

# **Multi-Stakeholder Health Care Payment Reform in California**

*Framing Report for  
California's State Innovation Model  
Design Grant Workgroup*

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**January 2013**

**Anna Davis, MPH and Peter Long, PhD**

Prepared for the California Health and Human Services Agency

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## About the Authors

Anna Davis is an independent consultant to Blue Shield of California Foundation, and a doctoral student in the department of health policy and management at the UCLA Fielding School of Public Health. She received her Master of Public Health from Boston University. Peter Long is president and chief executive officer of Blue Shield of California Foundation. He received his PhD in health services from the UCLA Fielding School of Public Health.

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## EXECUTIVE SUMMARY

### *Background*

There is growing interest in the development of coordinated, multi-purchaser initiatives to reshape care delivery and reward value in health care by changing payment structures. Health care costs in the U.S. are growing at an unsustainable rate, and threaten the country's ability to invest in other priorities such as education and infrastructure. While cost increases are related to a confluence of factors, they are driven primarily by the way in which we organize and pay for care. In particular, many commentators agree that the fee-for-service (FFS) payment structure and high levels of administrative waste are key contributors to cost growth that could be mitigated by payment reform.

The State Innovation Model (SIM) initiative creates a unique opportunity for state-led multi-purchaser payment reform. California applied for a six-month SIM Design Grant from the Center for Medicare and Medicaid Innovation (CMMI) at the Centers for Medicare and Medicaid Services (CMS). Assuming receipt of an award, under the SIM Design Grant the California Health and Human Services Agency (CHHS) will convene stakeholders to design a multi-payer health care payment reform initiative. The goal of payment reform is to maximize the value of health care, where value is defined as better quality at lower costs. In reforming provider payment systems, California seeks to achieve the triple aim of 1) improving health, 2) improving health care, and, 3) lowering health care costs.

The SIM initiative dovetails with the strategic vision of and the goals developed by the Let's Get Healthy California (LGHC) Task Force, which will inform California's approach to the SIM initiative. Using the six goals of the LGHC final report as a framework, CHHS will establish work groups to develop implementation strategies and policy recommendations relating to each goal. Payment reform was highlighted in the LGHC's report under goal six, which focuses on reducing health care expenditures. Together, the recommendations of the six workgroups will form the basis of a State Health Care Innovation Plan (SHCIP) required by CMMI. The culmination of the six-month design phase will result in the submission of a second proposal to

CMMI in the summer of 2013 to test California's selected payment reform model over a three-year period.

The charge for the work group convened around the SIM Design Grant and LGHC goal six will be to recommend a comprehensive payment reform strategy that moves the state toward value-based care; it will be informed by the recommendations of the other five workgroups. With a focus on reducing the rate of health care cost growth, payment reforms under California's SIM initiative will maximize the value of existing expenditures rather than invest new funds in the health care system.

The goal of this report is to set the stage for California's SIM Design Grant process by establishing a shared understanding of payment reform and a common set of resources. Specifically, this report is designed to:

- Establish a typology characterizing methods of provider payment in the health system and define terms related to each payment strategy;
- Describe past and current examples of payment and delivery system reforms in the U.S. and review existing evidence of effectiveness in achieving savings; and,
- Present initial considerations for California's Design Grant workgroup related to possible payment reform models.

## *Defining Payment Strategies*

All payment strategies have inherent incentives which drive provider (and/or consumer) behaviors. By restructuring or targeting payments, it is possible to reshape incentives in a way that leads to greater value. While there are innumerable ways to describe health care expenditure reforms, the core array of strategies is fairly limited. Based on an extensive review of the literature, we have developed a typology of payment strategies with three major domains:

1. Providers are reimbursed for the delivery of services via a ***base payment model***, which may make payments for individual services or people or groups of services or people. Base payment models fall across a spectrum of integration, and include from the most to the least integrated: Global Budgets; Global Payments/Capitation; Condition-Specific Capitation; Bundled Episode Payments; and Fee-for-Service.

