Introducing Social Determinants of Health Through Medicaid

Expanding Upstream Interventions with Federal Matching Funds and Social-Impact Investments under the 2016 Medicaid Managed Care Final Rule

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Introduction

This Open Source Solutions paper analyzes asserted “legal constraints to using federal Medicaid funds as an investor payout source”\(^1\) for “social-impact investment”\(^2\) transactions under the 2016 Medicaid Managed Care Final Rule (also referred to as the Mega Reg).\(^3\) We explore how “value-based purchasing” (VBP) under the Final Rule encourages Medicaid Managed Care Organizations (MCOs) to increase spending on non-medical interventions that target patient- and community-related social factors and circumstances that are known as “social determinants of health” (SDOH). We then compare two funding options, MCO self-funding and outcomes-based, social-impact investment mechanisms such as “Social Impacts Bonds” (SIBs) or “Pay for Success” (PFS) contracts,\(^4\) with a particular focus on non-medical needs that are most salient in Medicaid populations.

This analysis considers three specific questions. First, to what extent does the Final Rule allow federal managed-care funding to pay for non-medical (primarily social) services and interventions? Second, will future Medicaid managed-care rates fall if prevention programs reduce health care utilization and cost? And third, does the Final Rule make SIB/PFS financing mechanisms—in which private sector capital could be used to fund a non-medical social intervention—more attractive than MCOs paying for SDOH projects directly from their own funds?

Outcomes-based funding might help accelerate the adoption of interventions that address social circumstances and other non-medical factors to an extent that has so far eluded federal and state efforts. Private investors would provide the up-front funding for the expansion of prevention, early intervention, and other social programs. In the case of interventions that environmental impact alongside a financial return.” Global Impact Investing Network, “What is impact investing?” available at https://thegiin.org/impact-investing/need-to-know/#what-is-impact-investing.

\(^1\) Paula M. Lantz et al., “Pay for Success and Population Health: Early Results from Eleven Projects Reveal Challenges and Promise,” Health Affairs (35, no. 11; 2016): 2053-2061.

\(^2\) Impact investments are “made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return.” Global Impact Investing Network, “What is impact investing?” available at https://thegiin.org/impact-investing/need-to-know/#what-is-impact-investing.


\(^4\) This paper uses the terms Social Impact Bond and Pay for Success, and their respective acronyms, SIB and PFS, interchangeably.
attempt to address health-related social factors, investors would get their money back with a financial return only if, when, and to the extent that the interventions reach or exceed agreed-upon outcome metrics. These could include reduced use of health care services, health-risk behavior change, and social metrics like housing stability, educational attainment and reduced recidivism, as well as cost savings.

However, economic and regulatory uncertainties have slowed the adoption of VBP reforms. Financial incentives could prove short-lived if reduced utilization and associated costs of medical care abruptly ratcheted down future reimbursement rates, a problem referred to as “premium slide.” In that event, MCOs might steer clear of complex regulatory opportunities whose value would diminish or expire after one or two rate setting cycles.

In Part I of this paper, we explore trends driving Medicaid’s efforts to “shift from volume to value” and the implications for federal payment of non-clinical services. Part II examines whether prevention-based savings from the effective use of VBP would “slide” MCO revenue by a corresponding amount. Finally, Part III considers outcomes-based funding options for health-related prevention and social welfare programs, and compares direct and third-party investment models.

**PART I: THE FINAL RULE AND VALUE-BASED PURCHASING OF NON-MEDICAL SERVICES**

Medicaid is jointly funded by federal and state agencies under approved “State Plans.” The federal share of Medicaid spending (about $350 billion annually) is the largest source of federal revenue to states and comprises almost 10% of the $3.7 trillion U.S. government budget. Beginning in 2014, Medicaid expansion under the Affordable Care Act (ACA) led to a dramatic increase in the number of patients on Medicaid, including those with complex health needs. To date, 33 states have expanded Medicaid to cover individuals under 65 years of age with incomes up to 133% of the federal poverty level, bringing total U.S. enrollment to 76.1 million. More than 15.1 million (19.8%) enrolled via the expansion, of which 11.9 million (78.8%) were newly eligible.

Medicaid spending is extremely lopsided, with 1% of beneficiaries accounting for 25% of total cost and 5% accounting for 54%. In this respect, Medicaid mirrors the broader U.S. health care system, in which 5% of patients—the so-called “high utilizers”—account for roughly 50% of total health care cost. In 2014, annual U.S. expenditures per patient averaged $47,498 for the top 5% and $264 for the bottom 50%. Much of that cost is attributable to inappropriate use of Emergency Medical System (EMS) and hospital Emergency Departments (EDs) in “non-emergent” circumstances.

In addition to the growth in the size and cost of the Medicaid program, there is a growing recognition that the social determinants of health—pervasive influences such as economic instability, inadequate housing and education, poor nutrition, and other environmental and community factors—have decisive impacts on health...
status over the life course. The Final Rule encourages MCOs to shift federal and state payments from “downstream” health care treatment after people become ill to “upstream” social services and prevention efforts (at both the individual and community level) that might keep beneficiaries healthy at lower cost.

Both trends are moving away from the previous Medicaid regulatory framework, which off-loaded much of the financial risk of furnishing health care for poor and low-income people from government agencies to private and nonprofit health insurance plans (Plans) and clinical care providers (Providers). Those rules generally discouraged Medicaid MCOs from spending health care dollars on programs and services from non-clinical providers that address non-medical factors such as food insecurity and housing instability.

Some market leaders are beginning to turn their attention to this systematic misallocation of resources. Kaiser Permanente recently announced a $200 million impact investment in permanent housing for chronically homeless individuals following a $20 million commitment by United Healthcare in 2016. On August 21, 2018, a national network of 17 large hospital systems (comprising 280 hospitals) led by AVIA launched the Medicaid Transformation Project “to identify, develop, implement and scale financially sustainable solutions that improve the health of underserved individuals and families in their communities.”

