Outcomes-Based Payments
How to Pay for What Works in Public Health

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Abstract
The Green & Healthy Homes Initiative (GHHI), founded in 1986, is a national 501(c)3 nonprofit, nonpartisan organization that provides evidence-based direct services and technical assistance to create healthy, safe and energy efficient homes to improve health, economic and social outcomes for low-income families while reducing public and private healthcare costs.

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Executive summary

Paying for what works in a systematic manner can create an effective mechanism to transition from volume to value by allowing managed care providers to align their payments to service providers with the value those services create.

The payment transition from volume to value has the aim of improving health outcomes while reducing costs. States can advance this mission including value-based purchasing arrangements in their contractual relationships with managed care providers, especially those that leave room for the managed care providers to innovate regarding service-delivery and payment. These open programs can allow for service delivery innovation that supports the triple aim of improving the health outcomes, experience, and cost of care by arranging for payments based on outcomes. For example, managed care organizations can move from paying for the cost of delivering services to paying their service-providing subcontractors based on the marginal impact their services have on medical utilization costs. This document details the mechanism those managed care providers can use to integrate these programs into the existing medical claims and encounter records system to ensure appropriate documentation and accountability for these programs that can bend the managed care cost curves, improve quality, and deliver the best patient experience.

Current rate-setting practices are based on historical fee-for-service rates that the state recalculates frequently enough for financial assurances, but has the unintended consequence of creating negative incentives for long-term investment. Payments from managed care entities to their subcontracted service providers form the basis for the following year’s managed care compensation. Should a managed care provider make such an investment, in the subsequent redetermination of compensation, their state will likely lower their payment to the managed care provider. By doing this, the state removes the incentive for long-term preventative care measures because they claim the entirety of subsequent savings rather than allowing repayment of the investment or benefit to the managed care provider, which would have incentivized innovation.
By enabling outcomes-based payments, managed care providers can move to offer more advanced and comprehensive strategies for care management that include innovations in service delivery models. Those innovations can, for example, target the social determinants of health, leverage community or other supportive services, and effectively address chronic conditions that lay beyond the traditional continuum of care and reduce the cost-burden of publicly-financed healthcare by improving health.

This document will present the conceptual solution to these issues. It will then transition to using outcomes-based payment mechanisms as a component of a compensation arrangement that aligns (1) the financial interests of managed care providers with (2) health and reduced financial need of the public. This alignment will enable every managed care provider to lead their own experiments in service delivery, when contractually approved by their State and CMS. The volume of these programs, through inherent variations, will advance service delivery innovation faster than any centrally led program could alone, by allowing state and federal partners to scale proven programs while verifying the results.

Framework for determining and making outcomes based payments

- **Step 1 – Establish Baseline**: Determine the expected basket of services needed absent any intervention and set this equal to one outcome measure.
- **Step 2 – Establish Comparison**: Determine what comparison is appropriate to determine payment. Options include setting targets, historical references, historically-based forward-looking projections, ongoing comparison to a comparison group, or other methods as appropriate.
- **Step 3 – Evaluation**: Determine the impact that the program has had on the specified outcomes of the participants using the set comparison.
- **Step 4 – Outcomes Documentation**: Enter the evaluation outcome in the charge record using a program specific code. This charge code should include a modifier representative of improvement in outcomes that were shown to have been abated, improved, or otherwise affected for record-keeping and analysis.
- **Step 5 – Payment**: The managed care entity would transfer the funds in accordance with the charge record to the appropriate parties.
This process would give managed care entities a new tool in the transition from volume to value, while allowing them to invest in the long-term health of their populations in ways that meaningfully bend the cost curve for publicly-financed healthcare systems. Further, this would allow a charge record to be used in actuarial calculation in accordance with regulation and CMS guidance. It would include a record of the payment, its type, a reference to the program, and a factor that could be used in the adjustment of risk for the party in any subsequent analysis.
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Overview

Outcomes-based payments can be a valuable tool in the transition from volume to value and can be enabled under existing authorities with a basic technical framework.

In the transition from volume to value, many organizations are seeking to innovate in ways that develop new tools for making value-based payment that meaningfully impact health and lower the cost of care, especially for vulnerable and high-risk populations. One such tool that can assist in this endeavor is outcomes-based payments, which fall under the authority of value-based purchases that either share savings or risk for specific population and may include performance elements for outcome measures, usually tied to the total cost of care. There are two current barriers. First, a lack of precedent has led to hesitance to adopt these advanced value-based purchasing strategies. This includes a lack of well-developed mechanics and absent precedence for the appropriate inclusion of outcomes-based payments into rate determinations for the outcomes-based payment.

