁸ the Nonprofit Finance Fund,¹⁹ Bridges Ventures,²⁰ and the Social Finance Global Network²¹ attest that SIBs are gaining acceptance as a new approach for bringing previously untapped sources of funding to innovative programs. SIBs are also increasing the use of outcomes data and formal evaluation to channel more funding to more effective programs, and helping social entrepreneurs plan for longer-term growth with the expectation of reliable long-term support.

Two examples illustrate how challenging and important this work is:

- Thirteen communities are conducting PFS feasibility studies or pilot projects to improve asthma outcomes and reduce the \$50.1 billion in annual direct medical costs, primarily for acute healthcare visits for potentially preventable asthma episodes. This is an amount that far exceeds the cost of implementing “evidence-based interventions in community settings.”²² Government agencies, service providers, health insurers, technical specialists, intermediaries, and evaluation experts have been collaboratively tackling a host of daunting issues, including negotiating data-sharing agreements, conducting actuarial analyses of medical claims data, mapping and coordinating service delivery, establishing referral pathways, defining and pricing outcome metrics, quantifying cost savings, and most crucially, devising payment mechanisms with Medicaid and other regulated funders.
- Santa Clara County, California, which includes most of Silicon Valley, is mounting a PFS effort to reduce one of the largest homeless populations in the country:

“In order to identify the highest-cost, highest-need homeless individuals in the county who could be enrolled in Project Welcome Home, we had to create the capacity to pull data from our health care system, our homeless shelters, and our criminal justice system, match individuals’ records across systems, and then run that data against an algorithm that would identify the people eligible for the program. We had to build similar capacity to collect data on individuals to evaluate the program, determine whether the successful outcomes we defined are being achieved, and assess whether the project is successful in achieving other improvements in the health and wellbeing of the individuals served.”²³

The PFS project is structured such that the investors that provided \$6.9 million in upfront funding will receive a maximum payout of \$8 million “if and only if it successfully provides stable housing for these individuals.” After a year and a half, the project is so far meeting its success metric and the county is fulfilling its payment obligations.

This work appears to be laying a promising foundation for replication among similar programs and continued recruitment of social investors from the ranks of foundations (public, private and corporate), high net worth individuals and family offices, community development financial institutions (CDFIs), and other specialized financial institutions (such as regional banks) whose business models leverage various forms of “regulatory currency” such as the Community Reinvestment Act (CRA) and Low Income Housing Tax Credits (LIHTC). Although the market lacks reliable projections about potential growth—for example, a U.K. cabinet minister’s statement that SIBs would reach £1 billion by the end of the current Parliament has been sharply criticized²⁴—early indications are that this new contracting and financing mechanism (referred to here as “standard SIBs”) has just begun to scratch the surface of potential deployment.

But there are formidable obstacles to overcome, as the Santa Clara County project illustrates:

The county has had to make substantial investments in the human and technical infrastructure necessary to make these initiatives successful. This has involved coordinating each project; hiring a technical assistance provider; completing the multi-year process of defining desired outcomes, procuring a service provider, and negotiating

performance metrics; identifying and contracting with university researchers to conduct a rigorous evaluation of the program; and obtaining any necessary outside financing. Creating the legal agreements and building the technical infrastructure to gather the data necessary to enroll clients and evaluate outcomes has required key county leaders to invest huge amounts of time and energy in a project that will only serve 150 to 200 county residents.²⁵

In response, many social investment proponents are working on refinements of the standard model to improve the efficiency and reduce the cost of what have been complex, time-consuming and expensive transactions. They include enacting enabling legislation to clarify the legal authority for outcomes-based government contracts, standardizing the legal terms and documentation of SIB deals, using “rate cards” to simplifying pricing success payments,²⁶ opening SIBs to new customers such as retail investors, and packaging individual transactions into larger funds to diversify risk and increase deal flow.²⁷ Still, it is fair to say that we have arrived at a point where “it is worth pausing to consider what the roadblocks have been to date, whether they can be navigated and whether, if they cannot, it is the end of the road for SIBs.”²⁸

1.3 Scale Finance SIBs for Mainstream Investment

The thesis of this paper is that, until mainstream investors see SIBs as compelling business opportunities, they will remain modest enhancements of philanthropic and government funding, with little or no ability to “scale what works.” It presents an enhanced SIB model called “Scale Finance” that would offer large, profitable and enduring investment opportunities to overcome a select few of our most pervasive, disabling and intractable social problems. Scale Finance is designed to drive systemic change by engaging the momentum of commercial capital to expand proven (“evidence-based”) social interventions commensurate with unmet population needs.

Current SIBs typically raise about \$5-20 million of philanthropic and community development funding for experimental programs over 3-5 or more years.²⁹ These are largely “government-centric” pilot projects in which the public sector takes the lead in developing the transactions, an attribute that limits their appeal to mainstream investors. By contrast, Scale Finance SIBs would be much more “market-centric,” with hands-on investors exploring certified evidence-based programs (CEBPs) whose exponential growth they’d be willing to finance. Scale Finance projects would pre-raise some \$50-100 million from commercial, institutional and other accredited investors to expand certified interventions at their maximum feasible growth rates over 5-10 years. Well-developed financing proposals would then be offered to state and local governments on a competitive basis (“reverse procurement”), just as state economic development agencies compete to attract new manufacturing plants.

As shown in Figure 4, standard SIBs (and PFS) and Scale Finance are similar in that they both rely on “an ounce of prevention” to “monetize future government savings” by attracting other people’s money whose repayment would be contingent upon the achievement of measurable outcomes. But mainstream investment remains a bridge too far. As a result, standard SIBs—the only model, it must be acknowledged, with actual projects on the ground and in active development around the world—have pursued growth that exceeds what philanthropy and government funding have supported, but still falls short of scaling what works.

“Much confusion has come from failing to distinguish the funding needs of early stage, high risk ideas, as opposed to scaling of proven ideas.”³⁰ Standard SIBs need modest amounts of funding (relative to the total need) from “social investors,” foundations and community development funders that aren’t seeking competitive returns. Scale Finance needs vast amounts of expansion capital from accredited, fiduciary and other mainstream investors. For legal and business reasons, that kind of funding just isn’t available without risk-adjusted, market-rate returns. Greater financial risk means commercial investors would expect early and equal involvement in transaction development and governance, well beyond the imbalanced arrangements that social investors have been willing to accept. Thus, the two SIB models entail very different developmental approaches.

Government sponsors and social investors will consider experimental programs that might incrementally advance policy priorities, but fiduciary investors can only accept the highest levels of evidence and cost-effectiveness to assess and manage risk, and achieve competitive financial returns. Government agencies won't pay investors without (as explained in Section 6) stringently-controlled "counterfactual" evaluations proving causation, while commercial and institutional investors require flexible program management that counterfactuals preclude. Not unreasonably, mainstream investors would expect payment if independent auditors certified that programs were implemented in fidelity with models whose effectiveness and savings have already been validated many times over.

Figure 4. Comparison of SIB Models

	STANDARD SIB & PFS	SCALE FINANCE
OBJECTIVES	<ul style="list-style-type: none"> • <i>Improved social outcomes</i> • <i>Pay for programs that work</i> • Incremental expansion of effective social programs • “Evidence-based policymaking” 	<ul style="list-style-type: none"> • <i>Improved social outcomes</i> • <i>Pay for programs that work</i> • Step-change expansion commensurate with unmet population needs • “Governing by Network”³¹
INTERVENTIONS	<ul style="list-style-type: none"> • Largely promising prevention & early intervention programs 	<ul style="list-style-type: none"> • Exclusively proven prevention & early intervention programs
ORIGINATOR	<ul style="list-style-type: none"> • Government 	<ul style="list-style-type: none"> • “Model owners” (developers of proprietary CEBPs) • Mainstream investors & advisors
ORIGINATION PROCESS	<ul style="list-style-type: none"> • Government procurement 	<ul style="list-style-type: none"> • “Reverse procurement”
LEVELS OF EVIDENCE	<ul style="list-style-type: none"> • Any except none 	<ul style="list-style-type: none"> • Strong only
SIB MATH & RISK MANAGEMENT	<ul style="list-style-type: none"> • <i>Monetize future government savings</i> • Savings cover some program & financing costs • Grants, pro bono services & subsidies to defray fix costs • Third-party guarantees & credit enhancements 	<ul style="list-style-type: none"> • <i>Monetize future government savings</i> • Savings exceed program & financing costs • Full-cost investment analysis • High-fidelity compliance with validated models
OUTCOMES & SAVINGS VERIFICATION	<ul style="list-style-type: none"> • Counterfactual evaluations • Third-party evaluator 	<ul style="list-style-type: none"> • Fidelity to validated models • Third-party auditor
FULL FAITH & CREDIT	<ul style="list-style-type: none"> • No 	<ul style="list-style-type: none"> • Yes
TERMS & CONDITIONS	<ul style="list-style-type: none"> • Standard government contract 	<ul style="list-style-type: none"> • Negotiated
INVESTORS	<ul style="list-style-type: none"> • <i>Philanthropic</i> • <i>Community Development</i> 	<ul style="list-style-type: none"> • <i>Philanthropic</i> • <i>Community Development</i> • Commercial & Institutional
FINANCIAL RETURNS	<ul style="list-style-type: none"> • Concessionary 	<ul style="list-style-type: none"> • Risk-adjusted, market-rate

1.4 Dismantling the School-to-Prison Pipeline

To illustrate its immediate potential, Section 5 of this paper presents a case study that applies the Scale Finance model to the development of a \$65.6 million SIB that would expand MST and FFT over five years. These are two early intervention programs that have been proven by some three decades of rigorous evaluation to dramatically reduce juvenile offending at a fraction of the cost of traditional law enforcement and criminal justice responses. Despite the fact that these programs have been successfully delivered to more than 200,000 families over twenty years in dozens of states and countries, they remain chronically underutilized, reaching just 5-10% of at-risk teenagers. Applying the Scale Finance framework to MST/FFT would aim to finally bridge the “chasm between the services we provide and what is needed.”³²

The average cost of juvenile detention is so much greater than the average cost of evidence-based treatment that monetizing the future governmental savings should be sufficient to attract the market-rate capital needed to make MST and FFT available to effectively all interested families. In this way, scaling CEBPs commensurate with unmet population needs could provide investors with plentiful deal flow for decades to come. The addressable market for preventing juvenile offending involves some 60,000 families at an annual cost to state and local government of roughly \$5.7 billion, of which nearly \$1.9 billion could be saved each year (Figure 5). This is a long-term, multi-billion dollar investment opportunity for large institutional players that have formed new business units dedicated to impact investing, such as BlackRock Impact, Goldman Sachs Asset Management (having acquired Imprint Capital Advisors in 2015) and Bain Capital Double Impact.

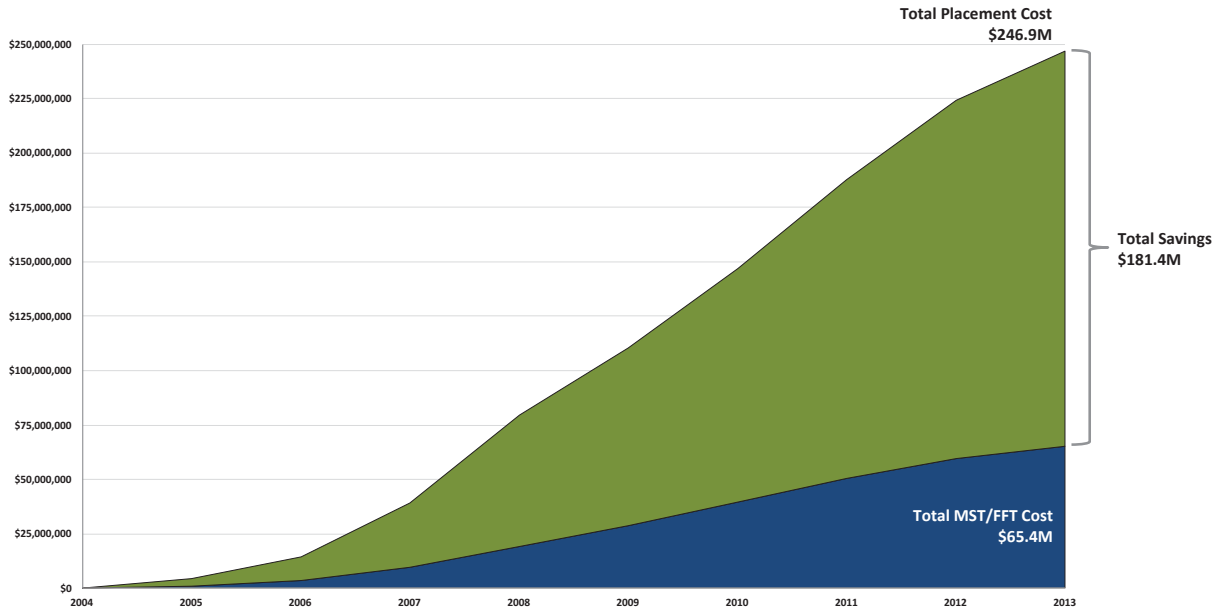
Figure 5. Addressable Market for Scaling MST/FFT³³

(1)	Ave. state spending on placement per youth		\$ 88,000
(2)	Ave. MST/FFT cost per family (conservative)		-\$ 10,000
(3)	Avoidable spending per family	(2) - (1)	\$ 78,000
(4)	Total annual placements		60,000
(5)	MST/FFT high-fidelity success rate		50%
(6)	Avoidable placements	(4) x (5)	30,000
(7)	Avoidable U.S. gross spending on placements	(3) x (6)	\$ 2,340,000,000
(8)	QA/QC overhead rate for scaling MST/FFT		10%
(9)	Added QA/QC cost	(7) x (8)	-\$ 234,000,000
(10)	Avoidable U.S. net spending	(7) - (9)	\$ 2,106,000,000
(11)	SIB fix cost rate (for legal, evaluation, etc.)		10%
(12)	Added SIB fixed cost	(10) x (11)	-\$ 210,600,000
(13)	Pool for investor returns & net savings	(10) - (12)	\$ 1,895,400,000

In fact, as the case study shows, we already know how to scale MST/FFT. From 2004-2013, a statewide expansion of MST and FFT to some 10,000 families in the Florida Redirection Project reduced juvenile commitments for program completers by more than 70%. As shown in Figure 6, the state spent a total of \$65.4 million for Redirection treatment programs, which saved \$181.4 million relative to what it would otherwise have spent on custodial placements (\$246.9 million). While Redirection was all but abandoned

in 2014 due to state budget constraints, the project confirmed that, even at very high levels of service, MST/FFT can save far more than they cost.

Figure 6. Florida Redirection Project Savings³⁴



Redirection did not involve SIB financing. However, in the U.K., the Essex County Council launched a SIB in 2013 that provides MST to families with children “on the edge of care.” To date, more than 80% of program completers have remained at home and out of care. The 5-year investment of \$3.8 million is on course to return net savings to the county of more than \$12.5 million after paying investors an 8-12% annual return.³⁵

Figure 7 summarizes a Scale Finance cash flow *pro forma* discussed in detail below that could serve 5,000 families in one large state over five years. If successful, the SIB would raise \$65.6 million, cut residential placements in half, pay annualized investor returns of 10%, and return net savings to the state of \$90.6 million.

By expanding MST/FFT commensurate with unmet population needs, Scale Finance could protect tens of thousands of at-risk youth from the gravitational pull of the school-to-prison pipeline and return hundreds of millions of dollars in net savings to state and local government on a financially self-sustaining basis. At full capacity, Scale Finance could potentially raise billions of dollars annually for the high-fidelity expansion of a select group of CEBPs that could pay for themselves through avoided future expenditures.

If so, Scale Finance could fund the modernization and expansion of “social infrastructure” – a network of qualified social services providers and implementation experts dedicated to the widespread delivery of the most cost-effective prevention and early intervention services – in much the same way that municipal finance funds public works and other physical infrastructure on which communities depend. In that event, the financial instrument might fulfill “our aspiration for the years to come ... that the [SIB] market will embrace larger scale projects and that impact can be delivered at scale.”³⁶

Figure 7. Summary of Scale Finance *Pro Forma* Cash Flow for Juvenile Offending

Current State Spending	\$500 million for 5,000 custodial placements over 5 years (at an average annual cost of \$100,000 per juvenile offender)
Intervention Models	MST and FFT (at an average cost of \$10,000 per family for 4-5 months)
Participants Served	5,000 families (at 1,000 per year for 5 years) in one state
SIB Investment Required	\$65.6 million
Duration of Financing	5 years; principal & interest payments to investors (if due) would be made in year 6
Outcome Metrics	Reductions in custodial placements; prevention of juvenile offending and recidivism
Investor Returns	10% IRR
Net Savings to State(s)	\$90.6 million

2. SCALE FINANCE

2.1 Attracting Mainstream Investment

“If the promise of institutional asset owners is bringing capital at scale to impact investing, it is also a challenge—investment opportunities must be of a sufficient size and structure to attract investor interest.”³⁷ As commercial investors see it, most impact investment deals are far too small and there just aren’t enough good ones. Every year, JPMorgan Chase and the Global Impact Investing Network dutifully report that the top two investor complaints are “the lack of ... appropriate capital across the risk/return spectrum” and “the lack of ... high-quality investment opportunities (fund or direct) with track record.”³⁸

Standard SIBs offer below-market (“concessionary”) returns to foundations and community-development funders for much-needed research and development. “In some Pay for Success [i.e., SIB] projects, investors can earn a small return on their investment.”³⁹ This is a feature, not a bug, of a government-centric model that focuses on improving the delivery of more effective public services.

One reason for small deal sizes is that standard SIBs are pilot projects. Using advanced measurement techniques such as randomized controlled trials (RCTs) and quasi-experimental designs (QEDs), SIB developers are trying to answer difficult questions about whether promising social innovations can reduce government spending and by how much. “Many hope that the use of rigorous experimental evaluation methodologies will go beyond answering the relatively simple question of whether or not an intervention works, and address questions of how, why and for whom it works.”⁴⁰

It is too soon to say whether this goal will be achieved. As a practical matter, however, standard SIBs address pervasive social problems that are orders of magnitude beyond the capacity of both current and planned transactions:

There is great variation in the size of PFS projects, both by number of individuals served and size of investment raised. Nevertheless, there is emerging consensus in the field that somewhere between \$5 and \$10 million is an appropriate minimum threshold for a PFS project, given both the relatively high transaction costs and the interest of investors

(particularly commercial ones) in larger investment opportunities. The relatively small size of most projects, in terms of numbers of individuals served, has led some observers to question whether or not PFS is capable of addressing the issue of scale, a challenge endemic to many social service interventions.⁴¹

Not so long ago, it had been said that the additional transaction costs “are only worth incurring for a SIB contract worth at least \$20 million.”⁴² In any event, SIB supporters and agnostics alike concede that the “big money” has yet to arrive:

Over the last five years, one of the central arguments for the SIB was that it would harness private capital to promote innovation in service delivery and enable greater social impact. The first observation was that it’s debatable how much harnessing of genuinely private capital has actually happened. The research shows that most funding for SIBs has come from “social investors” motivated primarily by social impact rather than financial return. These investors were willing to take lower returns and often happy just to get their initial investment back to ensure that projects remained viable and social impact was created. Attempts to raise commercial finance were generally either unsuccessful or the money was offered with unacceptable terms. The conclusion was that SIBs are too risky a proposition to ever attract genuinely “private” finance. This presents a serious question about the potential scale of a market that relies on a very narrow band of social investors.⁴³

Indeed, the projects already launched and under development haven’t depended on “genuinely ‘private’ finance.” SIB pilots have been backed by social investors—foundations, corporate social responsibility departments, high net worth individuals, and CDFIs (Figure 8 summarizes the investors in eight SIB projects)—willing to accept concessionary financial returns. This “may be a response to the economics of the PFS projects themselves, where the relatively narrow margin between total project costs and the maximum repayment committed by the back-end payor requires most investors to be repaid at a lower rate.”⁴⁴

This is also true in the U.K., which invented SIBs and has led the world in social impact investing. In 2014, the CEO of ClearlySo, a leading U.K. social investment bank, called on “banks, investment banks, insurers, private equity firms, the venture capital industry, fund managers and anybody else I have missed ... [to] please get off the side-lines and get into social investing.”⁴⁵ That “lamentable” situation has not changed appreciably since that time. One reason might be that, as the CEO of Investing for Good, another respected social investment intermediary, recently told a House of Lords committee, SIBs are “incomprehensible to mainstream investors,” adding “I don’t think they were designed by market practitioners. I think they were designed at a policy level. I’m sure they have their place but it’s a very narrow place.”⁴⁶ But low returns are certainly another factor, as the head of Big Society Capital recently explained:

If we reduce the cost of capital it would be lovely for the charities and social enterprises but there would be a lot less money available because we wouldn’t be able to draw in the co-investors.... With many social organisations the margin is just tiny.⁴⁷

These critiques point to a mismatch between how SIBs are designed and used today on the one hand, and their potential adoption by mainstream investors on the other. In the former case, public commissioners are developing expensive and complex transactions for primarily “philanthropic investors.” In the latter case, commercial investors have the sophistication and resources to handle the cost and intricacies involved in structuring outcomes-based financing, but they don’t see any attractive opportunities that meet standard due diligence and underwriting criteria, much less a continuing source of deal flow that might represent a future line of business worth pursuing. To bridge this gap, Scale Finance aims to develop large and profitable opportunities for commercial investors and their advisors.

Figure 8. Investors in Eight U.S. SIBs⁴⁸

	MA 1	NYC	OH	UT	MA 2	NYS	IL	CO	TOTAL
Goldman Sachs Urban Investment Group/Social Impact Fund	\$9,000,000	\$9,600,000		\$4,600,000			\$7,500,000		\$30,700,000
Bank of America Merrill Lynch Private Wealth						\$13,500,000			\$13,500,000
Northern Trust							\$5,500,000	\$3,000,000	\$8,500,000
J.B. & M.K. Pritzker Family Foundation				\$2,400,000			\$3,900,000		\$6,300,000
Kresge Foundation	\$1,500,000								\$1,500,000
Living Cities	\$1,500,000								\$1,500,000
Corporation for Supportive Housing					\$500,000				\$500,000
The Reinvestment Fund			\$1,575,000						\$1,575,000
George Gund Foundation			\$1,000,000						\$1,000,000
Nonprofit Finance Fund			\$325,000					\$434,696	\$759,696
Cleveland Foundation			\$750,000						\$750,000
Sisters of Charity Foundation			\$350,000						\$350,000
Denver Foundation							\$500,000		\$500,000
Piton Foundation							\$500,000		\$500,000
Laura and John Arnold Foundation	\$3,700,000							\$1,700,000	\$5,400,000
Colorado Health Foundation								\$1,000,000	\$1,000,000
Ben and Lucy Ana Fund								\$1,700,000	\$1,700,000
Blended Catalyst Fund								\$500,000	\$500,000
Santander Bank					\$1,000,000				\$1,000,000
United Way					\$1,750,000				\$1,750,000
New Profit	\$2,000,000								\$2,000,000
The Boston Foundation	\$300,000								\$300,000
Robin Hood Foundation						\$300,000			\$300,000
TOTAL	\$18,000,000	\$9,600,000	\$4,000,000	\$7,000,000	\$3,250,000	\$13,800,000	\$16,900,000	\$9,334,696	\$81,884,696

2.2 Meeting Fiduciary Standards

The World Economic Forum defines mainstream investors as “asset owners (e.g., pension funds, insurance firms, etc.) and asset managers (e.g., private equity firms, mutual funds) that are not actively investing in impact investments nor are informed about this emerging approach to investing.”⁴⁹ They are thought to be “one compelling group of investors who can help bring impact investing markets to scale.”⁵⁰ Indeed: “institutional” investors alone own almost 70% of the entire U.S. stock market.⁵¹

These professionals aren’t just risking their own money, but “investment assets [that] are increasingly aggregated in the form of pension funds, mutual funds, or institutional investment funds.”⁵² As such, mainstream investment involves “cases [where] individuals entrust others to oversee these investments on their behalf, to act as ‘fiduciaries’ in oversight of their retirement savings or, in the case of charitable foundations, private or publicly held community trusts to be managed for larger, societal benefit.” Responsible fiduciaries cannot subordinate financial merits to social benefits. “That’s not what our pension holders want to see. We are forced to do things that are not just good but also investable. We work the other way round: we look for things that are investable and also are delivering impact.”⁵³

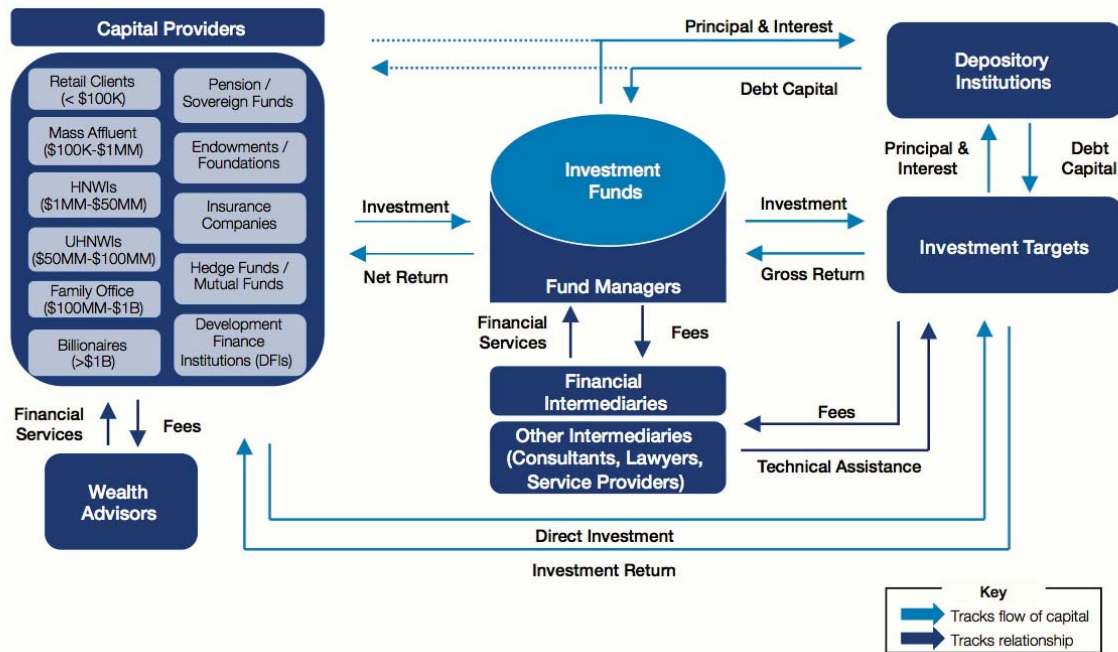
The Department of Labor recently issued an important interpretive bulletin under the Employee Retirement Income Security Act (ERISA) which stated that “fiduciaries need not treat commercially reasonable investments as inherently suspect or in need of special scrutiny merely because they take into consideration environmental, social, or other such factors.”⁵⁴ Instead, “the fiduciary standards applicable to ETIs [economically targeted investments] are no different than the standards applicable to plan investments generally.” So investment fiduciaries must have the same understanding of SIB risks and returns that prudent investors require for other commercially sound investments.

Fulfilling those responsibilities requires a more disciplined approach to assessing and managing opportunities and risks. “Accredited” investors and prudent fiduciaries making big bets with other

people’s money rely upon on an emerging “Impact Investment Ecosystem” (Figure 9) of capital providers, wealth advisors, depository institutions, fund managers, and financial and other intermediaries:

A different barrier to impact investing emerges from the way that investment strategies are delegated. Most institutional asset owners manage their investments working in close concert with external investment advisors and intermediaries, while a smaller number of funds use internal staff. Whether managed internally or externally, asset owner trustees determine investment strategies, most often with the advice of investment consultants, and delegate the execution to staff or external service providers.⁵⁵

Figure 9. Impact Investment Ecosystem⁵⁶



Standard SIBs for promising but untested innovations with limited performance and savings data aren’t equipped to run this gauntlet. By contrast, Scale Finance is specifically designed for “developing additional and more relevant information/data on their potential risk, which may then be used to make more informed financial investment decisions.”⁵⁷ The framework identifies opportunities where the information needed is both readily available and manifestly reliable.

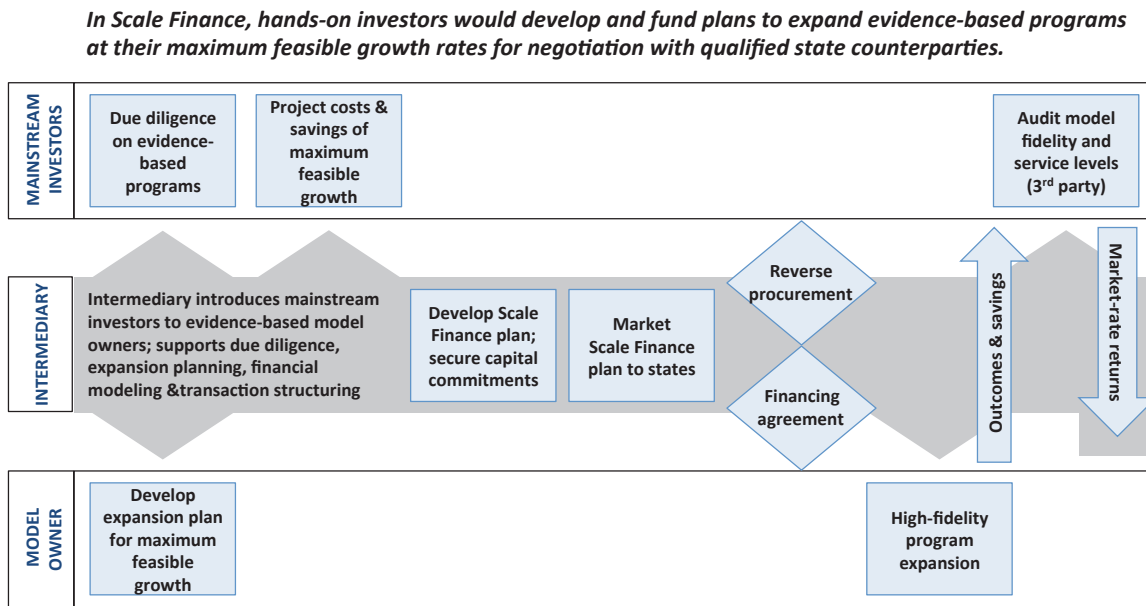
2.3 The Scale Finance Model

Scale Finance builds on the early years of SIB development by focusing on the commercial side of the market. It would invest only in evidence-based programs like MST and FFT that already have definitive answers to questions of efficacy and savings based on decades of peer-reviewed research and broad-based implementation in the field. It is a decidedly market-centric model by which capital asset owners, managers and advisors can devise long-term investment strategies to expand cost-effective social programs that are long overdue for widespread dissemination.

The model (Figure 10) focuses on two broad sets of activities: the selection of scalable CEBPs and the development of sizable transactions as part of an enduring deal flow:

- CEBP selection would be highly discriminating, requiring definitive evidence of effectiveness from numerous rigorous outcomes evaluations; confirmed benefit-cost ratios that exceed 1.5:1; detailed implementation specifications; provider capacity for multiplicative growth; and reliable data on costs, results and savings. Eligible CEBPs are few in number but have outsized expansion potential.
- Transaction development would also differ markedly from standard SIBs. What Bridges Ventures calls “hands-on investors”⁵⁸ would work with “model owners” (i.e., the original CEBP developers) to take the lead in originating deals they’d be willing to finance at deal sizes that would be large enough to fully cover the costs of high-fidelity implementation and still drive risk-adjusted, market-rate returns. Scale Finance investments would then be offered to state and local governments in much the same way that state economic development agencies compete to attract new manufacturing plants or corporate headquarters and the local jobs they’re projected to create.

Figure 10. Scale Finance Model



As shown in Figure 1, a key stakeholder in standard SIBs is the “provider,” typically a nonprofit organization or social enterprise that delivers the intervention to eligible participants. Their primary contributions are subject-matter expertise and service-delivery experience and capacity in fields such as permanent supportive housing (PSH) services in a homelessness SIB, kindergarten-readiness in an early childhood SIB, or offender re-entry services in a recidivism SIB. SIB providers play essentially the same role as they provide under human-services contracts funded directly by government or philanthropy, as well as help to define and manage outcomes targets.

The nature and role of the “model owner” in Scale Finance projects would be quite different. The term refers to the organization that has developed a *proprietary* evidence-based intervention and licenses its use to qualified providers. They literally own the rights to a brand-name program like MST, and they have the exclusive legal right to authorize its use in compliance with the essential components of the model.

For example, MST was originally designed by Dr. Scott Henggeler in the 1970s, and the Family Services Research Center at the Medical University of South Carolina was formed in 1992 to pursue its

development, validation and dissemination for youth with serious clinical problems.⁵⁹ In 1996, the University licensed MST Services, Inc. (MSTS) on an exclusive basis to disseminate MST technologies.⁶⁰ The University continues to own the model, which MSTS licenses to hundreds of providers around the world. Likewise, researchers at the University of Utah's Psychology Department Family Clinic developed FFT in 1969, and established FFT LLC in 1998 as "the sole authorized source for FFT training and implementation."⁶¹

Nurse-Family Partnership, a home-visiting program for first-time, Medicaid-eligible pregnant teens and young women, evolved in much the same way. Dr. David Olds developed the NFP model in the 1970s, and he heads the Prevention Research Center for Family and Child Health at the University of Colorado Denver, which owns the model. In 2003, NFP formed its National Service Office, which has the exclusive authority to license providers that comply with the model.⁶² "Once formal contracts are signed, agencies become official Nurse-Family Partnership implementing agencies."⁶³

Unlike many operational programs, NFP replication is highly regimented and closely monitored ... Use of the NFP model and name is limited to implementing agencies that contract with the NSO, participate in centralized training and extensive reporting (including longitudinal data by client), pay fees to the NSO to administer the data system and monitor quality, and comply with 18 quality elements including standards governing maximum case loads of nurses and supervisors, time spent on NFP's six domains, and nurse qualifications. NSO trains all nurse administrators, nurse supervisors, and nurse home visitors. NSO regional staff talk with state program coordinators at least weekly. Model improvements are evaluated in rigorous pilot studies ..., then rolled out to all sites.⁶⁴

In colloquial terms, these kinds of "brand-name" programs that are subject to licensure are distinguished from "generic" programs that are not. Generic models might address similar problems, serve similar populations and include similar programmatic features as brand-name programs, but they aren't strictly defined and any provider can offer its own variation.

For example, permanent supportive housing programs share certain principles (such as "housing first"), but "there is no single model for supportive housing's design" that all PSH programs must adopt and maintain.⁶⁵ The same is true for other kinds of home-visiting programs, which have wide variations in their designs.

Generic programs may have advantages over brand-name programs in terms of cost and flexibility. On the other hand, generic programs vary widely in their evidence, effectiveness and cost, making it difficult to confidently project outcomes and savings in standard SIBs. This is one reason that Scale Finance would only work with brand-name programs that have reliable data on those critical variables. Another is that proprietary programs are synonymous with quality control, an essential attribute of scale. Model adherence is mandatory, whether the provider serves one participant or 10,000.

A third reason that Scale Finance requires brand-name programs is that model owners are in the best position to know how to achieve exponential growth while preserving the integrity of programs they've designed and nurtured over many years. As explained below, making social innovations available to everyone who wants them involves a delicate balancing act: expanding the provider's capacity to deliver the intervention without compromising the complex mechanisms that have been proven to be essential to its effectiveness. No credible expansion plan of that magnitude could be developed without the active participation of the model owner.

Thus, Scale Finance would invert the process by which standard SIBs are developed. Instead of government agencies selecting providers to package up generic programs and then working with intermediaries to raise funding, hands-on mainstream investors would work with model owners and intermediaries to devise comprehensive expansion and financing plans that would monetize future savings. They would then solicit government counterparties willing to compete for market-based transactions.

Scale Finance deal sizes would be determined by answering three questions that standard SIBs don't need to ask:

1. If ample financing were available, what is the maximum feasible growth rate that CEBPs could achieve in a given jurisdiction over a 5-10 year investment horizon without compromising results?
2. Without cutting corners on quality assurance and control, how much would it cost to achieve that maximum feasible growth rate?
3. What is the minimum financial return that mainstream investors would require to commit that up-front capital?

The answers to these questions, which only mainstream investors and model owners could provide, would be plugged into Scale Finance quantitative models to determine whether the investment math worked. If so, investors and model owners would then work with intermediaries to offer up-front capital of \$50-100 million or more to prospective state and local government counterparties.

Scale Finance invokes the traditional long-term financing role of capital markets, by which "companies and investors must advocate for action to fill the gaping chasm between our massive infrastructure needs and squeezed government funding, including strategies for developing private-sector financing mechanisms."⁶⁶ If Scale Finance investors "can find the same courage the early institutional backers of the venture capital industry found,"⁶⁷ they could build a modern human-services delivery infrastructure that, as discussed below, the public sector is no longer able to build or sustain through direct spending.

Unlike many current SIBs, Scale Finance would not trade-off financial returns for social benefits. It exemplifies what Bridges Ventures has called "lock-step" investments in which the "investor's financial return [would be] in positive correlation to impact created."⁶⁸ This is the market-driven dynamic that can increase the supply of cost-effective solutions to fill the vast unmet demand.

3. SOLVING PROBLEMS WE ALREADY KNOW HOW TO FIX

3.1 Fiscal Realities

The U.S. National Advisory Board on Impact Investing believes that "government holds the key to addressing any social issue at scale," but also recognizes that "it is nearly impossible for governments, especially in the current fiscal environment, to allocate scarce resources to fund preventative programs."⁶⁹ SIBs, it seems, might be one answer to this paradox.⁷⁰

Government-centric SIBs depend on taxpayer funding, both to jump-start project development and to move outcomes-based finance "from the margins to the mainstream."⁷¹ On the front end, the Advisory Board has argued that "relatively small investments of public funds can ... [allow] private investors ... to enter the market and effectively use private capital to achieve public goods." On the back end, SIB supporters hope that government will provide "take-out" funding to make evidence-based programs widely available after outcomes-based pilots have demonstrated their success: "the goal is to shift the responsibility of pilot period investments from the philanthropic funders to the PFS funders and government entities."⁷²

To that end, the Advisory Board supports a federal Social Impact Bond Outcomes Fund of indeterminate amount, as well as other "action at the federal level, both in Congress and at the executive level, [that] could enable jurisdictions to supplement outcomes funding, which could support larger projects."⁷³ While such a public revolving fund⁷⁴ is an eminently sensible idea, its prospects must take into account both the government's current fiscal predicament and its grim long-term outlook.