The Value-Based Purchasing Framework

An MCO is “an entity that has, or is seeking to qualify for, a comprehensive risk contract” with a state. A risk contract between a state and an MCO “(1) assumes risk for the cost of the services covered under the contract; and (2) incurs loss if the cost of furnishing the services exceeds the payments under the contract.” But if the MCO’s services cost less than the total amount authorized in the state contract, the MCO retains the difference as surplus revenue or profit.

Federal and state Medicaid agencies have enlisted private- and nonprofit-sector Plans and Providers to help deploy public funding in more cost-effective ways. Medicaid agencies set maximum payment amounts under “capitated” rates to cover the projected costs of (1) delivering health care services and (2) maintaining necessary business operations. MCOs can improve their financial performance by preventing or mitigating expensive chronic health problems.

The Center for Medicare and Medicaid Services (CMS) has been trying to turn Medicaid away from open-ended fee-for-service payments and toward value-based purchasing and incentives for quality improvement in new clinical settings. As earlier efforts attracted only limited adoption by states, Plans and Providers, the Final Rule offers MCOs greater inducements to work with community-based social programs and services that target SDOH.

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16 Ibid.

17 “Capitation” is a “payment model where a fixed payment—e.g., per member per month (PMPM)—is paid in advance of service delivery. This fixed payment is based on the average, or expected, costs of the population rather than on the services actually provided, which is the opposite of the fee-for-service (FFS) model.” Juliet M. Spector, Brian Studebaker, and Ethan J. Menges, “Provider Payment Arrangements, Provider Risk, and Their Relationship with the Cost of Health Care,” Milliman Society of Actuaries (2015), available at https://zdoc.site/download/provider-payment-arrangements-provider-risk-society-of-actua.html.
The Final Rule liberalizes funding authorizations for non-clinical prevention and early intervention programs that might decrease excessive utilization of more expensive and less effective health care services. That Medicaid, like Medicare before it, now “reimburse[s] health care providers for nonclinical services delivered outside clinical visits demonstrates both growing recognition of the importance of interventions that address social factors and the willingness of payers to support programs that include them.”

The updated regulations don’t directly reference SDOH, but CMS does so in a round-about way in the Preamble to the Final Rule published in the Federal Register (May 6, 2016). CMS declined to adopt SDOH-specific screening and quality requirements, but it commented that “[d]isparities and social determinants of health that contribute to patient complexity and disease severity would be appropriate considerations in developing the risk adjustment methodology” under the “rate development standards” in §438.5. Fed. Reg. 27577 (discussed below).

The relevant regulatory changes are collectively termed “value-based purchasing,” with the primary objective of shifting health care spending “from volume to value.” While neither new nor exclusive to Medicaid, the Final Rule modernizes VBP for today’s Plans and Providers, relative to earlier prototypes that “often put providers in conflict with their own traditional business models:”

A value-based model that incents minimizing the utilization of high cost facilities and procedures generally means lower revenue than its fee-for-service counterpart. The decision therefore to move to value-based purchasing puts many chief financial officers in a difficult position: accepting longer-term financial incentives in return for deliberately lower revenue immediately, which further stresses profits and potentially increasing credit risk.

The new rule is designed to be more responsive to specific patient population needs and more accommodating to the business strategies that Providers develop to sustain and expand their operations. As the chief medical officer of a large public health system put it, “At the end of the day, health care executives have to run the business ... If the work on social needs reduces utilization and emergency department visits, you start to find a business model that is effective.”

The Final Rule preserves the longstanding administrative practice of awarding special waivers and competitive innovation funds to authorize and support non-clinical interventions for Medicaid populations. However, and as explained more fully below, states and Plans now have two new policy tools: 1) Alternative Payment Models (APMs) are “intended to recognize value or outcomes over the volume of services;” and 2) Delivery System Reforms (DSRs) allow MCOs to pay for non-clinical interventions “in lieu of” medical procedures and certain “quality improvement initiatives.” Figure 1 depicts the range of options available and the relationships among them.

**Waivers and Innovation Funds**

Under the old rule, MCOs funded health-related innovations primarily by applying for federal waivers that sidestepped specific regulatory obstacles. Since 1981, Medicaid rules have authorized

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both “program” and “demonstration” waivers that allow states to explore alternative health care delivery and reimbursement systems of their own design, subject to CMS review. However, *ad hoc* Medicaid waivers are notoriously time-consuming and expensive to secure, and their widespread use has resulted in disconnected pockets of innovation across states. As authorized exceptions to an established regulatory plan, waivers are not intended to guide states in new policy directions, much less to catalyze systemic transformation. However, they could be useful as transitional opportunities “to test strategies and pay for services that help address health-related social needs resulting in poor health outcomes and higher costs.”25

“Innovation funds,” such as the State Innovation Model Program and the Health Care Innovation Awards, are another way CMS encourages innovation through time-limited competitive grants. The Final Rule has incorporated some of the most effective program models these grants incubated in the hopes of providing sustainable funding.

**Alternative Payment Models (APMs)**

APMs modernize compensation practices to make value-based purchasing more attractive to MCOs. As shown in Figure 1, federal and state Medicaid agencies can use three broad (and sometimes overlapping) categories of APMs to encourage MCOs to work with non-clinical providers to make upstream programs and services more

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widely available. In each case, payment adjustments are based on formulas for measuring health and financial outcomes contained in state contracts with MCOs.

**Bundled payments** are models in which “a targeted expenditure is established for a population (total cost of care) and a provider or group of providers are held responsible for quality and cost based on that targeted expenditure.” Bundled payments must return a portion of any actual costs incurred for serving a defined patient population that exceed an agreed benchmark. **Shared risk** (sometimes called gain-sharing) allows providers to participate in any net savings when actual costs for the patient population fall below an agreed benchmark. **Shared savings** allows providers to participate in any net savings when actual costs for the patient population fall below an agreed benchmark. States can fashion their own combinations of models to incorporate quality and performance incentives and penalties in their managed care contracts, including arrangements that withhold a portion of capitation payments until defined outcomes are achieved.

