Using Outcomes-Based Financing to Invest in Social Determinants of Health: A Guide for Policymakers, Funders and MCOs

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Organization
The Green & Healthy Homes Initiative (GHHI), founded in 1986, is a national 501(c)3 nonprofit, nonpartisan organization focused on creating healthy, safe, and energy efficient homes to improve health, economic, and social outcomes for low-income families while reducing public and private health care costs. Our Policy & Innovation Team is working across 15 states to scale sustainable financing models that address the social determinants of health for vulnerable populations with a focus on the intersection of health and housing.

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“An ounce of prevention is worth a pound of a cure” – Benjamin Franklin

Introduction

In 1735, Benjamin Franklin made the case for creating Philadelphia’s first firefighting organization by arguing that the prevention of a citywide fire was preferable to rebuilding a burned city from scratch.¹ His famous proverb – *an ounce of prevention is worth a pound of cure* – is equally applicable to U.S. healthcare in 2018. As the financing of our healthcare system has evolved into one of the most heated areas of partisan conflict, one concept that all sides are likely to support is that interventions that both improve healthcare outcomes and decrease the burden of rising healthcare costs on our public finances ought to be prioritized. It is with this principle in mind that the Green & Healthy Homes Initiative (GHHI) has focused on developing outcomes-based financing (OBF) models to fund preventive health interventions. This approach enables mission-driven funders to invest in prevention and limits repayment to interventions that achieve these dual objectives based on rigorous evaluation.

Our goal in this brief is to provide an overview of outcomes-based financing (also referred to as Pay for Success or Social Impact Bonds) for policymakers, impact funders and Medicaid managed care organizations (MCOs) that have an interest in leveraging this model to invest in preventive health interventions that target the social determinants of health (SDOH).² Our specific focus in this brief is leveraging these innovative financing models to fund interventions targeted at beneficiaries covered by Medicaid – a program that covers over 74 million Americans and serves many of the individuals who can benefit most from interventions that address SDOH.³ However, the approach can be adapted to other segments of the healthcare marketplace including Medicare and commercial insurance plans. At various points, we use the example of a comprehensive in-home asthma intervention⁴ to illustrate this financing model; however, it is crucial to note that this model can be applied to many other widespread and costly healthcare challenges in the U.S. today such as opioid addiction, diabetes and behavioral health.

The brief is structured around three topics:

- **The case for investing in social determinants of health**: Why invest in interventions that target SDOH? What key obstacles have historically limited these investments?
- **Leveraging outcomes-based financing to address the social determinants of health**: What is outcomes-based financing? What core challenges does it solve?
- **Outcomes-based financing and value-based care**: How does outcomes-based financing fit within the framework of healthcare system moving toward value-based care?

The Case for Investing in Social Determinants of Health

**Why invest in SDOH?**

Investing in SDOH offers a unique opportunity to achieve better health, economic and social outcomes with a high return on investment. Healthcare spending in the United States accounts for approximately 18% of G.D.P. and over $10,000 per capita.⁵ It has been well-documented in recent years that while this is twice the per capita average of other wealthy countries,⁶ the U.S. often ranks dead last among this same group of countries on critical health outcomes measures such as mortality rates, disease burden and hospital admissions for preventable diseases.⁷ **It is with this data as context that** the rationale for investing in “upstream” SDOH interventions that improve health outcomes and reduce medical expenditures becomes increasingly clear.
The social determinants of health are defined by the World Health Organization (WHO) as the “conditions in which people are born, grow, live, work and age.”^8 Important social determinants of health include the physical environment, economic stability, education and health behaviors such as exercise and diet.\(^9\) Multiple studies have concluded that SDOH are the most important factor in driving long-term health outcomes.\(^10\) According to a 2015 report published by the Blue Cross Blue Shield Foundation of Massachusetts, only 20% of health outcomes are driven by access and quality of traditional clinical healthcare services, while 60% are driven by SDOH.\(^11\) One telling statistic comes from a study that analyzed data from 2001-2014 and found that men in the top percentile of the income distribution had an average life expectancy over 14 years higher than men in the bottom percentile, while the gap among women was 10 years.\(^12\)

Research has demonstrated that there is a compelling economic case for targeted, evidence-based investments that address SDOH, particularly among high-utilizers of the healthcare system.\(^13\) To cite one example, the Camden Coalition of Healthcare Providers in New Jersey built a “medical home without walls” to reach out to the high-utilizers and “provide care to them in their homes, in homeless shelters, or even on the street.”\(^14\) As a result of the program, the monthly cost of care for the target population fell by over 56%.\(^15\) In spite of this evidence, the U.S. spends the overwhelming majority of its healthcare resources on treating disease rather than preventing it.\(^16\) As a case in point, in 2015, only 3% of U.S. healthcare dollars were spent on preventive services.\(^17\)