Mandatory spending and entitlement programs already devour the lion's share of federal spending. As Nobel Prize-winning economist Paul Krugman put it, "your federal government is basically an insurance company with an army" because "the vast bulk of its spending goes to the big five: Social Security, Medicare, Medicaid, defense, and interest on the debt."⁷⁵

This helps explain why the Obama administration proposed \$300 million in dedicated spending for SIBs, but only \$46 million was appropriated.⁷⁶ In 2015, Congress cut the budget of the Social Innovation Fund, one of the most catalytic sources of PFS funding, by 29%, from \$70 million to \$50 million.⁷⁷ Despite bipartisan support for the Social Impact Partnership Act (H.R. 1336/H.R. 5170/S. 1089), Congress did not approve this bill that “would direct federal resources to states and local communities to support innovative Pay for Success arrangements.”⁷⁸

Going forward, any federal SIB grants and success payments would have to come out of “domestic discretionary” budgets that comprise only 12% of federal spending and have fallen below 2005 levels, adjusted for inflation. Significant budget cuts have already included the Transportation Security Administration (8.5% over five years); the National Institutes of Health (23% since 2003); K-12 education (11% over the last decade); the Internal Revenue Service (18% since 2010); and the Environmental Protection Agency (27% since 2010).⁷⁹

Of course, fiscal pressures aren’t limited to federal spending. State and local discretionary spending for “nonhealth related costs” will decline nearly 30% by 2064, from about 9.4% of GDP to about 6.7%.⁸⁰ Accenture recently estimated that the funding gap for all state social services will total \$940 billion through 2025.⁸¹

These budget pressures are already taking a heavy toll. The respected political scientist Norman Ornstein recently described how the once-vaunted Community Mental Health Act of 1963 has become “a spectacular failure”:

The law was built around a two-step process—release and catch, as it were. De-institutionalize the mentally ill in these deplorable institutions, and then get them into the system of community health centers. But there was no step two. More than half of the proposed community health centers were never built. Many states were delighted to close the cash-draining state mental hospitals, and pocket the savings without replacing them with community health centers. Those that were in operation were never fully funded.⁸²

Both the quantity and quality of care became inadequate. “Significant unmet need for children’s mental health care has been well documented with some estimates suggesting that fewer than half of those who need such care receive it.”⁸³

President Clinton’s push for welfare reform suffered a similar fate for similar reasons. The initiative had its roots in rigorous outcomes evaluations that “demonstrated that highly-effective welfare-to-work programs can be successfully replicated so as to improve people’s lives on a large scale.”⁸⁴ The Laura and John Arnold Foundation has showcased welfare reform as an example of successful evidence-based policy.⁸⁵

But like the mental health system that shortchanged community health centers, welfare reform has foundered without a “much greater emphasis on jobs programs to usher the poor into the labor force and bring them income.”⁸⁶ As a result, the program has become all stick and no carrot: “welfare reform has resulted in a layer of destitution that echoes poverty in countries like Bangladesh,” with one out of twenty-five American children living in extreme poverty. It exemplifies “a common pattern” in which “funds identified for an initial CEBP implementation in a service program, region, or state fade out after that initial effort.”⁸⁷

Pressures faced by those charged with bringing the interventions into their settings can lead to implementation limbo—the “How low can you go?” approach [which] ... generates bargaining by purchasers—government and agency leaders whose institutional responsibility is to produce as much as possible from a limited pool of funds, and who are working hard to do a good job.⁸⁸

Of course, this isn’t the first time that Herculean efforts produced Lilliputian results. When problems are overwhelmingly difficult, “we often declare success despite the fact that our impact is embarrassingly small compared to the size of the problems we are trying to solve.”⁸⁹

3.2 Understanding “Evidence-Based” Programs

In 2013, two former budget officials in the administrations of Presidents Barack Obama and George W. Bush declared themselves “flabbergasted” to find that “less than \$1 out of every \$100 of government spending is backed by even the most basic evidence that the money is being spent wisely.”⁹⁰ Since then, impressive momentum has begun to build behind the sensible idea that government should spend more money on programs that work and less on ones that don’t. Several bold initiatives have been announced.

One of the earliest proponents of SIBs in the U.S. and the founder of the Government Performance Lab at Harvard’s Kennedy School, Jeffrey Liebman, has proposed a “Ten-Year Challenge” as a way of “Building on Recent Advances in Evidence-Based Policymaking”:

The goal would be to discover two or three transformative approaches for each policy problem—solutions that could then be applied nationwide. The theory behind this initiative is that solving most of these problems will require a creative reengineering of systems and practices by multiple partners in each community, both governmental and non-governmental, and that for this to happen there needs to be a data-driven collaborative focus on achieving measurable improvements in outcomes for specific cohorts of individuals.⁹¹

The John T. and Catherine D. MacArthur Foundation is holding a competition for a single \$100 million grant “to inspire a wide range of applications that propose real, measurable solutions to significant problems from any field or sector.”⁹² The Laura and John Arnold Foundation recently announced a \$15 million Move the Needle competition to “significantly expand delivery of an intervention shown, in one or more well-conducted RCTs, to produce large, sustained effects on important life outcomes.”⁹³ The Brookings Institution, the Urban Institute and Child Trends announced an ambitious “Social Genome Project” to integrate research results in ways that could break the “pattern of intergenerational disadvantage” in which “a large fraction of American children who are born into low-income families grow up to become low-income adults.”⁹⁴

All of these efforts seek funding for the kinds of rigorous evaluation studies needed to empirically measure program effectiveness and promote disciplined approaches for incorporating those findings into policymaking and budgeting. Yet, they’re also stymied by the daunting challenge of “moving from private innovation to public implementation without any degradation in outcomes.”⁹⁵

In 2011, the Pew Center on the States and the MacArthur Foundation teamed up to launch the Results First Initiative, which “works with states to implement an innovative cost-benefit analysis approach that helps them invest in policies and programs that are proven to work.”⁹⁶ The model is designed to “systematically identify which programs work and which do not; calculate potential returns on investment of funding alternative programs; rank programs based on their projected benefits, costs, and investment risks; identify ineffective programs that could be targeted for cuts or elimination; and predict the impact of different policy options.” In 2016, with support from the Laura and John Arnold Foundation, researchers from the Urban Institute, Brookings Institution, American Enterprise Institute, and Pew-MacArthur Results First Initiative formed the Evidence-Based Policymaking Collaborative.⁹⁷

In considering the prospects for these initiatives, we must begin by asking what the term “evidence-based” means. With the advent of performance-based grants and outcomes-based finance, what has long been a largely academic debate among social scientists now has greater potential to materially affect the kinds of funding for which different programs qualify. The stakes are higher not only for potential recipients of outcomes-based funding, but also for taxpayers and investors who write the checks:

As states increasingly establish the importance of evidence-based practice through policy and funding mandates, the definition of evidence-based practice can have a significant impact on investment decisions. Not meeting established criteria can mean a loss of funding for established programs and the implementation disruption of programs without a strong research base.⁹⁸

Differentiating between verified and unverified EBPs is becoming more important, and there are already signs that the “evidence-based” mantle can become compromised if objective criteria are not applied with integrity and rigor. In the SIB space, the turmoil has been exacerbated by the conflicting aspirations to support promising innovations on the one hand and to scale what has already been proven to work and cost less on the other.

This presents a fundamental tension with which the field has yet to contend. The accepted protocol for developing standard SIBs holds that “the first stage is determining early feasibility including what cost savings are to be had and how the project should be designed to achieve them.”⁹⁹ But a recent study of 11 SIBs takes a different view:

A prerequisite for any PFS project should be a robust scientific evidence base for intervention effectiveness in the target population, including evidence regarding the magnitude of the intervention effect and its economic costs and benefits. Whether or not an intervention will have a significant effect in a target population should not be a question mark in a PFS initiative ... since the entire endeavor is premised upon intervention success.¹⁰⁰

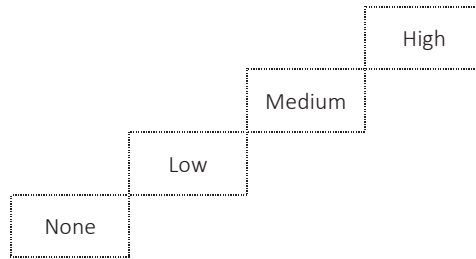
The quality and reliability of data about the effectiveness and cost-benefit of myriad social interventions spans a wide spectrum from none at all to essentially conclusive. The pursuit of “evidence” — “evaluation results, performance measures, and other relevant data analytics and research studies, with a preference for high-quality experimental and quasi-experimental studies”¹⁰¹—is an accumulative process in which enterprising providers make the climb from lower to higher “levels” or “tiers” of proof by carefully measuring the results they achieve on various “outcome metrics.” For example, a program that seeks to reduce chronic homelessness might track the number of adults living on the street, as well as the number and duration of such episodes. Juvenile justice interventions monitor the number of at-risk youth committed to custodial placements and their lengths of stay. Home-visiting programs measure the number of full-term births and healthy birth weights.

For most organizations trapped in the “nonprofit starvation cycle,”¹⁰² this is an arduous and expensive journey. In recent years, several programs have committed to helping social innovators make the climb. For example, a primary goal of the Social Innovation Fund (SIF), housed in the White House’s Corporation for National and Community Services, is to “build the evaluation capacity of nonprofit organizations so they can successfully assess whether their programs are truly creating impact.”¹⁰³ All SIF-funded programs “must conduct a rigorous evaluation by partnering with an independent evaluation team that will help build the evidence supporting its effectiveness and potentially move it to a higher tier of evidence.” This commitment to institutionalizing outcomes measurement is one of the signal contributions of the SIB movement.

An evaluation is considered “rigorous” if it follows sound statistical procedures and calculation methodologies. Since even rigorous evaluations entail unavoidable uncertainty and imprecision, the exercise must be repeated under sufficiently diverse conditions to provide confidence in the “generalizability” of the results. Over time, systematic outcomes evaluation is able to classify the levels of evidence for social programs based on the number of rigorous outcome evaluations performed, the statistical power of the results shown in those evaluations, the probability that benefits exceed costs, and the representativeness or similarity of participants studied. The resulting categories essentially correspond to no, low, medium and high evidence (Figure 11).

For investors unfamiliar with the often-opaque world of social service programs, making assessments about relative effectiveness and cost might seem a murky business to which standard due diligence tools and practices don’t readily lend themselves. Fortunately, third-party rating systems, sometimes called “certification registries,” allow prudent investors to tell the difference between outcomes that are reliable and those that are not, and between uncertainties and risks that are manageable and those that are not.

Figure 11. Levels of Evidence

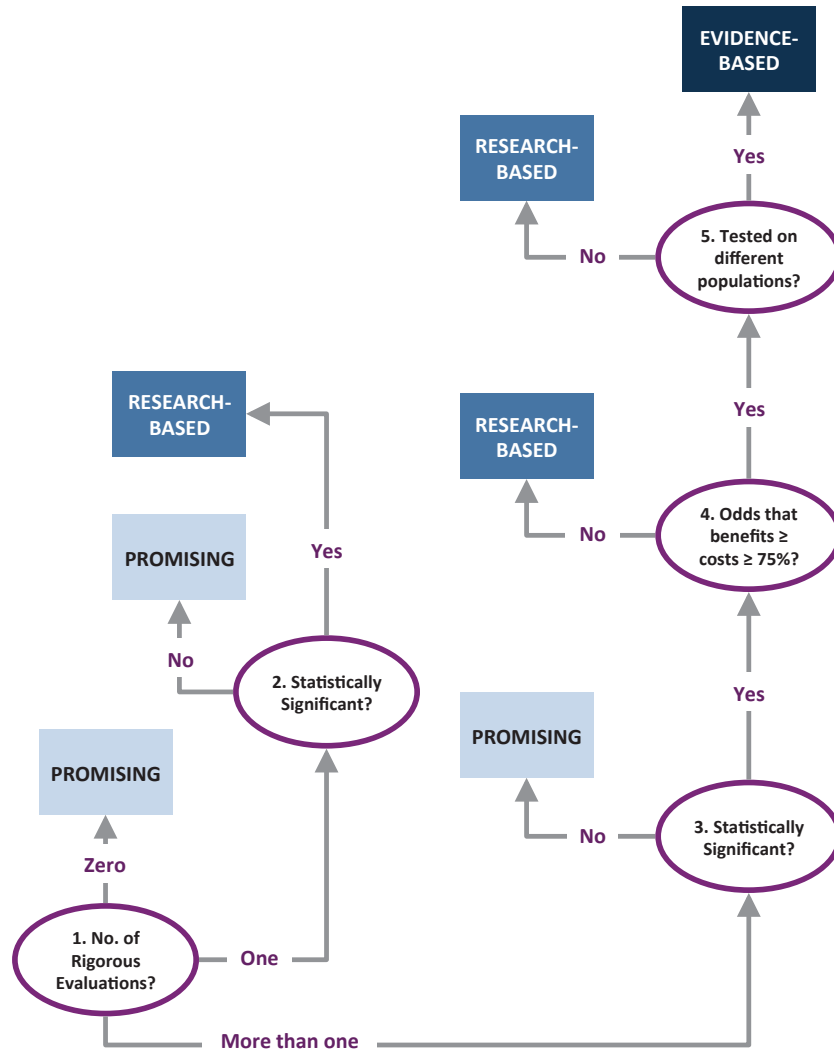


The classification process is disciplined and transparent. For example, the esteemed Washington State Institute for Public Policy (WSIPP) is effectively an Underwriter’s Laboratory or International Organization of Standardization for the social sector. WSIPP publishes detailed technical documentation of its evaluation and benefit-cost models, which is subject to intensive peer review. They are widely used to assess programs in child welfare, adult corrections, juvenile justice, education, employment, welfare, substance abuse, and healthcare.¹⁰⁴

WSIPP’s decision tree (Figure 12) summarizes its levels-of-evidence framework. In plain English, “promising” refers to social innovations that seem like a good idea but haven’t been studied yet, “research-based” means the programs are still being studied so their effectiveness is currently indeterminate, while “evidence-based” means that enough studies have been conducted to conclude that the programs work and to quantify the extent to which they do so. WSIPP reserves the “evidence-based” designation for

a program or practice that has been tested in heterogeneous or intended populations with multiple randomized, or statistically controlled evaluations, or both; or one large multiple site randomized, or statistically controlled evaluation, or both, where the weight of the evidence from a systemic review demonstrates sustained improvements in at least one outcome.¹⁰⁵

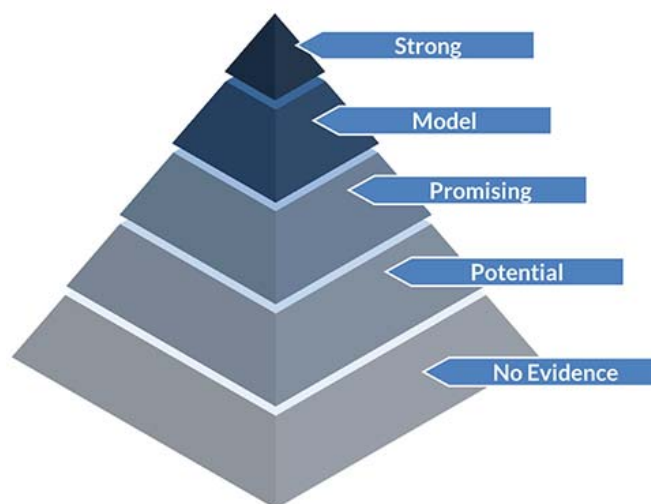
Figure 12. WSIPP Evidence Decision Tree (Adapted)



Other respected rating systems—the White House Social Innovation Fund¹⁰⁶; the U.S. Department of Justice’s Office of Juvenile Justice and Delinquency Prevention¹⁰⁷; and Blueprints for Healthy Youth Development¹⁰⁸—follow the same general rubric while using somewhat different criteria and terminology. Most recently, the Urban Institute developed a taxonomy with an important additional category at the top of its “Evidence Pyramid” (Figure 13):

- “Strong interventions have undergone enough randomized control trials (RCTs) to conduct a meta-analysis.
- Model interventions have multiple high-quality RCTs or quasi-experimental designs.
- Promising interventions have at least one RCT.
- Potential interventions have yet to be subject to an experimental evaluation, but have a clear link to defined outcomes and an underlying theory of change” (emphasis added).¹⁰⁹

Figure 13. Urban Institute's Evidence Pyramid



Urban's highest level of "strong" evidence is reserved for those rarefied interventions that have had so many discrete evaluations that subsequent researchers have been able to conduct "meta-analyses," basically "studies of studies" that assess robustness and consistency over time and place. As Urban notes, "very few programs meet the 'strong' criteria, while the vast majority of existing interventions have no evidence base at all." While some SIB evaluators maintain that assessing program effectiveness can never be definitive, the effectiveness, replicability and available savings of programs with "strong" evidence are effectively unimpeachable.

MST and FFT are two such programs. MST alone has received more than \$83 million in research funding since the 1970s.¹¹⁰ Some 55 published outcome, implementation and benchmarking studies involving more than 43,000 families have been conducted, including 25 randomized trials, yielding almost 100 published, peer-reviewed journal articles, of which three have been meta-analyses.¹¹¹

3.3 Raising the Evidence Bar for Mainstream Investment

Until quite recently, no U.S. SIBs had invested in programs with that kind of strong evidence. While most SIB interventions are superior programs with promising or moderate levels of proof, they have not had the funding or implementation horsepower that true CEBPs need to reach the evidentiary summit:

- In the Massachusetts Juvenile Justice Pay for Success Project, Roca, Inc. works with "the most high-risk young people ages 17-24 [who are] street, court, and gang-involved; drop-outs; young parents; refugees; and, immigrants." Its intervention model combines a number of recognized best practices, but the rigorous outcome evaluation designed by the University of Chicago's Chapin Hall and managed by the Urban Institute for the PFS project will be its first.¹¹²
- In the New York State SIB, the Center for Employment Opportunities, which provides transitional employment for ex-offenders, has had one outcome evaluation using a randomized controlled trial. The results were statistically significant but short-lived: declines in recidivism and increases in employment lasted only one year, essentially while participants still held transitional jobs provided by CEO.¹¹³

- Connecticut recently launched a PFS pilot project for “Family-Based Recovery” (FBR), an innovative program co-developed by the Yale Child Study Center and Johns Hopkins University that seeks to prevent child maltreatment and family disruption. A 2015 study, the first of its kind, found that “outcome data suggest that FBR is a promising model.”¹¹⁴

These are all excellent programs offered by accomplished nonprofits, and they’re exactly the kinds of innovations that government-led SIBs should support. At this point, however, we simply can’t say with confidence whether, for whom and to what extent these programs work. Nor do we know what it takes to implement them successfully or how much they might save when they are. It is not a criticism to say that these evolving programs haven’t yet reached the point when they can be called “evidence-based.”

Early childhood education (ECE) programs show how using “evidence-based” in an off-handed way could undermine the pursuit of mainstream investment. An advisor to the J.B. and M.K. Pritzker Family Foundation, a stalwart social investor, recently asked, “If Nobel Laureate economist James Heckman’s contention [is] that high-quality early childhood education has the greatest return on investment for families and society of any public program, then why not expand it in every community?”¹¹⁵ The Urban Institute recently published a toolkit which says that “PFS offers an opportunity to scale high-quality, evidence-based ECE programs ...”¹¹⁶

But it is hard to square Urban’s toolkit with its evidence framework discussed above, which shows that ECE is not a proven program that is ready for widespread dissemination with SIB funding. For example, the toolkit emphasizes the need for “selecting a proven intervention,” but states that “we are still learning what makes a quality [ECE] program.” WSIPP makes the point more forcefully:

Unfortunately, scientifically rigorous research identifying specific ECE program components critical to producing improved outcomes is scarce. We found preliminary evidence to suggest that teacher education levels and standardized measures of classroom quality are associated with small increases in student test scores immediately following preschool.¹¹⁷

The American Enterprise Institute recently reached the same conclusion: “Both the relevance and rigor of early childhood research is considerably weaker than many realize... Our current knowledge is insufficient to justify a large expansion of pre-K as the best path forward.”¹¹⁸

Prospective investors might be confused by Urban’s advice about the importance of “implementing a program with fidelity to the model” when, in ECE’s case, there is no settled model that has been shown to work. Urban also emphasizes that “PFS projects require ... regular opportunities for reflection and midcourse correction,” while at the same time it promotes the use of RCTs to evaluate ECE SIBs. As shown in Section 6, RCTs require a well-defined “treatment” program in order to make clear comparisons with a control group, which limits the extent to which programs can be fundamentally modified during an ongoing evaluation.

Urban also notes that “the strongest and most consistent evidence” is limited to “the short-term impact” of ECE programs, but recognizes that “the economic and social benefits of programs do not typically outweigh costs ... until long-term benefits ... are accounted for.” Thus, pricing PFS outcomes will be problematic given that documented short-term ECE impacts are small and (potentially) larger long-term impacts are unconfirmed.

The field would benefit from a clear delineation between (1) promising programs like ECE that are excellent candidates for incremental expansion in PFS pilot projects backed by risk-tolerant social investors, and (2) “strong” EBPs (using Urban’s definition) that are ready for exponential growth in Scale Finance projects backed by mainstream capital markets. Certified “EBPs” must have certain *kinds* of evidence in certain *amounts* that are obtained in certain *ways*, which ECE programs haven’t yet secured.

Informal usage deprives the term “evidence-based” of utility at a time when investors are being asked to shoulder the up-front costs of programs that supposedly work. Promiscuous use of a newly-fashionable label might seem expedient in the short term, but it could backfire when results prove disappointing and *post mortem* analysis reveals that the foundation was ramshackle all along, as happened in the New York

City SIB on Rikers Island. The “Adolescent Behavior Learning Experience” was a variation of two legitimate EBPs, but “the effectiveness of this intervention for the target population had not been evaluated, and the service provider had not provided this intervention previously.”¹¹⁹

Moreover, what satisfies due diligence for an independent foundation might be quite different for a mainstream investor. Social investors don’t have to be strict about evidentiary standards, but only the highest tier has the potential for satisfying fiduciary requirements. For that reason, Scale Finance requires strict adherence to a simple precept: responsible mainstream investors can safely and profitably provide the “big money” needed to scale social innovations that save more than they cost, *provided* they only consider programs at the very top of the evidence pyramid.

Such differentiations have begun to gain a toe-hold. The Social Finance Global Network espouses “a framework that differentiates which projects are focused on innovating and building the evidence base and which are positioned for replication and/or scaling.”¹²⁰ Other discerning funders are beginning to make similar distinctions:

We see PFS as a tool that should be intentionally used to scale the services and capacity of a service provider. To determine whether a project will accomplish this, one of the first questions we ask is whether it’s serving a significant proportion of the total eligible population. For example, if a project is serving 500 low-income mothers, and a total of 2,000 low-income mothers are eligible for treatment, then the project is actually reaching a quarter of the target population—that’s a big deal. However, we’ve also invested in smaller-scale PFS projects because they’re helping build an evidence base by testing out a program or intervention with a new target population.¹²¹

Standard SIBs are helping promising social innovations make the arduous climb up the evidence staircase, with each step dependent upon results-based funding. Outcomes are defined in advance, measured continually and judged by independent evaluators. This is determined pick-and-shovel work, and the miners are in it for the long haul. But long before SIBs and “Moneyball for Government”¹²² came along, CEBPs had reached the top landing, a largely unheralded feat that failed to earn sustainable funding. Private investment has the capacity to distinguish amongst these opportunities and tailor support based on their differing needs, risks and value.

3.4 Nurse-Family Partnership: The 3% Solution

Even when government provides funding for CEBPs, it is rarely adequate to address pervasive social problems. Often the best federal and state government can do is take “a half-step forward to deal with a huge problem in the country, constrained as every other major problem and crisis is by the unrealistic requirement to take any funds for the urgent problems out of already pinched existing programs.”¹²³

The challenge manifests itself in a legislative process known colloquially as “salami slicing”: when there’s nowhere near enough money to tackle a massive social problem, focus instead on giving something to as many programs as possible. “One of the persistent criticisms from economists is federal lawmakers’ tendency to spread cash across the country instead of focusing on places where the economic payoff would be greatest.”¹²⁴ Case in point: the federal Maternal, Infant, Early Childhood and Home Visiting (MIECHV) Act of 2010.

There are “approximately 800,000 children born every year to low-income, first-time mothers in the U.S.,”¹²⁵ many of whom experience exceptionally high rates of adverse health, social and economic impacts. “Home-visiting” programs have gained favor as a way of helping low-income pregnant teens avoid high-risk births and raise healthy babies. The dire need has spawned a multiplicity of approaches, with wide divergence in services, cost and effectiveness across program designs. Key differences include the types of professionals who conduct the visits; their onset, timing and duration; and the scope of services offered.

One thing they have in common, however, is the lack of adequate, sustainable or efficient funding. Mind-numbing complexities of so-called “braided” funding from more than a dozen federal, state and

philanthropic sources, all with overlapping and inconsistent administrative requirements, make home-visiting programs fragmented and precarious.¹²⁶ Consider the example of NFP's New York State program (which has also been working on a SIB), just one of its 38 locations:

Funding sources for New York's NFP programs vary and include: state and local health departments, Medicaid, the Maternal, Infant and Early Childhood Home Visiting (MIECHV) program (the state health department functions as the lead MIECHV agency), the NYS Office of Children and Family Services, the Office of Temporary and Disability Assistance, managed care reimbursement for public health nursing services, the federal Healthy Start Initiative, New York City tax levy dollars and county general funds, the United Way of Greater Rochester as well as numerous private foundations and in-kind contributions from program sites.¹²⁷

The Affordable Care Act sought to improve the situation by appropriating some \$2.1 billion for MIECHV over seven years. While \$300 million per year might seem like a large sum, it is far short of the amount needed to serve anywhere close to 800,000 women. So, as is often the case, Congress confronted the political problem of how to allocate those funds among competing programs.

To its credit, MIECHV adopted an unusual method for slicing the salami, reserving 75% of funding for "evidence-based" programs that followed federally-approved models and 25% for "promising" approaches that states would have to evaluate in order to receive grants. However, distinguishing the two groups proved challenging. As the former head of the Coalition for Evidence-Based Policy put it:

MIECHV's current evidence standard contains a loophole that has allowed a number of unproven and/or ineffective program models to qualify as "evidence based." Specifically, the current standard, as set out in detailed language in MIECHV's authorizing statute, focuses on whether rigorous evaluations have found that the model produced *statistically-significant* effects, but not on whether these effects have *policy or practical importance*. This has opened a loophole, allowing some models to qualify as evidence based solely on the basis of statistically-significant effects, even if those effects were 1. On intermediate or process measures (such as referrals to community services) that may never lead to ultimate, policy-important outcomes (such as parents' employment and earnings); 2. So small in size as to be of little practical importance; or 3. Likely to be chance findings (e.g., because the studies measured a large number of outcomes).¹²⁸

In fact, a comprehensive study of the 17 home-visiting models that met MIECHV's "evidence-based" criteria¹²⁹ showed that one program, the Nurse-Family Partnership (NFP), is categorically superior to all other programs: "A thorough literature review of home visitation programs points to NFP as a standout among such programs in terms of the methodological strength and encouraging implications of its studies."¹³⁰ NFP has roughly twice (or more) as many favorable impacts on primary and secondary outcome measures as its ostensible peers. Its evidence base comprises three primary RCTs, two supporting RCTs, four "broad-based implementation" evaluations, dozens of published research reports, and 27 cost-benefit analyses.¹³¹

NFP's exceptionality was confirmed by another factor relevant to the present discussion: governmental savings. Both the Office of Management and Budget and the Congressional Budget Office determined that NFP would produce large net savings in the federal budget (called "score savings") by reducing emergency room visits, cases of child abuse and neglect, juvenile and adult incarceration, and other predictable expenditures. Indeed, CBO determined that NFP was the *only* home-visiting program that had strong enough evidence of cost savings to qualify for scoring. But since Congress had expressly decided against funding just NFP, "CBO would not (and did not) score any savings from any of the legislative versions of home visiting programs."¹³² Thus, MIECHV deliberately avoided consideration of one measure that makes NFP uniquely suited to SIBs: savings that far exceed program costs.

It is fair to say that NFP exemplifies the "rare case when an abundance of social science evidence is entirely persuasive in showing that a given program works—and that it works better than all other

programs of its type.”¹³³ Yet, MIECHV has fallen well short of the pledge that then-Senator Barack Obama made in 2008 to “expand the highly-successful Nurse-Family Partnership to all 570,000 low-income, first-time mothers each year.”¹³⁴ From 1996 through 2013, NFP enrolled a total of 177,517 pregnant women, out of the total U.S. eligible population of nearly 14 million, or about 1.3%.¹³⁵ In 2012, NFP served nearly 23,679 clients out of the total 845,136 first births to Medicaid-eligible mothers, a “market penetration” rate of just 2.8%.¹³⁶

But we know that scaling NFP commensurate with unmet population needs could pay for itself. “By 2031, NFP program enrollments in 1996–2013 will ... eliminate the need for 4.8 million person-months of child Medicaid spending and reduce estimated spending on Medicaid, TANF [welfare], and food stamps by \$3.0 billion (present values in 2010 dollars). By comparison, NFP cost roughly \$1.6 billion.”¹³⁷ Given the chance, private investors whose financial returns would depend upon capturing large and reliable savings might well see things differently than Congress did.

After relying for so many years primarily on charitable donations and governmental funding, NFP just launched its first PFS project in 2016 in South Carolina. NFP currently serves some 1,200 families in the state, and the PFS project will add 3,200 participants over four years. “Philanthropic funders” have committed \$17 million to the effort, and the Centers for Medicare and Medicaid Services will add another \$13 million by “waiving” federal funding restrictions.¹³⁸

Now, \$30 million is a major funding infusion, and 3.7x growth (from 1,200 to 4,400 participants) in four years would be unprecedented. If NFP can replicate this model, it could change its growth trajectory. But two caveats are in order. First, while the relative growth would be significant, it would be somewhat tempered relative to the size of the problem overall. “More than 280,000 children in South Carolina—or 27 percent—live in poverty. And more than half of babies in the state are born to low-income mothers who qualify for Medicaid.”¹³⁹ In 2012, South Carolina had approximately 15,016 “first Medicaid births,”¹⁴⁰ of which the PFS would reach an additional 800 participants.

Second, and more important for the present discussion, the project did not raise any private investment dollars. Funding came from two sources, charitable donations and Medicaid reimbursement, and neither will get their principal back or earn financial returns. Instead, the state Department of Health and Human Services will “recycle” up to \$7.5 million in savings back into sustaining NFP’s services if the pilot project meets its outcomes targets. This is all to the good, of course, but it does not engage the capital market flywheel. While the project does involve outcomes-based funding, the “SIB” (or “PFS,” in this case) label doesn’t fit very well.

When it comes to direct governmental funding for evidence-based programs, MIECHV probably represents the high water mark. As the first and so far only U.S. PFS backing a certified evidence-based program, the South Carolina project illustrates both the promise and the challenges of the current approach to outcomes-based finance. If conventional SIBs can’t raise the mainstream investment capital NFP and other CEBPs need, perhaps an enhanced model like Scale Finance could move the needle on scaling what works.

4. CROSSING THE CAPITAL MARKET CHASM

4.1 Barriers To “Scaling What Works”

The social sector does not lack for innovation, but it has never had the wherewithal to make effective innovations readily available to effectively everyone whose lives they could improve. Consider three examples involving at-risk youth:

- In 2011, the Annie E. Casey Foundation, a leader in juvenile justice reform, cited the Florida Redirection Project as evidence that “the most favorable real-world outcomes have occurred when MST and FFT are employed as an alternative to incarceration or other residential placements.”¹⁴¹ Yet, wrote the foundation, “no state has ‘scaled up’ any of these evidence-based

models to serve all or nearly all youth who could benefit.” As a result, “fewer than 5% of eligible high-risk juvenile offenders in the U.S. are treated with an evidence-based treatment annually.”

- Youth Villages is an exemplary social enterprise founded in 1986 that helps more than 22,000 troubled children and families each year from more than 20 states. Its Evidentiary Family Restoration approach “produces lasting success for children with success rates twice that of traditional services at one-third the cost of traditional care.”¹⁴² Yet the Edna McConnell Clark Foundation, a steadfast venture philanthropy, reported that Youth Villages served less than 4% of eligible youth in 2011, which the program’s leadership described as meeting a “sliver” of the need.¹⁴³ The Bridgespan Group found “there are another 300,000 children who could benefit from Youth Villages’ services.”¹⁴⁴
- After 16 years of disciplined growth, Year Up successfully serves some 2,000 young adults in 12 cities, out of 6.7 million low-income young adults who are out of work and out of school. Its CEO acknowledges that, “given the magnitude of the problem, we can’t be satisfied with a plan that just doubles the size of Year Up. We need a new path to close the gap between what we’ve achieved to date and what we still need to accomplish.”¹⁴⁵

These case studies evince a systemic failure:

Over the years, incremental changes have been made to improve the quality and quantity of services provided to at-risk and disadvantaged youth, but research has been slow to influence many programs. As a result, in the past 20 years, the interventions that have been provided have not always been research-based or linked to best practice. And the U.S. still has approximately 5.8 million youth who are neither connected to school or to work and who face dismal futures because of poor education and skill levels, lack of social, health, housing and financial supports, or involvement in the court or child welfare systems.¹⁴⁶

As explained in the author’s book, *Billions of Drops in Millions of Buckets: Why Philanthropy Doesn’t Advance Social Progress*, social innovation doesn’t scale for two primary reasons, only the first of which is widely recognized: fragmented funding and adoption risk.¹⁴⁷ Standard SIBs can alleviate the former impediment to some extent, but they are not designed to address the latter.

4.2 Overcoming Fragmented Funding

Funding becomes fragmented because there’s little or no connection between the results social enterprises achieve and the money they receive. Nonprofit performance doesn’t have clear financial consequences, whether in the form of incentives or penalties. Generally speaking, strong performance doesn’t attract greater funding and weak performance doesn’t reduce funding; only strong and weak *fundraising* does. In fact, philanthropy “actually discourages management from pursuing performance as a primary objective”:

The conversation must begin with an analysis of how and why the philanthropic capital markets, for the most part, fail to encourage high performance in nonprofit organizations. Ironically, nonprofit executive directors, in numerous interviews, consistently reported that excellent performance of a nonprofit organization is rarely systematically rewarded with an increased flow of philanthropic capital. In fact, an opposite situation prevails. As programs were proven effective and the nonprofit organizations developed plans to grow, foundations (even those currently funding their organizations) were less receptive to their requests for funding. Nor is there a systematic reduction of philanthropic funds for mediocre performance. Examples abound of low performing nonprofit organizations that are kept afloat by sympathetic donors willing to contribute without objective data.¹⁴⁸

To its great credit, the standard SIB model is specifically designed to connect funding to performance. A SIB transaction raises in advance all the private investment a given program needs to serve more

participants over an extended period of time, often five or more years. SIBs can be structured so that capital contributions in, say, year three, are dependent on progress during years one and two. A project might be shut down early if interim performance targets aren't being met (as happened to the first U.S. SIB located at Rikers Island jail in New York City¹⁴⁹), but investors might receive interim payments along the way if they are. Ultimately, investors risk loss of principal if outcome metrics aren't achieved, but they stand to profit if, when and to the extent that they are. If this framework proves itself, SIBs could become a powerful counterforce to fragmented funding.

But merely connecting funding to performance isn't compelling enough to bring mainstream investors to the table. Instead, "the financial return must be proportionate to the outcome improvement."¹⁵⁰ Although standard SIBs often specify higher returns for investments that produce better results, the returns are capped at modest levels: "If the program exceeds those outcomes, the government pays a small return on the investment."¹⁵¹ A recent Salt Lake County PFS report provides a closer look:

As with traditional private financing models, the lead lenders that finance successful outcomes will receive success payments that include a nominal interest rate and the potential for an additional nominal return on their investment. The contracts will distinguish between performance payments, which have a higher likelihood of occurring, and success payments. Obviously, the County would like the private enterprise funds to finance the outcomes that bear the greatest risk of failure. The contract terms, which have yet to be negotiated, will ultimately decide the risk allocation between the County and the private investors. In other Pay-for-Success projects in the United States, a typical base interest rate paid on these loans is at or below 5 percent.¹⁵²

Thus, the connection between funding and performance attenuates as the amount of capital needed exceeds the capacity of public and philanthropic funders. This doesn't have to be the case. Recently, the CEO of ClearlySo in the U.K. lamented that government is being overly cautious: "They tend, for example, in many of the SIB structures, to cap investor returns or share out only a portion of the savings. Why not be more generous and encourage far greater investment?"¹⁵³

This is not an outlandish idea. London-based Bridges Ventures, a specialized investment fund manager, has developed a "Spectrum of Capital" framework that situates SIBs in relation to the potential returns that other kinds of impact investments offer.¹⁵⁴ Bridges had previously characterized SIBs as concessionary investments, but it now classifies them as investments "where returns are as yet unproven." Indeed, it surmises that SIBs might be capable of "delivering competitive financial returns." If so, they might finally defragment funding even at very high levels of operation by offering financial rewards commensurate with the results achieved. Today, however, SIBs have been criticized for having equity-like risks with bond-like returns.

4.3 Overcoming Adoption Risk

As discussed further below, cost-beneficial social programs with strong and well-documented evidence of effectiveness work only when they're implemented with fidelity to the validated model. But the other side of the coin is that such "manualized" interventions are low risk. CEBPs require exacting compliance with detailed clinical, supervisory, record-keeping, and other procedures, so any conscientious provider with the necessary support systems in place can implement them successfully. With strong evidence-based programs, qualified providers know how to control implementation risks, and allocating adequate resources for recruitment, hiring, training and supervision, conscientious data collection, and vigilant performance management enables them to do so.

But maintaining fidelity at scale is an entirely different proposition from doing so in pilot projects because the demands of quality control aren't proportional to the number of participants. At some point, higher levels of service require different and more muscular resources, not just more of the same.

A shop owner with 50 customers might get by doing her own pencil-and-paper accounting, but a business with 500 customers needs customized software and a trained bookkeeper. A rapidly growing community-based organization that once employed five therapists to serve all of its clients might need to

add a clinical supervisor for every five therapists. If the program expands to other communities, regional supervisors and staffed training facilities might be needed. Without greater working capital for new personnel, infrastructure and other overhead, service quality would inevitably erode.

When small providers grow larger, or one team becomes many, agencies face uncertainties. How long will growth continue? How large will we become? What infrastructure investments should we make and when? Will our funding keep up? Do we need to cultivate new funding sources? Growing too fast or too slow both have consequences, and no one has perfect foresight. Human-services delivery is a precarious business, and providers with insufficient and unreliable resources are likely to err on the side of caution to avoid becoming overextended. “As every small nonprofit knows, a life of living on grants is a life of living on the edge. There is constant worrying about whether the funding will materialize.”¹⁵⁵

Of course, the bigger the change, the greater the risk of failure. When it comes to potentially transformative innovations, large institutions must look carefully before they leap. They have too much at stake to experiment with unreliable approaches, so adopting revolutionary innovations isn’t an easy decision to make. Large enterprises often prefer to stick with a familiar approach that’s “good enough” if there’s a significant chance that the transition to a potentially better one could prove difficult or even catastrophic. So a mediocre solution that more or less works is often better, on the whole, than an ostensibly more effective one that can’t be counted on 24/7/365.

Consider the challenges that juvenile justice agencies would face in shifting from primary reliance on custodial placements to substantially greater use of evidence-based treatment programs. The juvenile justice system comprises a high-volume, high-risk bureaucracy that’s required to handle an enormous number of incidents involving violations of personal safety, intrusions on private property, drug crimes, and “public order” offenses. Nationwide, these state and local systems collectively handle more than one million cases annually and conduct more than half a million judicial proceedings, resulting in more than 300,000 convictions and nearly 80,000 custodial confinements.¹⁵⁶ All of their people, facilities, records, rules, and procedures have been organized to support the intake, processing and disposition of cases within the existing system.