**Delivery System Reform (DSR)**

**Rate Setting Considerations:** Rate setting regulations provide the scaffolding for delivery-system reform by regulating how MCOs generate revenue and become self-sustaining enterprises. “[E]ach [MCO] contract must identify each service and specify the amount, scope, and duration of contractual coverage.”

The resulting “[c]apitation rates should [1] be sufficient and appropriate for the anticipated service utilization of the populations and services covered under the contract and [2] provide appropriate compensation to plans for reasonable non-benefit costs,” including necessary business operations.

The sufficiency of Medicaid rates is measured against the principal of “actuarial soundness”: “Actuarially sound capitation rates are projected to provide for all reasonable, appropriate, and attainable costs that are required under the terms of the contract and for the operation of the MCO ... for the time period and the population covered under the terms of the contract.”

Actuarial soundness is an exercise in line-drawing between expenditures for patient care and those that are not directly provided to Medicaid beneficiaries. Non-medical expenditures are recognized in the “non-benefit component” of actuarially-sound rates, upon which states cast a wary eye for any unreasonable costs that fall outside of the regulatory parameters.

Payments above the established rates or beyond their scope are generally not allowed. That’s how MCOs “assume financial risk” under Medicaid. By embedding DSRs within the approved managed care rates, the Final Rule provides broad latitude for MCOs to safely explore investments and reallocate funding as long as authorized spending stays under the rate ceiling. Consider how DSRs can keep SDOH spending within the approved rate caps.

**Covered Services:** It costs money to devise, test, adopt, and disseminate new and better ways of improving population health at reduced expense without disturbing ongoing operations. The Final Rule encourages MCOs to make those explorations by counting DSR investments in SDOH as “covered services,” rather than the closely-inspected “non-benefit component.” In so doing, CMS offers more breathing space for upstream thinking and orthogonal programs that deliver, for example, safe and affordable housing, personalized and accessible community supports and reasonably-priced nutritious food that might reduce excessive utilization of expensive medical care by Medicaid recipients, too often in EMS and ED settings.


31 §438.4(a)
Entrepreneurial MCOs now have more freedom to innovate at reduced financial risk, provided they meet prescribed health outcomes and quality standards. For present purposes, two kinds of delivery system reforms qualify as covered services that rate caps can accommodate: 1) “in lieu of” services and 2) “quality improvement initiatives.”

**In Lieu Of Services:** MCOs may cover non-clinical services delivered in non-clinical settings “in lieu of services or settings covered under the State plan,” provided the state finds that they are a “medically appropriate and cost effective substitute for the covered service or setting.” 32 Approved in-lieu-of services are considered “covered services” themselves, so capitated rates include their cost just as any other covered service: “The utilization and actual cost of in lieu of services is taken into account in developing the component of the capitation rates that represents the covered State plan services...” 33

As of March 2018, however, no MCOs had entered agreements with states to offer in-lieu-of services, largely due to difficulties in “defining the scope of permissible service substitution and accurately pricing such services.” 34 The first concern can be addressed by MCOs taking the lead on developing new intervention packages that take advantage of the VBP provisions to advance their business strategies. SIB/PFS financing could help overcome the latter concern by interrogating the social-impact capital market for a “price” at which investors would be willing to provide the necessary up-front capital in exchange for an agreed financial return (or range of returns) at an agreed time in future years.

**Quality Improvement Initiatives:** DSRs also cover the cost of non-clinical expenses that qualify as “quality improvement initiatives.” However, they do so indirectly as a percentage of the cost of covered services through a calculation known as the “medical loss ratio” (“MLR”).

“Medical loss” is industry jargon for diverting health care dollars from clinical to non-clinical spending. Under that lexicon, spending capped Medicaid dollars on things like housing or social services is considered a “loss” to “medical” services. The MLR is calculated based on the following formula:

\[
\text{MLR} = \frac{\text{Incurred Claims} + \text{Health Care Quality Improvement Activities} + \text{Fraud & Abuse Activities}}{\text{Premium Revenue} - \text{Taxes & Fees}}
\]

The Final Rule mandates for the first time that MCOs must maintain MLRs of at least 85%, i.e., at least 85% of net premium revenue (“the denominator”) must be spent on patient-care and related services (“the numerator”). The policy assumption is that actuarially sound rates start to wobble when more than 15% of after-tax revenues are dedicated to non-medical costs: the MLR “can be used to assess whether capitation rates are appropriately set by generally illustrating how those funds are spent on claims and quality improvement activities as compared to administrative expenses ...” 35

The old regulatory framework generally discouraged non-medical spending, but the new rules liberalize what falls within the 85% share. As applied to Medicaid Managed Care, quality improvement initiatives include “activities related to service coordination, case management, and activities supporting state goals for community integration of individuals with more complex needs ...,” 36 which would encompass many SDOH programs for high-utilizers of care.

The actuarial soundness standard affects both the price levels (capitated rates) at which states compensate MCOs, as well as the share (MLR) of federal and state Medicaid payments “lost” to non-patient care. But MLR doesn’t just limit how much MCOs can spend on non-clinical care, it also sets a floor under capitated rates: “Capitation rates must be developed in a manner so that managed care plans can be expected to reasonably achieve at least an 85 percent MLR.” 37

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32 §438.3(e)(2)(i).
33 §438.3(e)(2)(iv)(emphasis added).
37 CMS Fact Sheet, “Medicaid and CHIP Managed Care Final Rule (CMS 2390-F); Improved Alignment with Medicare Advantage and Private Coverage Plans” (April 25, 2016).
As shown in Figure 1, Quality Improvement Initiatives fall into three broad categories: 1) services in lieu of covered medical services; 2) financial incentives; and 3) withholds.

**In Lieu of Services (Redux):** It seems somewhat circular, but the same in-lieu-of services that qualify directly as “covered services” also count indirectly (via the MLR) as quality improvement initiatives if they meet the relevant requirements. Thus, the Final Rule authorizes payment for qualified substitutes for usual medical care in both MCO pricing levels (capitated payments) and the numerator of the MLR percentage.