This paper sets forth to (1) develop the concept of paying for outcomes under the existing authorities, regulations, and standards of publicly-financed healthcare systems and (2) demonstrate the application in theory through example.

CMS and their affiliated state agencies can rapidly accelerate the transition from volume to value and catalyze innovations across Medicare and Medicaid programs by establishing a precedent for outcomes-based payments. When managed care contracts can be amended to include outcomes based payments for programs that seek to demonstrate innovations in service delivery, each managed care provider will be incentivized to work with local service providers to improve the value of care by improving health outcomes, their patient’s experience, and do so for lower costs.

All that is required is for an appropriate agency to issue an informational bulletin that states that:

“Under existing authorities, value-based purchases that share savings or risk utilizing outcomes-based payments that are included or referenced in the contracts of managed care providers should be included in the determination of appropriate rates under the rules and guidelines of actuarial soundness as if they were traditional state plan services.”
Paying for Outcomes

Outcome-based payment mechanisms can be leveraged to create economic opportunity and incentives to improve the value of care through innovations in service delivery.

An outcomes-based payment is any compensation arrangement where a measured effect determines payment rather than the performance of a duty, often intended to cause the desired effect. For example, consider asthma patients’ relationship to medical utilization. A payment that focuses on performance of duties will compensate parties for the number of visits to the doctor’s office, medications, emergency care, and even hospitalizations the patient has. The expense of the condition is tied to how much care the patient uses, and possibly other performance metrics, like, how well the doctors rate on patient-satisfaction surveys, or measures of population health. In contrast, an outcomes-based payment\(^1\) would make payments service providers\(^2\) for reductions in the amount of care needed or the associated cost. Equally useful would be payments for improvements on key health measures such as reductions in child hospitalization or mortality rates, as well as including prospective health indicator. This difference is a keystone in constructing effective value-based purchasing arrangements that address the social determinants of health.

Having a mechanism that compensates for the reduction in need for medical care aligns the economic interests of the publicly-financed healthcare system. The patient will not need the medical procedure that could potentially have complications. Insurance providers and other payers will have a lower aggregate cost burden, while providing better outcomes to the populations they serve. New business opportunities will be present for service providers to deliver cost-effective preventive solutions. The new opportunities created will be those where good health is good business.

There is an intentional trend in publicly-financed healthcare towards government entities paying for the value of care provided rather than the volume; however, there is little room for health plans to do the same. There is, however, a straightforward process that can

\(^{1}\) The payment can require meeting or allowing the existing standard of care.

\(^{2}\) These service providers could be existing clinical-service providers or nonstandard-service providers such as health-related social-service providers that may be government or nongovernmental agencies.
establish an outcomes-based payment mechanism that leverages existing regulatory frameworks, integrates with actuarial processes, and establishes the necessary mechanisms to ensure appropriate compensation. Without this framework, any managed care provider successfully reducing their costs will reduce their future compensation. While this is the ultimate goal, the current movement is so fast and so severe as to provide negative incentives for any long-term investments in preventative care. Establishing a mechanism for outcomes-based payments will allow for appropriate compensation that incentivizes investments in the long-term health of a population and shifts the financial risk of administering those innovative programs from the managed care provider to the services providers.

Types of Outcomes-Based Payments
Outcome-based payments can take many forms and be based on a few calculations, for example they can be based on costs, value created, or other methods. They can also use exclusively cost measures or be based on other measures. The table below, please see exhibit 1, shows an example of these mechanisms and how they could play out in practice using the example of paying for improved medical outcomes on the basis of cost.

<table>
<thead>
<tr>
<th>Unit basis</th>
<th>Incentive-creating</th>
<th>Cost-neutral</th>
<th>Cost-saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per unit</td>
<td>For every hospitalization* less than the prior year, an additional USD 1,000.00 will be paid to a managed care provider.</td>
<td>For every inpatient admission* that is avoided in comparison to an expected value, the value of that expense will be provided to the managed care provider directly.</td>
<td>For every inpatient admission* that is avoided in comparison to a target value, 85 percent of the projected expense will be directly provided to the responsible managed care provider.</td>
</tr>
<tr>
<td>Percent aggregate</td>
<td>For every percentage point of inpatient admission avoided from the prior year, an additional 1 percentage point of compensation will be provided for existing services.</td>
<td>For every percent reduction in the total cost of providing care, respective of a matched-comparison group, that value will be provided to the managed care provider directly.</td>
<td>For every percent reduction in the total cost of providing care, respective of the average of prior years, 65 percent of that value will be provided to the managed care provider directly.</td>
</tr>
</tbody>
</table>