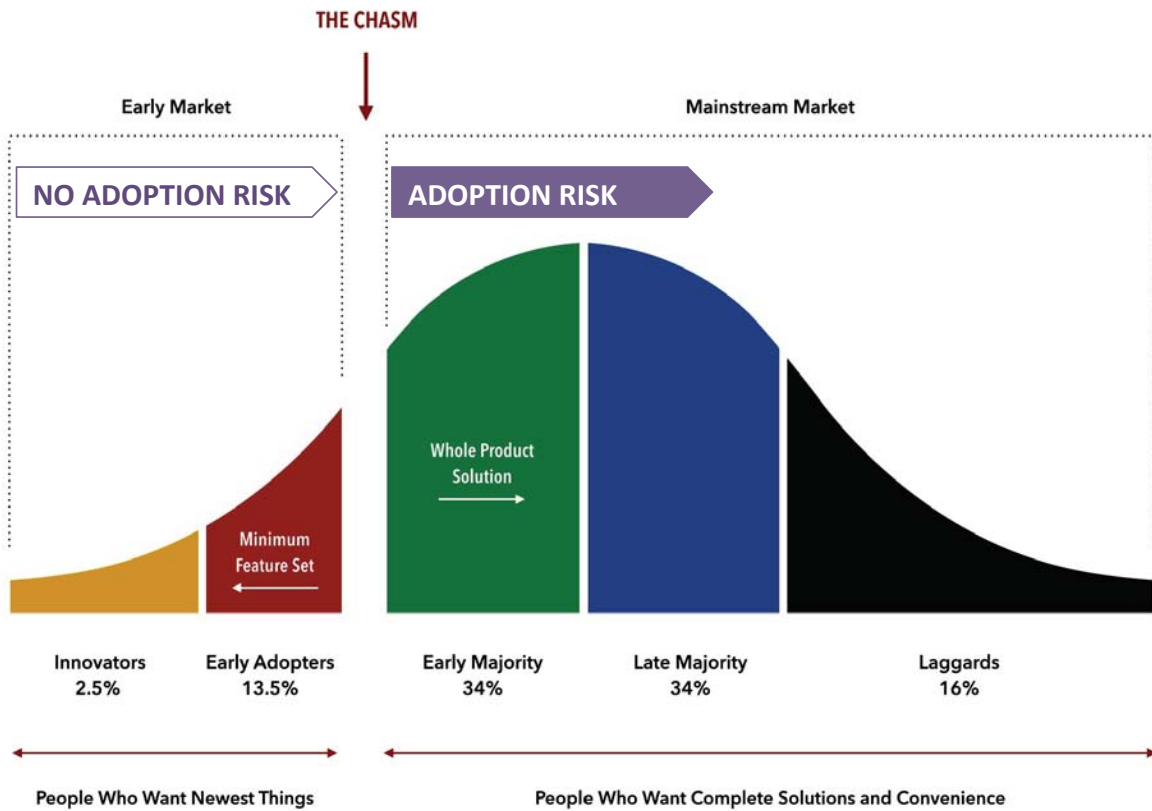
Reducing placements means that some youth who previously would have been put in detention or subjected to custodial supervision will remain at home and receive treatment, which, under the best of circumstances, won’t prevent juvenile offending at least 20% of the time. In large juvenile justice systems that process thousands of cases yearly, how could a responsible administrator make a meaningful number of such reductions without assuming undue risks to public safety? Risk-assessment tools are available for supporting commitment decisions, but they’re not perfect and they require expertise to properly administer, which costs money.

Converting to a primarily treatment-based arrangement would require major renovations from top to bottom. Keeping in mind that the system’s mission is to protect public safety, promote child well-being and steward public funds, such a transition would face serious risks of disruption along the way. Like other CEBPs, MST and FFT are more expensive and operationally demanding than less effective programs, with chronic staffing shortages and turnover making it difficult to maintain quality control. Funding constraints increase the risks of failure, and trying to move funds from one service category to another jeopardizes the ongoing operations of both.

“Adoption risk,” as this phenomenon is known, is intrinsic to systemic change. Even when new approaches have been proven superior to current practices, managers responsible for running large and complex systems must satisfy themselves that the adoption of innovation will not disrupt essential operations. While small operators can afford to experiment with promising but immature innovations, mainstream enterprises—such as state juvenile justice agencies—won’t do so unless they’re convinced that reasonable measures are in place to maintain basic services. Thus, massive safety-net systems become resistant to change as adoption risk rears its head. At some point, scaling innovation becomes impossible without a solution to this entirely new problem set.

We know where that divide is because innovation spreads through predictable phases (Figure 14, in which the area under the multi-colored curve represents all potential users). Risk-tolerant end users that value innovation for its potential uses (“innovators”) and those that are willing to accept the benefits of “beta” versions knowing that they still have bugs (“early adopters”) enable new products and services to get to market. This “early market” has only a small, albeit meaningful, share of potential customers, and those modest sales are necessary for innovators to gain a foothold. But displacing the firmly established status quo is not a near-term objective, so adoption risk is simply not a concern.

Figure 14. “Crossing the Chasm”¹⁵⁷ (modified)



Without dependable substitutes, “mainstream markets” that account for the lion’s share of users can’t abandon the assets and practices that have brought them success. For them, adoption risk is a show-stopper, so fledgling innovations are, at best, interesting curiosities that come and go, with no foreseeable relevance to or impact on legacy lines of business.

Geoffrey Moore called the yawning divide between innovations suited to early markets and those suited to mainstream markets the “chasm.”¹⁵⁸ Simply put, the chasm is where innovation goes to die. On the far side of the chasm, all potential new customers face decisive adoption risk, posing entirely new problems for which nascent innovations are not equipped. The roughly 16% market share available in the early market becomes the upper limit of their growth, and significant expansion ends at the chasm.

The private sector has learned how to overcome adoption risk in the ways that it designs and supports innovative products and services for mainstream markets. A “whole product solution”¹⁵⁹ is whatever combination of features a mainstream market segment – such as juvenile justice systems – needs to safely

adopt an innovative product without disrupting service to the large group of patrons that depend on it to meet critical needs.

For example, once a new technology has been developed and tested successfully, its widespread adoption by large customers depends on steady hand holding that comes from the kinds of add-on support services represented in Figure 15. The core innovation works fine without installation help, personalized configuration, tailored customization, and the rest, so innovators and early adopters can use the basic product just as it comes out of the box. But enterprise customers need attentive suppliers to set up the new product and make sure it is essentially fail-safe before they can abandon their old ways of doing business.

Figure 15. Generic Whole Product Solution

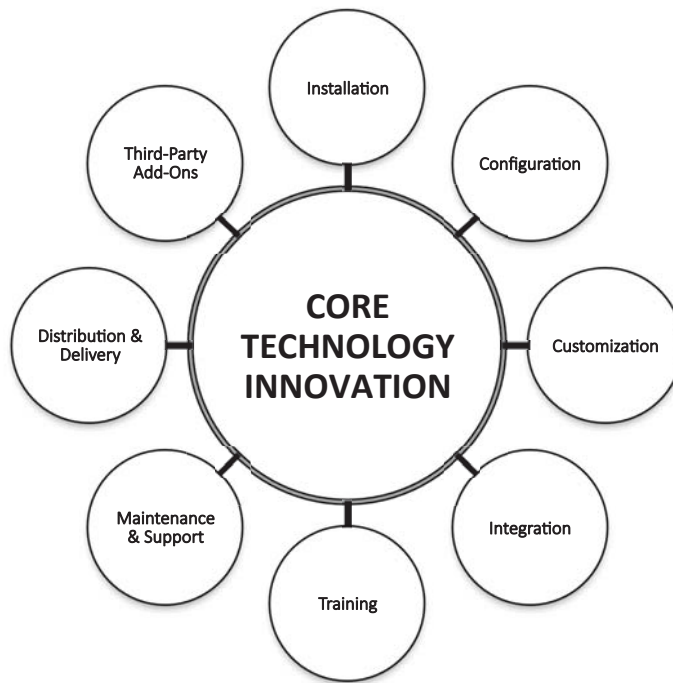


Figure 16 provides some historical examples. In each case, an *innovation* is developed that works better, faster or cheaper than what’s currently in use, but it is incapable of solving an important business problem until it is fashioned into a working *product*. But that product won’t be widely adopted until all features necessary to make it easy and reliable to use are incorporated into a *whole product solution*. That enhanced product can dominate the market segment for which it was designed, but it takes an *ecosystem* of suppliers, support services, technical specialists, and integrators to achieve scale across large and diverse mainstream markets.

This purposeful evolution is what made the Florida Redirection Project so successful. The state didn’t just contract directly with social service agencies that were licensed to provide MST and FFT counseling. Instead, it engaged a dedicated implementation-support organization (Evidence-Based Associates) to hire and manage those agencies and, crucially, to develop a whole product solution to make sure the conversion went smoothly (Figure 17).

Social innovations rarely have the resources or the staying power to develop whole product solutions, much less ecosystems to support widespread adoption. Standard SIBs commendably address fragmented funding to some extent, but they don't tackle adoption risk because they finance incremental growth for nascent innovations rather than systemic change grounded in CEBPs.

Figure 16. Scaling Business and Social Innovations

		INNOVATION	NEW PRODUCT	CHASM	WHOLE PRODUCT SOLUTION	ECOSYSTEM
		Early Market			Mainstream Market	
PERVASIVE NEED	LEGACY SOLUTION	Better, faster and/or cheaper "widget" that might solve a business or social problem someday	Innovation that solves an important business or social problem now, but is difficult to use or unreliable		Complete, customized & integrated solutions for one industry segment or sector that are reliable and easy to use	Suite of whole-product solutions for diverse industries or sectors to support widespread adoption
Personal travel	Horses, bicycles, trains, boats, etc.	Internal combustion engine (1872)	Automobile (1885)		Ford's Model T (1913 mass production)	Interstate Highway System, incl. gas stations, toll booths, maintenance facilities, etc. (1956)
Mobile communication	Land lines and pay phones	Wireless telephony (1880s)	Cellular phone (1940s)		iPhone (2007)	App Store (2010)
Polio epidemic	Quarantine; iron lung	Salk Vaccine (1953)	Oral Vaccine (1961)		Mass immunization (U.S. 1953+)	Global immunization (1988+)
Higher education	High school; on-the-job training	GI Bill (1944)	Federal student financial aid (1965)		Student Loan Marketing Association (Sallie Mae; 1972)	Free Application for Federal Student Aid (FAFSA; 1992)

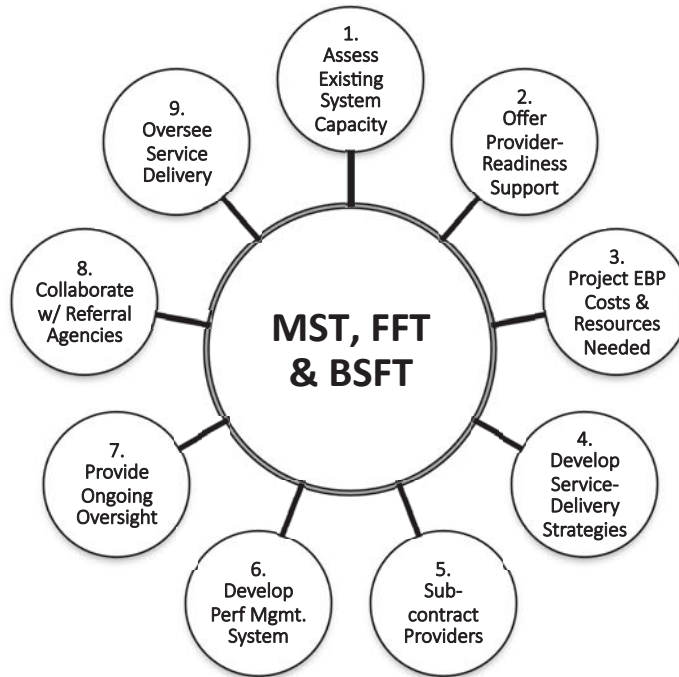
The business strategy for "crossing the chasm" is straightforward but challenging: identify a mainstream market segment that could benefit from the innovation and build them a whole product solution that can reliably supplant the established way of serving customers. Then extend that whole product solution to other market segments until an entire ecosystem supports widespread adoption.

An example is permanent supportive housing, which has been shown to make real headway against chronic homelessness. In 2010, the Obama administration released a plan to "prevent and end homelessness" in which one of the specific goals was to "finish the job of ending chronic homelessness by 2017."¹⁶⁰ According to the Department of Housing and Urban Development's most recent annual report to Congress, chronic homelessness declined from 106,062 individuals in 2010 to 77,486 in 2016. That 27% decline is important, but no one expects the rate to quadruple by 2017. Permanent supportive housing "remains a product without a system to produce it,"¹⁶¹ in no small part because "supported housing is associated with significant reductions in homelessness which we are unable to monetize at this time."¹⁶² To date, three U.S. SIBs have raised \$19.1 million to serve 1,250 homeless people.¹⁶³ By contrast, Los Angeles just approved a \$1.2 billion municipal bond to build 10,000 apartments for chronically homeless adults.¹⁶⁴

"It's often assumed that social innovation is all about radical new ideas, and out of the box thinking. But most innovation in most fields is much more about adoption and incremental adaptation."¹⁶⁵ As shown in Figure 8, an emerging "Impact Investing Ecosystem" is extending the capacity of mainstream capital

markets to assess, aggregate and manage the deployment of commercial investment in social and environmental businesses. But they won't be able to fund SIB projects unless they mitigate adoption risk. What might that look like?

Figure 17. Florida Redirection Project as a Whole Product Solution



5. CASE STUDY: DISMANTLING THE SCHOOL-TO-PRISON PIPELINE

It makes no sense for state and local governments facing severe budget pressures to spend \$5.7 billion every year to send 60,000 juvenile offenders into custodial placements when effective treatment programs that cost 75% less could keep most of them safely at home and in school. The school-to-prison pipeline that perpetuates intergenerational poverty is a problem we know how to fix but haven't been able to solve.

But making CEBPs like MST and FFT available to effectively every family they could help is not a simple task. To assess whether Scale Finance could attract the sustained mainstream investment needed to end juvenile mass incarceration, we must first understand the nature and scope of the problem, and the reasons why existing responses have proven inadequate to the task.

5.1 Custodial Placements of Juvenile Offenders

Although residential placements are a necessary instrument for managing juvenile offenders, their use must be calibrated against their deleterious consequences:

Youth in detention are removed from settings that matter: their homes, schools, and communities. Without those supports, children develop higher rates of depression, anxiety, and other mental health conditions, and they lose access to educational opportunities. Once released, youth who spent time behind bars are more likely to disengage from school and become system-involved in the future.¹⁶⁶

Decades of authoritative research prove that out-of-home placements damage at-risk adolescents and increase juvenile crime:

Involvement in the youth justice system has been shown to increase future rates of both childhood delinquency and adult penal system involvement. This negative impact increases as the type of intervention used becomes more restrictive, isolating, and punitive in nature. An ever-increasing body of evidence demonstrates that incarcerating children leads to increased violence, recidivism, and poor life outcomes for youth (even when controlling for the severity of offense). For youth with mental health concerns, detention (pre-trial) and incarceration (post-trial) have been shown to exacerbate mental health symptoms and increase the likelihood that youth will engage in self-harm and commit suicide. Youth who have experienced secure detention or incarceration are also less likely to return to school. Economists have shown that incarcerating youth decreases their future earning potential and the chance that they will remain in the labor market.¹⁶⁷

Confined youth are routinely exposed to “a sustained pattern of maltreatment,” including “serious physical or psychological harm in the forms of violence from staff or other youth, sexual assaults, and/or excessive use of isolation or restraints.”¹⁶⁸ Within three years of release, approximately 75% of youth are rearrested and more than 45% are convicted of a new offense. And “justice-involved” adolescents are much more likely to drop out of high school and be incarcerated as adults when they age out of juvenile jurisdiction.¹⁶⁹ Little wonder that the Annie E. Casey Foundation has called placements outside the home “iatrogenic” – an ostensible cure that actually makes the problem worse.¹⁷⁰

This tragedy is compounded by the fact that most youth are confined for offenses that don’t threaten public safety. Nationally, just 12% of youth placed into residential programs by delinquency courts have committed violent crimes. In 2013, 43% of detentions were due to technical violations of probation, drug possession, low-level property offenses, public-order offenses and “status offenses” involving activities that are not considered crimes for adults, such as possession of alcohol, truancy and running away.¹⁷¹

This self-defeating policy reflects an unwelcome trend toward the “criminalization of school discipline,” which “helps to redefine disciplinary situations as criminal justice problems rather than social, psychological, or academic problems, and accordingly increases the likelihood that students are arrested at school.”¹⁷² This shift is particularly acute at urban secondary schools. Among schools that adopt so-called “zero tolerance” policies, more than 300 districts nationwide suspend and expel more than one in four high school students.¹⁷³

Unsurprisingly, race and class matter enormously. When white suburban teenagers get caught skipping school, drinking or shoplifting, they usually get grounded, kept after school, or face some other parental or administrative discipline. When black and brown, poor and low-income kids engage in similar behavior, the consequences increase dramatically. “Many of these young people have engaged only in the kinds of normative adolescent behavior that in some communities – namely, predominantly white middle and upper class communities – are seen by schools, police, and other stakeholders as ‘teens being teens’ and dealt with in private, nongovernmental ways.”¹⁷⁴

The young people who sit today inside locked facilities are, overwhelmingly, our nation’s most vulnerable youth. Disproportionately black and brown and drawn from impoverished neighborhoods, they are more likely to have been victims of violence than they are to have perpetrated it. Incarceration not only exacerbates the vulnerabilities with which they arrive but exposes them to all manner of new challenges: post-traumatic stress syndrome; curtailed education; gang affiliation and a gladiator mentality enforced by prison culture; the unraveling effects of social isolation; and a lifetime of stigma and further isolation.¹⁷⁵

The U.S. Department of Education’s Office for Civil Rights just released the Civil Rights Data Collection for 2013-2014 which showed, not for the first time, that “black K-12 students are 3.8 times as likely to receive one or more out-of-school suspensions as white students.” Moreover, “black students are 1.9

times as likely to be expelled from school without educational services as white students,” with “black boys represent[ing] 8% of all students, but 19% of students expelled without educational services.”¹⁷⁶

Expanding proven treatment programs such as MST and FFT could keep thousands of at-risk youth in school and their troubled families intact. Yet “the juvenile justice and criminal justice systems trudge along, engaging in business as usual and all but ignoring the evidence-based practices that are staring them in the face – programs that cost less and keep communities safer.”¹⁷⁷ “Only 5% to 10% of juvenile offenders are afforded the benefit of evidence-based community programs.”¹⁷⁸

5.2 Juvenile Justice Reform

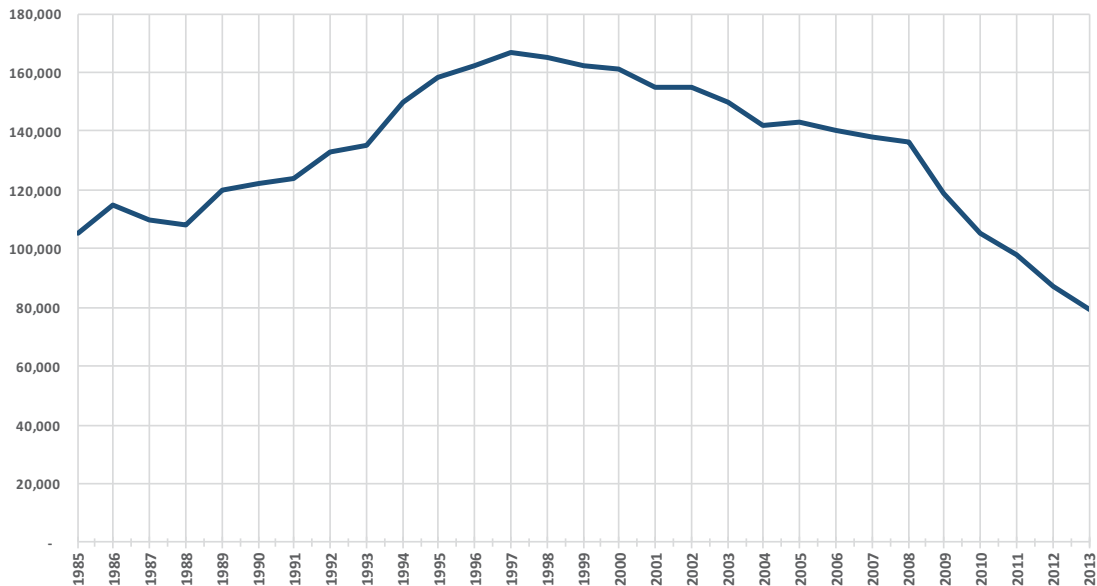
Over the last decade, concerted efforts to reform juvenile justice policy and practice have made progress in a number of states, enabling noteworthy reductions in out-of-home placements. Reforms include limiting eligibility for correctional placements; changing the intra-governmental financial incentives for incarcerating youth; reducing lengths of stay and detentions based on status offenses and technical violations of parole; toning down the “tough-on-crime” rhetoric; and increasing the use of pretrial diversion, community supervision and alternative sentencing.¹⁷⁹

This is a peculiar kind of progress, though. Virtually all of these changes involve little more than cutting back on the ill-advised policies and practices that were responsible for excessive juvenile confinements in the first place. The net result has largely taken us back to where we started from in the 1980s (Figure 18).

Picking low-hanging fruit is understandable, but simply making fewer bad decisions won’t get the job done. Further substantial reductions in unnecessary and damaging placements won’t be possible without helping at-risk families cope with the adverse influences facing their children. Yet tens of thousands of distressed families are trapped in a horrible Catch-22 where government can’t afford less expensive treatment programs because it spends five to ten times as much on custodial placements:

Counties often lack the financial means or incentive to expand local programs or services, so fewer of these options exist for youth than the demand would otherwise necessitate. Without local programs or services, judges may have little choice but to send youth convicted of marginal offenses to distant, locked facilities. As a result, youth have been locked in the state system simply because there was nowhere for them to go locally – and no easy way to pay for those services.¹⁸⁰

Figure 18. Juvenile “Out-of-Home Placements”¹⁸¹

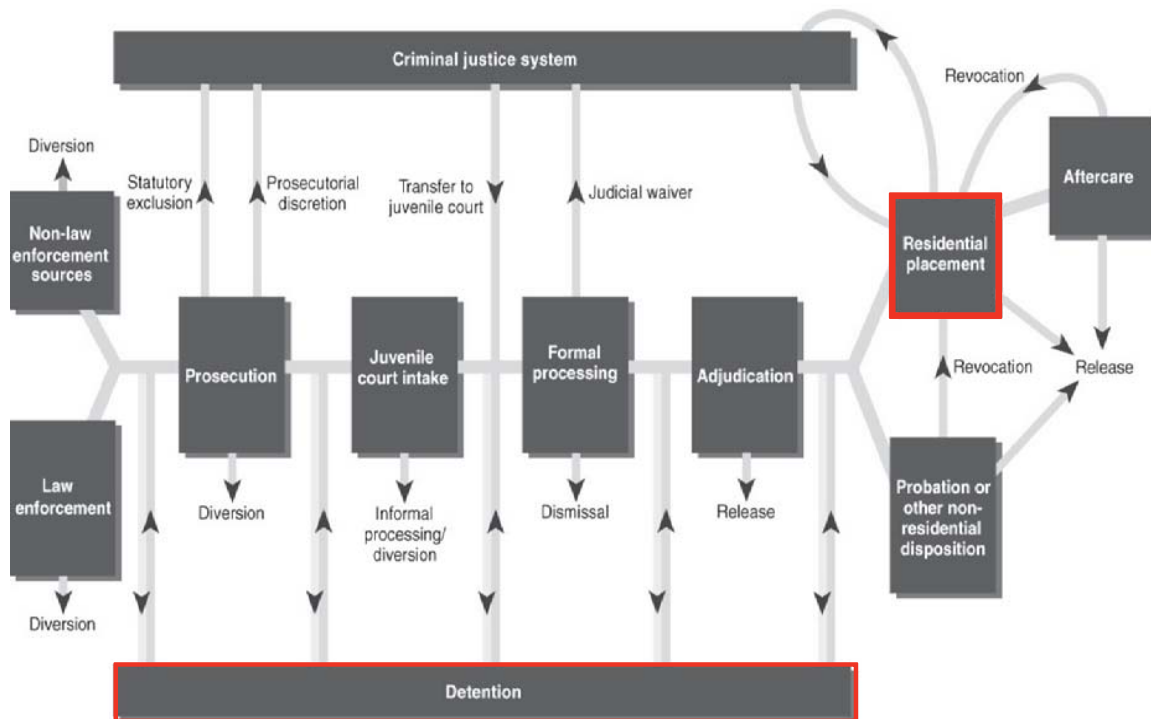


As a result, “most states are spending vast sums of taxpayer money and devoting the bulk of their juvenile justice budgets to correctional institutions and other facility placements.”¹⁸² Spending for locking up these kids far exceeds spending on their education.¹⁸³ As a result, current juvenile placement practices represent a “wholesale misallocation – and waste – of taxpayer resources.”¹⁸⁴

5.3 Evidence-Based Programs for “Deep-End” Youth

The juvenile justice system that swallows these wayward children and adolescents is a vortex with myriad entry and exit points (Figure 19). Those 60,000 youth sit in “detention” and in group homes, foster care, congregate care, and other “residential placements.”

Figure 19. Juvenile Justice Case Flow¹⁸⁵



The juvenile justice system is like a swimming pool with a shallow end and a deep end, with a gradually sloping bottom in between. All of the swimmers are in some kind of “criminogenic” trouble, but there are wide differences between the two ends in terms of public safety, seriousness of the offense, risk to the children themselves, likelihood of reoffending, and so on. Although every state has its own idiosyncratic system, there are important commonalities:

Juvenile courts may hold delinquents in a secure detention facility if the court believes it is in the best interest of the community or the child ... Residential commitment may be for a specific or indeterminate ordered time period. In 2009, 27% of adjudicated delinquents were placed in a residential facility. The facility may be publicly or privately operated and may have a secure prison-like environment or a more open, even home-like setting.

In many States, when the judge commits a juvenile to the State department of juvenile corrections, the department determines where the juvenile will be placed and when the juvenile will be released. In other instances the judge controls the type and length of stay.¹⁸⁶

The euphemisms “residential,” “commitment,” “adjudicated,” and “placement” signal the boundary between the shallow and deep ends, the critical threshold when an adolescent has been found “responsible for” (guilty of) a juvenile “offense” (a crime) and awaits “disposition” or “commitment” (sentencing). At that point, the state or county department of juvenile justice assumes temporary legal custody, with the power to remove the child from the family home and send him or her to incarceration or some other residential placement. Adjudication marks the point at which the punitive nature and cost of commitment become materially greater than they do for youth whose entanglements with the system have not reached the point of no return.

The juvenile justice system can more or less cope with kids in the shallow end and the middle. The programs that work for those kids—such as Cognitive Behavioral Therapy, “wraparound” services and mentoring—are relatively affordable, and juvenile justice agencies have (or can acquire) the necessary expertise to apply them effectively.

This is not the case for those youth who flounder in the deep end of the pool. Once the water figuratively gets over their heads, the system lacks the money and the capacity to deal with them in appropriate ways. Even though many jurisdictions are trying to move toward greater use of community-based services, progress has been modest at best:

The focus on evidence-based programing within juvenile treatment and corrections is growing. Supported by foundation funding, federal policy and state mandates, specific manualized interventions with demonstrated evidence of effectiveness are becoming a more visible element of the services landscape. These evidence-based programs are supported and promoted because they are good investments, yielding significant cost-benefit to taxpayers. Further, the most well studied and disseminated programs are supported by quality assurance mechanisms that encourage standardization of practice. Despite some gains in implementation, however, the overall penetration of evidence-based services within juvenile justice programing remains quite low. This is a research-to-practice failure mirrored by similar challenges across other child-serving systems (e.g., prevention, mental health and child welfare) ...¹⁸⁷

There are tens of thousands of juvenile offenders every year whose criminal behavior could be prevented or diminished by evidence-based treatment, but the current system generally doesn’t identify them or provide them with the intensive support they need to climb out of the pool and stay out. What one executive director said about incarcerating mentally ill adults is equally true for juvenile placements: “If you could design a system to treat these people as ineffectively and as expensively as possible, you’d use jails the way we do.”¹⁸⁸

How could juvenile justice systems that are excessively punitive and ruinously expensive be transformed into ones that focus primarily on the effective delivery of proven treatments? How could they make residential placements, including secure detention, the disposition of last resort?

The first step would be to focus on those areas where the gap between what kids need and what they get is the greatest. As already noted, juvenile justice systems are the least dysfunctional for kids in the shallower ends, and less money is wasted on ineffective efforts. At the deepest end, there are certainly juvenile offenders who commit serious crimes and need custodial supervision or secure detention, for the safety of themselves, their families and their communities. So at both extremes, the shallowest end and the deepest end, the chances and costs of systemic error are comparatively low.

Making these distinctions is feasible, albeit neither simple nor risk-free. Nor is there a politically expedient line between low-risk and high-risk youth. Programs like MST and FFT have been developed for the hard cases, not the easy ones:

MST works with the toughest offenders. They are adolescents, male and female, between the ages of 12 and 17 who typically have significant histories of committing crime. These kids don't just skip school to see the latest blockbuster movie or get into an occasional brawl on the basketball court. They steal, do drugs, sell drugs, beat up their parents and siblings, break into houses, rarely show up at school and if they do, are disruptive. Their teachers and community are threatened and don't want them around.¹⁸⁹

A number of jurisdictions have begun to adopt "diversion" policies that curtail unproductive policies such as arresting youth for loitering and truancy, or provide non-carceral services to children who have already been arrested. These reforms are working, with encouraging prospects for expansion. But very few systems intervene once a child has been *adjudicated* as a delinquent and awaits *commitment*.

Philadelphia exemplifies this dichotomy. High school students who commit a "low-level summary or misdemeanor delinquent offense" may be diverted to "Intensive Prevention Services" comprising academic support; social and emotional competency building; mentoring; recreation; work ready programming; community service/engagement; and parental involvement. Eligible offenses include "marijuana possession, fighting, disruptions, graffiti, bullying, threats, or possession of certain items that could be used as weapons."¹⁹⁰

None of those services are available, however, if that same student "has a previous delinquency finding or delinquency diversion or is currently under juvenile probation supervision," or if he or she has committed a "high-level offense." Those students are dispatched to the school-to-prison pipeline, complete with a lifetime criminal record:

The student goes through the arrest process: he or she is handcuffed, taken to police headquarters, fingerprinted, photographed, detained for a maximum of six hours, and assigned a police identification number that stays with the student into adulthood.

Thus, the second time an adolescent "has been involved in a behavioral incident or 'delinquent act,'" such as smoking a joint, getting in a fight or yelling at a teacher, the system abandons all attempts at diversion. It does not differentiate repeat low-risk offenders from serious offenders, it does not give low-risk offenders Intensive Prevention Services, and it certainly does not identify high-risk offenders for whom certified treatment programs have been designed. Philadelphia's two-strike policy takes no notice that "the final opportunity for diversion is after a child has been convicted and is in the sentencing process."¹⁹¹

If juvenile justice agencies want to reduce unwarranted placements to a significant extent, they must be willing to provide evidence-based treatment to kids who've encountered the system more than once. They need to focus on those youth whom the system treats far too harshly for no sound reason, at unacceptably high financial, psychological and social cost, and for whom there are less costly treatment programs that work exceedingly well. They should distinguish between those few who legitimately need to be placed outside the home and the many more who can safely remain with their families and stay in school if they are provided with the kinds of "high touch" support that CEBPs provide.

5.4 The Rise and Fall of the Florida Redirection Project

The foremost example of aggressively expanding CEBPs to reduce the number and cost of juvenile placements, rather than increasing placements due to a lack of treatment programs, was the Florida Redirection project launched in 2004.¹⁹² For years, the state's DJJ had offered programs like MST and FFT to a limited number of adolescent offenders. However, even though those programs were designed to *prevent* out-of-home placements, Florida made them available primarily to youth whom juvenile judges had *already* removed from their homes and sent to foster care, group homes or juvenile detention.

Wiser heads prevailed. In 2004, with the assistance of the National Council on Crime and Delinquency and the Florida Legislature's Office of Program Policy Analysis and Government Accountability, as well as the cooperation of state law enforcement agencies and juvenile courts, DJJ contracted with Evidence-Based Associates (EBA) to divert ("redirect") youth who had been placed on probation from going into residential placements. From 2004 to 2013, the state paid EBA a total of \$65.4 million to manage the

delivery of MST, FFT and, later, Brief Strategic Family Therapy (BSFT) to more than 10,000 families in 18 of the state's 20 judicial districts.¹⁹³

These are three of the highest-rated CEBPs available for families with troubled adolescents exhibiting chronic, violent, and substance-abusing behavior problems, and for serious juvenile offenders (Figure 20). Each comprises an intensive, home-based treatment for the entire family, featuring meticulous quality-assurance protocols:

- They address the many family, health and community factors that foster delinquency;¹⁹⁴
- Decades of peer-reviewed research in dozens of rigorous evaluation studies have documented their effectiveness;¹⁹⁵
- They produce large and statistically significant reductions in felony and violent felony arrests; drug-related arrests; re-arrests; days of incarceration, adult probation and adult confinement; and family instability;¹⁹⁶
- They've been delivered successfully for decades to thousands of families at hundreds of sites in dozens of states and countries;¹⁹⁷ and
- Their effectiveness has been recognized by every major public and private certification registry, including the Washington State Institute for Public Policy; the Office of Juvenile Justice and Delinquency Prevention in the U.S. Department of Justice; the Substance Abuse and Mental Health Services Administration in the U.S. Department of Health and Human Services; and Blueprints for Healthy Youth Development.¹⁹⁸

These programs are also extremely cost effective, producing between \$2.79 and \$11.19 in benefits for every dollar expended.¹⁹⁹

Overall, 70% of families who completed Redirection avoided placement at an average cost that was 73.6% less.²⁰⁰ Two independent evaluators determined that Florida saved approximately \$181 million relative to what it would have otherwise spent without Redirection (Figures 6 and 21).

Note that Florida's average cost per placement (\$36,238) was less than half the national average (\$88,000), while the cost for MST, FFT and BSFT would have been only marginally lower than the national average due primarily to differences in professional salary scales. So the cost of Redirection per family was just 26.4% of the cost of placement in Florida, but it would be a much smaller fraction in the states modeled in the *pro forma*, below, whose placement costs are more than double.

Despite Redirection's confirmed success, budget constraints forced Florida to wind the program down. In 2013, the state shifted Redirection from a program fully funded by general revenues at an annual cost of about \$10 million, to an "optional rehabilitation service" under Medicaid. As a means-tested program that was jointly funded by the state and federal governments, Florida's annual share of the required matching funds would only be \$2 million.²⁰¹ For 2014, "due to the new Medicaid compliance issues,"²⁰² DJJ restricted program eligibility to juveniles with specific clinical diagnoses, including major depression and bipolar disorder.²⁰³

The new rules diluted Redirection in two respects: broadening services to include unproven programs and reducing the number of eligible youth. Under the state's amended Medicaid plan, Redirection now funded "therapeutic support services" and "family-centered practice" that were not CEBPs for serious juvenile offenders, and services were available to just 403 youth each year, far below the peak enrollment of 1,121.²⁰⁴

Figure 20. Certified Evidence-Based Programs for Juvenile Offenders

	Multisystemic Therapy (MST)	Functional Family Therapy (FFT)	Brief Strategic Family Therapy (BSFT)
Intervention	Targets chronic, violent, and substance abusing delinquents age 12-18 at high risk for out-of-home placement. Focuses on the entire ecology of the youth including family, school, peer, and community relations.	Targets youth ages 11-18 at risk for and/or manifesting delinquency violence, substance use, Oppositional Defiant Disorder, or Conduct Disorders and their families. Focuses on family relations and communication; builds on strengths as motivation for change.	Designed to prevent, reduce, and/or treat adolescent behavior problems such as drug use, conduct problems, delinquency, aggressive/violent behavior, and association with antisocial peers; improve pro-social behaviors; and improve family functioning.
Research	16 studies, including 8 randomized trials, of which 7 independent studies did not involve an MST model developer. One randomized trial had two follow-up studies of 14 and 22 years post treatment (average participant ages of 28 and 37 years).	38 years of investigation in a range of settings and delivery sites. Study design has ranged from random assignment to treatment conditions, to quasi-experimental designs, to comparisons with base rates for that population.	The BSFT model has been evaluated in a number of randomized clinical trials evaluating the efficacy and effectiveness of the model.
Results	59% fewer re-arrests, 68% fewer days of incarceration, 57% fewer drug-related arrests, and 43% fewer days on adult probation.	FFT has produced statistically significant reductions in recidivism, out-of-home placement, or subsequent sibling referral, compared with controls.	More engagement in therapy, reduction in conduct problems, reduction in socialized aggression, reduction in substance use, and better family functioning.
Dissemination	More than 500 teams in 34 states, the District of Columbia and 15 countries, treating more than 23,000 youth.	Trained more than 270 local, state, national and international organizations serving over 12,000 families around the globe.	Implemented at approximately 110 sites in the United States, as well as in Chile, Germany, and Sweden, and has served more than 2,600 families.
Endorsements	Washington State Institute for Public Policy (WSIPP); Office of Juvenile Justice and Delinquency Prevention (OJJDP); Substance Abuse and Mental Health Services Administration (SAMHSA); Blueprints for Healthy Youth Development (Blueprints).	WSIPP, OJJDP, Blueprints.	WSIPP, OJJDP, SAMHSA.

Figure 21. Florida Redirection Project Annual Savings

	Annual Placement Cost Per Youth	4-5 Month Redirection Cost Per Family	Unit Cost Difference Between Placement and Redirection	Redirection Completions Per Year	Annual Savings (Millions USD)
2004	\$28,000	\$7,715	\$20,285	0	\$0.0
2005	\$31,387	\$7,715	\$23,672	140	\$3.3
2006	\$37,123	\$9,285	\$27,838	267	\$7.4
2007	\$39,853	\$10,075	\$29,778	618	\$18.4
2008	\$41,102	\$9,923	\$31,179	981	\$30.6
2009	\$38,651	\$11,624	\$27,027	797	\$21.5
2010	\$36,038	\$11,063	\$24,975	1,011	\$25.2
2011	\$36,743	\$9,429	\$27,314	1,121	\$30.6
2012	\$36,743	\$9,429	\$27,314	987	\$27.0
2013	\$36,743	\$9,429	\$27,314	618	\$16.9
Total				6,540	\$180.9
	Ave. \$36,238	Ave. \$9,569	Ave. \$26,669		
		26.4% of Ave. Placement Cost	73.6% of Ave. Placement Cost		

That’s when the state dismantled EBA’s whole production solution and adoption risk materialized. Florida signed a Medicaid management contract on September 30, 2013, for \$2,180,869, of which \$178,030 (8.2%) was unfunded. The contract was slated to run through 2017, but closed on September 17, 2015, with expenditures of just \$441,860.37, or 22% of the original award.²⁰⁵ By that time, 48 out of 67 Florida counties couldn’t keep up with needs “such as individual or family counseling (especially in-home counseling) ...”²⁰⁶ The shortages hit especially hard in counties where “in-home counseling is a top need due to transportation and geographic access barriers.”