**Incentives:** The Final Rule authorizes special payment provisions in state MCO contracts for “incentive arrangements,” defined as “any payment mechanism under which an MCO … may receive additional funds over and above the capitation rates it was paid for meeting targets specified in the contract.”

However, incentives above 105% of the approved capitation “will not be considered to be actuarially sound,” making them ineligible for Medicaid payment. Thus, the 5% cap significantly limits the amount of federal matching funds available for prevention spending programs that need up-front working capital, such as community paramedicine and supportive transportation. “Incentive payments in the Medicaid program are structured to reward MCOs for reducing the costs of covered services while maintaining quality. These small incentive payments were not designed to finance upstream social interventions outside of ‘medical assistance’ that produce later Medicaid savings.”

**Withholds:** The Final Rule defines a “withhold arrangement” as “any payment mechanism under which a portion of a capitation rate is withheld from an MCO … and a portion of or all of the withheld amount will be paid to the MCO … for meeting targets specified in the contract.” Unlike incentive payments that can breach rate caps, withholds simply defer payment of a portion of the capped rates. As with other covered services, the maximum capitated amount must include the full value of any withheld payments for quality improvement initiatives, with no adverse impact on maintaining the minimum 85% MLR standard.

Note that the definition of quality improvement initiatives excludes activities “which were paid for with grant money or other funding separate from premium revenue.” This language does not preclude social-impact investments.

“Premium revenue” is defined as state capitation payments and “[o]ther payments to the MCO ... approved under § 438.6(b)(3),” which governs quality improvement initiatives that make use of withhold arrangements. The State Plan and the MCO contract would have had to approve both the total premium amount and the withholding arrangement in advance, and the subsequent repayment would comprise the remainder of the premium revenue owed, but no more. Thus, within the current rating period, the quality-improvement activities would be funded entirely from “premium revenue.”

For example, suppose MCOs provided mobile integrated healthcare, such as community-paramedicine programs to improve chronic disease management in members’ homes, under an approved State Plan amendment that withheld a portion of Medicaid payments subject to a 3% reduction in hospital readmission rates. MCOs could cover the costs of those programs with their own reserves or with third-party investment, and Medicaid would reimburse those costs if and when the state determined the readmissions target had been met. In either case, total Medicaid payments would not exceed the capitated maximum amount, so the services would be fully funded by premium revenue. If the program cost exceeded the payment cap, Medicaid would not reimburse the MCOs for the additional costs whether they were covered by internal or third-party funds.
PART II: IMPACTS OF REDUCED UTILIZATION ON FUTURE MEDICAID MANAGED CARE RATES

Concerns have been expressed that the Final Rule might penalize MCO spending on prevention programs that work. Successful SDOH investments that reduced excessive utilization of clinical and emergency services could also reduce the MCO’s baseline cost of providing care to its members. Lower costs of care could eventually lead states to lower the corresponding capitated rates (premium slide). But premium slide should be manageable because the managed-care rate setting process does not move in lock-step with observed reductions in medical care utilization.

**Capitated Payments Within a Rating Period**

Figure 2 maps out the legal authorizations, contracts and flow of funds for VBP under the Final Rule. The process has three distinct phases that distribute VBP financial risks among states, MCOs and Providers, respectively:

- **Phase 1** provides authorization for VBP that aligns with state Medicaid policy and caps total funding. The process involves determining both the capitation rate and the total payments available for MCOs that adopt VBP arrangements.

- **Phase 2** involves states negotiating amendments to their MCO contracts that include specific VBP terms and conditions based on the total funds authorized in Phase 1. The contracts also set the capitated amounts for advanced monthly payments.

- In **Phase 3**, MCOs decide how to deploy the available funding among patient populations, including whether to use VBP arrangements for SDOH services upstream and downstream from medical care. MCOs negotiate amendments to their clinical provider contracts to include APMs and DSRs, with specific targets for care utilization, health outcomes and cost. MCOs or their clinical providers may contract with non-clinical providers of prevention and early intervention programs that might themselves assume financial risk within cost and quality parameters.

The rates developed under this process cover all medical and non-medical MCO spending within the applicable “rating period,” so MCOs keep any savings from approved VBP arrangements that reduce the cost of care below the approved rate cap: “because funds associated with delivery system reform or performance initiatives are part of the capitation payment, any unspent funds remain with the MCO .”

Thus, cost savings from prevention programs don’t reduce rates within an established rating period. To the contrary, managed care is designed to incentivize payers to reduce health spending below the cap without compromising quality. The Final Rule ensures that MCOs which successfully implement VBP to create more headroom under prevailing spending caps will reap the financial rewards.

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**Figure 2. Authorization, Contracts, and Funds Flows for Value-Based Purchasing**

<table>
<thead>
<tr>
<th><strong>PHASE 1</strong></th>
<th><strong>CAPITATED FEDERAL-STATE MCO PAYMENTS FOR VBP</strong></th>
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<tbody>
<tr>
<td><strong>STATE MEDICAID</strong></td>
<td><strong>Medicaid monitoring available (per FIP &amp; FMAP)</strong>&lt;br&gt;Approves VBP Amendments&lt;br&gt;Set actuarially sound capitation rate</td>
</tr>
<tr>
<td><strong>STATE PLUS</strong></td>
<td><strong>How MCOs can spend federal &amp; state funds (per Final Rule)</strong>&lt;br&gt;No SDOH risk adjustments</td>
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<tr>
<th><strong>PHASE 2</strong></th>
<th><strong>STATE-MCO ALLOCATE VBP RISKS</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>MCO Contracts</strong></td>
<td><strong>VBP Provider Contracts</strong>&lt;br&gt;<strong>VBP SDOH Contracts (w/MCO)</strong>&lt;br&gt;<strong>VBP Funding (by MCO)</strong>&lt;br&gt;<strong>VBP Funding (by Providers)</strong>&lt;br&gt;<strong>FUNDERS</strong></td>
</tr>
<tr>
<td><strong>MEDICAID MCO</strong></td>
<td><strong>MEDICAID MCO</strong>&lt;br&gt;<strong>VBP Provider Contracts</strong>&lt;br&gt;<strong>VBP SDOH Contracts (w/MCO)</strong>&lt;br&gt;<strong>VBP Funding (by MCO)</strong>&lt;br&gt;<strong>VBP Funding (by Providers)</strong>&lt;br&gt;<strong>FUNDERS</strong></td>
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**Note:** Adapted from Green and Healthy Homes Initiative, “Evaluating Medicaid Value-Based Purchasing Arrangements” (2017).