Note(s): Projects can also be designed around valuable outcomes not related to cost – not depicted here.
* Metrics are adjusted on a population basis.
Any type of outcome-based payment arrangement can be easily accommodated in publicly-financed healthcare system by creating a program code class and modifier system to reconcile and record outcomes as well as their associated payments. The program code and modifier system would enable multiple types of outcomes-based payment programs to be administered simultaneously, while maintaining data-clarity. As each outcome-based payment will be different, there is no need to create a national standard for the payment code so long as all parties to the agreement use a common unique identifier – though standards may emerge as effective programs scale beyond any one managed care entity.
Mechanics
A conceptual overview of setting up outcomes-based payments in claims or encounter records

Currently, state agencies responsible for Medicaid programs and their federal partners retain the value when managed care providers improve the long-term health outcomes for enrollees. States set managed care rates as a function of the number of persons being cared for and each of those person’s expected risk, often measured in expected dollars and segmented into groups. If a managed care provider’s efforts to improve medical outcomes for a population are successful, that person transitions to a new lower risk tier, which means that the managed care provider will receive less compensation in the next cycle of rate determination. This creates a disincentive for any managed care provider investing in the long-term health of their enrollees, defined beyond the next redetermination period. This can potentially represent millions of dollars of lost investment capital.

![Premium (rate) slide](source)

With each subsequent redetermination, improvements in health outcomes reduce the compensation to managed care providers.

<table>
<thead>
<tr>
<th>Tier 3</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment rate: $2,000 per unit</td>
<td>$2,000</td>
<td>$1,000</td>
<td>$000</td>
</tr>
<tr>
<td>Tier 2</td>
<td>Payment rate: $200 per unit</td>
<td>$200</td>
<td>$200</td>
</tr>
<tr>
<td>Tier 1</td>
<td>Payment rate: $20 per unit</td>
<td>$20</td>
<td>$30</td>
</tr>
<tr>
<td>Annual total: $2,220</td>
<td>Annual total: $1,230</td>
<td>Annual total: $240</td>
<td></td>
</tr>
</tbody>
</table>

As both the number of persons in each risk tier and the amount paid per person in a risk tier determine total compensation, the processes of rate determination represents a major economic barrier to substantive investments in long-term preventative care for managed
care organization yet remains the goal of the government partners. For example, a prevented emergency department visit may save a managed care provider a few-hundred dollars, but next year the managed care provider will not receive that few-hundred dollars and the patient may go back to the emergency department. To continue saving that amount they may need to invest in annual education sessions or other means of improving long-term health.

To resolve this, the managed care provider could make an outcomes-based payment for cost-savings under existing value-based purchasing authorities and include that payment in each patient’s encounter record as a program code. The code would be treated as a standard encounter and include all the relevant program information such as the service-provider, patient, a program code, place of service, and others. This payment can plug the gap in risk and financial value between the expected and observed incomes.

These program codes can be calculated by the managed care provider using an automated process and submitted with charge or encounter records on a regular basis to State Medicaid-responsible agencies or other parties as needed for approvals and other purposes – ensuring the burden on state resources is minimal.
Example: Asthma Pay for Success Project

Using an outcomes-based payment to address the social determinants of health negatively impacting vulnerable communities where housing conditions cause medical issues.

This section will detail the creation of the mechanism for recording and reporting payments made under a value-based purchasing sharing the risk of caring for a high-risk asthma population. Specifically, it will illustrate how to record the outcomes-based payments made to subcontracted health-related social-service provider for reductions in the total cost of caring for the specific population enrolled in their program.

Context for examples

This is an example of creating an outcomes-based payment for a comprehensive home-based asthma program that involves 3 components:

1. Close integration with clinical providers,
2. Home-visiting with home-based education, and
3. Remediation of home-based environmental causes and triggers of asthma.

The program is evidence-based drawing from the National Institutes of Health (NIH), Centers for Disease Control (CDC), as well as others to reduce the medical utilization needs of high-risk asthma patients. These evidence-based programs have been shown to reduce the medical utilization of high-risk asthma patients through (a) behavioral means by improving self-management and mechanically and (b) mechanical means by removing causes and triggers of asthma attacks in the patient’s environment.