These events exemplify the adage that “poor implementation always trumps a good model.” In an understandable but short-sighted decision, the state chased after quick savings in the form of federal matching funds for Medicaid. Even though the evaluators had long reported that Redirection achieved dramatic results and avoided enormous costs, future savings suffered by comparison with immediate gains from Medicaid cost-sharing. Since Medicaid compliance rules restricted the range of services eligible for reimbursement, the state began to unbundle Redirection, with the predictable effect that the quantity and quality of the CEBPs began to erode.

We know that the lack of sustainable funding and insufficient capacity to deliver services where they are needed has consequences. When juvenile judges and probation officers either send moderate-to-high and high-risk youth home without needed support (“below guidelines”) or commit them to residential placements they don’t need (“above guidelines”), recidivism rates are between 1.8 and 2.8 times higher than when youth are given appropriate levels of support in appropriate settings.²⁰⁷

5.5 The UK’s MST SIB

Yet even standard SIBs can overcome the kinds of up-front funding shortfalls that undermined Florida Redirection. In 2013, the Essex County Council in the U.K. launched an MST SIB to avoid out-of-home care for 380 at-risk children, with the reduction of care days as the primary outcome metric.²⁰⁸

Placing English children in out-of-home care costs between \$27,000 and just over \$240,000 per year per individual. So expanding MST in Essex County could avoid spending up to \$13.7 million over eight years. The SIB targets investor returns of 8% to 12% per annum, and returns can increase incrementally with the number of placement days saved, up to a cap of \$9.3 million. The first two years of the SIB have been quite successful:

As of February 2016, 208 adolescents had begun or completed the MST programme, with 82% avoiding care and remaining with their families. Progress is being tracked over 30

months, and of those who finish MST, 87% remain at home 12 months post-completion. Outcomes payments have been made to the Social Impact Bond holding company and will be recycled to pay for ongoing service delivery.²⁰⁹

Note that the council is providing MST to children “on the edge of care,” which in the U.S. is called children at risk of abuse and neglect. Those kids come under the jurisdiction of child welfare or child protective services agencies, rather than juvenile justice, and youth in the child welfare system sometimes have less serious and less costly social, emotional and other problems than juvenile offenders. By contrast, “standard” MST for juvenile offenders has been studied much more extensively than MST for child abuse and neglect (MST-CAN), which WSIPP considers a “research-based” rather than an evidence-based program.²¹⁰ So in the juvenile justice system, the cost differentials between residential placements and treatment can be higher, and the outcomes stronger and more reliable, than in the child welfare system. Thus, the U.K. results might be conservative relative to the *pro forma* presented next.

5.6 A Pro Forma Model for Scaling MST/FFT

Solving pervasive social problems we already know how to fix is a long and arduous journey. Figure 22 summarizes the analysis so far. We know that MST/FFT work and that they remain effective as long as expansions efforts maintain program fidelity. We also know that they save much more than they cost and that those savings can be monetized within a reasonable investment horizon.

These progressive accomplishments lay the groundwork for answering the remaining vital question: could SIBs replicate Redirection and expand MST and FFT commensurate with unmet population needs? For the reasons discussed, standard SIBs are unlikely to do so. But could Scale Finance expand MST/FFT at their maximum feasible growth rates?

Figure 22. Predicates for Scaling Juvenile Justice CEBPs

1. Do MST & FFT work?	2. Do they still work as growth escalates?	3. Do they save more than they cost?	4. Can future savings be monetized?
Dozens of rigorous outcomes evaluations provide the highest level of evidence that MST and FFT dramatically prevent juvenile offending and reduce recidivism.	Florida Redirection and Youth Villages show that CEBPs for juvenile offenders can be implemented with fidelity under real-world conditions to tens of thousands of families and reduce placements by at least 70% for program completers.	Redirection saved Florida more than \$180 million over nearly ten years.	The U.K. MST SIB shows that “cashable” prevention savings can be recovered to repay investors and reduce government spending.

At its peak, Florida Redirection served a little more than 1,000 families per year at an annual service cost of about \$10 million. (To put this in context, juvenile courts committed more than 1,000 youth to placement in seven other states in 2013: California, 4,452; Texas, 2,577; Pennsylvania, 2,337; Ohio, 1,338; New York, 1,236; Michigan, 1,224; and Virginia, 1,014.²¹¹) Figure 23 presents a *pro forma* cash flow for a Scale Finance SIB of roughly the same size as Redirection over five years.

Figure 23. Scale Finance *Pro Forma*

ASSUMPTIONS							
Placement Cost/Youth	\$100,000						
MST/FFT Cost/Family	\$10,000						
Placement Rate	100%						
Success Rate	50%						
SIB Overhead	25%						
Intermediary Management Fee	5.0%						
Intermediary Success Fee	3.0%						
Investor Share of Savings	12.25%						

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	TOTAL
Families Served	1,000	1,000	1,000	1,000	1,000	1,000	5,000
Youth Not Placed		500	500	500	500	500	2,500
Youth Place		500	500	500	500	500	2,500
CURRENT STATE SPENDING	\$100,000,000	\$100,000,000	\$100,000,000	\$100,000,000	\$100,000,000		\$500,000,000
INVESTOR PRINCIPAL ("SIB Size")	\$13,125,000	\$13,125,000	\$13,125,000	\$13,125,000	\$13,125,000		\$65,625,000
SIB COST							
MST/FFT Cost	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000		\$50,000,000
SIB Overhead	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000		\$12,500,000
Intermediary Management Fee	\$625,000	\$625,000	\$625,000	\$625,000	\$625,000		\$3,125,000
TOTAL SIB COST	\$13,125,000	\$13,125,000	\$13,125,000	\$13,125,000	\$13,125,000		\$65,625,000
GROSS SAVINGS							
Current Placement Cost		\$100,000,000	\$100,000,000	\$100,000,000	\$100,000,000	\$100,000,000	\$500,000,000
SIB Cost		(\$13,125,000)	(\$13,125,000)	(\$13,125,000)	(\$13,125,000)	(\$13,125,000)	(\$65,625,000)
Residual Placement Costs		(\$50,000,000)	(\$50,000,000)	(\$50,000,000)	(\$50,000,000)	(\$50,000,000)	(\$250,000,000)
TOTAL GROSS SAVINGS		\$36,875,000	\$36,875,000	\$36,875,000	\$36,875,000	\$36,875,000	\$184,375,000
CAPITAL COST							
Return of Investor Principal						\$65,625,000	\$65,625,000
SIB Financial Returns							
Intermediary Success Fee		\$1,106,250	\$1,106,250	\$1,106,250	\$1,106,250	\$1,106,250	\$5,531,250
Investor Return						\$25,585,938	\$22,585,938
TOTAL CAPITAL COST		\$1,106,250	\$1,106,250	\$1,106,250	\$1,106,250	\$89,317,188	\$93,742,188
NET SAVINGS TO STATE							
Gross Savings							\$184,375,000
Capital Cost							(\$90,632,813)
TOTAL NET SAVINGS TO STATE							\$90,632,813
INTERNAL RATE OF RETURN							
Cash Flows (out)	(\$13,125,000)	(\$13,125,000)	(\$13,125,000)	(\$13,125,000)	(\$13,125,000)		(\$65,625,000)
Cash Flows (in)						\$88,210,938	\$88,210,938
Net Cash Flows	(\$13,125,000)	(\$13,125,000)	(\$13,125,000)	(\$13,125,000)	(\$13,125,000)	\$88,210,938	\$22,585,938
IRR	10.0%						

The *pro forma* makes four conservative assumptions:

1. Annual placement cost per youth is \$100,000, as compared to substantially higher detention costs in New York (\$352,663), Virginia (\$260,019), California (\$208,338), Ohio (\$202,502), and Michigan (\$173,455).²¹²
2. CEBP cost per family is \$10,000, which exceeds the \$7,500 cost of MST, the most expensive of the three interventions.²¹³
3. Placement rates are reduced by only 50%, even though Redirection, Youth Villages and the Essex County Council SIB all had success rates above 70% for program completers.

4. SIB overhead costs for legal, data collection, performance management, and evaluation are 25% of CEBP costs. A recent Utah PFS analysis estimates “project costs” for “evaluation, project manager, legal and audit expenses” at 12.5% of the services budget.²¹⁴

The model also makes three simplifying assumptions that require more detailed analysis:

- First, it assumes that the impacts of MST/FFT all happen in the year following program completion. That is, youth who receive treatment in Year 1 either succeed (avoid placement) or fail (go into placement) in Year 2, and so on. Hence, the investment proceeds are spent and services are provided in Years 1 through 5, and placement costs/savings accrue in Years 2 through 6. But MST/FFT treatment take less than six months, and outcomes will be staggered across the population.
- Second, the model assumes that a binary result—a 50% reduction in placements—would satisfy contractual impact targets. It does not include more granular measures such as the number of days in placement.
- Third, the *pro forma* assumes that savings don’t depend on reductions in large fixed costs for brick-and-mortar facilities. In many states (such as Florida), most placement facilities are small structures like group homes and local detention centers that can be closed whenever commitments decrease even moderately. Other states have large prison-like institutions that can’t be taken offline without significant, long-term reductions in detainees. In those jurisdictions, incremental placement reductions might not produce proximate savings of the size and timing modeled in the *pro forma*.

Based on these assumptions, 1,000 placements per year (i.e., without CEBPs) currently cost a prototypical state \$100 million per year, or \$500 million over five years. This assumption is reasonable: in 2014, 23 states spent more than \$100 million per year on juvenile confinement; 9 other states spent more than \$200 million annually; and New York spent more than \$350 million.²¹⁵

Providing CEBPs to those same 1,000 families would (like Florida Redirection) cost \$10 million per year, or \$50 million over five years. Adding in 25% overhead (\$2.5 million per year) and a 5% intermediary management fee (\$625,000 per year), would cost about \$3.1 million per year, bringing the annual total cost to roughly \$13.1 million, or almost \$65.6 million over the life of the SIB. This would be the SIB principal amount to be raised from investors, otherwise known as the “size” of the SIB.

Assuming conservatively that CEBPs prevent placements in only half of the 1,000 total cases, then 500 youth per year, or 2,500 over five years, would still cost \$100,000 each for placement. If so, “residual” placement costs would be \$50 million annually, or \$250 million for five years. In that event, gross savings would be about \$36.9 million per year or nearly \$184.4 million over the life of the SIB, representing 37% of total current state spending. Beyond governmental savings, the SIB would produce large reductions in unnecessary placements and corresponding increases in unseparated families.

Of course, states could fund these programs directly and retain all of the savings (assuming they achieved the same results), but nothing has prevented them from doing so for the last twenty years, and conditions going forward are much less favorable. So the choice before us is rather stark: allow the school-to-prison pipeline to remain largely intact, or incur what would be a reasonable “investment premium” that would pay for itself and reduce placements by half.

The *pro forma* provides one illustration of a possible investment premium. It allocates 5% of funds raised as an annual intermediary management fee, 3% of gross savings as an annual intermediary success fee and 12.25% of gross savings to investors on the back end. Thus, total capital costs for the transaction would be \$93.7 million, comprising \$65.6 million of principal plus \$28.1 million in returns and fees. Deducting these amounts from gross savings would provide net savings back to the state of \$90.6 million.

Thus, instead of spending half a billion dollars on 5,000 placements over five years, states could cut placements in half with no up-front funding and keep almost \$91 million in the treasury. Mainstream investors would earn competitive returns, providing strong incentives for subsequent rounds of Scale

Finance funding. Several factors drive these results: the sizable number of youth placed in custodial confinements; the wide cost differential between placements and MST/FFT; and adequate working capital for the high-fidelity implementation needed to achieve documented success rates and savings.

Incidentally, these same factors insulate Scale Finance from concerns that unintended consequences “can occur if service providers are able to choose themselves which beneficiaries are the recipients of the intervention, thereby ‘cherry-picking’ the easy cases and denying services to those most in need.”²¹⁶ Highly demanding programs like MST/FFT (and NFP) focus exclusively on stubborn problems with complex causes and devastating effects for tens of thousands of people nationwide. Intensive and comparatively expensive therapies like MST and FFT aren’t designed for low-risk youth, and governmental counterparties won’t pay investment premiums for services families don’t need. “In practical terms, juvenile justice systems will generally get more delinquency reduction benefits from their intervention dollars by focusing their most effective and costly interventions on higher risk juveniles and providing less intensive and costly interventions to the lower risk cases.”²¹⁷ For SIBs, the deepest end of need is where the greatest savings are. Scale Finance math doesn’t work without very large cost differentials between prevention and remediation, which “easy cases” simply don’t have.

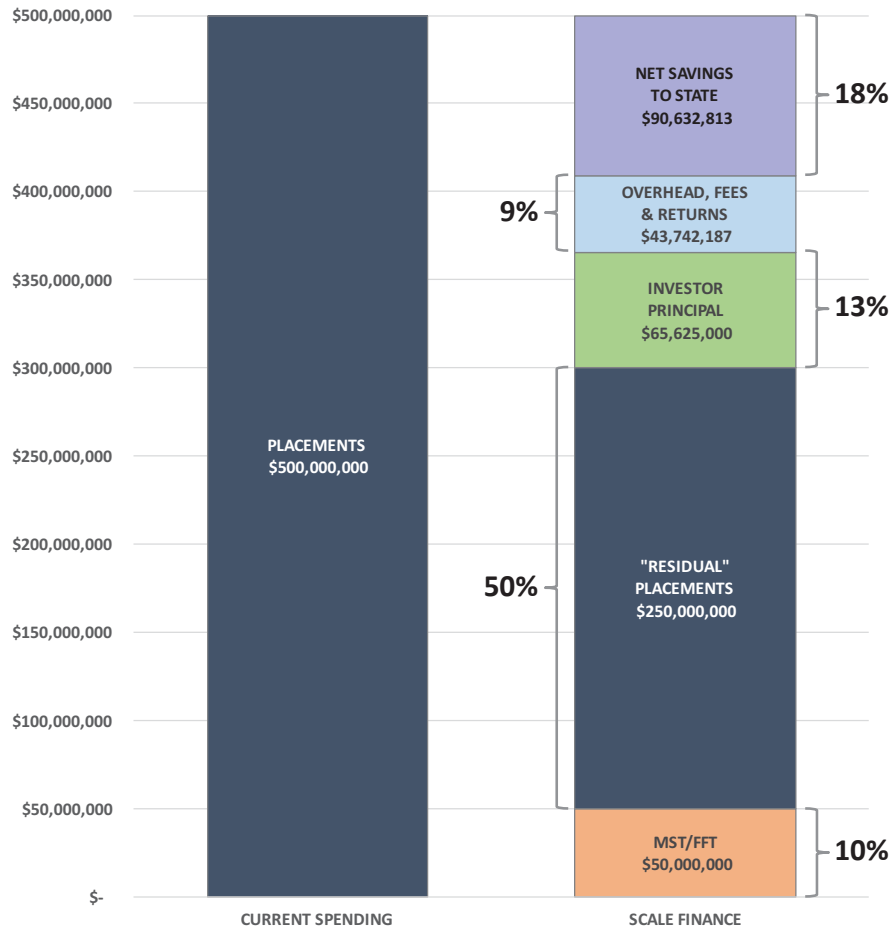
If the SIB succeeds, investors would commit \$65.6 million over five years and receive back \$88.2 million in Year 6. The internal rate of return (IRR) for investors would be a healthy 10% per annum. This would be more than the “financial return of about 7%” that Sir Ronald Cohen believes social investment needs to become “the new venture capital,”²¹⁸ but the scope of the undertaking and corresponding risk are greater than the transactions he had in mind. This would be a reasonable reward for raising and managing all of the capital needed to expand proven social programs at their maximum feasible growth rates, and it would be sufficient to attract subsequent rounds of funding to finish the job.

One of the most important features of Scale Finance is that it fairly compensates the intermediary for organizing large, successful transactions, which is what they should be incentivized to do. Standard SIBs are too small with insufficient margins to cover the intermediary’s true costs; indeed, most SIBs require charitable subsidies and pro bono services to make the math work. (For example, Salt Lake County recently stated “philanthropic funds will be used to cover Project Costs—if possible.” The County estimates those costs will be \$2 million for two PFS projects with a combined total cost of \$11.5 million.²¹⁹) Raising and managing this kind of money requires a dedicated intermediary whose own funding doesn’t depend on grants and consulting contracts for non-transactional work, as standard SIBs do today.

The usual terms for private equity firms raising similar sums are 2% of the capital raised as an up-front management fee and 20% of the gross returns as “carried interest,” a kind of success fee. By comparison, the Scale Finance *pro forma* model raises the up-front percentage to 5% annually to sustain the intermediary organization and a 3% annual success fee on gross savings. The management fee translates to \$625,000 per year (whether or not the SIB is successful) or \$3.125 million over the life of the SIB. If the SIB succeeds, the intermediary success fee would be \$1.1 million per year, or \$5.5 million over five years. This would be reasonable compensation for raising \$65 million, preventing 2,500 placements, and saving the state more than \$90 million.

Figure 24 shows why this is a better way to allocate \$500 million over five years. Of that amount, 10% would be used to expand MST and FFT to all 5,000 families; 50% would now go to residual placements; 13% would repay investor principal; 9% would cover SIB overhead, fees and financial returns; and 18% would be returned to the state. And 2,500 youth and their families would be spared custodial confinement, without financial risk to the state.

Figure 24. A Better Way to Allocate \$500 Million Over Five Years



All that being said, it is important to understand what a gigantic leap of faith such an investment would require. In a SIB market that totals less than \$200 million worldwide, and in which the average transaction size in the U.S. is less than \$10 million over nearly five years, we don't know yet whether or how commercial investors could amass \$65 million for one deal. Even if one adventurous "anchor" investor stepped forward to get the ball rolling, there's no standing roster of "commercial co-investors that provide market validation ... [whose] presence signals a market expectation of commercial returns."²²⁰ Whatever type and number of mainstream investors would be needed to achieve critical mass, each of them would have to be willing to cross the chasm into unexplored territory.

5.7 Euthanizing White Elephants

SIBs aren't magic. The money to repay investors has to come from somewhere, namely by capturing the savings from avoided expenditures on problems that don't occur. But government won't have any savings to capture unless it is prepared to substantially curtail the programs and facilities it currently funds (such as group home contracts and juvenile detention centers) that early interventions would make superfluous. Cutting expensive programs that don't work are not unintended consequences.

Reality is more complicated, of course, in part because shifting governmental spending priorities entails difficult political decisions. The \$5.7 billion states and counties currently spend on juvenile placement every year constitutes revenue to the placement industry,²²¹ and closing detention facilities arouses

protests in communities that lose those jobs.²²² No one should be surprised that the loudest critics of SIBs are public sector unions²²³ and human services providers²²⁴ with longstanding interests in the status quo.²²⁵

However, it can be done. From 1992 to 2012, Connecticut reduced residential commitments nearly 70% and closed one of its three state-operated detention centers, while it increased spending on evidence-based, family-focused adolescent treatment programs.²²⁶ However, this 20-year journey shows how difficult it is for states to undertake such a thoroughgoing transformation. In Connecticut's case, it took a civil rights law suit; two consent decrees; a former governor's resignation and imprisonment for rigging the contracting process; comprehensive reform legislation that reorganized the judiciary and increased funding for community-based programs; cancellation of \$7.5 million in contracts for ineffective programs over 18 months; and a prolonged series of scandals widely covered by the media.

Georgia offers an example of a state that is making progress but can't quite make the difficult political changes required. The Pew Center on the States reported that, "following a criminal justice overhaul in 2012, Georgia enacted ... wide-ranging reforms to its juvenile justice system [that] will save an estimated \$85 million over five years and reduce recidivism by focusing out-of-home facilities on serious offenders and investing in evidence-based programs."²²⁷ Sure enough, since 2013, the number of youth in secure confinement has dropped by 17% and youth awaiting placement has decreased by 51%. Yet the costs of long-term and short-term lock-up have *increased* and still make up more than 60% of the state Department of Juvenile Justice's budget:

From fiscal year 2014 to the fiscal year 2017 proposal, funding for community services grew 17 percent, from \$82 million to \$95 million in a budget of \$334 million. Meanwhile, funding for secure commitment grew 11 percent, from \$85 million to \$95 million and secure detention grew 12 percent from \$107 million to \$120 million.²²⁸

From a fiscal perspective, this is the worst of both worlds. The state increased funding for CEBPs, which, as expected, dramatically decreased out-of-home placements, but somehow the detention budget keeps rising. Until the other shoe drops, the projected savings of \$85 million will remain out of reach.

By contrast, Virginia recently announced plans to "give DJJ the opportunity to hold on to its savings from the closure of Beaumont Juvenile Correctional Center." The savings will be used to expand "community-based services, particularly those that are evidence-based, [which] are often more effective and less costly than an out-of-home placement or commitment to a juvenile correctional center."²²⁹

These case studies document a mixed record of success and failure, and progress and delays when it comes to juvenile justice reform efforts. What would it take for other people's money to accelerate and amplify these government-led initiatives?

6. DEVELOPING SCALE FINANCE SIBS

In many respects, Scale Finance reverse-engineers the standard SIB model. With standard SIBs, public officials identify stubborn social problems and then ask whether there are innovative solutions that private investors could fund. Philanthropic investors and community development funders, the innovators and early adopters who always respond to such visionary calls, have patiently endured arduous transactions to pursue incremental expansions of promising prevention programs. They're making real progress, but a pathway to systemic transformation is not apparent.

By contrast, Scale Finance would challenge mainstream investors to fund proven but long-neglected solutions at their maximum feasible growth rates. The case is made here that commercial and institutional investors should explore these opportunities on their financial merits, with no altruistic trade-offs. "Institutional asset owners who consider ETI investments typically ensure that these opportunities match benchmarks on a risk-adjusted financial basis and are acceptable exclusively on their merits as financial investments, apart from any collateral benefits."²³⁰

But these asset owners and managers haven't been involved in SIBs at all, and both the problems targeted and the proffered "evidence-based" solutions are entirely foreign to them. It shouldn't be surprising,

then, that Scale Finance would require quite different procedures for developing transactions than standard SIBs follow.

6.1 “Reverse Procurement”

At ground level, the developers of standard SIBs are taking on the formidable task of helping both the public and social sectors become more performance-based:

Cities have a difficult time seeing the connection between spending on social services and progress in addressing major social problems. In areas like homelessness, cities find that they are spending more and more on services, yet the problem keeps getting larger. Often there is little coordination between different funders focused on a given problem to make sure that the overall funds are efficiently allocated and that needy individuals don't fall through the cracks. Cities often fail to track results of the services using meaningful metrics. At best, cities monitor processes, such as how many beds were occupied at a homeless shelter. It is rare for cities to track outcomes, such as how many individuals were placed in stable housing. As a result, cities are unable to manage their social service contracts to improve outcomes.²³¹

The champions of evidence-based policymaking know full well that the established order is impervious to superficial changes. So, in 2011, the Pew Charitable Trusts and the John T. and Catherine D. MacArthur Foundation launched the “Results First Initiative,” which “works with states to implement an innovative benefit-cost analysis approach that helps them invest in policies and programs that are proved to work.” Since that time, they've implemented a three-part approach in 21 states and four California counties to “use data to inform the critical budget decisions they make each year: 1. Create a comprehensive inventory of funded programs and assess the evidence of each intervention's effectiveness. 2. Require agencies to justify requests for new funding with rigorous research on program effectiveness. 3. Embed evidence requirements into agency contracts and grants to ensure that research guides program activities.”²³²

In the SIB realm, the Government Performance Lab at Harvard's Kennedy School of Government assigns full-time “fellows” to provide *pro bono* technical assistance to twenty state and local governments to explore SIBs in areas including early education, criminal justice, behavioral health, and child welfare.²³³ Its support model targets three governmental barriers that impede social progress: “lack of performance assessment, under-investment in prevention, and inability to collaborate effectively with service providers around improving systems.” Old soldiers like the Urban Institute and new recruits like the Sorenson Impact Center at the University of Utah's David Eccles School of Business have mounted similar efforts.

In parallel, human-services providers often struggle with the many ways in which governmental funding and other “external factors make growth challenging,” including lack of political will, frequent leadership changes, a dearth of champions, bias toward congregate care, and disinterest in outcomes data.²³⁴ A cottage industry is responding to their needs for technical assistance in working more effectively with government. Intermediaries like Third Sector Capital Partners have arrived whose “mission is to accelerate America's transition to a performance-driven social sector,”²³⁵ joined by the likes of Social Finance, Inc., the Nonprofit Finance Fund, and the Corporation for Supportive Housing.

Still, government and nonprofit organizational incapacities complicate the formation of standard SIB projects. The U.S. has generally followed the U.K.'s lead in adopting a SIB development process by which a government “commissioner” initiates and manages the formation and implementation of the transaction. But as the number of SIB pilots has grown, there has been increasing frustration in both countries with the administrative burden and time-consuming nature of government procurements. For example, issuing and responding to requests for proposals (RFPs) and negotiating government contracts have taken about two years on average,²³⁶ leading many to ask whether the game is worth the candle. “Pay for Success projects require an incredible depth and breadth of expertise and a serious investment of organizational time and resources during the project construction phase.”²³⁷ With credible reports

describing “how current contracting and procurement processes threaten the survival of small charities,”²³⁸ SIBs exacerbate a formalistic acquisition processes that was already far too cumbersome.

A frank *post mortem* of an unsuccessful PFS procurement provides a trenchant example. An experienced human services provider, the Hillside Children’s Center, working with a leading PFS intermediary, Third Sector Capital Partners, with financial support from a respected CDFI, the Nonprofit Finance Fund, joined with New York State to develop a SIB “as a community-based alternative for youth in the juvenile justice system.” The Intensive Community Asset Program (ICAP) bore some similarities to MST:

The ICAP model sought to use collaborative partnerships and wraparound care management to engage and stabilize youth and their families by meeting immediate needs; fostering connections with “placed-based,” or accessible and neighborhood-based, community assets and natural supports; and developing and strengthening tools for coping with challenges.

However, “after three years of exploration, planning, and significant steps towards project execution, Hillside learned that the State decided not to move forward on contracting for its proposed Pay for Success project.”²³⁹ Due to a lack of “uniform eligibility criteria” for high-risk youth, Hillside wasn’t able to accumulate a sample size large enough for an RCT evaluation. In addition, a “rapidly changing policy landscape made it difficult to predict judicial behavior, complicating the referral process ...” Hillside, Third Sector and the Urban Institute tried to rescue the project by incorporating an outcomes rate card,²⁴⁰ but “this new innovation in the field diverged too radically from New York State’s original understanding of the confines of Pay for Success in the 2013 RFP, posing procurement challenges.”

Moreover, investors find themselves assuming the more passive role of assessing opportunities that governmental and nonprofit organizations have already designed without their input. Like a game of telephone, the message becomes more garbled as it travels from government agencies that write RFPs to social service providers that respond to those solicitations and negotiate contracts, before it finally arrives at investors’ doors as a *fait accompli*.

Further, “investors do not have decision-making power in PFS governance structures.”²⁴¹ At best, they may be “allowed access to meetings of the operations or executive committees as non-voting members and typically have project termination rights that are defined in the PFS contract.” Little wonder, then, that mainstream investors have taken a pass, especially when their timely advice from 2012 was never embraced:

The Payment by Results model supported by external investment aims to transfer some risk associated with an innovative programme from the commissioner to the investor for an appropriate price. The investor provides the upfront capital required to deliver the services and bears the risk that the outcomes will be achieved. This risk is transferred at a price that takes into account the commissioner’s prospects of future savings with the investor’s cost of capital and opportunity cost of alternative investment. When the commissioner seeks to transfer greater risk, social investors will want to balance the possibility of losing a substantial proportion of their capital with the possibility of a greater return (that could be reinvested in future social projects).

To ensure investor and commissioner appetite for risk transfer will “overlap”, investors should be involved as early as possible in the PBR procurement process – certainly at the conceptual or design stage. Involvement of delivery organisations is not the same thing as involving investors.²⁴²

It should be noted that using procurement rules for SIBs is not a legal requirement. Federal and state procurement laws apply only when government agencies “purchase goods and services,” not whenever government spends money.²⁴³ SIBs don’t involve such purchases for the simple reason that governments “pay for success,” i.e., outcomes, rather than the services that produce them. SIBs aim to expand innovative social programs without financial risk to government, objectives that rigid procurement rules, highly structured RFPs and boilerplate government contracts don’t advance.

Many of the critical skills and capacities needed to develop large and enduring SIBs are not among the public sector's strong suits. SIBs must (1) attract sustained private investment to (2) expand effective early interventions in order to (3) prevent serious social problems and (4) reduce the downstream demand for costly and ineffective governmental facilities and services; (5) repayments to investors depend on the achievement of future governmental savings and other beneficial results (6) specified in outcomes-based contracts. No link in that chain is an inherently governmental function, nor do they invoke traditional public sector expertise or capacities. As others have noted, "governments find it challenging to sustain focus on difficult social problems over multiple years"²⁴⁴ and "government is not accustomed to contracting for social services in a multi-year or contingent way."²⁴⁵

A recent analysis by New Zealand's Treasury and Ministry of Health (MoH) of two unsuccessful SIB pilots illustrates the point. Back in September 2013, KPMG presented the two ministries with a feasibility study and business case which requested approval for a SIB pilot project based on "the shortlisted outcomes areas/populations deemed suitable for a pilot." Instead, the Cabinet directed MoH to "undertake a 'market-led' programme, which would seek participants' ideas in relation to the outcomes sought and the populations targeted for intervention." There followed a more than two-year procurement ordeal that the review summarized as "market sounding/building → ROI → shortlist → RFP → interactive process for proposal development → shortlist → negotiation." It did not end well:

Ministers approved the fast-tracking of the first potential pilot in May 2015. Following this approval, a "joint development" phase was commenced, which included development (and negotiation) of the commercial parameters of the deal, i.e. risk allocation, performance standards, payment mechanism structure, etc. This phase continued through to May 2016, at which point in time the parties behind this pilot withdrew from the pilot programme.

In other words, the government rejected KPMG's recommendations to develop a pilot project for interventions that had been found feasible for SIB funding and instead conducted an open-ended procurement process the review described as a "'bring us your ideas' approach." Investment parameters were not developed until *after* the two-year commissioning was completed, by which time the outside parties threw up their hands and walked away.

Upon reflection, the review found it was a mistake that the project "team does not have, nor purports to have, any experience in undertaking commercial transactions. The difference between running a regular government procurement process and undertaking a commercial transaction (especially in a new market) is significant." Inasmuch as investors "ultimately make or break the deal," project success should be determined by "having a 'banked' contract ready for implementation ...". In hindsight, "investors should have been better included in all parts of the procurement process in order to understand what potential issues/concerns they might have about things like risk allocation and financial return."

New Zealand's post-mortem lends support to several observations made here. These include the lack of internal governmental expertise in developing commercial transactions; the unsuitability of standard procurement procedures for developing SIBs; the need for early and continuing investor involvement in designing SIB transactions; and, above all, the centrality of financeable transactions ("banked contracts") to the entire undertaking.

If the objective is to scale proven solutions commensurate with unmet population needs, traditional procurement mechanisms are unlikely to serve. The obtuse and prescriptive details contained in SIB RFPs and the one-sided contracts that government payers offer are not conducive to developing balanced risk-sharing and flexible governance arrangements that would be needed to attract sizeable investments under outcomes-based contracts. To overcome inefficiencies of government procurement and contracting, Scale Finance draws upon the respective strengths of each of the parties:

- CEBP model owners and social innovators and entrepreneurs know how to deliver high-quality services and plan out the resources needed for expansion. Even though their overall market penetration has been modest relative to the need, they have nonetheless managed far greater long-term growth than most programs.

- Mainstream investors know how to finance expansion, manage risk and benchmark competitive returns. As the head of the Chan Zuckerberg Education Initiative recently put it, “business knows how to take things to scale. That’s what they do and how their incentives work. There are lots of things that we need to figure out in the nonprofit and the public sector about how to do that.”²⁴⁶
- Government has responsibility for and expertise in protecting vulnerable populations, managing the use of taxpayer funds and overseeing compliance with laws of general applicability. Only they can make the choice between maintaining the status quo and converting their systems to prevention-based solutions.

Social entrepreneurs and mainstream investors might well be better equipped, at least in the first instance, to formulate and manage plans to structure long-term financing to scale proven social innovations. Under the Scale Finance model, they would take the *initial* lead on developing comprehensive proposals for SIBs they’d be willing to fund and execute. Once they commit to a plan for maximum feasible growth whose savings substantially exceed the up-front costs, they would then invite states to compete for the investment opportunity. It would then fall to government to carefully scrutinize the plan, and negotiate any changes needed to protect the public and insure private investors don’t reap unreasonable rewards. If investors overreach, states won’t bite. If, however, investors develop commercially-reasonable, market-based solutions to intractable social problems at meaningful scale, government might see opportunities they couldn’t develop on their own.

As things stand today, social innovators and investors are only allowed to respond to detailed RFPs that government issues, which greatly diminishes room for creative or ambitious thinking. “Often when states release requests for proposals, the deadline to respond is such that no more than a month and a half of dedicated work time is available.”²⁴⁷ But the inarguable fact that government partners must ensure that SIBs satisfy public and not just private interests does not mean that government must “drive the bus” or otherwise initiate all SIB transactions. Instead, government’s primary and indispensable role would be to act as a *responsible counterparty* that agrees to pay for outcomes achieved at reduced cost, while protecting vulnerable populations and taxpayer funds.

Inviting private parties to submit Scale Finance proposals for government’s consideration would not subordinate the public interest to private self-interest; rather, it would allow government to benefit from private and social sector ingenuity and market discipline. If the parties can’t negotiate mutually-agreeable arrangements, then deals won’t happen. But if government always takes the lead, it is far less likely that advanced transactions would even be developed in the first place:

Perhaps what distinguishes this [economic development] effort at the state level is most of all the high degree of pragmatism. Operating out of necessity, innovation policies at the state level often involve taking advantage of existing resources and recombining them in new ways, forging innovative partnerships among universities, industry and government organizations, growing the skill base, and investing in the infrastructure to develop new technologies and new industries. Many of these initiatives are being guided by leaders from the private sector and universities.²⁴⁸

This new approach wouldn’t reflect antipathy toward the public sector, but an honest recognition that scaling prevention programs and monetizing future savings are not governmental *fortés*. Scale Finance would cultivate “ETIs [that] target financial return to the fund as well as economic growth or some other ancillary benefit in areas related to beneficiaries. They have traditionally targeted investment in underserved regions or communities, often on the argument that there are ‘emerging domestic markets’ where investment opportunities can be linked to social benefits.”²⁴⁹

So “reverse procurement” for large Scale Finance investments would mirror the way that governments have long competed for economic development projects that promise new jobs and tax revenues. Companies make plans to build large facilities that are expected to move the needle on local and even regional employment. Governments evaluate the plans and offer tax and other incentives commensurate

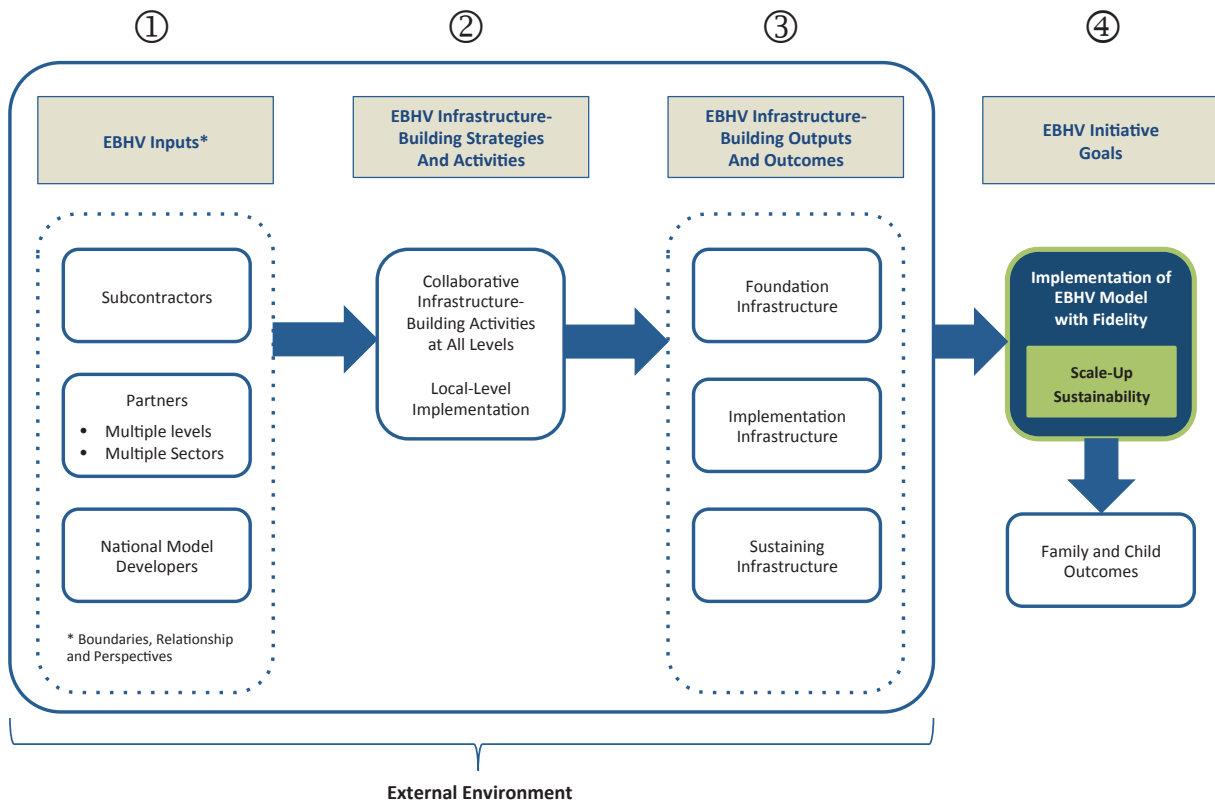
with expected economic benefits. The parties then negotiate mutually-advantageous contracts that balance public and private ends, without regard to inapposite public contracting and procurement rules.

6.2 Public Finance for “Social Infrastructure”

As stated earlier, SIBs and PFS investments have been designed to incrementally expand the availability of innovative social services that government does not provide directly. By contrast, Scale Finance is designed to expand certified EBPs to an extent that effectively meets the entire unmet need. It is argued that the latter can be accomplished if and only if the SIB model can be extended to attract mainstream capital in amounts large enough to fill the service gap permanently, effectively solving problems such as juvenile mass incarceration and first-time mothers without appropriate pre- and post-natal nursing care.

Trying to eradicate rather than mitigate a pervasive and disabling social problem requires not just more spending on tools already in place, but also the acquisition of new and different tools that the *status quo* does not require. Expanding CEBPs commensurate with unmet needs would require construction of capacious and durable “social infrastructure” above and beyond increasing the number of program teams and sites. Using evidence-based home-visiting programs as an example, Figure 25 illustrates the connections among (1) scaling CEBPs, (2) investing in essential infrastructure and (3) practicing high-fidelity implementation.

Figure 25. Theory of Change for Evidence-Based Home-Visiting (EBHV) Initiative²⁵⁰



The three left-most columns exemplify the kind of well-managed national footprint that NFP has developed over decades. The first column, “EBHV Inputs,” portrays three basic components needed to deliver a CEBP across diverse geographies: subcontractors; partners at multiple levels and sectors; and national model developers.