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Capitated Payments Across Rating Periods

Concerns about premium slide assume that subsequent rate setting proceedings would reduce capitated payments in line with reductions in the total comprehensive care cost resulting from the effective use of authorized VBP. While revised rates would continue to cover health-related VBP expenditures, it would be dismaying if the savings generated in the previous rate period would vanish in the next. “The shifting downward of MCO capitation revenue because of a successful [SDOH] ... intervention can be viewed as penalizing the MCO for prevention success, yet this is the only way for the public sector to actually save money in a managed care context.”46

But the new rules are clear that the state’s authority to lower the payment ceiling is subject to a painstaking process that isn’t designed for speed or rubber-stamping:

Disparities and social determinants of health that contribute to patient complexity and disease severity would be appropriate considerations in developing the risk adjustment methodology. We [CMS] maintain that the reference to generally accepted actuarial principles and practices in §438.5(g) is sufficient to address the application of such considerations in the risk adjustment methodology.47

While the potential for premium slide can’t be dismissed altogether, several factors are likely to substantially attenuate or even eliminate its downward pressure on future rates.

First, capitation covers aggregate spending across discrete enrollment categories (rate cells), so prevention-based reductions in health care utilization in one or more cells might not cause a ripple in aggregate spending. “If an MCO reduces its costs below the capitation rate, the state may not necessarily have to reduce the rate accordingly, including if the costs of care were not reduced for most persons in the broader Medicaid population.”48

Second, the Final Rule has been in effect for just two years, and only a handful of states have started to include SDOH considerations in prospective risk adjustments. In similar instances, CMS has discouraged states from making hasty and unverified changes to approved rates:

We agree that determining the amount of the withhold that is reasonably achievable requires the actuary to exercise judgment.... If neither the state, nor actuary, can provide any evidence or information that managed care plans can expect to earn some or all of withhold, the appropriate course would be to take the most cautious approach and assume that none of the withhold is reasonably achievable.49

Third, CMS requires states to submit a new rate certification whenever VBP contract amendments change rates or rate ranges.50 Rate determinations and adjustments are highly fact-specific, based on encounter and outcomes data collected from a class of managed-care plans with comparable contracts within each state: “Each adjustment must reasonably support the development of an accurate base data set for purposes of rate setting, address appropriate programmatic changes, reflect the health status of the enrolled population, or reflect non-benefit costs, and be developed in accordance with generally accepted actuarial principles and practices.”

Since states must secure “written approval [from CMS] prior to implementation”51 of any VBP arrangements, premiums should not slide between rating periods unless and until the following ordered conditions have been met:

In Phase 1:

- State actuaries have reliable “base data” on existing VBP service cost, utilization and delivery; and
- State actuaries understand the current and future impacts of VBP on enrollee health status, service quality and cost; the underlying base data; the expected...

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46 Lantz, “‘Pay for Success’ Financing and Home-Based Multicomponent Childhood Asthma Interventions.”
51 §438.6(c)(2)(emphasis added).
performance of APMs and DSRs; and the potential need for risk adjustments.

In Phase 2:

− State Medicaid agencies adopt new VBP policies and negotiate State Plan Amendments with CMS; and

− MCOs renegotiate their state contracts for implementation of authorized VBP in accordance with the amended State Plans.

And fourth, premium slide assumes that VBP is effectively “one and done,” such that the Final Rule confers hard-earned financial rewards on MCOs during one rating period only to reclaim them in the next and thereafter. But CMS understands the futility of ephemeral incentives: “We appreciate that success of value-based purchasing models or other delivery system reforms are predicated on the readiness of affected parties—namely, managed care plans and affected providers—to undertake the operational and other considerations to implement and sustain these approaches.”

Thus, federal and state Medicaid agencies must weigh the immediate gratification of a possibly short-lived windfall against the risk of slowing the market-wide uptake of VBP. Until CMS, states, and Plans factor SDOH in risk adjustments and payment algorithms, one-time cost reductions alone should not justify precipitate rate changes that would further deprive MCOs of the financial resources they need to serve income-eligible and medically-needy populations.

PART III: FUNDING HEALTH-RELATED PREVENTION AND SOCIAL WELFARE PROGRAMS

The foregoing analysis confirms that “[t]he new managed care regulations provide a path forward for value-based purchasing arrangements between managed care providers and their sub-contracted service providers, which is inclusive of health-related social-service providers.” But while MCOs have more freedom to design, negotiate and adopt VBP practices in their state Medicaid contracts, concerns about business and financial risks have slowed their adoption.

The Final Rule “allows for value-based purchasing agreements that leverage a combination of outcomes-based payments with Pay for Success financing, so long as the approved value-based purchasing agreement is included in the contracts between the respective state and their managed care providers, ensuring Federal Payment Participation (FPP) at existing levels.”

So we turn to our third question: do those regulatory changes make social-impact investment financing more attractive to MCOs, especially when it comes to scaling SDOH programs commensurate with unmet population needs? If so, how does the investment model stack up against self-funding that some MCOs can pursue on their own?

Self-Funding Social Interventions

Broadly speaking, MCOs could (1) use their own reserves to pay for SDOH programs, (2) take out conventional loans from commercial or subsidized sources (such as community development financial institutions and foundations offering mission- and program-related investments), and (3) raise outcomes-based funding from socially-minded investors.

MCOs with strong financial reserves might rationally decide to self-fund SDOH spending. Their business model of taking financial risk for providing medical care to low-income, high-risk populations with capitated revenue should give them a head start for doing the same with non-medical care. Self-funded prevention projects could be developed faster and at less cost than structuring investment transactions, and MCOs wouldn’t have to share any savings with investors.