**2. *Complementary strategies*** are used to adjust the incentives of the base payment model.

Complementary strategies may be grouped into two types:

- a) Methods that adjust payments to create or strengthen incentives in base payments and/or achieve a secondary aim like improving quality, coordination, or value, or advancing health information technology (Health IT). This category includes: Shared Savings/Shared Risk Agreement; Enhanced Payments for Additional Services; Pay-for-Performance; and Provider Warranty.
  - b) Methods that provide decision makers (purchasers, providers or patients) with information and incentives to encourage them to make decisions based on relative value. This category includes: Reference Pricing; Tiered or Limited Networks; Value-Based Insurance Design; Technology Assessment/Evidence-Based Purchasing; and Performance Reporting.
- 3.** Investments are made to *improve health outcomes at a population level*. This domain of non-clinical preventive and wellness initiatives includes: Global Budgets; Wellness Trusts; Social Impact Bonds; and Community Health Collaborative/Health in All Policies programs.

### ***Status of Payment Reform in the U.S.***

Payment reforms have been increasingly implemented throughout the U.S. in both the public and private sectors. There are numerous ways to structure payment reforms, customizing and combining approaches to address the structure of a particular health care delivery system. Most examples of payment reform initiatives have used complementary strategies to modify incentives of existing base payment arrangements rather than altering the base payment. However, there are growing numbers of programs that are attempting to make more fundamental changes to base reimbursement models. Most commentators argue that reforms to base payments are necessary to achieve significant changes in the rate of growth in total health care costs.

Despite the large number of payment reform initiatives nationally, the current evidence for cost savings associated with any payment reform model is thin. Some of the best evidence for the

potential savings associated with payment reforms is based on projection models rather than analysis of specific initiatives. Limited evidence of its effectiveness should not be seen as an argument against reform; it is clear that restructuring provider payments is necessary, and a major goal of the SIM initiative is to generate additional evidence from participating states about effective approaches to payment reform.

### *Considerations for California's SIM workgroup*

Given the typology of payment reform options, limited evidence regarding payment reform from around the nation, and California's unique health care environment, California's SIM Design Grant workgroup might consider the following key issues when evaluating a payment reform strategy:

- The merits of a regional approach
- Provider and purchaser readiness
- Price setting and implementation costs
- Maximizing administrative efficiency
- Targeting interventions to specific populations or services
- Protecting vulnerable populations
- Market consolidation and the regulatory framework
- Consumer perceptions
- Framework for defining costs and savings
- Aligning payment reforms and incentives

Building a broad, multi-purchaser collaborative will be essential to increasing alignment among payers, reducing average administrative costs, and incentivizing purchasers to make investments for the greater common good. The SIM Design Grant workgroup should consider establishing agreement on basic principles of reform and desired provider incentives. This may help the work group to identify a strategy for payment reform in California that can achieve broad adoption across the public and private sectors.





## BACKGROUND

There is growing interest in development of coordinated, multi-purchaser initiatives to reshape care delivery and reward value in health care by reforming payment structures. To this end, the Center for Medicare and Medicaid Innovation (CMMI) at the Centers for Medicare and Medicaid Services (CMS) created a State Innovation Model (SIM) funding initiative. CMMI will support states' efforts to "design and test multi-payer payment and delivery models that deliver high-quality health care and improve health system performance" [1]. One of the goals of CMMI's SIM initiative is to leverage a state's convening role to drive large-scale reform initiatives that can transfer the "preponderance of care" in the state to models that reward value and have potential to reduce costs and improve quality [1].

California applied for a six-month SIM Design Grant from CMMI. Assuming receipt of an award, under the Design Grant the California Health and Human Services Agency (CHHS) will convene stakeholders to design a multi-payer health care payment reform initiative. The Design Grant is expected to result in submission of a second proposal to CMMI in the summer of 2013 to test California's selected payment reform model. This Implementation and Testing Grant, if awarded, could provide between \$20 million and \$60 million in federal support over a three-year period [2].

The goal of this report is to set the stage for California's SIM Design Grant process by establishing a shared understanding of payment reform and a common set of resources. Specifically, this report is designed to:

- Establish a typology characterizing methods of provider payment in the health system and define terms related to each payment strategy;
- Describe past and current examples of payment and delivery system reforms in the U.S. and review existing evidence of effectiveness in achieving savings; and,
- Present initial considerations for California's Design Grant workgroup related to possible payment reform models.