The second column, “EBHV Infrastructure-Building Strategies and Activities,” comprises the routine but essential work necessary to build out those three components. The extended team must collaborate on infrastructure-building activities at the same time that implementation is carried out at the local level. An example is NFP’s National Service Office (NSO) work with the 170 local “Implementing Agencies” in 32 states.²⁵¹

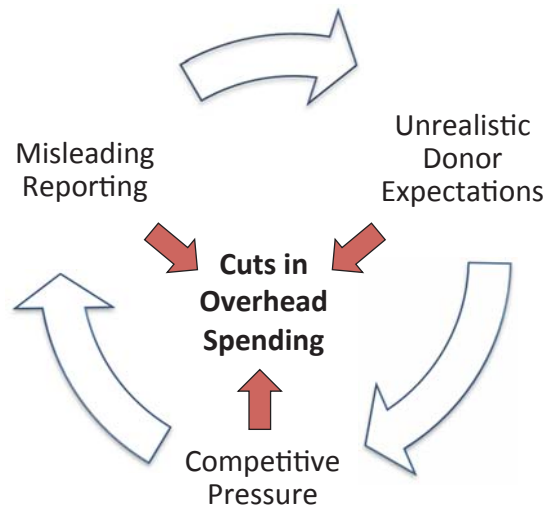
The third column, “EBHV Infrastructure-Building Outputs and Outcomes,” shows the enduring accomplishments of all this hard work: foundation, implementation and sustaining infrastructure. In NFP’s case, examples include an impressive collection of NSO guidance documents for business development, nursing practice, program quality support, marketing and communications, and public policy government affairs.²⁵² These are wheels that no state or implementing agency has to reinvent.

This colossal effort, which has taken NFP some 30 years, is what has enabled the preeminent home-visiting program to become the “3% solution” discussed earlier. MST/FFT has followed an equally arduous course to roughly similar effect.

What both have been unable to do (albeit not for lack of trying) is to pursue the systemic “EBHV Initiative Goals” in the fourth column. Although NFP has certainly practiced “Implementation of EBHV Model with Fidelity,” those efforts have not led to “Scale-Up” or “Sustainability” shown in the green box. Both NFP and MST/FFT continue to serve more eligible participants, but the number of unserved eligibles has essentially not budged. Despite heroic and sustained fundraising, advocacy and outreach campaigns, more than 90%, perhaps even 95%, of those eligible for CEPBs can’t obtain them.

The kind of *programmatic* infrastructure that standard SIBs fund (columns 2 and 3 in Figure 25) is designed to ameliorate the “nonprofit starvation cycle” (Figure 26): “This phenomenon occurs when an organization reduces (in reality or through creative accounting) the amount of money spent on overhead expenditures in order to gain a competitive edge in donor markets; over time, however, the constant erosion of infrastructure starves the organization of productive capacity.”²⁵³ Such heedless reductions in overhead undermine organizational effectiveness: “[t]he inability of nonprofits to invest in more efficient management systems, higher skilled managers, training, and program development over time means that as promising programs grow, they are going to be hollowed out, resulting in burned out staff, under-maintained buildings, out of date services, and many other symptoms of inadequately funded overhead.”

Figure 26. Nonprofit Starvation Cycle²⁵⁴



Standard SIBs could become a powerful counterforce to such self-defeating cost-cutting for the simple reason that nonprofits struggling to survive on starvation diets don't make good SIB candidates. Feasible SIB transactions must raise sufficient investment to cover the cost of essential overhead needed to achieve the contracted outcomes. In this way, outcomes-based funding might foster more robust provider organizations, and the proliferation of standard SIBs could help secure the productive capacity of the social sector more broadly.

But simply building stronger nonprofit organizations won't begin to satisfy the unmet demand, as the low market penetrations of NFP and MST/FFT demonstrate. Social investors alone can't provide sufficient funding for the *systemic* infrastructure needed to achieve scale as depicted in Figure 25, column 4.

When it comes to *physical infrastructure*, government has two principal financing options: borrowing the money directly by incurring public debt (issuing state or municipal bonds), and pledging future cash flows generated by the new assets (project finance). Traditionally, public finance distinguishes between long- and short-term expenditures when it comes to direct borrowing:

There are sound reasons that states and localities borrow to pay for infrastructure, rather than use annual tax collections and other revenues. Public buildings, roads, and bridges are used for decades but entail large upfront costs; borrowing enables the state to spread out those costs. As a result, taxpayers who will use the infrastructure in the future help pay for it, which promotes intergenerational equity. Borrowing also makes infrastructure projects more affordable by reducing the pressure on a state's budget in any given year.²⁵⁵

In contrast to physical infrastructure, "states typically prohibit the use of bond proceeds to fund operating expenses" based on the belief that ordinary goods and services should be paid from the annual (or biannual) budget. Current expenditures are much smaller than the cost of massive infrastructure projects, and it is considered fiscally irresponsible to amortize costs that don't have long-term value once they're used to meet short-term needs.

However, the notion of building *social infrastructure* with the capacity to finally solve pervasive social problems we already know how to fix challenges both assumptions. As shown above, the social safety net constructed during the 1960s and 1970s has come undone for hundreds of thousands of disadvantaged families, with no prospects for replenishment of domestic discretionary funding. The cost of scaling CEBPs like MST/FFT and NFP alone would exceed \$1 billion annually, and it would take at least a decade to build a service delivery network that could substantially reduce the unmet demand for those programs.

More important, creating the *permanent capacity to serve every eligible beneficiary* would not produce ephemeral value that would only benefit current taxpayers. To the contrary, investing in such systems would break some of the main drivers of intergenerational poverty and disadvantage, such as juvenile mass incarceration and high-risk births to low-income, first-time mothers. Not only would future government spending on juvenile and adult correction, emergency and chronic healthcare, and special education be sustainably reduced, but improving the lifetime prospects of the individuals who participate in these exceptional programs would expand local, state and national economic output.

In NFP's case, hundreds of thousands of formerly poor and unhealthy children and their once unprepared mothers would now be able to pursue educational attainment and economic self-sufficiency:

One of the Nurse-Family Partnership program's three stated goals is economic self-sufficiency for the family.... Among the improvements in low-income, unmarried mothers' economic self-sufficiency that have been observed in at least two of the three randomized, controlled trials of the program are ... reduction in use of welfare and other government assistance and greater employment for the mothers ...²⁵⁶

Similarly, MST Services, Inc. supports more than 500 therapist teams worldwide, serving some 23,000 families. But that workforce reaches just 5% of the eligible population, and Scale Finance could fund a 5-10x expansion that might yield the same kinds of job growth and economic independence. Dismantling the school-to-prison pipeline would have profound effects on low-income families and communities for generations to come. Since future taxpayers would benefit directly from having such a comprehensive system in place, they should contribute to its long-term financing.

Project financing offers an intriguing analogy for Scale Finance. Project finance refers to “the raising of finance on a Limited Recourse basis, for the purposes of developing a large capital-intensive infrastructure project, where the borrower is a special purpose vehicle and repayment of the financing by the borrower will be dependent on the internally generated cashflows of the project.”²⁵⁷ SIBs also involve contingent finance in which the investors’ recourse is usually limited to the assets of an SPV, but they differ from project finance in two key respects. First, like government borrowing, project finance has been used to pay for physical infrastructure but not for current services. Second, investor payments come from fees and other positive revenues charged for the future use and enjoyment of the project assets, not future savings.

Unlike standard SIBs, Scale Finance could evolve into a new form of project finance that would be more familiar to mainstream investors. As already shown, the enduring cost of building full capacity for CEBPs like MST/FFT and NFP would be comparable to many infrastructure projects. Further, interventions with the strongest level of evidence and positive benefit-cost multiples that are well documented offer quantifiable and predictable savings that could be rigorously modeled and diligently scrutinized. Large SIBs to replicate state-wide programs like Florida Redirection could be structured to capture those reliable savings as cashflow equivalents to governmental counterparties.

The space between the first three columns in Figure 25 and the fourth column is the same “chasm” between early and mainstream markets discussed above. Private capital markets, if fully engaged, might be able to develop financeable transactions as ambitious as the Scale Finance *pro forma*. But their ingenuity, resources and courage will not be fully engaged by the inefficient and cumbersome processes that standard SIBs have had to endure. If, instead, hands-on mainstream investors applied their unique expertise to assess opportunities to invest in social infrastructure, both MST/FFT and NFP offer the kinds of regional economic benefits for which procedures like reverse procurement have traditionally been used.

For example, scaling CEBPs would require labor forces that are far larger and more robust than fragile human services systems typically develop. To reach 3% of the eligible population, Nurse-Family Partnership deploys more than 1,800 nurses nationwide to serve nearly 33,000 first-time mothers.²⁵⁸ Reaching half of the eligible population would take more than 25,000 nurses, as well as the management, facilities and technical capabilities needed to recruit, train, supervise, and support them. That’s a lot of new, high-paying jobs, but NFP lacks the human resources capacity to rise to the occasion.

Durable social infrastructure will require massive and sustained investments in business planning and budgeting, human capital development, enterprise accounting, technology, and organizational and operations management that share many characteristics with bricks-and-mortar investment. Mainstream investors could take it upon themselves to extend the traditional boundaries of government borrowing and project financing in order to fully scale CEBPs, but “the financial return must be proportionate to the outcome improvement.”²⁵⁹

6.3 Measuring “Post-Counterfactual” Outcomes and Savings

One reason SIBs are so complex is that they require rigorous outcomes measurement, which can be both a blessing and a curse. The premise is that investors shouldn’t get paid unless they’re responsible for the results, and the results can’t be attributed to the funded program unless other possible factors can be ruled out. So most SIBs employ control or comparison groups—randomized or historically matched samples of participants who don’t receive the intervention—as “counterfactuals” to estimate what would

have happened without the program. These sophisticated statistical methods can isolate program impacts, but they impose artificial conditions that are cumbersome and expensive to administer.

Such rigorous evaluations are considered necessary to the integrity of outcomes-based finance. But the added expense and complexity they impose are not trivial, and they're one of several factors that prolong and complicate SIB procurement and contracting, and constrain the size of SIB transactions. For now, the market accepts them as a necessary burden, albeit for a reason that's rarely acknowledged: counterfactuals are needed because the interventions don't already have strong evidence of effectiveness or cost-benefit. When program outcomes and savings are uncertain, government has been unwilling to pay unless the SIB is structured to prove that the observed results are attributable to the services that investors funded.

But CEBPs have already completed numerous RCTs and QEDs during their trial phases years or even decades earlier, and the individual outcomes evaluations of such programs as MST/FFT and NFP have been confirmed by "meta-analyses," studies of studies to establish consistency across spans of time and diverse places. Thus, the economic and operational burdens of traditional outcomes evaluations are unnecessary in the case of Scale Finance SIBs for the simple reason that the impacts and savings attributable to CEBPs have already been well established by the strongest levels of evidence.

Scale Finance would be no less outcomes-based than standard SIBs, however, and they would still require rigorous measurement. But rather than focusing on questions that have already been answered many times over—whether and how the interventions work, what results they achieve, how they must be implemented, and how much they save—verification of outcomes and savings, together with any success payments due investors, could be made by simply *auditing* service levels and implementation fidelity. Independent auditors could assess whether the same interventions were implemented in the same way as the researched programs when they are expanded by factors of, say, three to five over 5-10 years. If so, then the savings formulas derived from previous cost-benefit analyses could be applied to the larger service volumes to determine investor payments. This approach would make "pricing" calculations much simpler and payment "triggers" much less uncertain.

This is a fundamental distinction between traditional SIBs and Scale Finance. SIBs that fund promising but unproven programs use counterfactuals because it is otherwise difficult to say with any confidence whether they've met their outcomes and savings targets. By contrast, Scale Finance is trying to expand specific "manualized" interventions that have already been proven to work. In the former case, SIBs have to measure whether the program worked and saved money; in the latter, SIBs have to measure whether program integrity was maintained as the number of participants increased significantly over long periods of time.

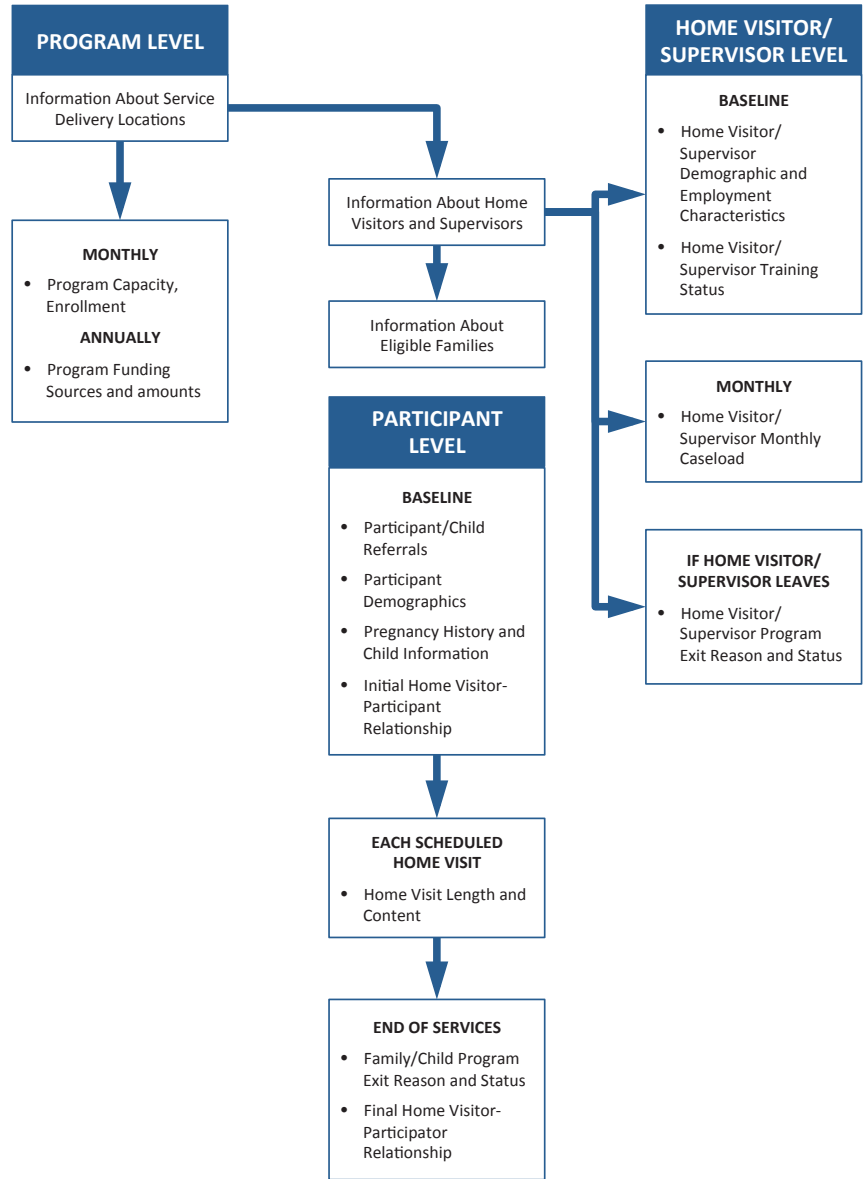
Measuring for attribution (standard SIBs) and measuring for fidelity (Scale Finance) involve quite different procedures. Attribution is a *statistical* exercise that uses counterfactuals to fashion an artificial reality: what would have happened to the participants without the program? Scale Finance, on the other hand, is a *counting* exercise: how many people received the same program that has already been studied? This is no small feat, inasmuch as the quality of program implementation faces downward pressures as case loads increase and quality-control budgets often don't keep up. RCTs and QEDs can't tell us anything about that.

Measuring fidelity is itself a highly complex undertaking. "Fidelity is the extent to which an intervention is implemented as intended by its designers. It refers not only to whether or not all the intervention components and activities were actually implemented, but also to whether they were implemented properly."²⁶⁰ It embraces two components: (1) "structural aspects of the intervention that demonstrate adherence to basic program elements such as reaching the target population, delivering the recommended dosage, maintaining low caseloads, and hiring and retaining well-qualified staff" and (2) "dynamic aspects of the participant-provider interaction."²⁶¹

By way of illustration, Figure 27 shows just the data-collection framework for replicating evidence-based home-visiting programs with fidelity. Scale Finance audits would have to track compliance with all of these elements. Similar requirements would apply to MST/FFT. Investors would be credited with the

corresponding outcomes and savings if and only if independent auditors confirmed that the same CEBPs that earlier research had validated were provided to the SIB participants.

Figure 27. Fidelity Data Element and Collection Schedule (Home Visiting)²⁶²



Not only are counterfactuals superfluous for CEBPs, but evaluation techniques used to determine attribution simply don't work for scaling or systemic change. One reason is that a "controlled" trial compares a well-defined treatment program to the absence of that program. If the program changes significantly, the counterfactual becomes compromised. But the whole point of long-term, outcomes-based projects is that we want them to make course corrections in response to actual performance data.

For example, the Peterborough SIB began with a program addressing five participant needs: housing, family relationships, addiction, benefits, and health and well-being. By the second year, however, the

services were adapted to also cover education, training and employment; immigration; children and families; attitudes/thinking/behavior; finance/benefit/debt; legal advice; purposeful activity; and information technology.²⁶³

Measurement regimes that depend on rigid counterfactuals can't accommodate such drastic changes, but Peterborough wouldn't have succeeded without them. Large-scale SIBs cannot be shackled to "a rigid, unadaptable supply chain which has little ability or incentive to innovate in order to generate social outcomes more effectively."²⁶⁴

Once pilot projects have conducted a sufficient number of evaluations using counterfactuals, they need to move on to more flexible methods designed for scaling impact and enabling systemic change. CEBPs like MST/FFT and NFP passed that threshold long ago, and Scale Finance could incorporate careful audit procedures to maintain their integrity in the face of inevitable growth pressures. Such an approach for measuring mature interventions has been espoused by two of the most respected exponents of rigorous evaluation, the Bill and Melinda Gates Foundation and MDRC.

In 2010, the Gates Foundation published an overlooked but visionary paper entitled, "A Guide to Actionable Measurement," which explains why different kinds of assessment are appropriate for different kinds of programs.²⁶⁵ In the case of "Model Development," that is, "work to develop a product, model, innovative service or program in a specific setting," measurement must "evaluate for attribution: the ability to credit the results achieved to a specific intervention or investment." By contrast, for "Delivery at Scale," defined as "wide-scale distribution of proven products, models, services or programs across defined populations," actionable measurement doesn't require counterfactuals, but only methods that "track execution, reach, fidelity of implementation, and capture innovation":

We use the term "scale" often to describe an aspiration to expand the target population served by a pilot intervention to a larger geographic area or whole population. When initiatives seek ... to deliver at scale, we measure to determine the degree to which targeted populations are reached, whether the proven model was implemented, and to document innovation and adaptation to context. *It is not necessary to measure for attribution when the efficacy or effectiveness of the intervention has already been demonstrated.* Where a causal relationship has already been established, outcomes can be considered proxies for impact. (Emphasis added)

Once a program's impacts have been conclusively established by repeatedly disproving the counterfactual that it has no impact, they don't need to be proven anew each time, provided it is really the same program. An evaluation of an evidence-based program does not ask whether the program worked or how well it worked, as those questions have been repeatedly asked and diligently answered. Instead, it asks whether the proven program was actually delivered and to how many people.

The second category of post-counterfactual evaluation is "Systems Change," which Gates defines as "efforts to improve people's lives by targeting public or private structures, mechanisms, or incentives of organizations or networks in which they live." Here, counterfactuals are simply infeasible, unreliable and unaffordable. In their place, sound evaluation practice requires responsible parties to "measure desired outcomes, track execution, and focus on short-term feedback":

Our efforts to affect long-term change in complex dynamic systems involve the collective action of many different players and a measurement approach that can capture the ways we influence the system along the way. Because systems are varied across contexts and in time, measurement should be used to enable flexible planning and ongoing learning. Systematically tracking execution of progress toward outcomes in shorter time frames can be especially helpful to inform adjustment and adaptation; whether in the policy arena or on the ground in a community, country, or region. *Usually measuring attribution is not feasible or worthwhile since so many players contribute to change; making attribution problematic, the expense is great, and the payoff is not particularly actionable.* (Emphasis added)

MDRC has also recognized that counterfactual evaluations are unnecessary for SIBs funding CEBPs. “Only in those few cases in which the SIB is replicating an intervention that has been reliably demonstrated to work at scale should SIB parties consider omitting an impact study. In such cases they could perhaps replace it with a combination of outcome measures and an assessment of fidelity to the model.”²⁶⁶

Dispensing with unnecessary counterfactuals would reduce the cost and complexity of Scale Finance SIBs. Replacing an expensive RCT/QED black box with familiar auditing tools would also be more conducive to attracting mainstream investment.

6.4 Appropriations Risk

Another major risk factor that confounds standard SIB deals is appropriations risk. Under both federal and state constitutions, spending taxpayer money is always a two-step legislative process: “authorization” – giving permission to incur the expenditure – and “appropriation” – directing the actual release of funds from the treasury. Agencies need authorization to sign a contract that requires a future payment, but it also needs a subsequent appropriation vote to make the payment when it becomes due. A state cannot make payments under an otherwise valid contract without a separate and contemporaneous vote of the legislature to appropriate the funds, usually by enacting an annual or biannual budget.

Moreover, under the obscure but well-established legal doctrine of “sovereign immunity,” a party otherwise entitled to payment under a valid government contract cannot sue the state for money that hasn’t been appropriated.²⁶⁷ But the oft-stated belief that “states can’t enact legislation that binds a future legislature” is mistaken. A state can “waive” its sovereign immunity by enacting a law that pledges its “full faith and credit” for the payment obligation, which effectively combines the authorization and appropriation in one bill. In the case of SIBs, however, only Massachusetts has done so.²⁶⁸

Without such a pledge, which no other state has even considered, investor payments under a long-term SIB contract are subject to the complete discretion of future legislators, many of whom might not even have held office when the contract was signed. They would have no obligation to even take up such a bill, thereby negating the government’s responsibility to make success payments.

As a result, all government-led SIBs other than Massachusetts are completely unsecured investments, making it unlikely they can ever grow big enough to make real headway against our most important social problems. Institutional investors would violate their fiduciary duties if they committed large amounts of capital to deals in which the counterparty had complete freedom to renege on the contract. But full-faith-and-credit legislation that irrevocably commits future spending can be politically radioactive, as virtually every state requires either a super-majority vote of the legislature or a voter-approved ballot initiative for such a fiscal pledge.

Elected officials generally won’t expose themselves to voter disapprobation for relatively small sums, so full faith and credit legislation is generally a non-starter for standard SIBs of \$20 million or less. Moreover, defaulting on such a contract would have little or no effect on the credit rating of any states with multi-billion budgets. But mainstream investors consider those deals much too small, and they can’t make much larger investments without legal recourse in the event of governmental default. So only “social investors” – foundations, high net worth individuals and CDFIs – are actively backing standard SIBs today. Until large deals are developed that neutralize appropriations risk, commercial and institutional investors are likely to remain on the sidelines.

Hence, government’s primary and indispensable role in Scale Finance SIBs would be to act as a *responsible counterparty*. Mainstream investors would develop large transactions they consider viable, agree to commit the capital for exponential growth of definitive EBPs, and invite prospective government partners to consider their proposals for negotiation. But such an opportunity would require the government to honor its financial obligations in a legally-enforceable way. Without such assurances, the big money simply will not arrive.

The current SIB development process that relies on public procurement and contracting can't engineer these kinds of investment opportunities. In a reverse-procurement arrangement, mainstream investors would be incentivized to develop robust transactions that can move the needle on debilitating social problems that deplete state budgets. Those kinds of investment propositions might be compelling enough to convince states they must address appropriations risk. This is an acid test: if the public sector won't stand behind outcomes-based investments that can solve problems we already know how to fix, mainstream investors won't offer them. If government commits to doing so, perhaps commercial and institutional investors will put something quite new on the table.

While some argue that the public sector can avoid appropriations risk by setting aside funds annually to prepare for future success payments, several problems arise. First, each reserve amount must itself be appropriated, which simply multiplies the political risk by requiring more numerous enactments of smaller amounts. Second, as shown above, state budgets don't have the necessary slack to park enough money for large enough SIBs. Third, nothing prevents the legislature from raiding the reserve fund later on should the need arise. States would be better off making an enforceable bargain with investors: pledge full faith and credit contingent upon the production of savings that exceed the required success payments, for transactions that are large enough to really matter and sound enough to withstand public scrutiny.

The Scale Finance model offers a new kind of virtuous cycle across the finance, social and public sectors. By signaling mainstream investors that government is irrevocably committed to repaying them with interest if, when and to the extent that they solve pervasive social problems, the parties could create an environment in which the full creative energy and financial expertise of mainstream capital markets could be applied to expanding proven prevention programs commensurate with unmet population needs.

6.5 Implementation Fidelity

Just as the term "evidence-based" has been diluted by its misapplication to promising programs with limited evaluation data, the important concept of "implementation fidelity" has suffered from the widespread misconception that model adherence is somehow automatic. Critics ask, "Why would government be willing to pay Wall Street banks and billionaire investors premiums ranging from 5 to more than 20 percent for funding social programs that have already been proven to work ... [and are] already guaranteed to reliably produce results"?²⁶⁹ The Government Accountability Office has expressed similar views:

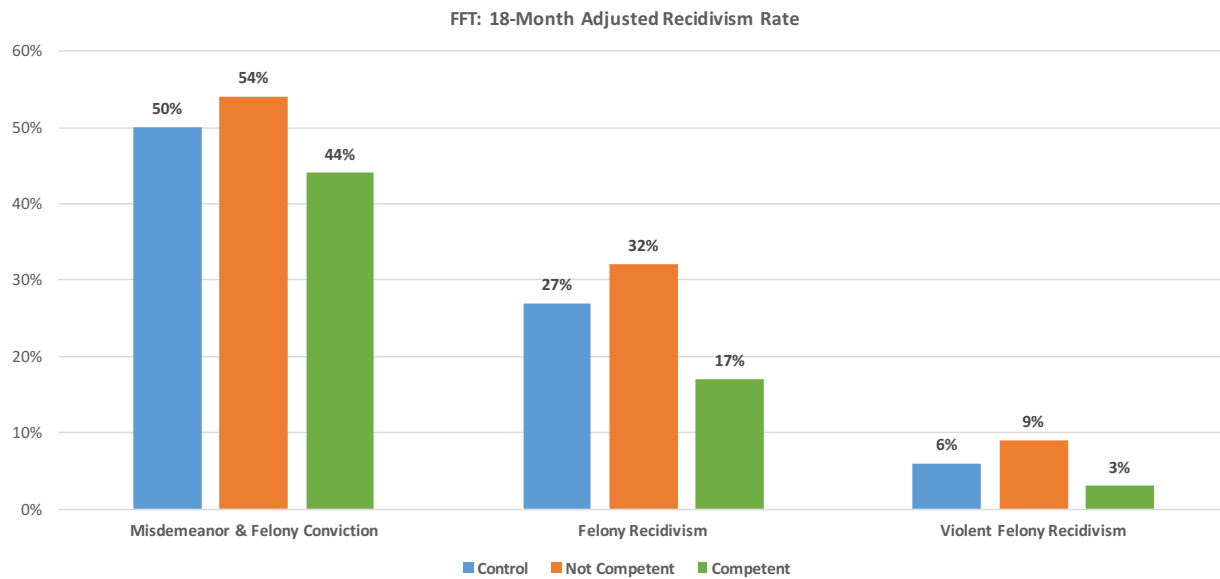
In practice, investors whose return on investment is contingent on positive results may prefer projects that are based on rigorous evidence of success and may avoid innovative approaches that have not been rigorously tested. If this potential flight to programs with a strong evidence base turns out to become reality, it may not make sense for governments to rely on PFS projects. Instead, they may consider funding these types of programs directly, through traditional performance-based contracts that incorporate features of PFS projects that reduce the government's risk, such as independent evaluation and governance rules that allow for strong management and oversight. By undertaking a PFS project to implement a program that is known to be successful, a government could be taking on extraneous costs for little or no benefit.²⁷⁰

As already discussed, the notion of sufficient government funding for evidence-based interventions is an entirely sensible aspiration with little hope of fulfillment. "PFS proponents in general have argued that such direct government funding of new prevention programs has been difficult to do in the current budget environment."²⁷¹

But the notion that CEBPs are "guaranteed" and "known to be successful" is deeply misleading. Even if the public sector could allocate much greater funding to such programs, implementing them with fidelity at scale would still be a formidable challenge. Although the term "evidence-based" might seem to suggest that programs like MST are self-executing—that is, just apply the recipe and the outcomes and

savings will follow – the opposite is actually true. CEBPs work only when they’re implemented in strict compliance with their proven models, and high-fidelity implementation at scale is always difficult even under the best of circumstances. For example, rigorous evaluations have shown that recidivism rates decrease when FFT is provided by qualified therapists, but they increase when it isn’t (Figure 28).²⁷²

Figure 28. FFT Success Depends on Provider Competence



But government-funded social programs never operate under the best of circumstances, often because agency contracts rarely cover the full cost of service-delivery infrastructure and essential overhead.²⁷³ The problem is particularly acute in the case of nonprofits, of which nearly 70% have reported that government contracts don’t cover the full cost of services.²⁷⁴ With extremely rare exceptions like Florida Redirection, the public sector has never scaled complex CEBPs with the high-fidelity implementation required to maintain the outcomes achieved in small research projects. So even if government tried to mount standard SIBs to expand MST and FFT, penny-wise pressures to minimize up-front spending could prove pound-foolish if the savings failed to materialize on the back end.

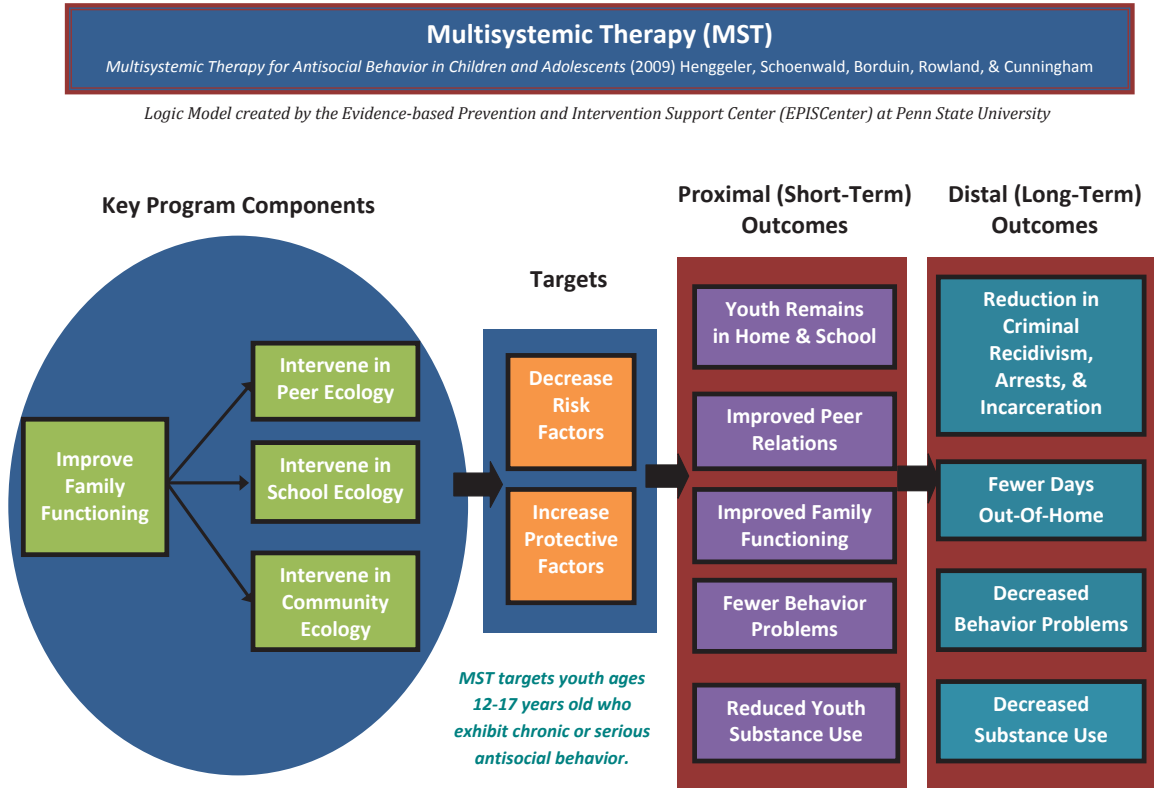
Social interventions that successfully mitigate complex problems for many people under widely divergent circumstances start with rigorous investigations of causal factors and proceed to careful development of multi-dimensional responses over many years. A young Dr. Scott Henggeler first developed MST in the mid-1970s after his eyes were opened when he visited at-risk teens in their homes: “It took me 15 to 20 seconds to realize how incredibly stupid my brilliant treatment plans developed in an office setting were.”²⁷⁵

Once effective models have been devised, detailed implementation procedures must be tested, refined and documented, and associated hiring, training and case-management practices must be instituted to control quality and assure that outcomes achieved under laboratory conditions can be reliably replicated in the field. This is an uncertain process that has taken MST/FFT and NFP decades, and few prevention and early-intervention programs have the funding or organizational capacity to complete this arduous journey.

Like other CEBPs, MST is a complex clinical intervention that must be carefully implemented. As shown in Figure 29, MST reduces out-of-home placements by improving how families with adolescents

exhibiting chronic or serious antisocial behavior function. MST therapists teach at-risk youth and their families techniques for various settings (with their peers, at school and in the community) which decrease “risk” factors that lead to juvenile offending and increase “protective” factors that guard against it.²⁷⁶ Figure 30 shows just how demanding the detailed performance requirements are.

Figure 29. MST Logic Model²⁷⁷

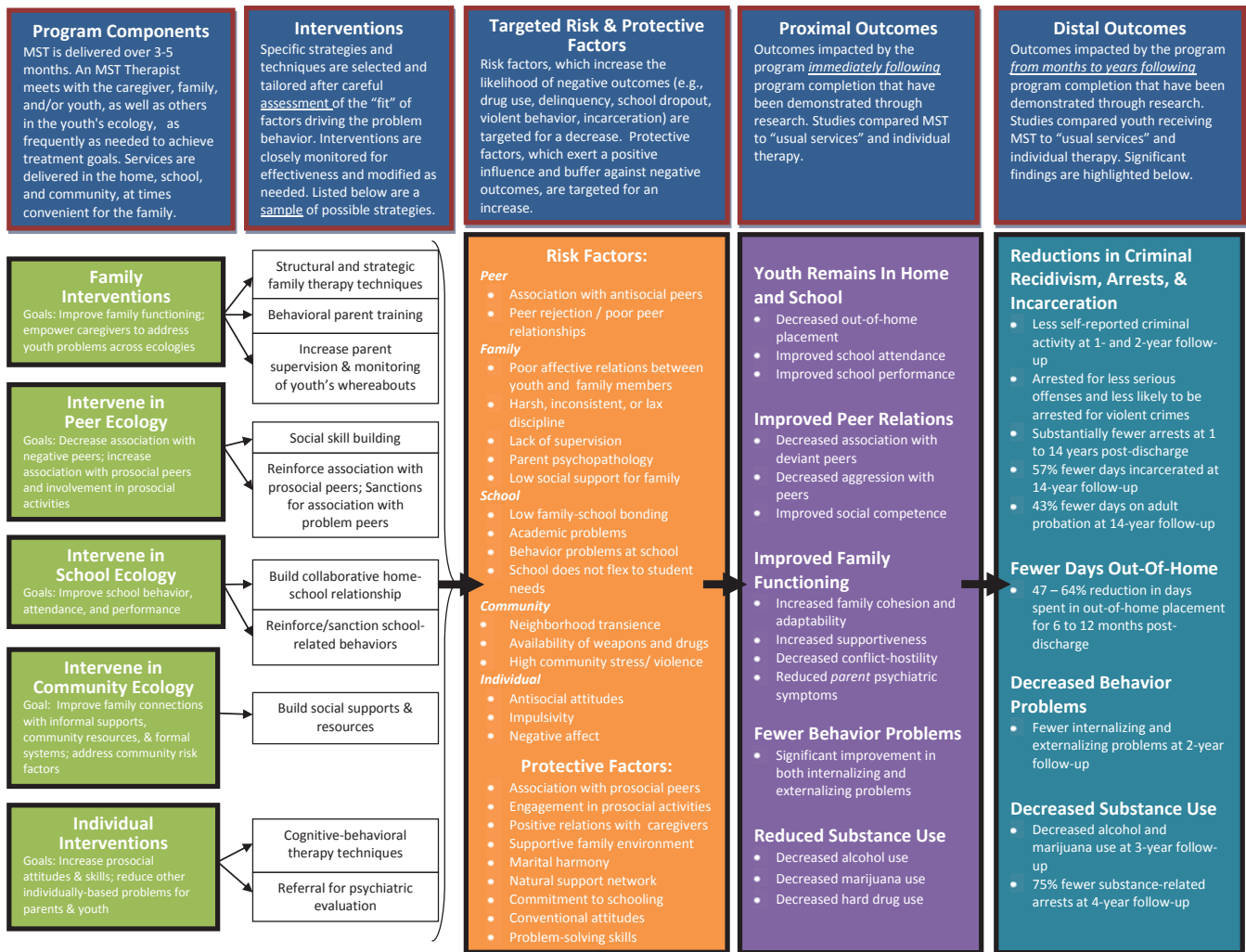


Developed in collaboration with MST Services, January 2011

If and only if these exacting procedures are followed, lives change dramatically. In the short term, MST participants are much more likely to remain in school, improve relations with peers and family functioning, and have fewer behavior problems and substance abuse. In the long term, youth completing MST experience reduced incarceration, recidivism and arrests, fewer days out-of-home, and sustained decreases in behavior problems and substance use.²⁷⁸

Some 13 published MST implementation studies have proven the importance of treatment adherence.²⁷⁹ A 45-site study on the “transport” (i.e., replication at other sites) of MST involving almost 2,000 families, and more than 450 therapists and 80 supervisors, concluded that, at 2.3 years after treatment, high therapist and supervisor adherence can reduce the number of youth facing criminal charges by 36% and 53%, respectively.²⁸⁰

Figure 30. MST Theory of Change



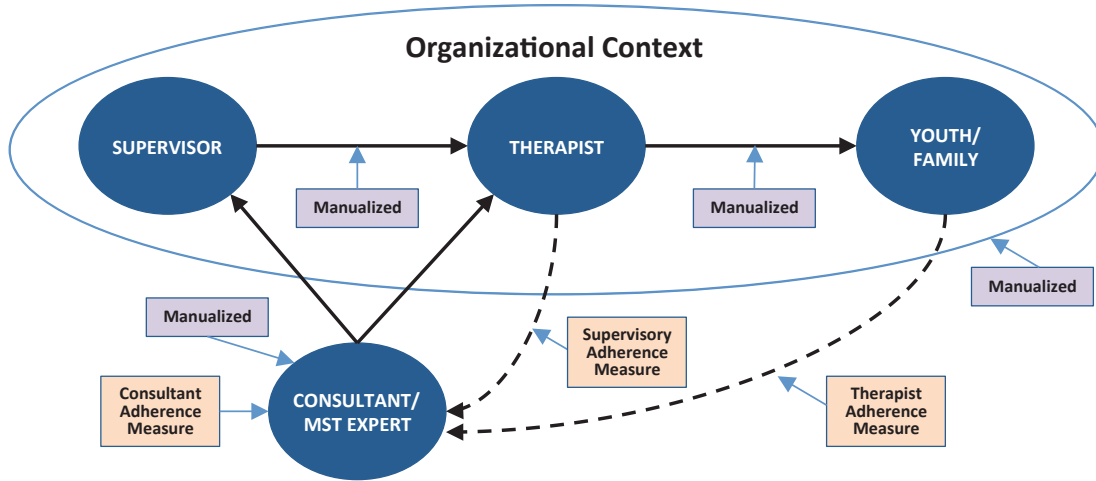
“Top-tier” CEBPs like MST and NFP (which has equally demanding and proven fidelity requirements) require a level of executional exactitude that most nonprofits can’t afford and government generally won’t fund. Figure 31 illustrates the quality assurance system (QA) that licensed MST providers must follow, which comprise three layers:

- Four separate implementation manuals that govern clinical treatment, supervision, expert consultation, and organizational support;
- Three separate adherence tracking measures that ensure MST staff at all levels—therapist, supervisor and consultant—follow empirically-supported treatment protocols; and
- Two feedback loops that integrate data-based and qualitative feedback about MST implementation at multiple levels.