However, it takes time and effort to find effective social interventions, estimate their costs and project their potential impact on future health care utilization. So does managing their implementation or contracting with small community-based organizations (whose own funding may be precarious) and managing their cost and performance. Some CFOs might prefer to off-load some of the performance and investment risk to a dedicated team of outside experts with experience

54 Ibid.
developing outcomes-based funding projects and raising third-party capital. MCOs could also tap the commercial or nonprofit loan market, but this would add transaction cost thereby reducing projected savings.

Forward-thinking MCOs have already begun developing SDOH projects, but the above considerations have reduced their size and shortened their duration, leaving a scattered field of tentative and incremental efforts. For example, while community health workers (CHWs) can improve people’s health, lower health care costs, and address health disparities, “a lack of sustainable funding is a barrier to expanding CHW programs and integrating them into the health care system.”

Without additional working capital, the prospects for MCOs directly scaling effective prevention services commensurate with unmet population needs over a reasonable time horizon seem daunting.

On the other hand, emerging research provides growing encouragement that some health-related social and environmental programs improve health and save money. The Final Rule has the salutary effect of reducing the risks that MCOs might lose the federal share of Medicaid funding for the ongoing cost of SDOH programs, or that resulting reductions in utilization levels alone might trigger premium slide.

The business question for MCOs is whether they can deploy effective social interventions that improve population health and reduce total cost of care by an amount that exceeds the cost of service provision. Implementation risk should inform the MCO’s choice between shifting some portion of their ongoing health funding to non-medical services, or maintaining current funding allocations and securing new sources of funding dedicated to SDOH investments.

**Social Impact Bonds and Pay for Success Contracts**

The availability of sustainable funding is an important consideration in any type of intervention addressing complex social factors and circumstances. To that end, SIBs and PFS contracts are gaining traction as a potential complement to direct government funding for social welfare programs. These emerging financing mechanisms invoke Ben Franklin’s adage that “an ounce of prevention is worth a pound of cure.” In this model, social-impact investors provide the up-front working capital to increase the supply of interventions, programs or services that target populations and outcomes of mutual interest to all parties.

Social-impact investment contracts “monetize” those expected future savings—that is, make them financially valuable years before they actually materialize—by having “payers” agree to pay back the investors’ principal plus a reasonable rate of financial return if, when, and to the extent the savings do arrive. If utilization and the cost of care don’t fall by an amount agreed in the financing contract, the payers owe nothing and the investors lose some or all of their principal. Thus, government agencies only “pay for success” because the social-impact investors assume full financial risk subject to carefully measured and independently evaluated outcomes.

By their nature, social-impact investments are burdensome undertakings. Deal formation entails a delicate balancing act in which investors agree to provide capital up front if and only if the payers agree to repay them at the end of the contracted period. In addition, SIBs and PFS contracts are designed to be multi-year investments so that project planners and working groups can rely on sustainable funding over the entire period considered necessary to develop, implement, and improve prevention and early interventions programs that could have a material impact on the well-being of beneficiary populations and the cost to serve

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them. The average duration of a U.S.-based SIB/PFS project has been about 4.5 years.\textsuperscript{58}

In most cases, a government sponsor engages an intermediary organization to assess the feasibility of a social-investment transaction by projecting program costs, health impacts and savings; handle provider contracting and formation of one or more working groups from among the stakeholders; structure an investment transaction that culminates in raising multi-year capital under agreed terms and conditions; and manage the deployment of funds and provider performance, pursuant to the negotiated terms of the investment agreement.

All SIB/PFS projects that have launched globally have funded interventions that address SDOH.\textsuperscript{59} Indeed, through 2017, 32 SIB/PFS project worldwide raised well over $100 million for supportive housing interventions, nurse home-visiting programs, intensive family therapies, and prevention and management of asthma, diabetes and other chronic conditions.\textsuperscript{60} “The vision here is that PFS can increase attention to and investment in the social rather than medical determinants of health by creating new, attractive avenues for private investments in programs and services that both improve population health outcomes and allow governmental entities to achieve greater value and efficiency in the allocation of public resources.”\textsuperscript{61}

For example, the Green and Healthy Homes Initiative (GHHI) has launched a National Asthma PFS Portfolio comprising 11 demonstration projects that are exploring investments in evidence-based programs to mitigate environmental asthma triggers (allergens and irritants) in homes, improve health outcomes and reduce the cost of care. GHHI relies on three cost-benefit studies showing that “home-based multi-trigger, multicomponent environmental interventions” produced savings from averted costs of asthma care and improvement in productivity that returned $5.30 to $14 for each dollar invested.\textsuperscript{62} A recent economic analysis of the asthma intervention confirmed that “the savings from the predicted reduction in ED visits and hospitalizations are greater than the costs of delivering the intervention.”\textsuperscript{63}

In South Carolina, federal and state Medicaid agencies are supporting a PFS project to expand the Nurse-Family Partnership program across the state. The project was launched under a Section 1915(b) Medicaid waiver that was approved before the Final Rule went into effect. Medicaid funds are being used to pay for the delivery of NFP services, and any savings from reduced health care costs will be recycled into further program expansion.\textsuperscript{64}

\section*{Comparing Funding Approaches}

The potential advantages of self-funding seem obvious. MCO direct funding should be much simpler, with no need for an intermediary or an evaluator, much lower transaction costs, complete control over spending and program choices, and retention of all savings. But implementing cost-effective prevention programs is quite difficult, and most evidence-based programs rarely scale to an extent that measurably affects population health.