## *Why is Payment Reform Needed?*

The need for payment and delivery system innovation is derived from unsustainable growth in health care expenditures, which threatens the country's ability to invest in other priorities such as education and infrastructure [3]. Health care costs in the U.S. currently comprise approximately 18 percent of Gross Domestic Product (GDP) [4], more than \$8,000 per person per year on average, and far exceed spending in other developed nations [5]. Despite these high expenditures, it is generally acknowledged that the U.S. is not a global leader in health outcomes at a population level. This issue is of particular urgency for local, state, and federal governments, which cover roughly half of current health care expenditures [4].

While cost increases are related to the confluence of a number of factors [3], they are driven primarily by the way in which we organize and pay for care. In particular, many commentators agree that a primary underlying reason for health care cost growth in the U.S. is the fee-for-service (FFS) payment structure [6-8]. FFS payments reward providers based on the volume of care they deliver. They fail to create incentives to promote quality and coordination of care, and commonly result in inefficient overprovision of services.[9, 10] Furthermore, FFS payments may lead providers to marginalize potentially beneficial services or activities that are not reimbursable or are poorly reimbursed [11]. In addition to the FFS payment system, there are other major drivers of cost growth that could be mitigated by payment reforms, including administrative complexity, fragmentation of care, and lack of provider competition.

The goal of payment reform is to maximize the value of health care, where value is achieved by simultaneously optimizing both quality and costs [9]. A common approach to payment reform is to reduce expenditures by restricting the quantity of services rendered [12]. This can be achieved by limiting health benefits, increasing cost-sharing (co-insurance, co-pays and deductibles), and tightening eligibility criteria among other tools [12]. These methods may lead to near-term savings for purchasers, but they can discourage beneficiaries from using valuable and appropriate services and potentially lead to longer-term cost growth. More systematic and coordinated approaches to reduce health care expenditure growth are advocated widely and have potential to achieve desired improvements in value. It is these latter approaches that provide the framework for the SIM initiatives funded by CMMI.

## *The Case for Multi-Purchaser Collaboration*

While there are numerous examples of payment and delivery system reform programs being operated in the U.S. currently, many programs are implemented on a small scale and involve a specific purchaser and/or a targeted population subgroup. A multi-payer approach to payment reform is ideal for many reasons, including:

- Providers typically have many separate contracts with different payers, with differing contractual requirements, payment levels, and payment strategies. Providers may be more likely to alter practice patterns toward value-based care as the proportion of their business that incentivizes value increases [6].
- Many payment reforms create administrative burdens for providers and administrators; coordinated reforms that create uniform goals and measures across payers may reduce administrative burdens [6].
- Payers and purchasers rarely retain patients over the long-term. Since no individual remains insured by the same payer throughout their lifespan, there is arguably a lack of incentive for insurers to make investments that have delayed benefits (in some cases for decades), and therefore may not yield a return on investment for the insurer who covered the preventive service [13-15]. Payers may be more likely to participate in reforms that will yield delayed returns if other payers make similar investments.

If, for example, a provider receives a relatively modest pay-for-performance payment for meeting quality targets, the impact of the payment will be greatest if it is available for a large proportion of the provider's patients. The critical mass concept holds for many payment strategies, as they may require providers to alter care patterns, data systems, and business practices. These changes on the part of the provider have associated costs and are more likely to be acceptable if a substantial financial incentive is associated with change [6].

## *State Innovation Models: An Opportunity to Innovate*

CMMI created the SIM initiative for “states that are prepared for or committed to planning, designing, testing, and supporting evaluation of new payment and service delivery models in the context of larger health system transformation” [1]. SIM initiatives are expected to include

public purchasers (at least Medicare, Medicaid, and the Children’s Health Insurance Program (CHIP)) as well as private payers [2].

CMMI described the Design Grant process as development of “a comprehensive approach to transforming the health system of a state, made up of ‘payment and service delivery models’... that drive and reward better health, better care, and lower costs...[and] will also include a broad array of other strategies, including community-based interventions, to improve population health” [1]. The [funding opportunity announcement \(FOA\)](#) from CMMI suggested a wide array of potential strategies that states could consider as levers to influence the structure and performance of the health care system. The FOA also specified particular approaches as out of scope [2]. Relevant excerpted language from the FOA is included in [Appendix A](#).