This integrated quality assurance system is how MST optimizes the potential for positive clinical outcomes in line with published research. Human-services agencies can’t become licensed to provide MST unless they consistently follow this rubric to the letter.

And this is how MST must be implemented for a *single* team comprising two to four therapists and one clinical supervisor, all with Master’s degrees. Each team can serve no more than six families and must provide—literally, not figuratively—24/7 coverage for three to five months.²⁸¹ Those teams are like molecules made up of certain essential atomic particles: the MST model, the training, the quality assurance system, and so on. When the right elements are combined, the CEBP works and saves more than it costs.

Figure 31. MST Quality Assurance System²⁸²



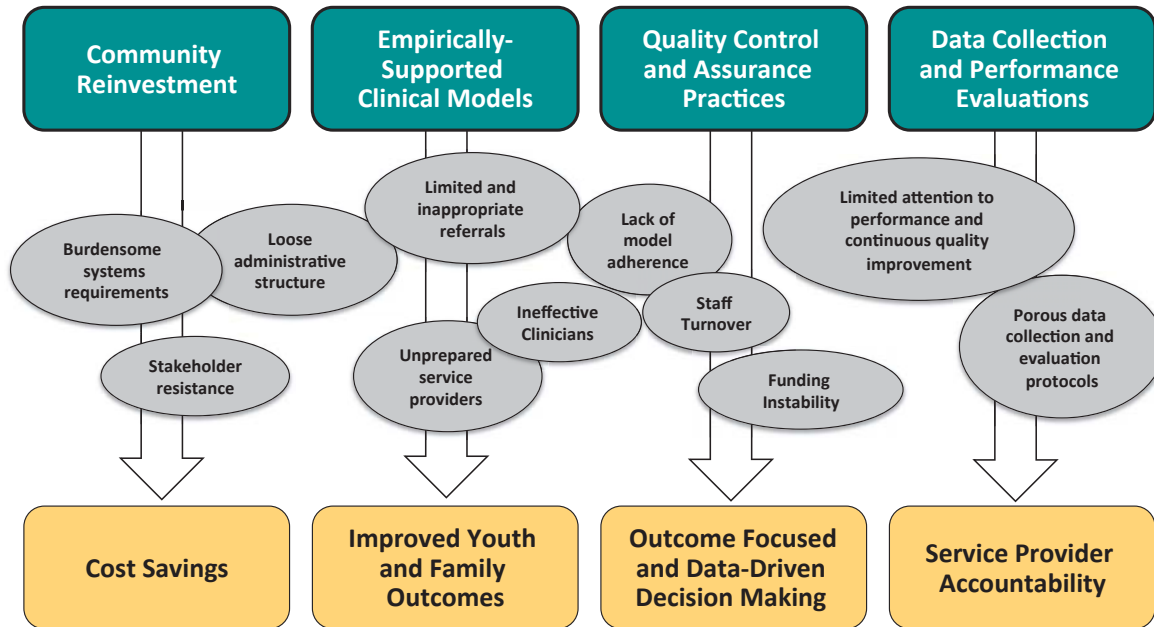
But Florida Redirection was much more than just a large collection of certified molecules. The average annual service capacity for each MST therapist is 15 families per year.²⁸³ On average, then, 66 teams were needed to serve the 1,000 families enrolled in Florida Redirection annually, as would the 1,000 families program modeled in the Scale Finance *pro forma*. (Florida now has just four MST teams.²⁸⁴) That’s an enormous number of teams, and for all of Redirection’s unprecedented growth, it still reached less than half of the eligible families. Trying to convert a state-wide juvenile justice system from one that was predominantly placement-based to one that was primarily treatment-based entailed a whole new set of implementation challenges that create massive adoption risk (Figure 32).

That’s why Redirection’s implementation manager, Evidence-Based Associates, supplemented the core CEBP with the supports shown in Figure 17: system, provider and population assessments; provider readiness support; resource needs assessment; service-delivery strategies; provider subcontracting; data collection and performance management; administrative oversight and reporting; structured collaboration with referral agencies; and service delivery oversight. It is perfectly understandable why such exacting programs have proven so difficult to scale despite their demonstrated effectiveness. Florida Redirection was a singular effort that endured for nearly a decade, but it finally succumbed to budget shortfalls, despite its documented savings.

As discussed above, fiscal retrenchment forces government agencies to dilute effective programs. Although private investment might be expected to insulate SIBs from these pressures, reality is likely to be harsher. Most standard SIBs fund programs that aren’t expected to save more than they cost, and public sector payers are responsible for compensating investors if and when SIBs work. Supporters assert that SIBs will produce other kinds of policy-relevant outcomes (e.g., increased child well-being and educational success) that government should value even though they don’t pay for themselves. Even if this is correct, responsible officials will try to capture those non-financial benefits at the lowest-possible

cost. As a result, governmental counterparties understandably focus on up-front program costs and how much they'll have to pay when the time comes, rather than on how much government will save if investors fund high-fidelity implementation.

Figure 32. Barriers to Successful Implementation at Scale²⁸⁵



This conundrum might help to explain a seemingly paradoxical feature of the South Carolina PFS project, the only U.S. pilot designed to expand a certified EBP, Nurse-Family Partnership. The Medicaid waiver that contributes \$17 million in funding to the SIB requires “all participating providers ... to provide home visit services in accordance with the NFP evidence-based service delivery model.”²⁸⁶ But the SIB contract requires that NFP “establish and implement strategies to reduce the costs of the NFP Program by 25.0 percent by the end of the PFS Project.”²⁸⁷ The contract defines the “NFP Program” as “the evidence-based community health program known as the Nurse-Family Partnership.” Thus, the SIB requires that NFP implement the program in complete fidelity with the certified model at 75% of the cost.

Further, although reliable cost-benefit analysis shows that NFP saves \$1.61 for every \$1 invested,²⁸⁸ the South Carolina SIB does not capture all of the attributable savings. The pilot project only counts savings recovered during the 4-year contract term, even though NFP savings have been documented through the child’s eighteenth birthday. It also credits investors with savings from just four outcome metrics (preterm birth, healthy birth interval, child injury, and coverage of low-income ZIP codes), and excludes other documented savings from reduced complications of pregnancy, infant deaths, youth criminal offenses and substance abuse, and government benefits.²⁸⁹

It would be no mean feat for state health departments to design SIBs that account for very long-term savings, as well as expenditures that have been avoided from the budgets of non-healthcare agencies, an intra-governmental challenge referred to as “the wrong pockets problem.”²⁹⁰ “It is much more difficult to run an efficient and effective process when multiple agencies have various responsibilities within individual outcome areas ...”²⁹¹ That’s why mainstream investors need to go first: they could develop comprehensive financing proposals that wouldn’t be constrained by artificial budget silos.

7. CONCLUSION: ADDING COMMERCIAL-VIABLE SIBS TO THE MIX

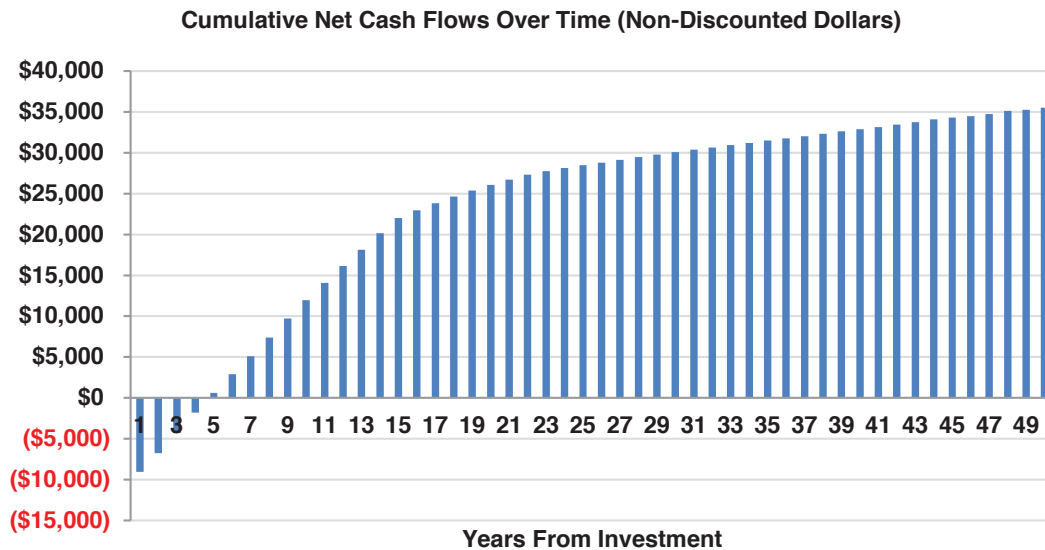
The argument advanced in this paper rests on four premises:

- *First*, there are pervasive and disabling social problems like the school-to-prison pipeline that could be effectively eradicated by expanding a small number of certified EBPs commensurate with unmet population needs.
- *Second*, those CEBCPs can't achieve meaningful scale without sustainable funding that is orders of magnitude beyond what is or could realistically become available from existing sources, including direct government funding, philanthropy and standard SIBs.
- *Third*, the necessary funding could be secured from mainstream capital markets under an enhanced SIB model, Scale Finance, that would offer risk-adjusted, market-rate returns contingent upon the achievement of auditable outcomes and savings that would exceed program and financing costs.
- *Fourth*, Scale Finance requires proactive development of comprehensive funding proposals by hands-on commercial investors and model owners, and irrevocable payment obligations by governmental counterparties.

The case presented here diverges from the view that “the future of PFS lies in aligning with impact-seeking investors, not return-seeking investors.”²⁹² At least in the case of CEBCPs that meet the Scale Finance criteria, the present paper respectfully disagrees with those who see “the emergence of foundations ... as the potential major funding source for the PFS model,” and not private market capital.

The subordinate argument that future government savings can pay for SIBs is particularly unfashionable. *The Economist* recently described SIB savings as “notional.”²⁹³ A Center for American Progress brief references “so-called cashable savings.”²⁹⁴ Two Harvard researchers claim that “governments sold on the idea of SIBs as ‘paying for themselves’ are realising this is only a half-truth.”²⁹⁵ In fact, the linchpin might simply be selecting the right CEBCPs in the first place (Figure 33), and then developing market-based transactions to expand them at their maximum feasible growth rates.

Figure 33. MST Cash Flows per Participant²⁹⁶



In addition to skepticism about whether SIBs *can* expand CEBPs, others question whether they *should* do so. This notion of “big money” understandably disturbs many fair-minded people who believe (as does the author) that funding social programs is the business of government, a basic tenet of the social contract that members of civil society make with one another.

Regrettably, government won’t do so, largely because, given the nation’s sour fiscal prospects, it simply can’t. Direct government funding for social programs has been eroding for decades, first steadily, and now precipitously. There’s no historical evidence for the proposition that the public sector has had the knowledge, capacity or inclination to scale any prevention or early intervention social program since the 1970s that is both evidence-based and cost-effective. Legislation as ambitious as the Affordable Care Act rarely makes it through Congress, and even important accomplishments like MIECHV generally turn out to be less than half-measures.

Significant expansions of appropriations for social programs are highly unlikely. For example, the new head of the White House Office of Management and Budget has previously pledged support for “the ‘Cut, Cap, Balance’ plan,” which states that “a statutory spending cap, and Congressional passage of a Balanced Budget Amendment to the Constitution is the minimum necessary precondition to raising the debt limit.”²⁹⁷

The move toward evidenced-policymaking is clearly a positive development, but it is far from clear that it represents the kind of paradigm shift needed to scale social innovation. Advocates for shifting public funding from ineffective services to CEBPs face three dismaying hurdles. First, as the examples of MIECHV and unverified SIB interventions show, the line separating effective from ineffective programs is often unclear and even debatable. Second, legacy programs won’t relinquish long-established funding without a fight, making it exceedingly difficult to reallocate funding. Third, all programs, good and bad, face overwhelming fiscal pressures. At all levels, the public sector remains a domain “where spending decisions are largely based on good intentions, inertia, hunches, partisan politics, and personal relationships...”²⁹⁸

Even traditional funders recognize the need for new paradigms. “While philanthropy has always relied on other sectors to co-create and sustain social change, the fact remains that governments and traditional philanthropy do not have sufficient funds to address the world’s most serious problems. Commercial capital and the tremendous power of market forces will have to be part of the solution.”²⁹⁹ As the head of the Edna McConnell Clark Foundation put it, “Without large, long-term investments of growth capital for organizations with proven results, we’ll continue to salve but not solve our big social challenges.”³⁰⁰ One investment banking and venture capital veteran believes that “the only way to address the scale of social problems we confront is by encouraging mainstream capital into impact investing.”³⁰¹ The Executive Director of the U.S. Impact Investing Alliance recently said that “population growth, income inequality, climate change and other social and environmental factors are shaping the world. The private sector has a major role to play (and returns to make) in ameliorating these intractable challenges by investing in ventures that are consistent with our values.”³⁰²

If so, the question then becomes how to engage the dynamism, acumen and assets of mainstream capital markets. An honest appraisal of the capital needed for scaling CEBPs to meet unsatisfied demand—a growth multiple of at least five to ten within a decade—shows that SIBs must generate the kind of large and enduring deal flow that fund owners and managers expect both as a sound business proposition and as part of their fiduciary obligations.

This is a categorically different kind of money than government, foundations and standard SIBs provide. The head of the U.K.’s Mulago Foundation recently divided social investment capital into “three buckets of money”: “free money, real money, and maybe money.”³⁰³ Grants are free money, investments that expect financial returns are real money, and maybe money is something else altogether, as in “Maybe we’ll get it back,” and “Maybe it will get this venture all the way to real money.”

Maybe money comes from: a) smart investors who understand the risks and want to give high-impact start-ups a chance, and b) less-smart investors who think they're investing real money. Some of the smart investors see maybe money as a kind of recyclable philanthropy that they can re-invest in one high-impact idea after another. The kind of people who consciously invest maybe money are obsessed with impact. They're not as concerned about return; many would be happy if they just could preserve capital across a portfolio.

Standard SIBs attract both "smart investors" and "less-smart investors" who seek to transform philanthropy from an inherently dissipating pool to a re-investment vehicle powered by recycling. If successful, outcomes-based finance could become a reliable way to steadily replenish R&D funding for social innovation, and that may well be the important contribution that standard SIBs ultimately make. It would not, however, turn maybe money into the real money needed to build and sustain a sturdy system of effective prevention and early-intervention programs:

The hard truth is that no for-profit idea achieves big scale without real money. And impact at a scale that really matters comes from industries—lots of similar businesses—not one-off businesses. Nobody wants to invest real money into businesses that don't generate solid profits, and nobody wants to imitate them either. You can't scale on maybe money, and you can't get to real money without real profit.³⁰⁴

The once-bifurcated world of markets and philanthropy has become superannuated, but the wall between fiduciary and concessionary investors remains firmly in place. When it comes to SIBs, there hasn't been any real money yet, and structural limitations of the standard model make it unlikely that will change anytime soon. This isn't a problem for promising programs that standard SIBs can expand slowly and incrementally, but it deprives social enterprises offering definitive CEBPs of the only source of capital that can move mountains.

Starting in the 1930s, America boldly pursued such ambitious projects as rural electrification, the "Arsenal of Democracy," the GI Bill, the Interstate Highway System, and the March of Dimes against polio.³⁰⁵ Over the past three decades of governmental retrenchment, however, the social sector has not yet developed a plausible business case for mainstream investment. Virtually all SIBs launched to date have made unsecured investments in promising, but unproven social innovations, rather than "scaling what works." While these pilots can support the incremental expansion of fledgling innovations, they are not designed to raise large amounts of capital from institutional investors to finance long overdue systemic change.

Scale Finance is dedicated to the "moon shot" proposition that SIBs can be developed today—not ten or twenty years from now—that could attract mainstream investment to expand proven social innovations commensurate with unmet population needs. The model is designed exclusively to marshal the "big money" needed to solve systemic problems we already know how to fix, like dismantling the school-to-prison pipeline or ensuring that poor and low-income first-time mothers receive high-quality pre- and post-natal care.

When we think about connecting social innovation with private investment, we cannot afford to ignore proven, scalable interventions on the mistaken assumption that government "should," "must" or "will" fund such programs to any meaningful extent. Programs like MST and FFT have been available for decades, but government clings to policies like juvenile mass incarceration that cause more harm than good and cost five or more times as much. To the extent that government has belatedly and inadequately cut back on draconian detention policies, it has still failed to expand proven early interventions that could pay for themselves through savings.

Scale Finance provides the opportunity for institutional investors and their advisors to take the lead on structuring the finance and supporting the enterprises whose growth can become the social-sector equivalent of railroads, energy grids and digital communication networks. The model exemplifies a "governing by network" approach with a "heavy reliance on partnerships, philosophy of leveraging nongovernmental organizations to enhance public value, and varied and innovative business

relationships,” along “with measurable performance goals, assigned responsibilities to each partner, and structured information flow.”³⁰⁶ Mainstream investors would have the initial responsibility of figuring out how to bring the big money to the table that would be capable of solving social problems we already know how to fix. Government, in turn, would have the responsibility of acting as the dependable counterparty needed to consummate transactions of the necessary magnitude while protecting the public interest.

This paper asks, first, whether the lack of commercial finance for SIBs matters, and, second, if so, whether anything can be done to correct the deficiency in the near term. The case is made here that funding from “a very narrow band of social investors”³⁰⁷ isn’t a problem for standard SIBs, but it is a show-stopper for a few singularly important ones. However, those few offer potentially groundbreaking business opportunities that will come to fruition only “if investors can find the same courage the early institutional backers of the venture capital industry found ...”³⁰⁸

Standard SIBs have taken on the formidable challenges of improving government and nonprofit performance, and applying those enhanced powers to nurture, sustain and expand social innovation. To those ends, their sponsors have developed frameworks and capacities for providing new kinds of technical assistance needed to adopt outcomes-based contracting, which could help ameliorate the longstanding disconnection between the results nonprofits achieve and the funding they receive.

SIB technical experts have also helped the public sector begin to structure rather more substantial and less ephemeral transactions by targeting programs with at least some evidence of effectiveness and potential cost savings. Subjecting promising programs to rigorous evaluations and calculations of estimated savings and other positive results has been exacting and sometimes grueling work, but measurable progress has been achieved in just six years, with steady replication building noticeable momentum.

However, baby steps alone won’t engage the untapped energies of private capital markets. Scale Finance seeks to cross the capital market chasm for the sole purpose of “scaling what works,” defined here as making programs with the strongest levels of evidence and savings available to effectively everyone who wants them within ten years time. Only by focusing on such incontrovertible EBPs, it is argued, can SIBs attract self-replicating capital from aggregated asset pools to surmount problems like the school-to-prison pipeline. Further, marshaling those assets requires a new approach to developing SIB transactions that calls upon mainstream investors and their advisors, working with the owners of CEBP intervention models, to devise financeable transactions at scale and offer them for consideration through reverse procurements to states and counties willing to act as responsible counterparties with enforceable security for investors.

Of course, there aren’t many social interventions with that kind of untapped potential. But the loss to society comes not from the number of programs, but from the vast expanse of unmet population needs: the enormous gap between the widespread demand for these transformational services and their relatively meager availability on the ground.

In his important new book, *The Rise and Fall of American Growth*, Northwestern University’s Robert Gordon calls out four “headwinds—inequality, education, demography, and debt repayment—that are buffeting the U.S. economy and pushing down the growth rate of the real disposable income of the bottom 99 percent of the income distribution to little above zero.”³⁰⁹ Those forces already consign tens of thousands of black and brown adolescents to lives of intergenerational poverty, but mainstream investment has the wherewithal to finance and build a nationwide support system that government and philanthropy lack. Now that a few “scalable opportunities” have finally appeared, it is time to see what, if anything, the “big money” can do with them.

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COMMUNITY DEVELOPMENT AS A PARTNER FOR HEALTH EQUITY

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Build Healthy
Places Network

PRESENTATION OUTLINE

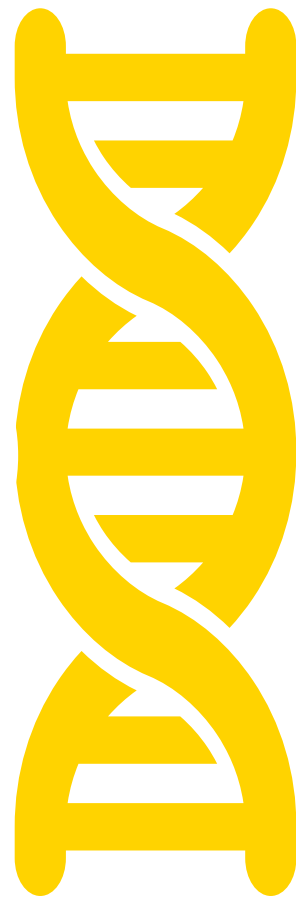
1. Health Happens in Neighborhoods
2. What is Community Development?
3. Community Development's Scope and Scale
4. Momentum for Cross-Sector Collaboration
5. Opportunities for Public Health
6. The Network as the Connector



**HEALTH HAPPENS
IN NEIGHBORHOODS**

**IN DETERMINING
YOUR HEALTH...**

94102 >



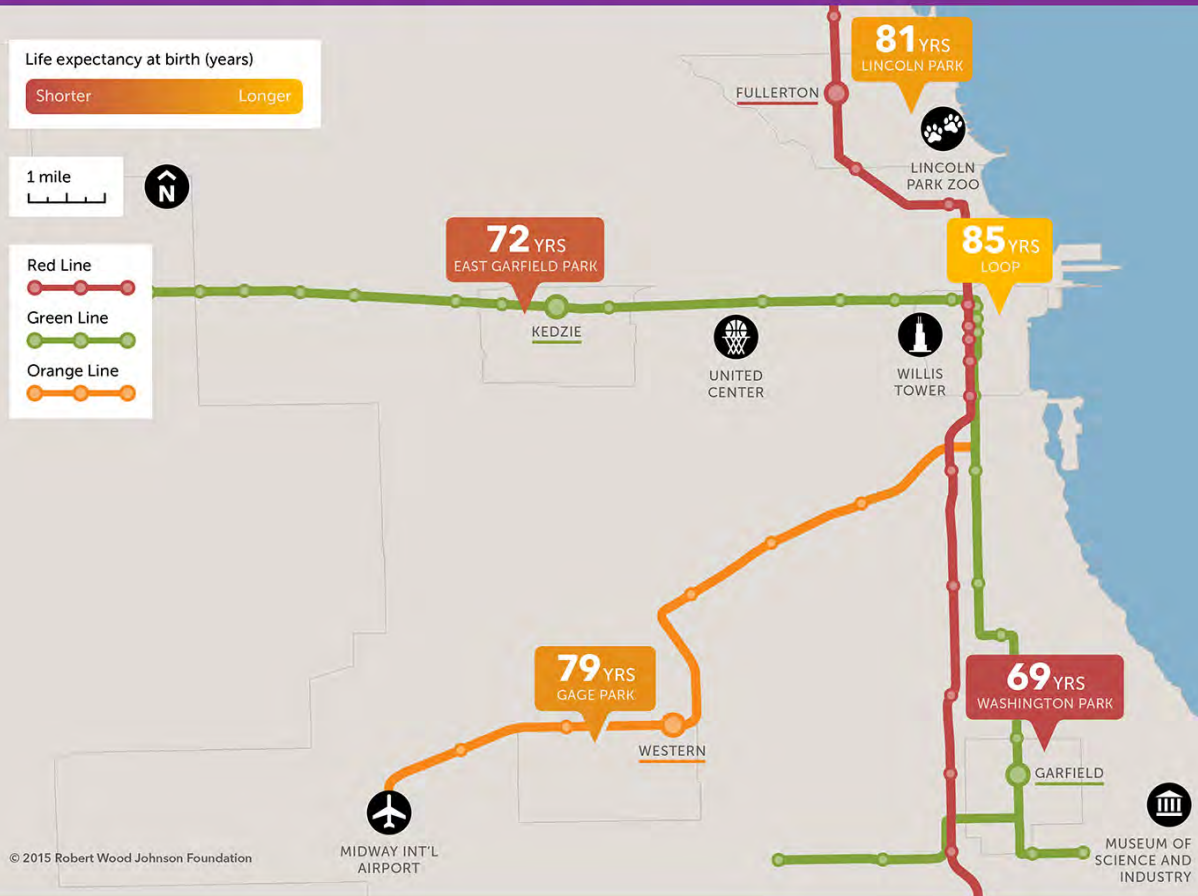
HEALTH HAPPENS IN NEIGHBORHOODS

CHICAGO, ILLINOIS

Short Distances to Large Gaps in Health

Follow the discussion

#CloseHealthGaps



In Chicago, for example, babies born just a few train stops apart can have a **16-year difference** in life expectancy.

HEALTH HAPPENS IN NEIGHBORHOODS

RWJF Commission
to Build a Healthier America

Robert Wood Johnson Foundation

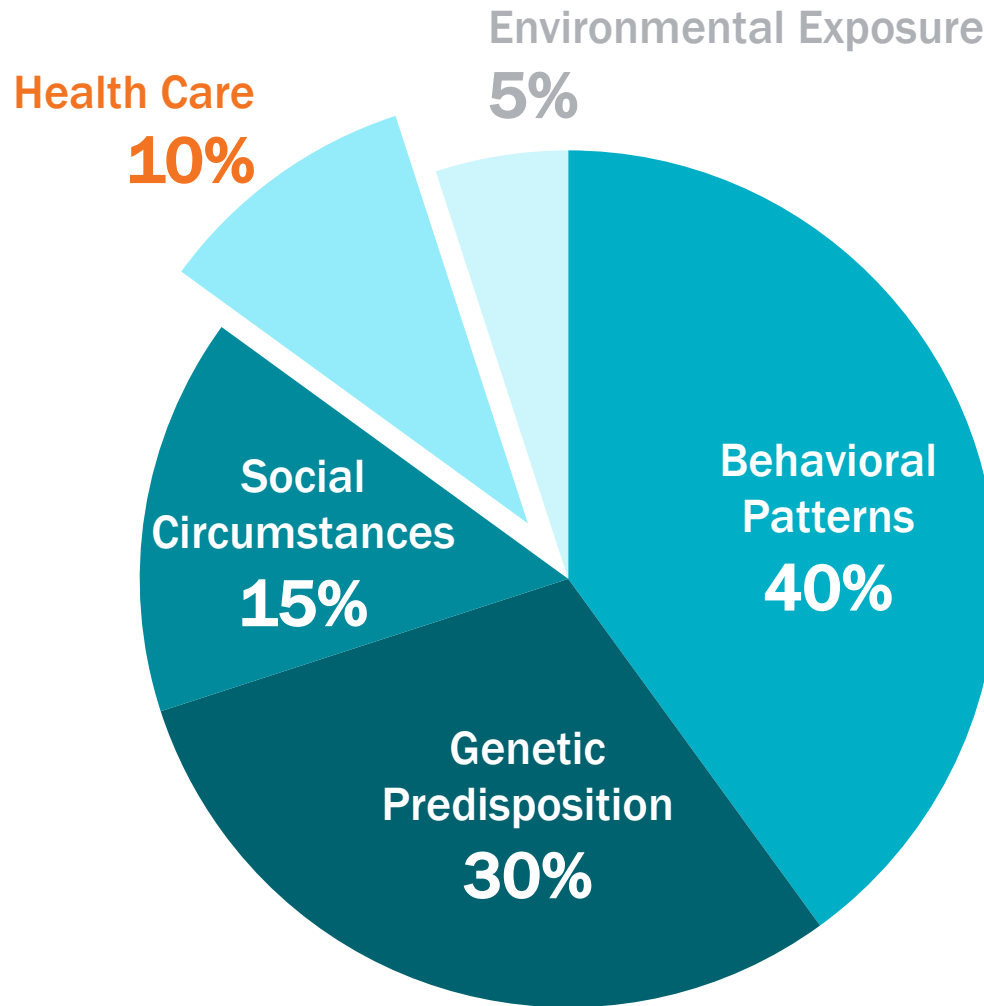


In New Orleans, life expectancy can vary by **25 years** across neighborhoods.



Source: Robert Wood Johnson Foundation. "Maps to #CloseHealthGaps

HEALTH CARE ≠ HEALTH



Source: McGinnis, J. et al. (2002). "The Case For More Active Policy Attention To Health Promotion." *Health Affairs* 21, no. 2 (March 1, 2002): 78-93

THE SCALE OF HEALTHCARE SPENDING

\$3.2 trillion

in healthcare expenditures in 2015

Less than **3%** of this amount (**\$75.4 billion**)
was invested in public health in 2013

HEALTHY COMMUNITIES INITIATIVE



- 24 meetings to date



Robert Wood Johnson Foundation



RWJF COMMISSION TO BUILD A HEALTHIER AMERICA

RWJF Commission
to Build a Healthier America

Click on Tools to convert files
to PDF.

Fundamentally change how we revitalize neighborhoods, fully integrating health into community development.

- Robert Wood Johnson Foundation Commission to Build a Healthier America Report, 2014

Time to Act: Investing in the Health
of Our Children and Communities

Recommendations From the Robert Wood Johnson Foundation
Commission to Build a Healthier America



Robert Wood Johnson Foundation



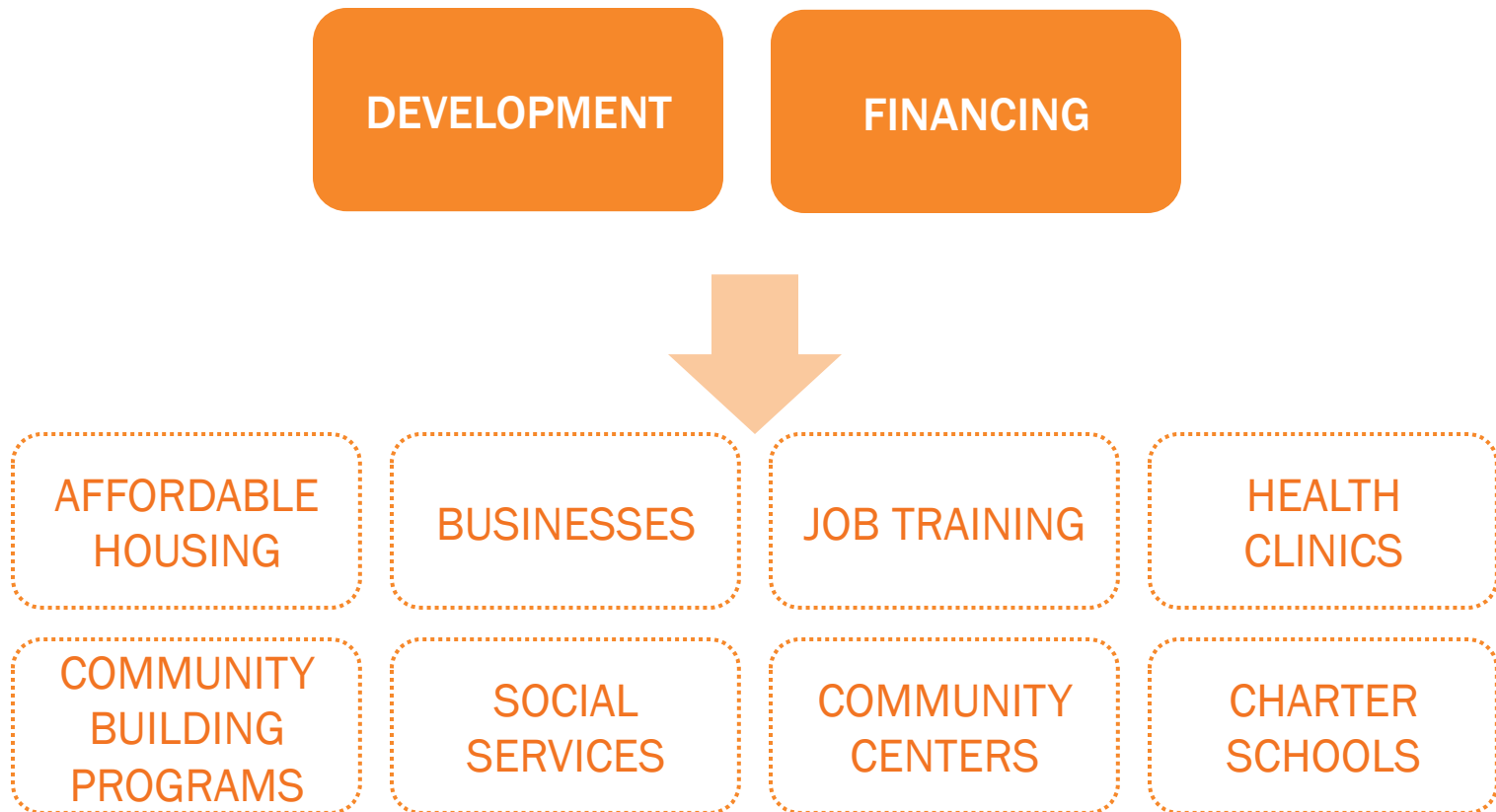
WHAT IS COMMUNITY DEVELOPMENT?

COMMUNITY DEVELOPMENT IS IN THE NEIGHBORHOOD IMPROVEMENT BUSINESS



Baker Ripley Neighborhood Center, Houston TX

COMMUNITY DEVELOPMENT IS A SECTOR



COMMUNITY DEVELOPMENT IS A SECTOR



COMMUNITY DEVELOPMENT IS A SECTOR

- AFFORDABLE HOUSING DEVELOPERS
- NEIGHBORHOOD PLANNERS

COMMUNITY DEVELOPMENT CORPORATIONS (CDCs)

COMMUNITY DEVELOPMENT FINANCIAL INSTITUTIONS (CDFIs)

- FOUNDATIONS
- PRIVATE BANKS
- IMPACT INVESTORS

DEVELOPMENT

FINANCING



AFFORDABLE HOUSING

BUSINESSES

JOB TRAINING

HEALTH CLINICS

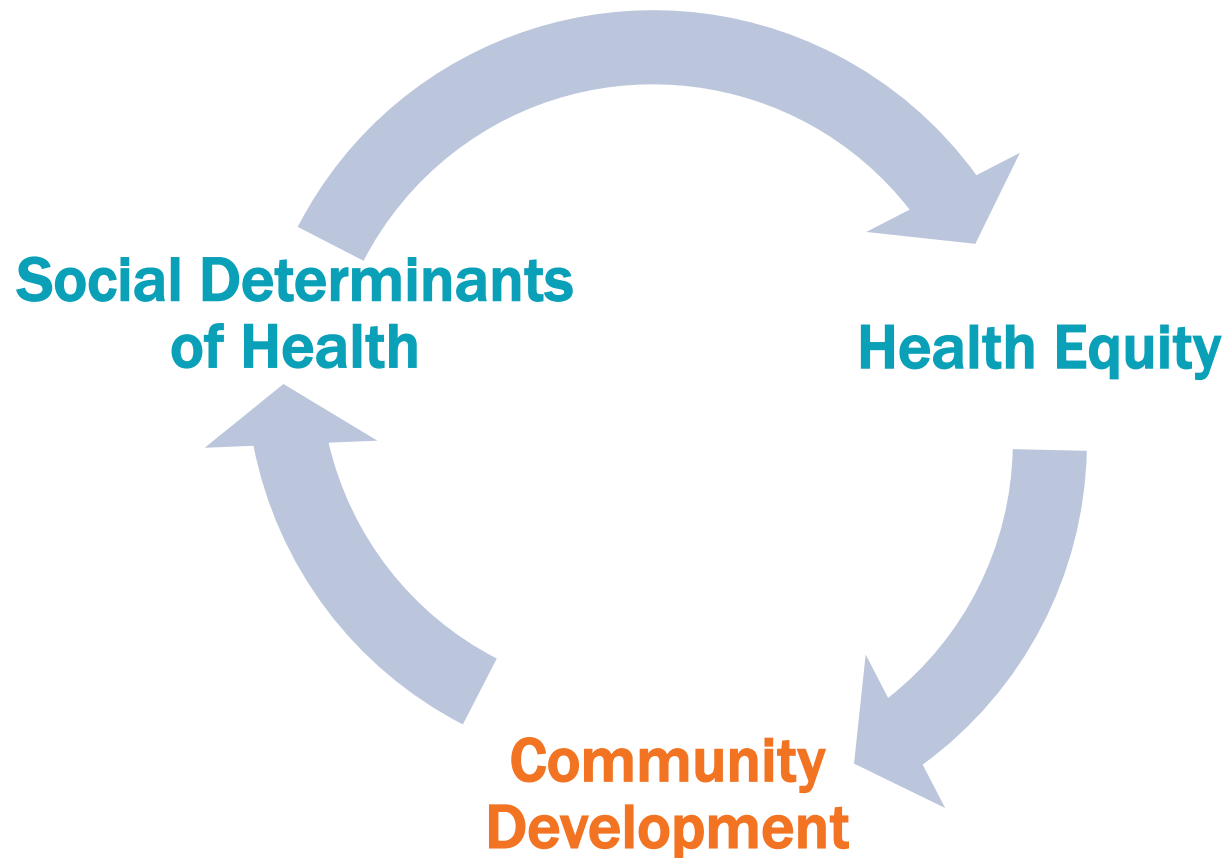
COMMUNITY BUILDING PROGRAMS

SOCIAL SERVICES

COMMUNITY CENTERS

CHARTER SCHOOLS

COMMUNITY DEVELOPMENT: AN ACTION ARM FOR HEALTH EQUITY



See *The Network's Jargon Buster* and
blog posts on [the community development sector](#)
and [its connections to health](#).