Moreover, while self-funding might be the path of less resistance, it could also be the path of slowest progress. Coding practices, other administrative requirements, the long waiting time for savings to materialize, and the difficulties inherent in public-community collaborations and partnerships are likely to inhibit the

\begin{footnotes}
\item[61] Lantz, “Pay For Success And Population Health” (2016).
\item[63] Lantz, “‘Pay for Success’ Financing and Home-Based Multicomponent Childhood Asthma Interventions” (2018).
\end{footnotes}
adoption of prevention and early intervention services.65 “Ambitious payment reforms are difficult to achieve when community providers lack experience with alternative payment methods and the information and management infrastructure necessary to manage financial risk.”66

By contrast, an experienced intermediary organization (like GHHI) should have both program expertise and market experience to manage health-related interventions and develop more robust financing models and projections. Unlike MCOs that spend their own funds, intermediaries must develop financial transactions that satisfy investor due diligence and provide returns that are large enough relative to alternative investment opportunities to attract the capital needed to fund the entire multi-year project. MCOs would have to decide whether the net return on investment after transaction fees and other legal and evaluation costs have been covered are worthwhile relative to self-funding.

At the same time, a potential shortcoming of social-impact investments in SDOH is that interventions must have a rigorous evidence base and demonstrate cost-savings or cost-effectiveness in a relatively short time period. Indeed, “using a PFS initiative to demonstrate the effectiveness or proof of concept of a novel intervention is ill advised.”

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.67

We have identified a number of interventions that are suitable for SIB/PFS financing based on a previously developed set of criteria.68

In general, choosing appropriate interventions requires thoughtful consideration of the strength of the intervention, the appropriateness of outcome metrics, and the political and social climate of the jurisdiction. Table 1 lists a sample of interventions that fit these criteria.

| Table 1. Health-Related Social Interventions Suitable for SIB/PFS in Medicaid Populations |
|---------------------------------|---------------------------------|
| Multisystemic Therapy and Functional Family Therapy |
| Home-based multicomponent asthma interventions |
| Long-Acting Reversible Contraception (LARC) |
| Nurse-Family Partnership |
| Medication-Assisted Treatment (MAT) for opioid use disorder |
| Permanent supportive housing for chronically homeless |
| Short-term critical housing interventions |
| Diabetes Prevention Program |

The Final Rule provides that state-directed payment arrangements cannot be renewed automatically beyond a fixed period of time, which CMS generally interprets as one year.69 This provision ensures that APM outcomes are evaluated before they are continued in the next rating period. But this could be incompatible with PFS projects, which typically run between 3 and 7 years and include time for project mobilization and launch, course corrections based on interim results, and evaluation of short-, medium- and sometimes long-term results.

Fortunately, CMS allows multi-year delivery system reforms to include single-year APMs, provided states first obtain written approval from CMS.70 “[S]tates can develop

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69 §438.6(c).

70 Department of Health and Human Services, Centers for Medicare & Medicaid Services, “Section 438.6(c) Preprint” (July
payment arrangements that are intended to pursue delivery system reform over a fixed period of time that is longer than one year. For example, states that have multi-year delivery system reform initiatives may want to pursue approval of a multi-year managed care directed payment arrangement that is commensurate with the length of their delivery system reform initiative.”

The larger problem remains the reluctance of states and Plans to forsake waivers and innovation funds in favor of broadly adopting VBP across health care systems. While some publicly- and privately-funded demonstration projects are underway, the stubborn problem of scale remains: how do effective social innovations become widely available to eligible populations?

The honest answer is that scale rarely happens. Incremental growth is progress, of course, but widespread chronic conditions and health crises such as asthma (affecting 25 million people at an annual cost of $56 billion), diabetes (30 million people at $245 billion), and opioids (between 17,000 and 32,000 overdose deaths at $504 billion) must be subdued.

SIB/PFS projects have generally been government-led, which can facilitate stakeholder buy-in but also can slow development time (particularly if procurement rules are followed) and increase transaction risk. A jumble of more than 80 federal programs has proved largely impervious to performance and cost-control efforts:

Table 2 summarizes the relative advantages and disadvantages of the two approaches to funding prevention and social welfare programs. In the short term, well-financed Medicaid MCOs might prefer to develop their own SDOH projects, contract out for any services beyond their in-house expertise and capacity, and keep all the savings. In the long term, market-driven investments with dedicated intermediaries at the helm could reduce MCO risk and increase the potential for greater spending on service-delivery infrastructure and data collection. Mainstream capital markets have effectively unlimited capital for follow-on funding rounds if investors deem earlier transactions to have been successful.

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72 Steven H. Goldberg, Billions of drops in millions of buckets: Why philanthropy doesn’t advance social progress, John Wiley & Sons (2009).


76 “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. 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.” Goldberg, “Scale Finance” (April 2017).

## Table 2. Comparing MCO Direct Funding and Social-Impact Investment

<table>
<thead>
<tr>
<th>MCO SELF-FUNDING</th>
<th>SOCIAL-IMPACT INVESTMENT</th>
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<tbody>
<tr>
<td><strong>Business Case</strong></td>
<td></td>
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<tr>
<td>MCOs have expertise in managing financial risk under capitated payments, but might not have the capacity to support a large SDOH expansion without adding staff or contracting out</td>
<td>Intermediaries have dedicated expertise and can add staff for feasibility studies and transaction structuring as needed</td>
</tr>
<tr>
<td>MCOs should look for intermediaries with specific subject-matter and regulatory expertise</td>
<td>MCOs should look for intermediaries with specific subject-matter and regulatory expertise</td>
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</table>

| Capital-Raising |                          |
| Should be simpler, faster and cheaper for MCOs to spend within their own balance sheets | Social-investment capital markets have effectively unlimited funding capacity for well-designed transactions and growth plans |
| Project size and scope limited by the amount of internal funding available | Intermediaries have extensive and active investor networks in place |
| Third-party investors might require legal opinion on regulatory compliance (e.g., meaning of “premium revenue”) | Third-party investors might require legal opinion on regulatory compliance (e.g., meaning of “premium revenue”) |

| Contracting & Governance |                          |
| As market-led initiatives, MCOs can develop and manage their own business arrangements with SDOH service providers | As government-led initiatives, most SIB/PFS projects follow public contracting and procurement law; project formation and contracting generally take 18 months or more |
| MCOs might need to add staff or contract out for additional capacity | Intermediaries have dedicated capacity for project governance & management |