### *California’s Approach to Payment Reform*

In accordance with the vision set forth by CMMI, California seeks to establish a multi-payer collaborative reform effort that will impact the preponderance of care around the state. This may be achieved by impacting a large proportion of individual consumers or by reforming payments for a large share of total health care expenditures.

In reforming payments, California seeks to achieve the triple aim of 1) improving health; 2) improving health care; and, 3) lowering health care costs. The SIM initiative dovetails with the strategic vision of and the goals developed by the Let’s Get Healthy California (LGHC) Task Force, which will inform California’s approach to the SIM initiative. [16]. Using the six goals of LGHC’s final report as a framework, CHHS will establish workgroups to develop implementation strategies and policy recommendations relating to each goal. Payment reform was highlighted in LGHC’s report under goal six, which focuses on reducing health care expenditures. Together, the recommendations of the six workgroups will form the basis of a State Health Care Innovation Plan (SHCIP) required by CMMI.

The charge for the workgroup convened around the SIM Design Grant and LGHC goal six will be to recommend a comprehensive payment reform strategy that moves the state toward value-based care; it will be informed by the recommendations of the other five workgroups. Given the goal of the SIM initiative and the LGHC task force to reduce total health care costs, payment

reforms in California will focus on maximizing the value of existing expenditures. While any payment reform may experience initial start-up costs during early stages of implementation, the multi-payer reform initiative that California designs is expected to demonstrate overall cost savings within the three-year SIM testing phase.

The ultimate goal of the SIM initiative in California is to move the delivery of health care from a model that rewards volume of services to one that rewards value. By redirecting incentives in the health care delivery system and through other aspects of the State Health Care Innovation Plan, California seeks to constrain health care spending growth to the rate of general growth in GDP by 2022 [16].

## DEFINING PAYMENT STRATEGIES

All payment strategies have inherent incentives which drive provider (and/or consumer) behaviors. By restructuring or targeting payments, it is possible to reshape incentives in a way that improves value. While there are innumerable ways to structure health care expenditure reforms, the core array of possible strategies and tools is fairly limited. Based on an extensive review of the literature, we have developed a typology of payment strategies with three major domains:

- 1) Providers are reimbursed for the delivery of services via a ***base payment model***, which may make payments for individual services or people or groups of services or people.
- 2) ***Complementary strategies*** are used to adjust incentives of the base payment model by:
  - a) Adjusting payments to achieve a secondary aim like improving quality, coordination, patient experience, use of health information technology, or other dimensions of the triple aim; or
  - b) Providing decision makers (purchasers, providers or patients) with information and incentives to encourage them to make decisions based on relative value.
- 3) Investments are made to ***improve health outcomes at a population level***.

Within each health care payment domain, we have characterized the range of specific models and strategies. A detailed discussion of each specific model within domains one through three is

presented below, including a summary of the key incentives and attributes of each model.

[Appendix B](#) contains a summary table with a definition of each payment strategy.

### ***(1) Base Payment Models: Payments for Individual Services or People or Groups of Services or People***

The payment methods in this domain are the primary ways that providers are reimbursed for patient care. The base payment method is the central driver of provider incentives. Different payment methods are appropriate for various service types and settings. The specific manner in which a base payment agreement is structured can vary by pricing, scope of benefits, utilization management rules, and other parameters.

Base payment methods are arranged in this list from the most to the least integrated. Payments that combine financing for groups of patients or services are designed to encourage care coordination by changing the flow of funds between providers and incentivizing value over volume [17]. This is in contrast to the least integrated payment method, FFS or payment for each service provided. Each strategy is defined below, followed by summary tables highlighting the key attributes and potential challenges associated with each model.

#### **Global Budgets**

Under global budget agreements a total fixed budget is prospectively defined for the care of a specific population or organization (e.g., hospital) over a period of time. This budget is divided among individual providers of services. This method of payment creates an incentive for providers to keep costs within the total budget as their profit is based on the amount of unspent funds. Therefore global budgets can incentivize providers to limit both the level of expenditures per encounter and the number of encounters [7]. Providers may achieve these goals through a range of strategies, such as lowering cost structures, coordinating care, and focusing on prevention at the individual or population level.