For research findings and recommendations, please see:
(National Heart, Lung, and Blood Institute 2007)
(The Centers for Disease Control 2008)
(Community Preventive Services Task Force 2008)
(Robert Wood Johnson Foundation Commission to Build a Healthier America 2009)
(Taskforce on Community Preventive Services 2011)
(Office of Disease Prevention and Health Promotion 2017)

High-risk patients care considered those with a previous diagnosis of asthma, who subsequently are hospitalized or receive emergency care for an asthma related respiratory condition.
Asthma is expensive, primary research by GHHI\textsuperscript{4} has shown that on average health plans are spending between USD 7,500.00 and over USD 40,000.00 for an asthma patient with a history of hospitalization in a given year, with outliers being substantially higher. Preventing even a small percentage of these utilization costs can effectively fund comprehensive interventions. Offering the programs more broadly can not only reduce the medical needs of other populations, but deliver secondary benefits to communities.

In the example, a feasibility study confirmed that the project was appropriate for a specific high-risk population, in sufficient numbers, with an actuarial analysis determining there was sufficient economic potential to warrant the program. This example assumes that the state contract with managed care entities allows them to develop value-based purchasing arrangements with those entities’ subcontractors. Then those managed care entities contract with the service-providers to share the risk of caring for a specific high-risk asthma population that agrees to enrollment in the new program. The remainder of the section details how those payments are calculated, recorded, and used in future rate setting.

Calculating program impact

The program impact needs to be determined in accordance with the managed-care entity’s contract, which establishes a designation of the program’s enrollment terms and justification, which may be framed as services or a theory of change including what the program does more broadly than traditional service definition and why it is expected to have the state outcomes. In the case of the asthma program, behavioral change will be achieved through advanced education, while mechanically the causes and triggers of asthma in the home will be physically removed.

Once a beneficiary is enrolled in the program, the subcontracted service provider would need to provide verification that the party is enrolled as of a set date as well as when services are completed. Established in the services subcontract will be the duration of service (if applicable) as well as a maximum term of evaluation for the outcomes payment. For

\textsuperscript{4}GHHI has worked with health-plans and states to conduct 15 actuarial analysis covering nearly 500 thousand member-months in markets throughout the United States, with more pending completion. Publication of the results is forthcoming.
our running example, eligible members would be enrolled through a process that establishes an overview of the program, expectations of all parties, and appropriate disclosures before securing a signed program enrollment form. Once enrolled the comprehensive services are initiated as soon as possible and continuing over a period of months as home-based assessments establish the individuals needs in terms of education, environmental remediation, and medical management. The effects of the intervention will be assessed for the duration of the program including a period of years after services have been completed.

The managed care entity or actuarial partner would then use a comparison data-set to establish what the marginal impact on the specified metrics the interventions has had. In our asthma example, the managed care entity arranges to have a state-wide medical claims and encounter database provide the state-wide records to an actuarial partner to conduct a matched comparison analysis of the program enrollments, controlling for prior risk-adjustment factor, socio-economic status, gender, and other factors. The analysis determines that the average cost of the non-enrolled population was USD 1,000.00 per-member per-month, while the average cost of the enrolled population was USD 500.00 per-member per-month – a savings of 50 percent in the year.

**Using the existing claims or encounter reporting system**

The managed care provider would then include the savings or risk value in their claims or encounter record for each person as provided to the state at the close of the period. They do so though recording an encounter for each patient enrolled in the project totaling USD 500.00 of medical savings attributed or for an appropriate risk value for care-volume reductions. For our example, each encounter code could include dates of service starting and concluding, with the financial value determined by the actuarial analysis and record the service provider as the organization’s program name. In lieu of a CPT or HCPS code, the program could include an identifier for the program including that it was an out-

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5 Ideally, a state or national body would provide the medical claims or encounter record of a comparable population over the same time as the program operates for an appropriate and broad matched-comparison group analysis of comparative claims cost, medical utilization, or other appropriate metrics.
comes-based payment as well as a program identifier, such as “OBP.CAHV.01” for Outcomes-Based Payment for Comprehensive Asthma Home Visiting program number 01. There is no need to create national standards for these program codes, because they will vary as new programs are formed or developed. It would be beneficial to create a registry of such programs so that duplicate codes do not exist and each program can be tracked over time.

**Future rate-setting**

The appropriate metrics from program codes reported in the outcomes data will then be included in the actuarial rate-setting process as if they were encounters under the state-plan as the contracts with the managed care providers include such value-based payments.

This inclusion has the benefit of appropriately compensating the managed care provider for long-term investments in services, ideally to the point where economically-viable service offerings become so common that it is difficult to create an appropriate comparison group due to non-participant scarcity. Over this time, the state(s) should have had sufficient time to determine the effectiveness of the programs and decide to continue them or not. States and their partners can then use the historical reimbursement rates, trends, and other information to create a formal bundled payment for the services offerings to continue programs where nonparticipant scarcity becomes an issue. Actuaries would then include that bundle in sound rates as well, officially formalizing the innovative service-delivery offering.
Bibliography