**Healthcare payment models: a traditional barrier to investing in preventive health**

Healthcare payment models in the U.S. have traditionally created one of the most significant barriers to investing in preventive health. Simply put, if health systems and community-based organizations do not receive adequate reimbursement for preventive services, they cannot sustain nor scale them to meet the needs of patients. Today, regulations continue to prevent direct reimbursement for services that fall outside of narrowly defined medical expenditures, even where – as in the Camden case above – those services are medically relevant and significantly reduce medical expenses for the target population. This issue is compounded by a time horizon problem – the principle that the costs of preventive health or other social service interventions start piling up immediately, while the health benefits and cost savings that flow from those interventions can take years or decades to be fully realized.\(^18\)

Asthma represents an excellent case study that illustrates the traditional challenges associated with investing in SDOH. In 2014, The Centers for Medicare & Medicaid Services (CMS) spent more on medical utilization for asthma patients than cancer patients in every single state in the country according to publicly available data tables.\(^19\) 40% of asthma medical utilization is directly attributable to the home environment\(^20\) and analysis by GHHI and the actuarial firm Milliman has shown that comprehensive in-home asthma interventions can dramatically reduce medical utilization among high-utilizers.\(^21\) Nonetheless, regulations have historically prohibited reimbursing Medicaid providers for addressing the home-based triggers of asthma directly because those services are not narrowly defined medical benefits. This creates a significant opportunity for alternative means of funding these services which is where OBF comes in.
Leveraging Outcomes-Based Financing to Address the Social Determinants of Health

What is Outcomes-Based Financing?
Outcomes-based financing agreements allow outside parties to fund interventions and receive repayment contingent upon successful outcomes. OBF models typically leverage third-party capital from mission-driven “impact investors” and philanthropies to provide upfront capital to scale an evidence-based intervention for a specific target population and then receive repayment if the intervention produces both better outcomes for the target population and economic value (often cost savings) that government or a healthcare payer values.

At GHHI, we have worked on a variety of OBF projects across the United States focused on addressing the social determinants of health. Although there can be some variation on a project-by-project basis, the Medicaid OBF financing model is typically a relationship between three parties: (1) impact funders, (2) a certified Medicaid provider (a provider authorized to receive reimbursement with Medicaid funds) and (3) a health plan (a Medicaid MCO). In some cases, the certified Medicaid provider may also subcontract with local community-based organizations or service providers to perform portions of the intervention. There are four steps involved in this type of financing arrangement (Exhibit 1):

1. The impact funder(s) provide an upfront investment to scale an intervention
2. The certified Medicaid provider implements an intervention that reduces healthcare utilization
3. The health plan pays the certified Medicaid provider from verified cost savings
4. The certified Medicaid provider repays the initial investment

This model is based on two fundamental principles: (1) the MCO only pays for successful outcomes, and (2) the MCO never pays more than its current costs.

Comprehensive in-home asthma interventions provide an excellent illustration of how the OBF model can be applied under Medicaid. To use a hypothetical example – after receiving a $1 million investment, a provider that has designed a program focused on reducing asthma triggers in the home scales up services in its local community. The intervention leads to fewer inpatient and emergency room visits, reducing net medical costs by $2 million dollars – far exceeding the costs of the original intervention. Based on its verified cost savings, the MCO pays the provider who in turn uses the payments from the MCO to repay the initial investment.
What are the advantages of using OBF to fund SDOH interventions?
In analyzing the Medicaid OBF model, the advantages become most apparent when viewing the benefits for each party to the transaction (Exhibit 2).

**EXHIBIT 2 | Who benefits?**

- **Beneficiaries**: Receive improved health outcomes at greater scale
- **Provider**: Obtains upfront capital that allows it to scale evidence-based programs
- **MCO**: Tests new models of care, shifts financial risk to the funders and only pays for what works
- **State**: Promotes the health of its residents and mitigates the burden of rising medical costs on state budgets
- **Funder**: Catalyzes social impact and receives a financial return if the project measurably improves health outcomes

In sum, this financing model solves a set of core challenges that have previously presented obstacles to funding preventive health interventions. Service providers need upfront capital to scale their services and OBF offers a mechanism for supplying that funding – and mitigating the time horizon problem – by leveraging the “future value” of those programs. By limiting Medicaid payments to interventions that rigorously demonstrate both improved outcomes and cost savings, the risk for MCOs and State Medicaid agencies is eliminated, creating a win-win situation. Ultimately, this offers mission-oriented funders an opportunity to supplement taxpayer-financed healthcare funds with private capital and provides an additional mechanism for moving healthcare payments in the direction of paying solely for what works.22

**Outcomes-Based Financing and Value-Based Care**

**OBF and value-based payments**

Among the most important trends in the U.S. healthcare landscape today is the transition from a fee-for-service to a value-based payment system. This represents a vital shift from reimbursing providers based on volume metrics – the number of patients seen and procedures administered – to reimbursing providers based on value measures such as health outcomes, quality metrics and cost-effectiveness. This shift to paying for value over volume or quality over quantity is evident in the current Medicaid managed care regulations which clear a path for leveraging OBF financing to fund preventive health interventions.