### **Global Payment/Capitation**

Global payments (also called “capitated rates”) are prospective payments for the total cost of care per member, across settings and conditions and for a defined period of time [18, 19]. Global payments are designed to incentivize health systems to limit both the expenditures per encounter and number of encounters. Payment amounts are risk adjusted, and quality monitoring and reporting is inherent in the model [20].

Either “full” or “partial” global payment agreements can be established; full global payments constitute a single payment that encompasses the full array of providers including primary care, specialty, hospital, behavioral health, and ancillary services. Partial global payments can be limited to a specific portion of services or providers, such as physical health services or outpatient services [7]. The majority of existing capitated payments are partial agreements, with a substantial portion of care paid via FFS billing outside of the prospective global fee.

### **Condition-Specific Capitation**

In this strategy, providers receive a prospective per-person payment for all of the care related to a specific condition (usually chronic) over a defined period of time [10]. A condition-specific capitation payment bridges all care settings and providers involved in treatment for the designated condition.

This method is most appropriate for conditions like diabetes, for which patients will have ongoing health care needs, and where coordinated and continuous management is integral to control the condition and avoid acute care episodes. It can also be used for “clusters” of conditions that frequently co-occur [19]. Condition-specific capitation creates incentives for the provider to limit the occurrence or reoccurrence of acute episodes and to invest in health maintenance and self-management of illness, thereby reducing the overall cost of care for the patient’s condition. The payment amount varies between conditions and is risk-adjusted for the health status of the individual patient [10].

### **Bundled Episode Payments**

Bundled or episode payments group reimbursement for all of the services used by a patient within a single episode of care related to a specific medical treatment or event [18, 19]. Most examples of bundled payments are for acute episodes, such as a total knee replacement or a heart attack, because these episodes can be clearly defined with start and end points [6]. Payments are made retrospectively based on occurrences of episodes of care. Bundles may include a period of time and services surrounding the index episode, such as 30- or 60-days post-discharge. Payments are risk-adjusted [8].

Bundled payments may bridge multiple care settings and providers, thus incentivizing coordination of care throughout the encounter. Bundling seeks to reduce costs by limiting the level of expenditures per encounter, but it does not address the number of encounters. Providers are not accountable for preventing occurrence or reoccurrence of the event/condition.

### **Fee-for-Service**

As described above, FFS payments involve separate reimbursement for each service used by a patient. This is characterized by disaggregation of payments to a sub-encounter level, such that distinct reimbursements are made for each procedure, resource or facility service, and provider involved in any specific health care encounter.

FFS payments create a strong incentive for providers to deliver as many services as possible for each patient, and to see as many patients as possible. Therefore this mechanism of payment has been described as rewarding volume rather than value.

### **Summary of Base Payment Model Incentives and Attributes**

These base payments are the core driver of provider incentives, and are used to pay for the bulk of services delivered to patients. Each model has inherent incentives and attributes which can lead to differing system and organizational behaviors, as shown in Table 1. All methods except FFS incentivize reduction in costs within each episode. Other than bundled payments, they also incentivize a reduction in the number of episodes.

**Table 1: Key Attributes of Base Payment Models**

	Crosses Organizations	Crosses Providers	Crosses Conditions	Incentivizes Reduction in Number of Episodes	Incentivizes Reduction in Cost per Episode
Global Budget	✓	✓	✓	✓	✓
Global Payment/Capitation	✓	✓	✓	✓	✓
Condition-Specific Capitation	✓	✓		✓	✓
Bundled Episode Payment	✓*	✓*			✓
Fee-for-Service					

✓ = attribute of the model. ✓\* = potential but not necessary attribute of the model.

Table 2 summarizes potential key prerequisites, challenges and benefits associated with partially or fully integrated base payment models, relative to FFS payments. As shown, many of the more aggregated payment methods share common characteristics.

**Table 2: Specific Prerequisites, Benefits and Challenges of Base Payment Models Relative to FFS Payments**

	Global Budget	Global Payment / Capitation	Condition-Specific Capitation	Bundled Episode Payment
P Requires an Overarching Organization to Manage Payments	✓	✓	✓	✓
P Requires Insurance Risk Management for Providers	✓	✓*	✓*	
P Requires Allocation of Patients	✓*	✓	✓	
C Increases Incentive for Cost Shifting	✓	✓	✓	✓
C May Harm Access and Quality	✓	✓	✓	✓
C Increases Administrative Complexity		✓*	✓	✓
B Increases Financial Predictability	✓	✓	✓	✓
B Lowers Transaction Costs	✓	✓*		
B Creates/Increases Incentives for Care Coordination and Quality	✓	✓	✓	✓

✓ = attribute of the model. ✓\* = potential but not necessary attribute of the model.