EAST LAKE MEADOWS ATLANTA, GEORGIA



VILLAGES OF EAST LAKE ATLANTA, GEORGIA



PURPOSE
BUILT
COMMUNITIES

See the Network's [*Community Close Up*](#) case study on East Lake



VILLAGES OF EAST LAKE ATLANTA, GEORGIA



PURPOSE
BUILT
COMMUNITIES



MODEL FOR NEIGHBORHOOD TRANSFORMATION

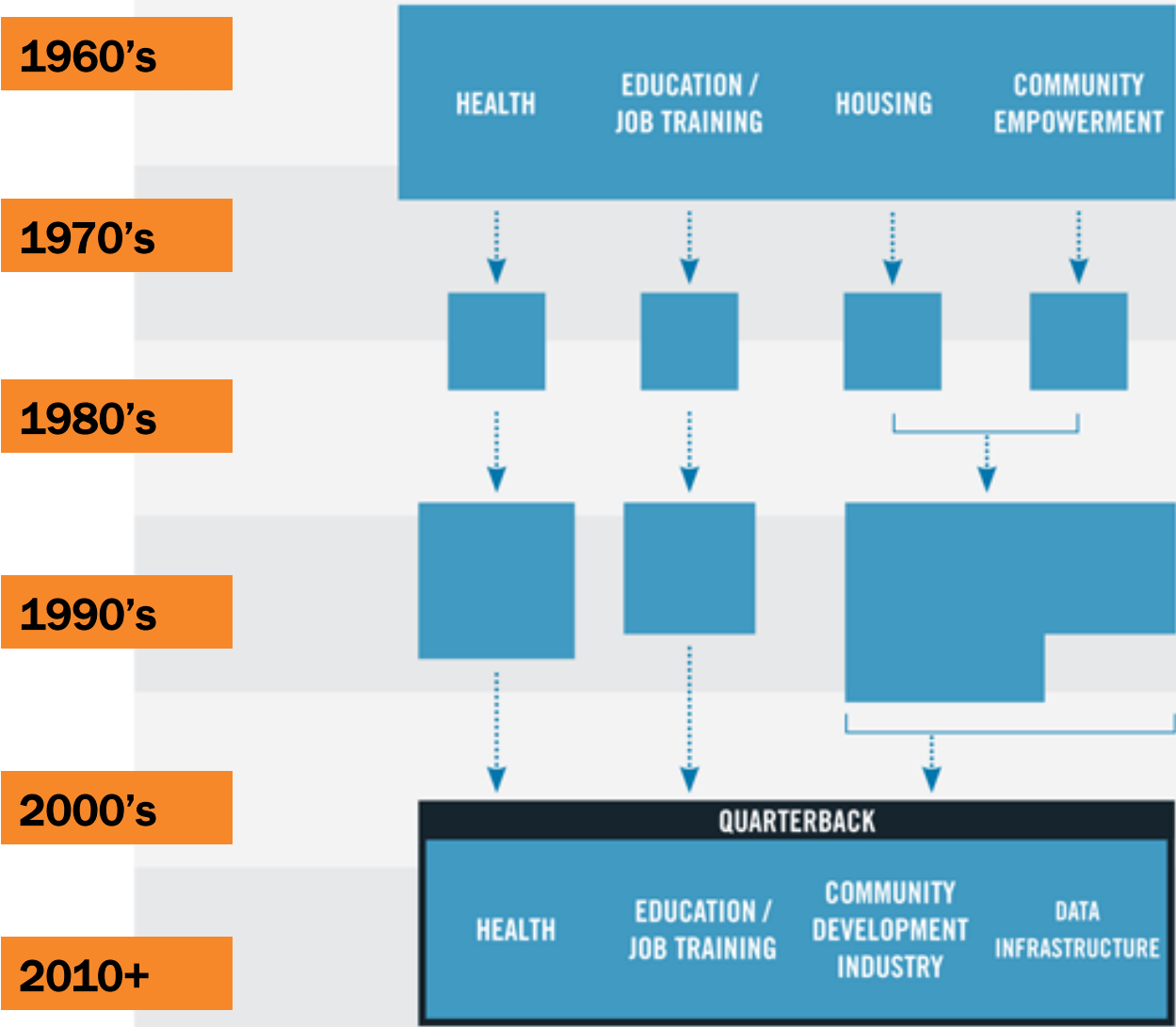


COMMUNITY DEVELOPMENT'S SCOPE AND SCALE

COMMUNITY DEVELOPMENT PAST: URBAN RENEWAL



COMMUNITY DEVELOPMENT OVER THE DECADES



Source: [*Investing in What Works For America's Communities*](#)

COMMUNITY DEVELOPMENT CORPORATIONS & AFFILIATES



46,000

of CDCs nationwide (2006)



75,000

Jobs created by CDC activities (2010)



COMMUNITY DEVELOPMENT FINANCIAL INSTITUTIONS



958

government-certified CDFIs (2015)



1.56 Million

Square feet of healthy food retail
financed (2015)



OPPORTUNITYFINANCE
NETWORK

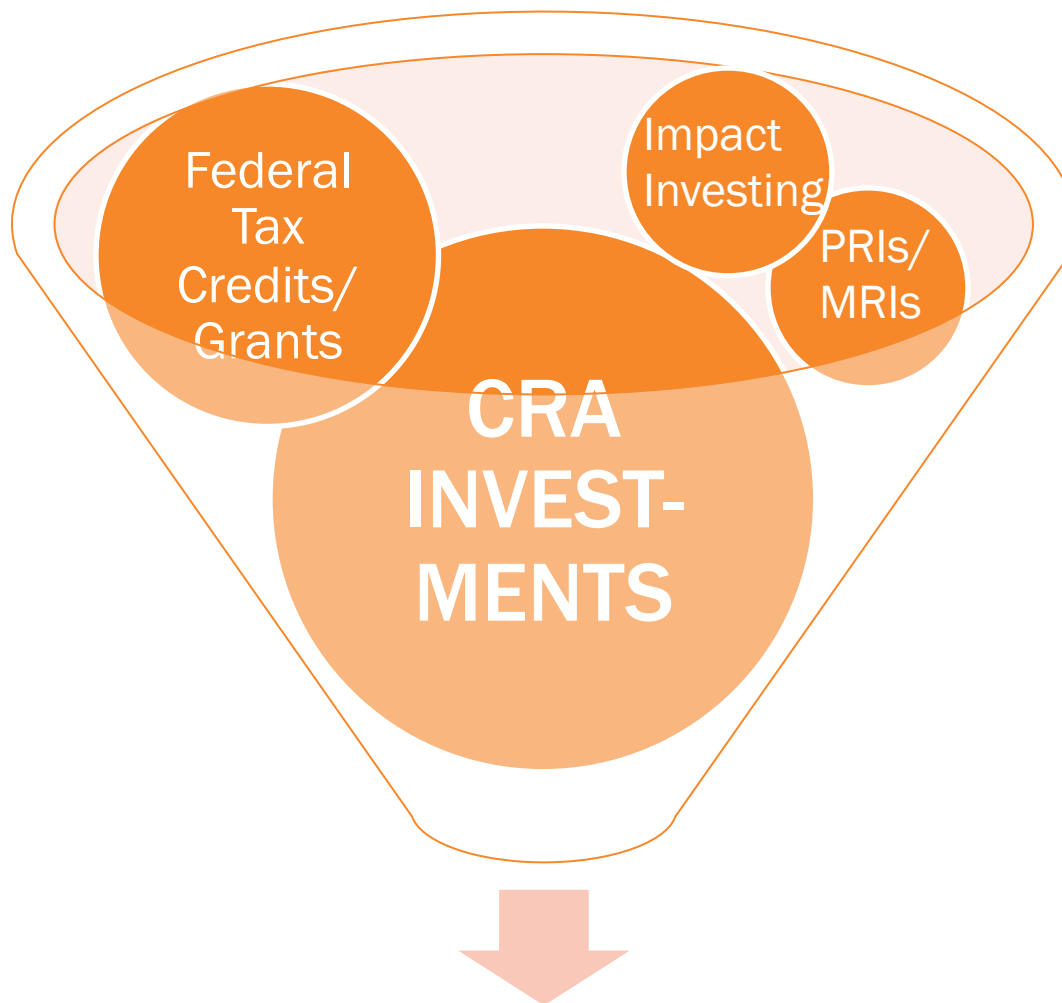


LISC
Building Sustainable
Communities

Enterprise™

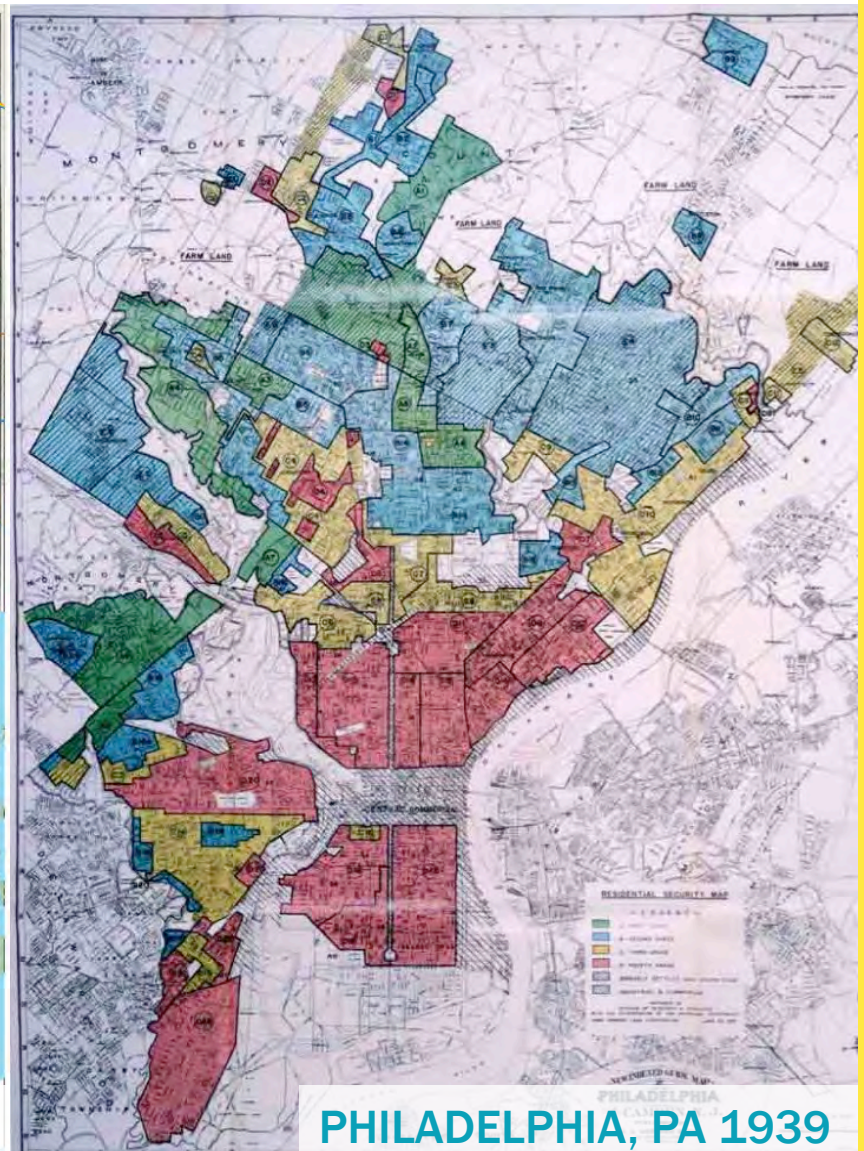
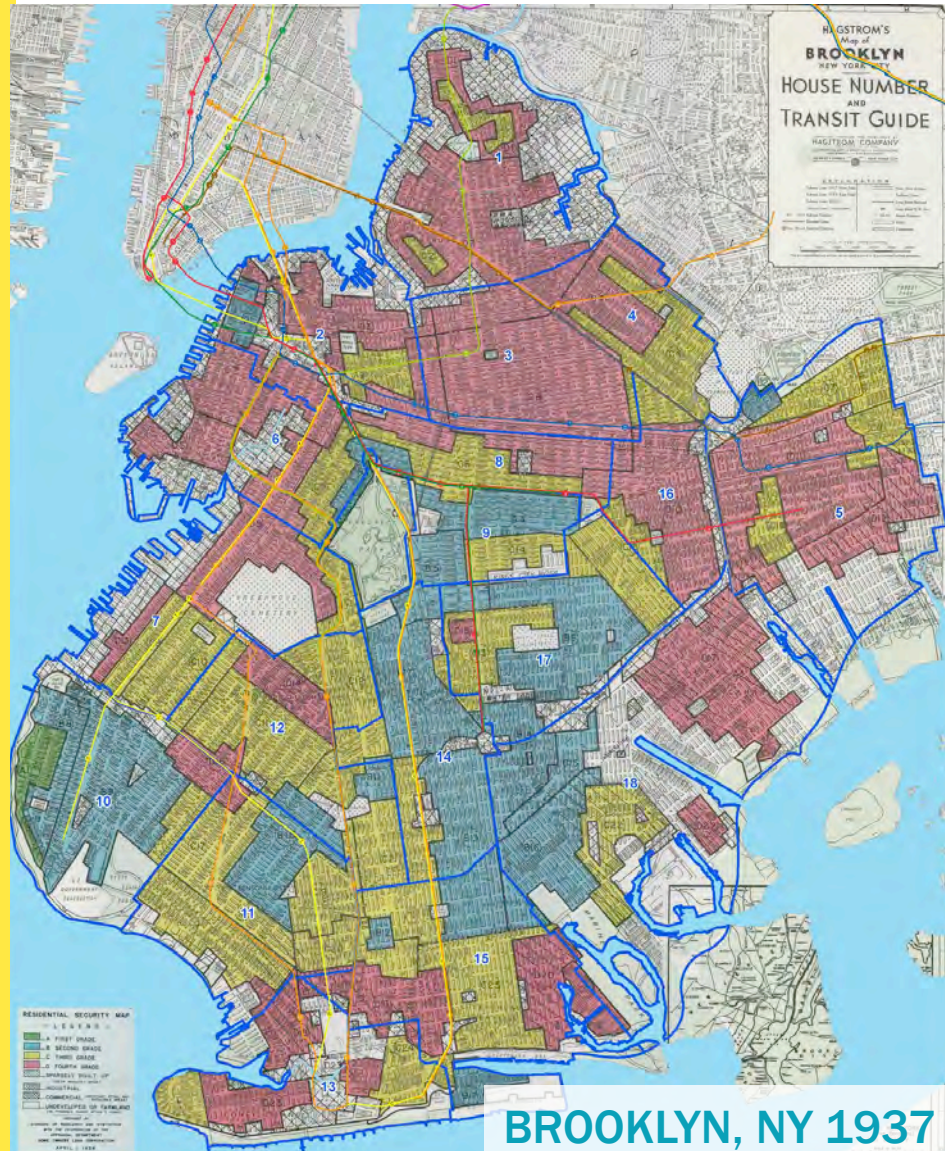
HOW MUCH?

WHERE DOES THE MONEY COME FROM?



\$200 Billion Annually

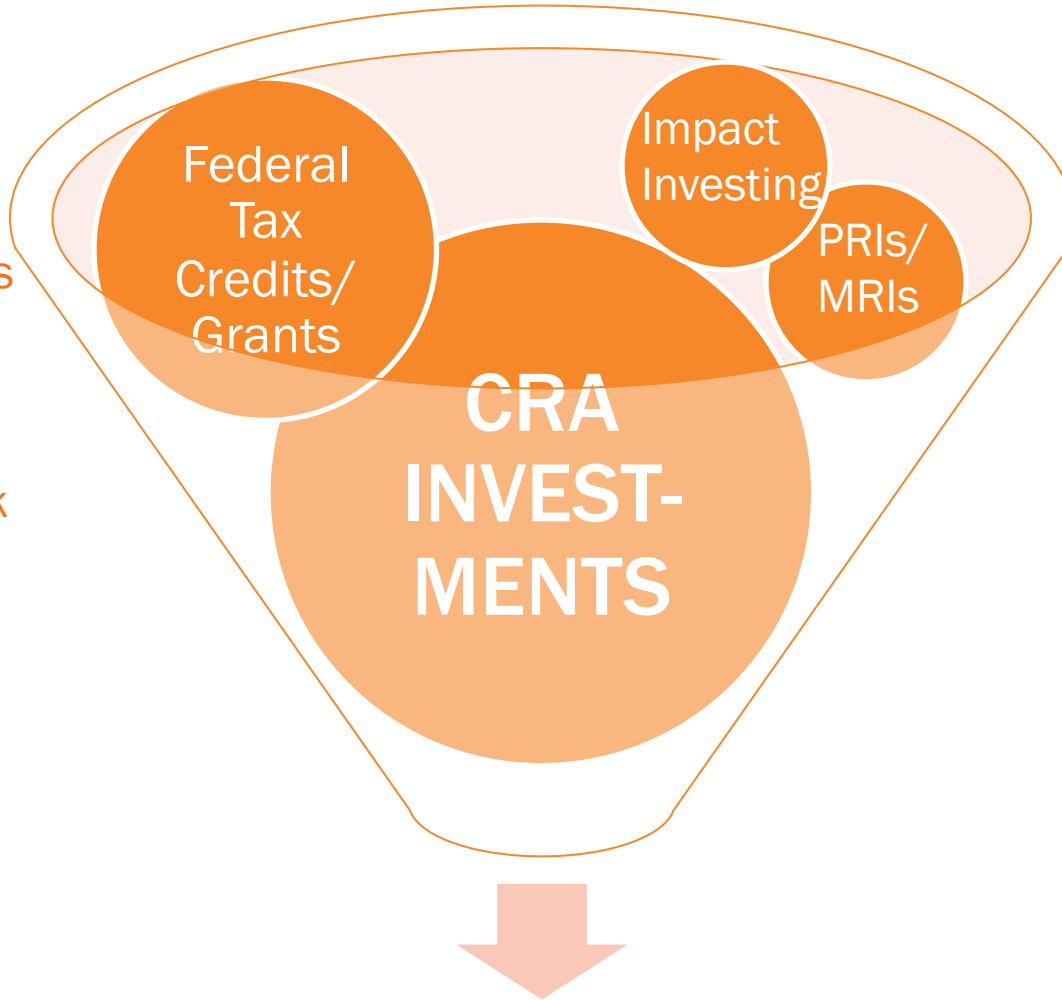
ENSURING EQUITABLE INVESTMENTS: COMMUNITY REINVESTMENT ACT OF 1977



HOW MUCH?

WHERE DOES THE MONEY COME FROM?

- Low-Income Housing Tax Credits
- New Markets Tax Credits
- Community Development Block Grants
- CDFI Loan Funds

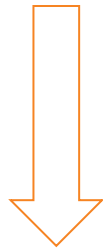


\$200 Billion Annually

COMMUNITY DEVELOPMENT IS IN THE LEVERAGING BUSINESS

\$15 MILLION RAISED IN
CAPITAL CAMPAIGN

\$15 MILLION INVESTED
IN AFFORDABLE
HOUSING

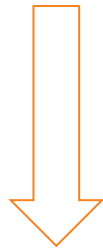


\$15 MILLION
AFFORDABLE
HOUSING

COMMUNITY DEVELOPMENT IS IN THE LEVERAGING BUSINESS

\$15 MILLION RAISED IN
CAPITAL CAMPAIGN

\$15 MILLION INVESTED
IN AFFORDABLE
HOUSING



\$15 MILLION
AFFORDABLE
HOUSING

\$15 MILLION RAISED IN
CAPITAL CAMPAIGN

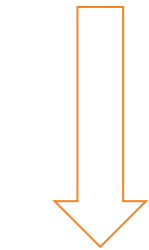
\$5 MILLION INVESTED
IN AFFORDABLE
HOUSING

\$15 MILLION
LEVERAGED FROM
CDFIS AND BANKS

COMMUNITY DEVELOPMENT IS IN THE LEVERAGING BUSINESS

\$15 MILLION RAISED IN CAPITAL CAMPAIGN

\$15 MILLION INVESTED IN AFFORDABLE HOUSING



\$15 MILLION AFFORDABLE HOUSING

\$15 MILLION RAISED IN CAPITAL CAMPAIGN

\$5 MILLION INVESTED IN AFFORDABLE HOUSING

\$15 MILLION LEVERAGED FROM CDFIS AND BANKS



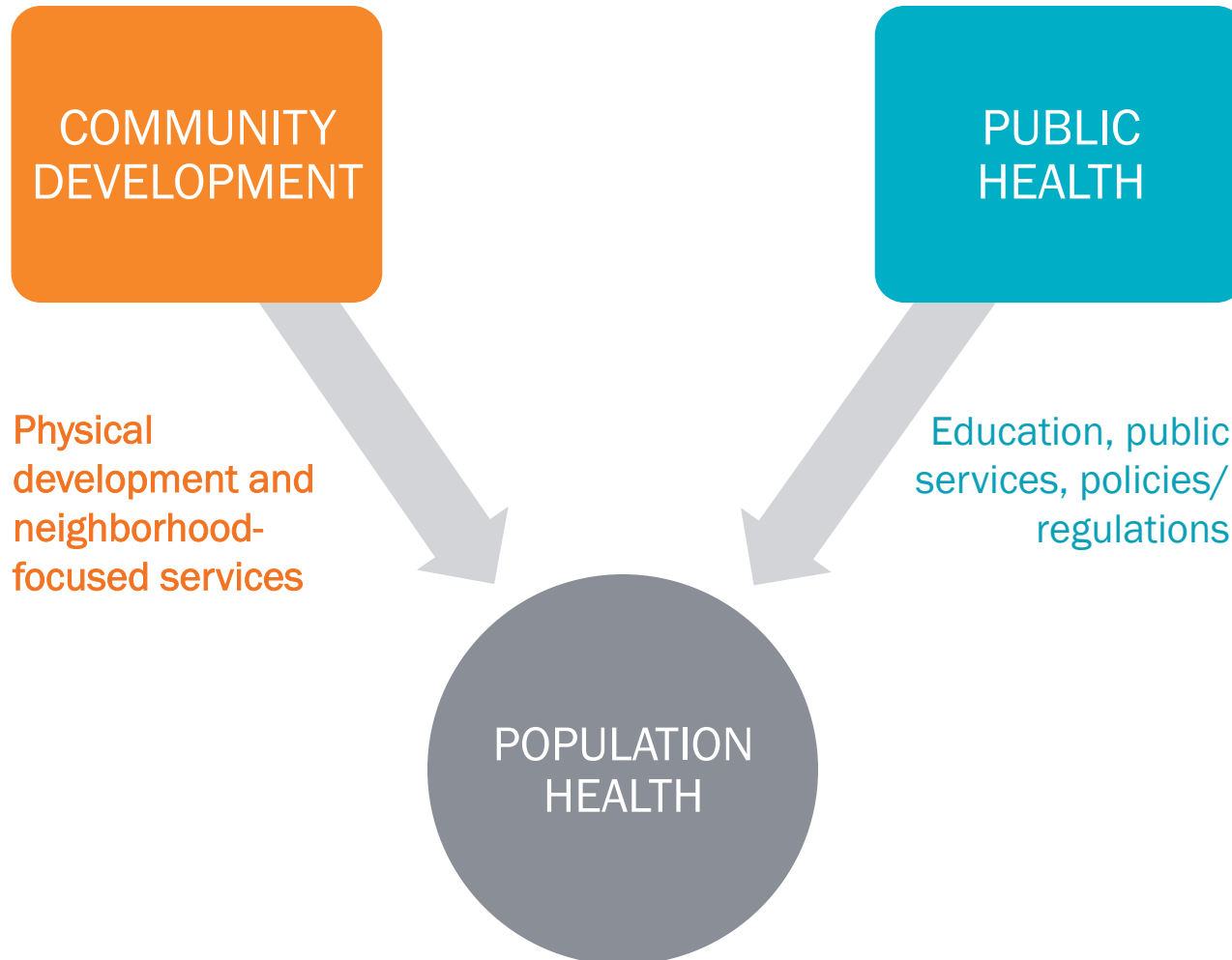
\$20 MILLION AFFORDABLE HOUSING



\$10 MILLION EARLY CHILDHOOD CENTER

MOMENTUM FOR CROSS-SECTOR COLLABORATION

SHARED AIMS



SHARED AIMS, CONVERGING PATHS

COMMUNITY
DEVELOPMENT
& PUBLIC
HEALTH

DETERMINANTS OF
ECONOMIC
OPPORTUNITY =
DETERMINANTS OF
HEALTH



POPULATION
HEALTH



WHAT WE'VE LEARNED ABOUT BOTH SECTOR'S ASSETS

PUBLIC HEALTH

- Data/research capabilities
- Expertise in social determinants of health/health
- Policy expertise/connections to government

COMMUNITY DEVELOPMENT

- Community engagement/deep connection to neighborhoods
- Technical expertise in land use, real estate, etc.
- Financial resources

NATIONAL MOMENTUM: APHA POLICY STATEMENT



AMERICAN PUBLIC HEALTH ASSOCIATION

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Opportunities for Health Collaboration: Leveraging Community Development Investments to Improve Health in Low-Income Neighborhoods

[< Policy Statements and Advocacy](#)

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Abstract

Evidence for the role of place in health outcomes has been growing. Significant disparities in health outcomes between neighborhoods reflect place-based inequities in the physical, social, and economic assets needed by residents to live productive and healthy lives. The community development industry is a multibillion-dollar sector of the economy investing in low-income neighborhoods, yet to date there has been limited collaboration between the health and community development sectors. With 77 million people in the United States living in high-poverty neighborhoods, there is an ethical imperative to advance such collaboration. Integration of these sectors is needed to ensure that (1) significant public and private investments in neighborhood revitalization maximize opportunities for health improvement, (2) health expertise informs the development of tools and techniques to guide health-related project decision-making and measure health outcomes, and (3) the increasing efforts of the health care sector to address prevention and population health, in light of the Patient Protection and Affordable Care Act, are coordinated and leveraged with community development sector investments. Innovative cross-sector collaborations by the community development sector show promise in mitigating place-based disadvantage and improving the social determinants of health.

Read more at: www.apha.org

NATIONAL MOMENTUM: APHA POLICY STATEMENT



Calls upon public health agencies to solicit input and involvement from the community development sector and collaborate on research, implementation and measurement.

NATIONAL MOMENTUM: RWJF ANNUAL MESSAGE



As part of this Annual Message we are issuing a challenge to individuals and organizations across America *to forge new and unconventional partnerships with the goal of building a Culture of Health that benefits all.*

– *Risa Lavizzo-Mourey, MD, MBA,
President/CEO, Robert Wood
Johnson Foundation*

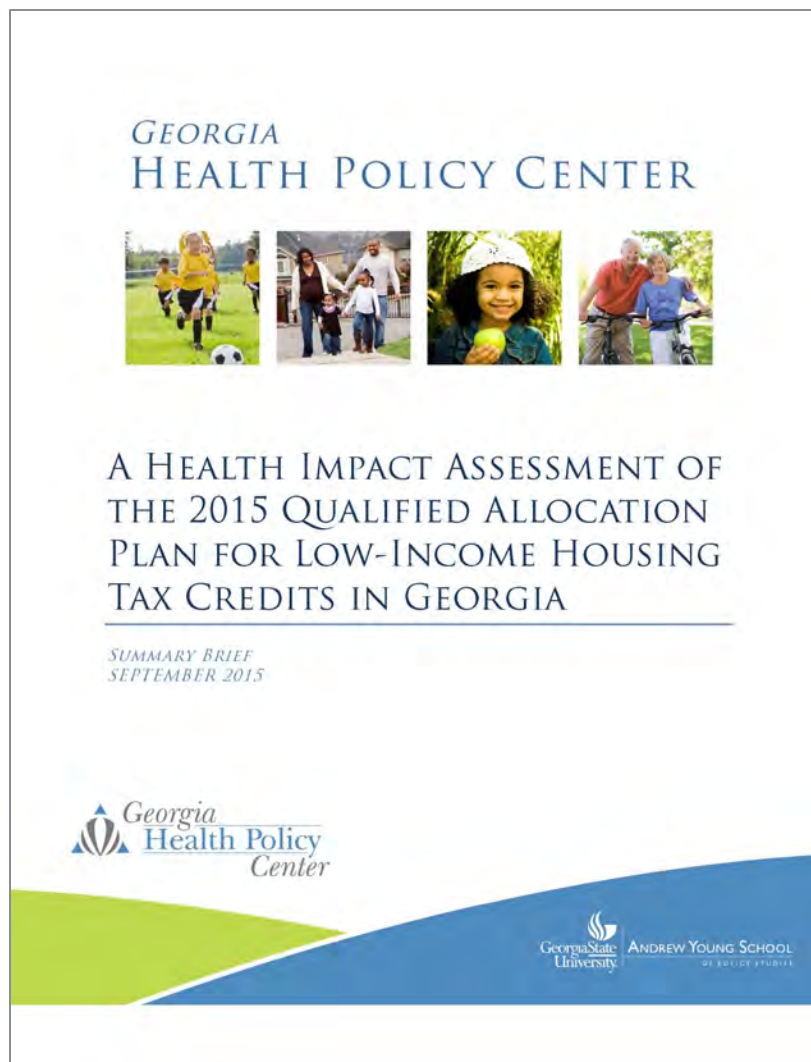
2016 PRESIDENT'S MESSAGE

Joining Forces to Build Momentum

Risa Lavizzo-Mourey, MD, MBA
President and Chief Executive Officer

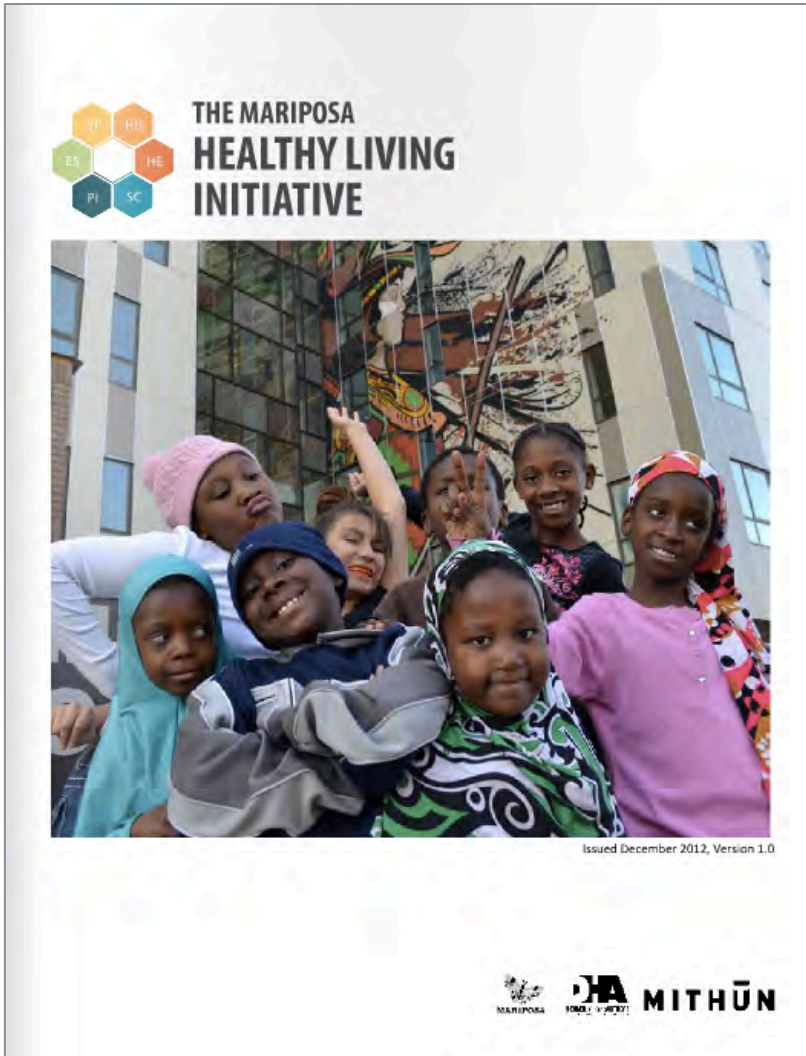
Read more at www.rwjf.org

STATEWIDE PRACTICE: HIAs INFORMING COMM DEVT, GEORGIA




Read more on the [Georgia Health Policy Center's website](#) and the [Network's Fast Facts blog series](#).

LOCAL PRACTICE: HIAs INFORMING COMM DEVT, DENVER



Read more on the [Mariposa Denver website](#).

NEW INVESTMENT VEHICLES: HEALTHY NEIGHBORHOODS EQUITY FUND



A \$30 million private equity fund investing in the building blocks of healthy communities in Massachusetts

**HEALTHY
NEIGHBORHOODS**
EQUITY FUND | LP

Read more in the Network's [Crosswalk Magazine](#) and www.hnefund.org

NEW INVESTMENT VEHICLES: HEALTHY FUTURES FUND



Source: www.healthyfuturesfund.org

HealthyFuturesFund★

Read more in the [Network's Crosswalk Magazine](#)
and [Expert Insights blog series](#)

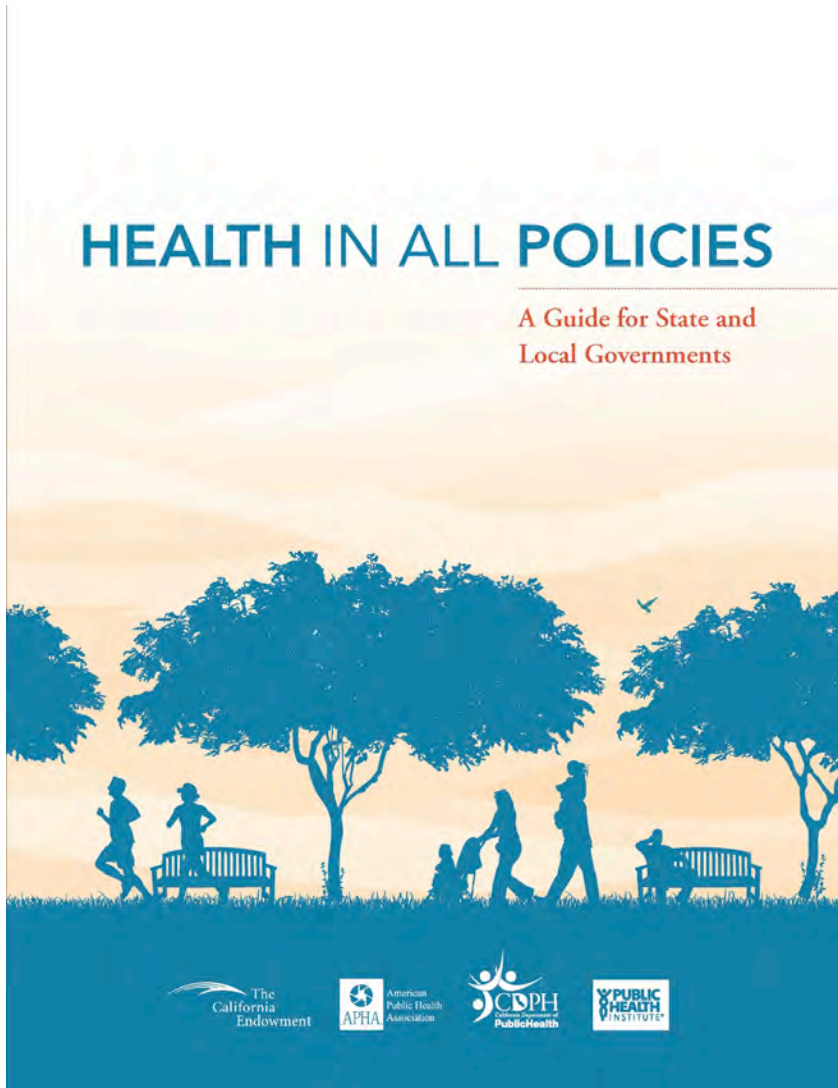
OPPORTUNITIES FOR PUBLIC HEALTH

POLICY LEVER: AFFORDABLE CARE ACT



POLICY LEVER: HEALTH IN ALL POLICIES

A collaborative approach to improving the health of all people by incorporating health consideration into decision-making across sectors and policy areas.



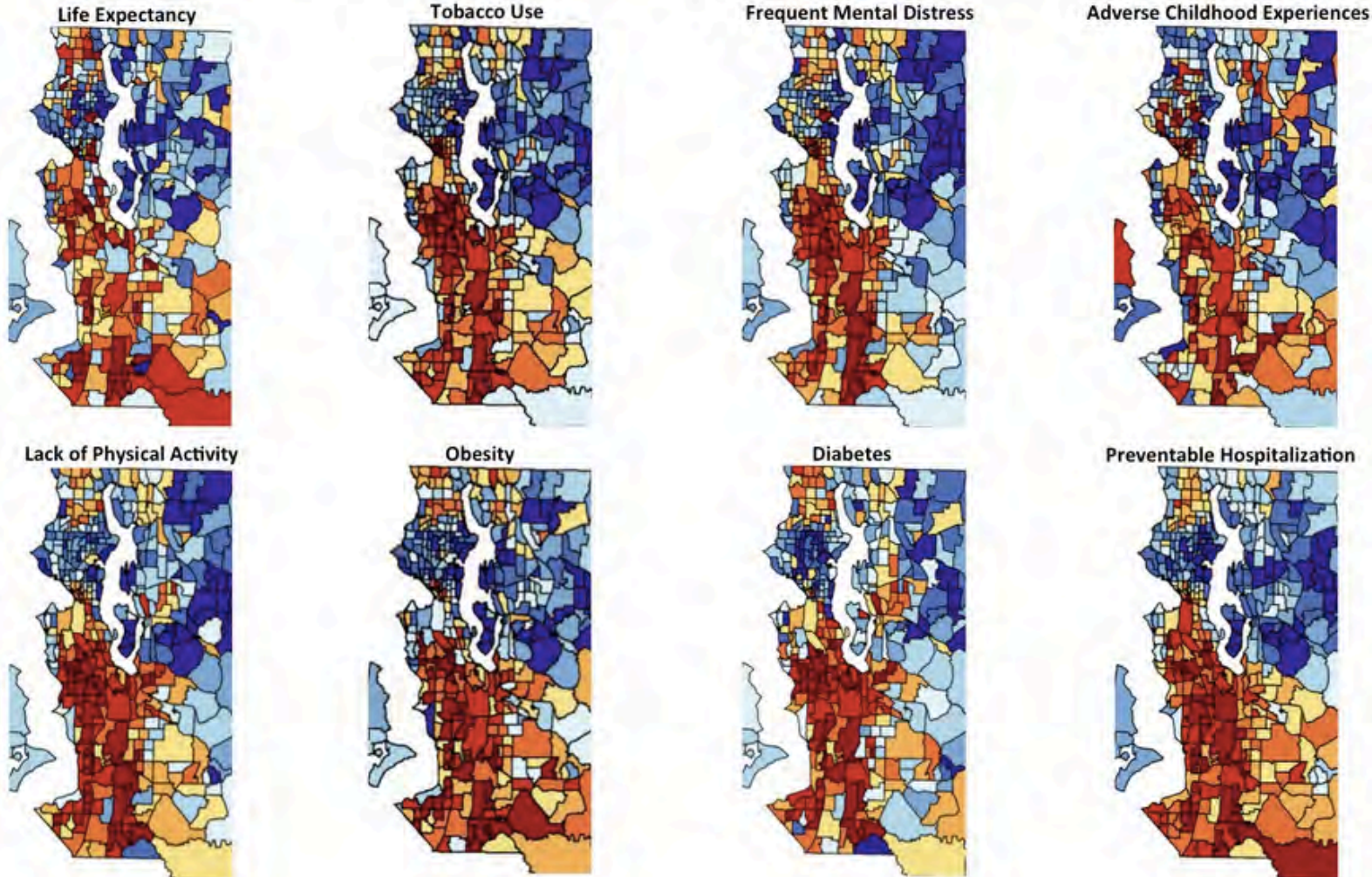
PUBLIC HEALTH PARTNERSHIPS: WEST OAKLAND, CA



Learn more by visiting the Network's [Community Close Up series](#)

PUBLIC HEALTH PARTNERSHIPS: SEATTLE/KING COUNTY, WA

KING COUNTY HEALTH AND WELL-BEING MEASURES



Read more about Communities of Opportunity in: [What Counts: Harnessing Data for America's Communities](#)

STATEWIDE INITIATIVES: ACA & MEDICAID



Completed, Creston Ave, Bronx, NY



Underway, Boston Rd, Bronx, NY

STATEWIDE INITIATIVES: FUNDING FOR PREVENTATIVE HEALTH

The Massachusetts Prevention and Wellness Trust

An Innovative Approach to Prevention as
a Component of Health Care Reform



Massachusetts Prevention & Wellness Trust



SIM

State Innovation Model

State Innovation Model (SIM) Initiative



THE NETWORK AS THE CONNECTOR



Build Healthy Places Network



MISSION:

To catalyze and support collaboration across the health and community development sectors, together working to improve low-income communities and the lives of people living in them.