The Medicaid managed care regulations allow for states to require or enable MCOs to develop alternative payment models such as value-based purchasing (VBP) arrangements that pay for outcomes rather than the volume of services delivered. These outcomes may be generated from services that directly address the root causes of many of the costliest medical conditions. To continue with the example of an in-home asthma intervention, under the current Medicaid managed care regulations, MCOs and providers can enter into a value-based purchasing arrangement in which the provider is reimbursed based on a reduction in an asthma patients’ total cost of care. This allows the provider to implement services that address the root causes of this costly chronic condition and then be compensated based on the improvement in health outcomes.
We can see how a value-based purchasing agreement fits within the Medicaid OBF model by viewing the three agreements needed to execute a OBF transaction using Medicaid funds (Exhibit 3):

**EXHIBIT 3 | Contracting diagram**

A. **Managed care contract**: The contract between State Medicaid and the MCO that allows the MCO to make value-based payments for measured reductions in total cost of care or other health outcomes measures.

B. **Value-based purchasing agreement**: An agreement between the MCO and the certified Medicaid provider in which the MCO pays the provider for the program’s impact based on total cost of care or other health outcomes measures rather than the traditional fee-for-service model.

C. **Funders agreement**: An agreement between the impact funders and certified Medicaid provider that specifies the terms of repayment to the impact funders based on cost-savings or other agreed upon metrics.

**Key health policy implications**

As we consider outcomes-based financing within the context of a health system shifting to value-based care, there are three key health policy implications worth considering. OBF arrangements:

*Fit directly within a value-based framework.* Value-based payments are a growing percentage of healthcare spending across Medicaid, Medicare and Commercial payers. OBF helps to accelerate this trend by allowing outside funders to cover the upfront costs of evidence-based preventive interventions that can then be reimbursed based on a reduction in total cost of care or other health outcomes measures. Similarly, it serves to shift risk away from payers and State Medicaid agencies which allows for increased innovation in preventive health services.

*Allow states to address critical public health issues while continuing to secure Federal Financial Participation.* Using the Medicaid OBF model, states can help MCOs address SDOH while maintaining their Federal match. As a result, several states have now updated their VBP requirements to encourage investment in SDOH. For example, New York Medicaid requires certain providers to implement at least one SDOH intervention and specifically includes the example of implementing “home-based interventions targeted at improving air quality in the homes of asthmatics” in its value-based payment materials on addressing SDOH.

*Allow MCOs to invest in the health of their members while counting the value-based payments as medical expenses for the purposes of calculating Medical Loss Ratio (MLR) and future rate-setting.* Under the current
Medicaid managed care regulations, value-based payments count towards the numerator in calculating the Medical Loss Ratio, helping MCOs meet requirement that a specified percentage of the organization’s expenditures cover medical expenses. Similarly, many states now incorporate value-based payments into claims data used for rate-setting, ensuring that MCOs are appropriately compensated for investing in population health and avoiding “premium slide.”

**Conclusion**

Ultimately, at a time when there is increasing recognition of SDOH as a critical driver of health outcomes, OBF represents an important tool for accelerating investments in evidence-based preventive interventions that address SDOH in communities across the United States. These investments have the potential to improve health, social and economic outcomes while mitigating the burden of rising healthcare costs on American public finances. While we have used asthma as an illustrative case study, this model can be applied to other widespread and costly public health issues from opioid use to diabetes and behavioral health. The potential for mitigating these public health challenges while simultaneously moving U.S. healthcare payments in a direction of paying for outcomes instead of the volume of services delivered make outcomes-based financing an important tool in the current healthcare landscape.
Endnotes

2 For a full list of GHHI’s innovative finance resources more detailed list of resources, see: http://www.greenandhealthyhomes.org/get-help/pay-success
4 For a full list of GHHI’s publications and resources related to comprehensive in-home asthma interventions, see: http://www.greenandhealthyhomes.org/get-help/downloads
8 Word Health Organization Website, http://www.who.int/social_determinants/sdh_definition/en/, accessed June 4, 2018
10 Ibid.
15 Ibid.
20 Bruce P. Lanphear, “Residential exposures associated with asthma in US children,” Pediatrics 107, no. 3 (March, 2001)
21 Olson, “Utilizing Pay for Success”
22 Hamblin, “Key Considerations for Gaining Traction in Medicaid”