| Transaction Costs & Net Savings |                          |
| MCOs have low transaction costs and larger potential net savings | Substantial fixed costs for legal advice, third-party evaluation and intermediary fees |
| Increased costs limit deal sizes and potential net savings | Increased costs limit deal sizes and potential net savings |

| Program Risk |                          |
| MCOs can propose any social innovations that meet the Final Rule criteria (e.g., DSR services “in lieu of” clinical care must be “medically appropriate and cost effective substitutes”) | Social-impact investors exert market discipline through a modified due diligence process that assesses evidence base |
| Weight MCOs give to evidence base is discretionary and may be secondary to business and mission value | Level of evidence affects breadth and depth of investor pool: mainstream (fiduciary) investors need complete and reliable data to make informed decisions; (non-fiduciary) social-impact investors can accept greater uncertainty |

| Performance Management |                          |
| Resource availability drives project size, outcomes and savings; while project size, outcomes & savings drive performance management resources | Risk management capacity over the life of the project affects the size and composition of the investor pool because outcomes-based funders are deeply interested in ongoing performance management |
| At project launch, MCOs must dedicate sufficient staffing and other resources for high-fidelity implementation of evidence-based programs | Intermediaries develop dedicated risk-management resources and expertise to cultivate prospective investors and secure follow-on funding |
| MCOs also need capacity to manage ongoing performance and make course corrections relative to long-term health and financial outcomes | Performance management aligns all stakeholders on health outcomes and cost reductions |
| Fewer resources engender incremental rather than step-change growth for population health | Fewer resources engender incremental rather than step-change growth for population health |

| Investment Risk |                          |
| Assuming compliance with VBP provisions, the Final Rule mitigates MCO financial risks by securing full federal matching funds and reserving net savings for MCOs | The social-impact investment mechanism is designed to rigorously assess the feasibility of multi-year investments in high-quality prevention and early intervention programs; structure sound, outcomes-based financial transactions for program expansion; and raise third-party capital |
| MCOs have expertise and capacity to estimate potential savings and compare internal rates of return for alternative spending choices | After project launch, performance management mitigates investment risk |

| Scaling Potential |                          |
| Successful pilot projects competing for scarce internal resources are likely to grow slowly and incrementally | Subject to program effectiveness and cost savings, intermediaries can design feasible and financeable SDOH investment projects at population-health levels |
| Spending horizons constrained by MCO budgets and Medicaid rate setting cycles | Social-impact investors have investment horizons suited to 5-10 year initiatives |
One of the authors of this paper has proposed an advanced SIB model called “Scale Finance,” in which social entrepreneurs and mainstream (not just social-impact) investors would take the lead on: 1) developing feasible and financeable expansion plans and 2) lining up large, albeit provisional funding commitments (roughly $50 million and above over 5-10 years), before 3) offering to negotiate the investment opportunity with competing government jurisdictions that meet screening criteria for advantageous partnerships (“reverse procurement”).

**PART IV: CONCLUSIONS AND RECOMMENDATIONS**

Our first policy question asked whether and to what extent the Final Rule allows federal Medicaid managed-care payments to be used for health-related spending. The foregoing analysis shows how the Final Rule gives MCOs greater latitude to use federal and state Medicaid funds to pay for non-medical interventions targeting SDOH in order to improve the health of income-eligible beneficiaries at reduced cost—particularly “high-utilizers” with complex but manageable conditions. It does so by broadening the scope of “covered services” to include socially-focused programs “in lieu of” clinical services and eligible “quality improvement initiatives,” and by sweetening the terms of risk-based payments. These provisions are sufficiently clear that MCOs shouldn’t hesitate to explore new business practices.

As to our second question, even if successful SDOH programs cause premiums to slide, rate reductions are likely to involve a slow and measured process that considers many factors beyond last year’s observed cost of care. Here, too, additional regulatory guidance isn’t necessary, since CMS recognizes that MCOs aren’t likely to make long-term upstream investments for short-term gains.

The answers to our third question about the choice between self-funding and third-party investments are less clear. There appear to be compelling business opportunities at hand for both approaches, with the primary differences relating to MCO capacity, expertise, and available up-front funding. Socialimpact investment likely offers greater working capital and dedicated project management resources, but at increased transaction cost and reduced net savings for MCOs after investors are paid. Which approach makes more sense can only be determined by undertaking feasibility studies and pilot projects for specific enrolled populations under particular State Plans and MCO contracts.

But the notion that “payers can’t control costs without [a] social determinants of health model” is starting to take hold. The discussion has “evolved beyond isolated pilots or community benefit dollars to addressing those factors in a sustainable, scalable way.” Medicaid probably can’t significantly improve the health of hundreds of thousands of high-needs patients or abate an unsustainable cost trajectory unless states, Plans and Providers take the initiative:

Collecting better data on the impact of these programs is crucial, but providers report that obtaining funding to gather such information and pursue research can be difficult. Nonetheless, given compelling evidence of links between social factors and patient health—and growing evidence of the success of interventions that address patients’ unmet social needs—many providers have concluded that investing in such interventions will in fact improve health outcomes and lower costs. In short, they are not waiting for the final piece of evidence. The Final Rule provides fertile ground for enterprising MCOs to proactively pursue VBP arrangements that support the broad expansion of SDOH programs and services. At a time when “the research demonstrating social determinants’ impact on health outcomes is piling up to a point where the healthcare industry can’t ignore it,” innovative models and providers are responding to the increased demand and the pervasive implementation and financing challenges they present. If the market responds energetically enough, the Final Rule might finally “punctuate the equilibrium” in the long-awaited evolution of managed care for high-needs, low-income populations.

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81 Ibid.
82 Examples include new think tanks and testing laboratories (the Blue Cross Blue Shield Institute and AVIA’s Medicaid Transformation Project), new business models and social enterprises (Oregon’s Coordinated Care Organizations, Humana’s Bold Goal, Iora Health, Solera Health, City Health Works, and Socially Determined), and digital “pure plays” (Onduo and Omada Health).
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