Build Healthy
Places Network



PROGRAM OF



SUPPORTED BY

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BUILDS UPON





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CONNECTS LEADERS

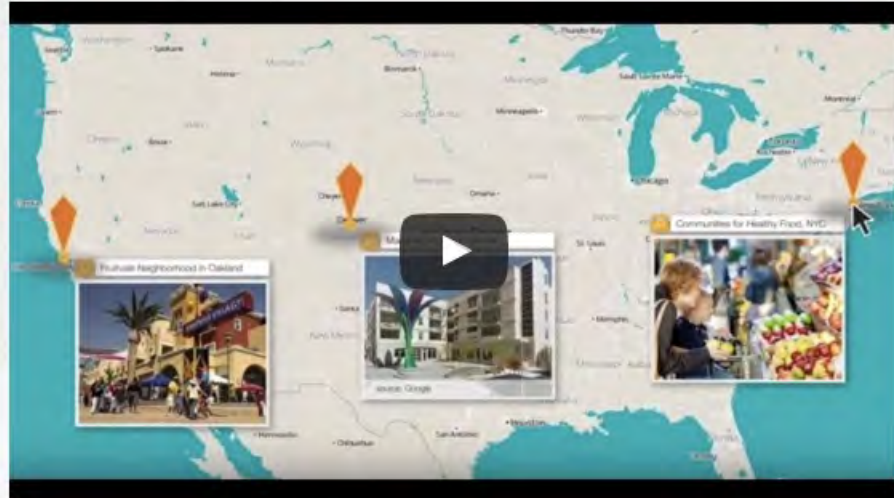
BUILDS THE KNOWLEDGE BASE FOR COLLABORATION

CURATES RESOURCES AND EXAMPLES OF WHAT WORKS

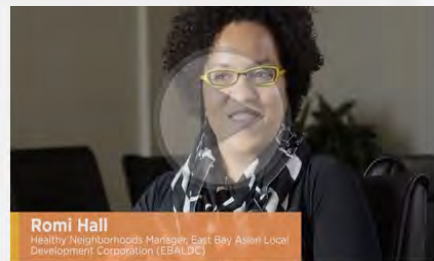
BUILDHEALTHYPLACES.ORG

By joining forces, community developers and health professionals can have a more powerful impact.

[Learn More About the Network](#)




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The Pulse

A monthly roundup of what we're reading and where we've been at the intersection of community development and health.

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APRIL
There's a SIB for that

MARCH
Place matters to children's health

FEBRUARY
Tackling the social inequities that shape health





Crosswalk



Whose City Is it? The Promise and Peril of Gentrification



A Financial Remedy on the Reservation

Read our other articles on the Network's [Crosswalk Magazine](#)

TOOLS FOR COLLABORATION: MEASUREUP

MeasureUp

Welcome to MeasureUp, a microsite of resources and tools to help you measure and describe your programs' impact on families and communities and on factors related to health. MeasureUp provides examples, tools, and resources to help you make your case, without having to become an economist.

You can [dip your toe into the topic](#) or [dive deep](#). You can learn about [how to map](#) issues in your community or see how other groups are measuring impact and [the tools](#) they use. [Read stories](#) about communities that have used health metrics in community development work. And if you want to [design your own study](#), you can do that too. If you need to make your case to a funder or policymaker, [read about the evidence](#) for a link between health and community.

Here's what's available:



Mapping Tools

Learn how to map your community's strengths and target areas.



Measurement Tools

See how others are measuring health-related impact and find resources to help you get started.



Evidence Base

Learn more about the effects of neighborhood on health.



Measurement Stories

Read and watch stories from the field about measurement in action.



Deeper Dive

Want more? Go deeper with these ideas and innovations.

WWW.BUILDHEALTHYPLACES.ORG/MEASUREUP



Build Healthy
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TOOLS FOR COLLABORATION: JARGON BUSTER

Jargon Buster

Working across sectors begins with speaking the same language. If you're lost in a sea of acronyms, this tool can help. Below we aim to demystify common industry jargon.

CDC (Centers for Disease Control and Prevention)

+

CDC (Community Development Corporation)

+

Community Benefits (Agreements)

+

Community Benefits (Hospital)

+

Community Development

-

Related Terms: CDC (Community Development Corporation), Community Development Financial Institutions (CDFIs), Social Determinants of Health, Health Equity

Community development is a multi-billion-dollar sector of the American economy that invests in low- and moderate-income communities through the development and financing of affordable housing, businesses, community centers, health clinics, job training programs, and services to support children, youth, and families. The sector has its roots in the urban revitalization efforts of the late 19th century but expanded as a result of the War on Poverty programs of the 1960s. Today, the

Tags

#NetworkCommons

#ZIPmatters

Affordable Care Act

Affordable

Housing

collaboration

Community Close Up

Community

Development

Community Health Needs

Assessment Community

Quarterback County Health

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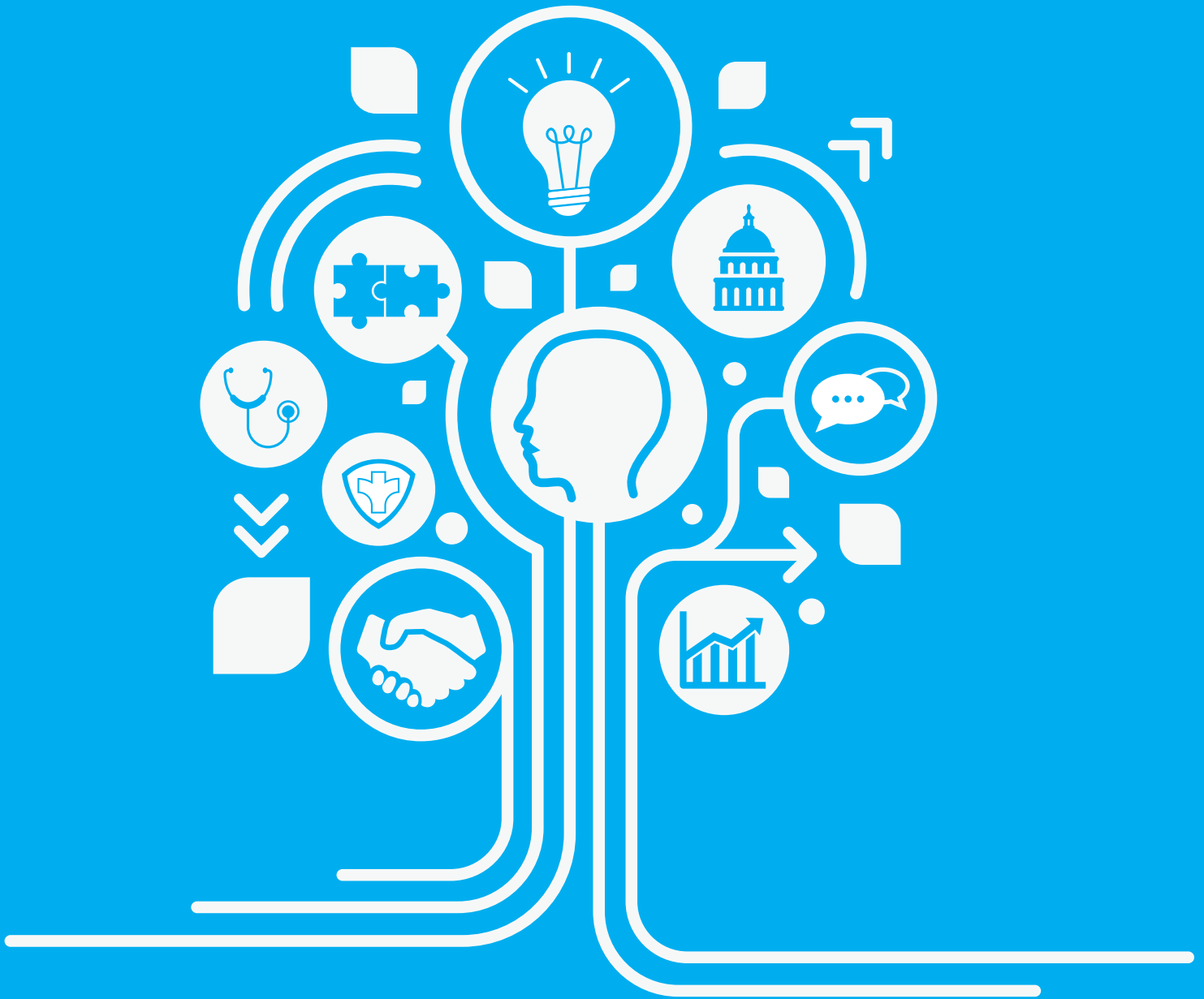
02

CDC HEALTH POLICY SERIES

Towards Sustainable Improvements in Population Health

Overview of Community Integration Structures and Emerging Innovations in Financing

Hester JA,^a Stange PV,^b Seeff LC,^b Davis JB,^c Craft CA^d



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

AUTHOR AFFILIATIONS:

^a Population Health Systems

^b Centers for Disease Control and Prevention

^c ORISE Research Participant Program and Centers for Disease Control and Prevention

^d FHI 360

The American healthcare system is in the midst of unprecedented change, and the Triple Aim^{®1,2}—achieving better care for patients, better health for communities, and lower costs through healthcare system improvement—is becoming a widely accepted framework for the desired outcomes of the evolving system.^{1,2} Key elements emerging in this transformation include new structures for integrating and coordinating services, a renewed focus on patient engagement and patient-centered care, and new payment models based on the value of population-based health outcomes rather than the volume of services delivered. Private and public payers are testing these payment models in large-scale settings involving thousands of providers and millions of patients. In selected markets, multiple payers are working to align their respective payment models with one another to speed the transformation. This period of change is creating important opportunities to establish effective, more sustainable, community-focused delivery and payment models to improve population health.

Those opportunities—and the accompanying challenges—are discussed in this report. We review evolving community-level population health delivery models; define the key functions, opportunities, and challenges of a community integrator; and introduce the concept of a balanced portfolio as a crucial component in developing a sustainable financial model. We also review emerging financing vehicles that could be used for specific population health interventions.

WHY EMPHASIZE POPULATION HEALTH?

Before going further, it is helpful to define population health and establish why the broader focus on population health is important. The term population health has a range of meanings and uses within the healthcare and public health fields. For this report, we will use Kindig and Stoddart's definition adopted by the Institute of Medicine Roundtable on Population Health Improvement: "the health outcomes of a group of individuals, including the distribution of such outcomes within the group...population health outcomes are the product of many determinants of health, including healthcare, public health, genetics, behavior, social factors, and environmental factors."^{3,4}

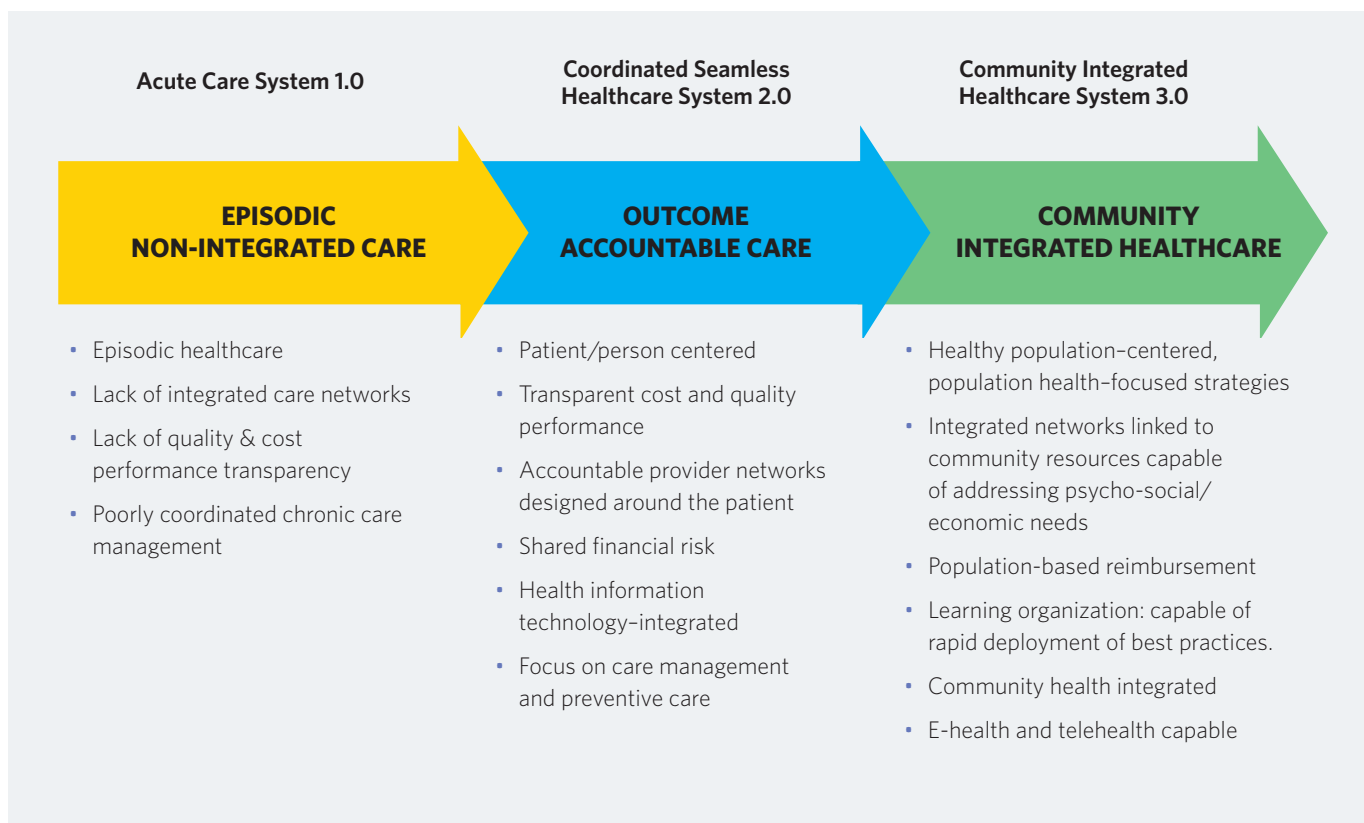
Determinants of health models attribute only a small percentage of a population's health to care received in a clinical setting⁵; however, most healthcare systems and payers continue to focus on improving care delivered to individual patients in a clinical setting with far less attention to the non-medical determinants of health that impact longer-term improvements in the health of individuals and the community. The implication for the current healthcare system seems clear: If the goals of the Triple Aim[®] are to be realized, this period of innovation must shift the focus beyond the clinical setting to also address other determinants of health for the overall population.

Halfon has created a helpful framework that defines transitions along three stages in the evolution of the healthcare system that must occur to achieve the Triple Aim[®] (Figure 1).⁶ The first transition moves from the traditional, episodic, acute care-focused stage (Healthcare 1.0) to a more patient-centered stage that coordinates care for a variety of chronic illnesses across a broad range of caregivers and over the lifetime of the patient. This is Healthcare 2.0. Many local and regional healthcare systems throughout the United States are engaged in this transition, implementing new care models such as patient-centered medical homes^{2,7} and accountable care organizations (ACOs).^{2,8,9} The second transition

moves from the 2.0 patient-centered care to a community-based system that addresses the full spectrum of health, including healthcare and the determinants of health, to reduce the prevalence of chronic disease and improve the quality of life. This is Healthcare 3.0, a community integrated healthcare framework.

One likely indicator of a mature 3.0 stage is a shift in accountability from a panel of patients who use a provider or healthcare system to the total population within a geographic area, only a subset of which Healthcare stages 1.0 or 2.0 traditionally serve. Recognizing the significance of the determinants of health within the 3.0 stage requires that the health system 1) expand the scope of interventions beyond clinical services to include a wide range of community-based interventions targeting non-medical determinants of health; and 2) access data that can measure clinical and non-clinical delivery and outcomes for a total geographically defined population.

Although the Triple Aim[®] is being embraced more widely and incorporated into mission statements and objectives of local, state, and national initiatives, many healthcare systems are reluctant to move away from the familiar fee-for-service payment model. In practice, very few are actually testing a path to Halfon's Healthcare 3.0.⁶

FIGURE 1: U.S. Healthcare Delivery System Evolution: Health Delivery System Transformation Critical Path

Halfon N, Long P, Chang DI, Hester J, Inkelas M, Rodgers A. Applying a 3.0 transformation framework to guide large-scale health system reform. *Health Affairs* 2014;31(11). doi: 10.1377/hlthaff.2014.0485.

EMERGING COMMUNITY-LEVEL INTEGRATION STRUCTURES

Improving population health requires integration of multiple levels within a health system.⁸ The first is the primary care practice level—the foundation of integrated care to meet each patient’s needs. Such integration requires managing care across multiple settings and supporting

patients in making long-term changes in health risk behaviors.

The second is the community or regional health system level, which starts with a local network composed of the community hospital, its primary care practices and specialist physicians, and other key providers in the local area, including those addressing behavioral health.⁸ This level must expand to include a spectrum of other public health

services, social and behavioral health services, and community-based resources that are vital to facilitate effective disease management for the health of a population.

The third level—the state—provides the enabling infrastructure for the primary care and community health system. That infrastructure includes health information technology support, design and implementation of all-payer payment reforms, and

technical support and training to share best practices and build process improvement.¹⁰ An important current state-based initiative is the State Innovation Model program of the Centers for Medicare and Medicaid Services (CMS).¹¹ This program will integrate and align state policies in a state transformation plan designed to accelerate delivery system reform.

Finally, an alignment of resources is important for an integrated health system. At the federal level, the transformative policy and payment reforms already occurring in Medicare¹² provide important opportunities for community provider networks to consider. All four levels need to be engaged, but we focus here on the community level.

Community Integrator and a Balanced Portfolio

At the community health system level, one promising approach is the establishment of a community health integrator, accountable for the health of a total population within a geographic area, including reducing health disparities within that population. A number of conceptual models identify the need for an integrator as a central component of a community health system to bring together clinical care, public health, and community services in a coherent strategy to meet the community's needs. This integrator is at the core of

models such as the Community Chief Health Strategist,^{13,14} Accountable Health Communities,¹⁵ community integrators,¹⁶ community quarterbacks for community development,¹⁷ and the “backbone organization” described in the collective impact movement.¹⁸ For the purposes of this report, we will refer to these models collectively as community integrators. As multiple community integrator models are emerging, the specific term used to describe the integrator is less important than an emphasis on its key structure and functions.

The community integrator is structured as a geographically based organization that identifies appropriate delivery partners for each intervention and selects a financing vehicle to match the time frame and risk profile of each intervention. The community integrator must be a legal, operational entity capable of establishing contractual relationships with delivery partners and have a broad-based and transparent governance. To successfully impact population health, the integrator's geographic boundaries of governance must align with the geographic boundaries of the community it serves. Its credibility and authority will stem from the inclusion of key community stakeholders and its ability to improve the health of the community over time.

The functions of a fully developed community integrator span the

planning, implementation, and evaluation cycle. The integrator-led process begins with convening stakeholders and managing their diverse perspectives to establish a shared vision and goals. The integrator facilitates a common assessment of needs for its geographically defined community, defines health priorities, and identifies specific interventions, building on starting points such as the requirement for nonprofit hospitals to conduct community health needs assessments (CHNA).¹⁹ The integrator facilitates development of a coordinated network of medical, behavioral health, and community and social services for its residents. For each intervention prioritized for implementation, the integrator makes the business case for the intervention and identifies a delivery partner and an appropriate financing vehicle.²⁰

The resulting network of diverse providers implements a portfolio of interventions that is balanced along a spectrum of three perspectives: 1) time frames, reflecting short- and longer-term intervention effects; 2) level of investment risk,ⁱ reflecting both the strength of scientific evidence and investment in innovation to help develop the evidence; and 3) scale of return, based on measures for health, financial, and social impact. The balanced portfolio is strategically designed to realize **short-term** opportunities for savings in medical

ⁱ Investment risk is the likelihood that an investor will recover the principal invested and earn the projected return. It is a measure of the strength of the evidence supporting the use of a given intervention and the expertise of the organization responsible for achieving those results. It is quite different from actuarial risk for the medical expense of a given population, which is used in shared savings or global capitation payment models.

costs, such as providing housing-based services for high-risk Medicaid-eligible individuals^{21,22}; to implement **medium-term** interventions to change health risk behaviors, such as the National Diabetes Prevention Program²³; and to address **longer-term** determinants of health, such as investments in early childhood development. It reflects the assessment and prioritization of community needs aligned to best

meet the goals established by the community. An example of a balanced portfolio is given in Table 1.

Balancing the portfolio to optimize returns requires alignment of multiple funding streams, both public and private. Given the need to create more global population-based payment models that align financial incentives with health outcomes, the community integrator might also manage a population health budget,

serving as a neutral entity to allocate resources. The integrator additionally facilitates the process of monitoring progress and outcomes and implementing rapid-cycle changes. Early successes offer best practices that can be applied and expanded as new approaches are tested.

Existing integrator models¹⁵⁻¹⁸ could serve as starting points for a fully developed community integrator that includes enhanced financial functions.

TABLE 1: Sample Balanced Portfolio for Community Health Systems

Intervention	Target Population	Implementation Partners	Financing Vehicle	Time Frame*	Investment Risk	Savings-Sharing Vehicle
Intensive care coordination	Dual eligible high utilizers	Accountable care organizations	Shared savings	Short	Low risk	Community benefit
Integrated housing-based services	Medicaid eligible, multiple chronic illnesses	Medicaid managed care plan, housing corporation	Capitation	Short	Low risk	Performance contract
Innovative use of remote monitoring	Medicare eligible, multiple chronic illnesses	Medicare Advantage Plan, private foundation	Grant	Short	High risk	None
YMCA Diabetes Prevention Program	Commercial insured and self-insured	Commercial health plan, self-insured employers	Shared savings	Medium	Medium risk	Performance contract
Asthma medical management	School-aged children	Commercial and Medicaid health plan	Shared savings	Medium	Medium risk	Performance contract
Asthma environmental hot spots	Children with asthma	Public health agency	Social impact bonds	Medium	Medium risk	Investing in social impact bond
Expanded early childhood education	Children at risk for adverse childhood events	Preschool educators	Pay for success, social impact bonds	Long	Medium risk	Investing in social impact bond
Community walking trails	Community	Nonprofit hospital	Community benefit	Long	Medium risk	None
New grocery store	Residents of U.S. Department of Agriculture food deserts	Community development financial institution	Community reinvestment	Long	Medium risk	None

* Time needed to generate financial savings.

Hester JA, Stange PV. A Sustainable Financial Model for Community Health Systems. Discussion Paper, Institute of Medicine, Washington, DC; 2014. Available at <http://www.iom.edu/Global/Perspectives/2014/SustainableFinancialModel>.

However, few, if any, of the existing models are currently working across the trajectory from planning to implementation and financing.¹⁰

A SUSTAINABLE PAYMENT MODEL FOR COMMUNITY INTEGRATORS

The elusive “holy grail” for the population health movement has been a payment model that breaks the cycle of dependence on limited-term grants and provides sustainable support for both infrastructure and interventions. Two critical requirements that support sustainable population health improvement are reinvestment of a portion of the savings from interventions back into the community and better alignment of diverse funding sources with interventions in the balanced portfolio.

Capturing a portion of savings for reinvestment is essential for long-term sustainability, and can be achieved in a variety of ways (Table 1). Savings accrued from improved efficiencies gained by restructuring uncoordinated medical and social services may be used to support interventions outside of the acute care setting that improve health and reduce costs. For example, in a short-term initiative using

shared-savings payment models for an ACO built around nonprofit hospitals, the integrator could negotiate to receive a percentage of savings for reinvestment into the community. The hospital could classify the money returned to the community for interventions outside the healthcare setting as a community benefit.¹⁹ Even while shared savings are an important potential source of initial funding for the integrator’s portfolio, at some point the opportunities to realize savings from reduced medical costs will diminish and financing will need to transition to other, longer-term vehicles. In the early childhood education example in Table 1, for example, the integrator could participate as an investor in the pay-for-success financing, capturing a portion of savings for reinvestment in the community to support future programs.²⁰

Viewing community health as a long-term, capital-investment venture will be essential to realize population health improvement. The capital requirements—not unlike those in well-established, rigorously planned regional transportation initiatives throughout the nation²⁴—are well beyond the capacity of the health sector alone. Combining and leveraging investment capital from multiple public and private entities will be an important step. Further, as with regional infrastructure development, the necessary planning

and investment must be considered on a longer horizon—decades, rather than 3–5 years commonly used in governmental and philanthropic grant-making—as very few interventions yield short-term returns on health or cost outcomes.^{24,25}

The mix of financing vehicles in the portfolio will shift with the maturity of the community integrator. At the development and testing phase, integrators require greater grant support, which is more risk tolerant and allows for the time required to develop evidence of new interventions’ effectiveness or expand existing initiatives to scale. As a community model matures and begins to achieve early successes, a broader range of financing vehicles may support dissemination of proven interventions and the infrastructure needed for larger-scale implementation. In the mature operation phase, the community integrator has established its balanced portfolio and, ideally, has developed sustainable financing.

EMERGING FINANCING VEHICLES

Currently, governments, insurers, healthcare systems, and other payers and providers are exploring a wide range of financing vehicles that support improved patient and population

TABLE 2: Emerging Financing Vehicles and Payment Mechanisms

Financing Vehicle	Payment Mechanism: How Does It Work?	Time Frame*	Investment Risk Profile	Status
Payment Models for Care Delivery				
Global budget/capitation	Payment budget set for provider group for expected services (or subset thereof) for a given population. When spending is under budget, providers share the surplus; when spending is over budget, providers are responsible for extra costs. Similar to “capitation” model but more sophisticated means of risk adjustment, and financial results are linked with performance. ²⁵	Short	Moderate (with experience) two-sided risk.	Population measures are clinical.
Shared savings	Group of providers receive incentive to reduce healthcare spending for expected services (or subset thereof) for a defined patient population. Providers receive a percentage of the net savings. Access to savings often contingent on meeting performance measures for care access, quality, or efficiency. ²⁵	Short	Low to moderate risk (with experience); range of one- and two-sided risk options.	Implemented widely, but population health measures are clinical.
Care coordination fee	Providers receive payment specifically for care coordination, ²⁶ typically in the form of a per-member-per-month fee for HMO enrollees or the attributed population in a multi-payer advanced primary care practice (aka “medical home”). ²⁷	Short	Low risk.	Implemented with clinical health measures.
Fee for service with pay for performance (P4P)	Combines traditional fee-for-service physician payment system with a financial incentive based on meeting a set of performance or reporting standards over a specified period of time. ²⁵	Short	Low risk.	Gaining traction, but incentives are small.
Multisector Funds				
Blended: co-mingled	Funds from multiple funding streams are combined into one “pot.” Programs and services are financed out of that pot without distinction of where original funding came from. ²⁸	Varies with funded intervention	Challenge to meet reporting requirements of various funders.	Implemented in early care and education and social services. ²⁹⁻³²
Braided: coordinated targeting	Funds from multiple funding streams are combined, with careful accounting for how dollars from each funding source are spent. ³⁰	Varies with funded intervention	Must follow restrictions, reporting requirements for each funding stream.	
Medicaid waiver	States apply for waivers to test new ways to deliver or pay for healthcare services through Medicaid or the Children’s Health Insurance Program. ³³	Medium	Loss of waiver or financial penalties for not meeting goals.	>450 waivers across all 50 states and DC. ³³
Innovative Financing Vehicles				
Charitable hospital community benefit	For tax exemption, nonprofit hospitals must file report to IRS of their community benefit. ¹⁹ Activities that meet this requirement must improve community health or safety, meet at least one community benefit objective, and respond to a demonstrated community need (determined through health needs assessment conducted every 3 years).	Varies with funded intervention	Low to moderate risk.	As ACA coverage for uninsured rises, charity care should decrease, freeing resources for non-clinical investment.
Pay for success or social impact bond	Government agrees to pay an organization for an intervention if it meets specific, measurable goals in a set time. ³⁴ Organization secures funding from investor(s) to cover program costs and providers. Third-party evaluator assesses outcomes. If intervention achieved goals, government pays the implementing organization, which repays its investors. If not, government does not pay; investors are not repaid with public funds. ³⁵	Medium	Moderate risk (with experience). To attract capital, organizations must mitigate risks and offer high financial returns.	Several states use social impact bonds; 12 others considering them. ³⁶ Early involvement in health sector.
Community development financial institutions (CDFIs)	CDFIs attract public and private funds—including from the Treasury Department’s CDFI Fund—to create economic opportunity for individuals and small businesses, quality affordable housing, and essential community services. ³⁷ All are private sector, market driven, and locally controlled. Closely tied to the Community Reinvestment Act. ³⁸	Long	CDFIs reduce financial risks for projects.	About 1,000 nationwide, with most focusing in urban areas.
Program-related investments	Foundations invest in charitable activities that involve potential return on capital within a set time. ³⁸ They provide flexible loans, loan guarantees, and equity investments in charitable organizations and in commercial ventures that have a charitable purpose. Capital resulting from the investment is recycled for further charitable investment.	Varies with funded intervention	Foundations use endowments to absorb risks that hinder private investors.	Few hundred U.S. foundations make program-related investments.
Prevention and wellness trusts	State or community raises a pool of money that is set aside for prevention and community health. Funds for trust often come from taxing insurers and hospitals, but can come from pooling foundation resources or redirecting existing government funds. ³⁹	Varies with funded intervention	Medium risk; mix of innovation and evidence-based interventions.	Model is the philosophy behind Prevention and Public Health Fund.

*Time needed to generate financial savings.

health and have the potential to slow rising healthcare costs.

These vehicles, summarized in Table 2, fall into three broad categories:

1. Payment models for care delivery that reward value-based outcomes instead of volume^{26,27};
2. Multisector funds that blend resources into a common pool, such as through some Medicaid Section waivers²⁸⁻³³; and
3. Innovative financing vehicles that access new and existing pools of public and private capital.³⁴⁻³⁹

The first category uses incentive-based payment systems for clinical services as a means of achieving better coordinated, accountable healthcare—Healthcare 2.0⁶—and redirecting funds from acute care to upstream determinants. Although Triple Aim[®] goals have been set in a number of new models, such as ACOs and patient-centered medical homes, the associated population health outcome measures have often been more clinical⁴⁰ rather than reflective of the broader measures of health and its determinants. The second category includes a number of evolving examples, some funded through the creative use of Medicaid and Medicare waivers, such as those recently granted to Maryland,⁴¹ New York,⁴² and Texas.⁴³

Examples in the third category—innovative financing vehicles—include:

- Affordable Care Act (ACA) requirements for nonprofit hospitals to conduct CHNAs and adopt implementation strategies with specific resources to address priority needs¹⁹;
- Recognition of the connection between healthy populations and strong, economically vibrant communities opening the door to access Community Reinvestment Act vehicles, such as Community Development Financial Institutions and Community Development Banks³⁷;
- The growing social capital movement, implementation of the first pay-for-success agreements (social impact bonds), and creation of new social mission corporate vehicles such as low-profit limited liability companies^{34,35};
- Use of program-related investments by philanthropic institutions as a complement to traditional grants³⁹; and
- Establishment of health and wellness trusts at the state and local levels, such as the Massachusetts Wellness Trust.^{38,44}

While a diversity of financial interests, structures, and objectives is valuable because it increases the

likelihood that a given intervention will be financed by an appropriate vehicle, it raises the unintended possibility of fragmentation and conflicting efforts. Simply implementing an uncoordinated series of intervention transactions will likely be neither effective nor sustainable. An important role of the community integrator is to avoid this fragmentation. To do this, it will need to implement a combination of complementary interventions that are tailored to each community's needs, generating a multiplier effect that results in positive community outcomes and achieves the goals of reduced disparities and better quality of life.

CHALLENGES AND CONCLUSIONS

Transitioning from an episode-focused, volume-driven healthcare system to an integrated system that supports population health by attending to both clinical care and the non-medical determinants of health will be challenging. To support change and sustain significant improvements in health at the community level, coordination of programs and policies at the federal level related to healthcare delivery and payment, public health, quality measurement, and financing will be of paramount importance.

The National Prevention Council⁴⁵—created through the Affordable Care Act and composed of 20 federal departments, agencies, and offices, including housing, transportation, education, environment, and defense—is a unifying federal body that can provide leadership, coordination, and support for the kind of long-term integrated planning, prioritization, and financing that will support and sustain change at the community level. Through the *National Prevention Strategy: America’s Plan for Better Health and Wellness*,⁴⁶ released in 2011, and the 2012 *National Prevention Council Action Plan: Implementing the National Prevention Strategy*,⁴⁷ the National Prevention Council continues to prioritize prevention across multiple settings to improve health and save lives. Stronger connections between federal financing and regulatory agencies, including the Department of Treasury and The Federal Reserve, could accelerate important links between health and innovative financing described in this paper. Existing federal initiatives—such as the “Partnership for Sustainable Communities,” an interagency partnership between Housing and Urban Development, Department of Transportation, and the Environmental Protection Agency⁴⁸; the Department of Health and Human Services’ “Birth to 5: Watch Me Thrive” initiative⁴⁹; and the Department of Defense’s “Healthy Base” initiative⁵⁰—could be examined as starting points for building collaboration, with an emphasis on those that already highlight cross-sector partnerships.

A key building block for emerging delivery and financing models is the ability to measure meaningful and timely health, quality, and cost outcomes at a population level across a spectrum of time horizons. Existing measures and datasets are not well developed and are not typically available at a local, census-tract level, limiting the ability to describe community-level health. They also focus more on short-term clinical and cost outcomes and less on non-medical processes and outcomes. Additional measures and analytic models are needed for use at the community level to address intermediate outcomes related to disease burden, patient-reported quality of life, long-term outcomes of quality-adjusted life expectancy, and the non-medical social determinants of health. Such analytic tools would also help to project long-term impacts and provide evidence to make a business case for population health, which is fundamentally different than demonstrating an impact on risk factors or specific conditions.

The business case for population health is complex and requires investments from multiple sectors that accrue over long periods of time. This requires a shift in focus, as population health programs have traditionally been evaluated on the basis of risk factor reduction—that is, whether an intervention changed

behavior—rather than on their combined health and financial impact. Current shared savings models, with a focus on medical expenditures on an annual cycle, do not fully capture the longer term benefits of effective population health interventions. Emerging financial mechanisms, including shared savings models and social impact bonds, will likely be more sustainable in the intermediate to long term when both the health and non-health sectors at the community level move closer to an outcome-oriented, population-based global budget. Without these elements, the risk is that new payment models will be established with a limited population health component.^{51,52}

Substantial developmental work and conceptual realignment is still needed to understand, prioritize, and finance efforts to improve population health. Broad-based, multi-stakeholder engagement of government entities, the healthcare delivery system, private investors, and communities can accelerate the development and testing of new and emerging models for improving population health. It will be important also to continue to test a broad set of interventions and sustainable financing vehicles for improving health, with successful models scaled up to the national level and lessons learned translated to private healthcare payer systems.

Examples of community-level innovation focusing on improving health and addressing and financing determinants of health are rapidly emerging. The private sector has initiated a number of community-centered programs to identify promising local initiatives, create learning networks, and disseminate best practices. Some examples include “The Way to Wellville,” an investor-sponsored contest by HICCup (Health Initiative Coordinating Council)⁵³; the “Moving Healthcare Upstream” collaborative funded by the Kresge Foundation⁵⁴; and “Escape Velocity to a Culture of Health,”⁵⁵ organized by the Institute on Health Improvement.

Given the focus of public health on geographically defined populations and on community and social service supports, the public health enterprise—including governmental public health departments, non-governmental public health organizations, and academic public health—should play an important role to help accelerate evolution toward a mature and integrated healthcare system. As the infrastructure, delivery, and financing of community and population health evolve, so will the role of the public health enterprise and public health departments.^{13,14} Public health and health departments should accelerate

strategic, collaborative partnerships with the changing community health system and with healthcare purchasers, payers, and providers and emerging shared-savings delivery models, building on early successes.³⁶ Public health has an important opportunity to exercise and strengthen its traditional roles of surveillance and epidemiology, measurement, evaluation, and the convening of key stakeholders, and adapt into critical new roles including policy design and a re-orientation of the health system towards prevention, health promotion, and wellness.^{13,56} Alignment of the changing health system and evolving public health role with accreditation of public health departments may also be an important step. One important near-term role for public health is to promote the use of tools to help communities and nonprofit hospitals conduct their 2015 community health needs assessments and implementation plans in a coordinated, collective impact-driven fashion. Such tools are being developed by CDC and will be publicly available in 2015.⁵⁷

While the number of private and public initiatives supporting system-level, integrated population health improvement is encouraging, a number of challenges will need continued attention, including:

As the infrastructure, delivery, and financing of community and population health evolve, so will the role of the public health enterprise and public health departments.

- Wider acceptance of the concept and implementation of a balanced portfolio, particularly support for interventions within the portfolio requiring a longer time horizon to achieve sustained outcomes;
- Better understanding of how to create and sustain a fully realized, credible community integrator that works from planning to implementation to evaluation and manages the financing of a balanced portfolio;
- Improved use of varied data sources, measures, and tools to facilitate the monitoring of complex and evolving community models and their intended short-, medium-, and long-term outcomes; and
- An improved ability for all key stakeholders, including public health, to articulate their individual added value towards true collective impact.

Sustaining attention to the evolving community-based delivery and financing models during this critical window of opportunity will be a challenge for the healthcare and public health fields, particularly in learning to collaborate with the private financial world on the financing innovations they are exploring.^{52,58} Ultimately, it will be imperative to align a broad range of financial resources with the needs of each community if we are to fully address the upstream social determinants of health and succeed in substantially improving population health.

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About this Series

The passage of the Affordable Care Act led to changes in the U.S. health care and public health systems. With both now positioned to place greater emphasis on better care, smarter spending, and healthier people, there is a tremendous opportunity to improve population health as more of the population is covered by health insurance. To support this change, the Centers for Disease Control and Prevention, Office of the Associate Director for Policy, in partnership with NORC at the University of Chicago, experts at the Milken Institute School of Public Health at The George Washington University, and Population Health Systems, have produced a series of issue briefs highlighting opportunities for public health to support health system transformation.

Each issue brief is designed to provide practical guidance to state and local public health departments and to health systems, highlighting specific opportunities for public health and health care to engage to improve population health. Additionally, the briefs include success stories to demonstrate how state and local public health practitioners can collaborate with the health system to catalyze health system transformation.

Disclaimer

The findings and conclusions in this report do not necessarily represent the views of the Centers for Disease Control and Prevention.

Suggested Citation

Hester JA, Stange PV, Seeff LC, Davis JB, Craft CA. Toward Sustainable Improvements in Population Health: Overview of Community Integration Structures and Emerging Innovations in Financing. Atlanta, GA: CDC; 2015. CDC Health Policy Series, No. 2.



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