P = Prerequisite, C = Challenge, B = Benefit.

All aggregated base payment methods may require an overarching organization or integrator. This entity takes on responsibility for the defined patient population, receives the aggregated payment, and distributes reimbursement among providers who participated in care delivery. This entity can be a Managed Care Organization (MCO) or an Accountable Care Organization (ACO), but other organizational structures are also able to manage payments of these types [21]. These organizations take on the risks associated with the aggregated payment, which can include both insurance risk – the risk associated with whether patients become sick or develop an illness that requires care, which is outside of the provider’s control, and performance risk – the risks associated with their performance providing effective and efficient care to the patient [6].

Some providers may be unable or unwilling to manage insurance risk. However, under aggregated payment models, it is not necessarily clear how individual providers are reimbursed by the overarching organization. More information about the specific characteristics of provider contracts could help to clarify the incentives at the point of care. In many cases, providers may continue to bill via FFS methods, while the overarching organization receives an aggregated payment and uses other tools such as utilization management to contain costs. In these cases, risk does not necessarily reside with the individual provider, and practice patterns may be minimally changed by the aggregated payment.

Aggregated methods may also increase incentives for cost shifting and may reduce quality and access to care. In global budget agreements, these concerns are most relevant when the budget is defined below the population level. Per-person or per-case payments may lead providers to limit care in ways that could harm outcomes. This might occur if providers “skimp” on services, or if they reduce access by limiting hours or other means.

Models that make per-person payments require that patients be assigned to specific providers or provider organizations. This process, called “allocation,” can be challenging in some settings and requires either claims-based allocation methodologies or prospective provider assignment/selection systems.

For aggregated payments that cover only a portion of each individual’s care, there may be new administrative challenges related to defining “in-bundle” services [8]. This is true both prospectively when designing the payment agreement and retrospectively when making

payments. Capitated or bundled agreements must be clearly defined, which may lead payers and providers to under-specify the service package for the sake of precision and accuracy, leaving out indirectly related services (e.g., a heart attack in a diabetic patient may be partially attributable to diabetes, but not clearly so). For bundled payments in particular, this challenge may be partially mitigated by CMS' National Pilot Program on Payment Bundling and the Bundled Payments for Care Improvement Initiative. Under these programs, CMS is currently working with providers to establish episode-of-care definitions centered around a hospitalization [22-24]. These efforts may yield useful technical information for states and other purchasers interested in pursuing bundled payments, although the programs are still in early stages.

Financial predictability can be improved under aggregated payments, both for providers and for purchasers. Some aggregated payments may lower transaction costs, to the extent that they reduce or eliminate the need for adjudication of claims and other administrative oversight. Others may increase transaction costs. Finally, all integrated forms of base payments are designed to increase incentives for care coordination and quality of care. The strength of this effect is likely to increase as the level of payment integration increases.

## ***(2) Complementary Strategies that Modify the Incentives of the Base Payment Model***

Base payments can be refined via complementary strategies, which create or strengthen incentives that are not sufficiently supported by the base payment. Purchasers can use complementary strategies in various combinations to incentivize improvements in performance on quality, value, patient experience or other dimensions of the triple aim.

These strategies are grouped into two major classes: (a) those that adjust payments (either up or down) to achieve a specific secondary aim; and (b) those that provide decision makers (purchasers, providers or patients) with information and incentives to encourage them to make decisions based on relative value. Each strategy is defined below, followed by summary tables highlighting the key attributes and potential challenges associated with each model.

### *a) Strategies that Adjust Payments to Achieve a Secondary Aim*

The primary goal of these complementary strategies is to improve provider performance over time, where performance can focus on any measurable domain such as quality, coordination of care, health information technology (Health IT) adoption, patient experience, or other goals. There are myriad ways to structure payment adjustments, which may depend in part on the nature of the base payment agreement. All of these methods result in a change in the amount of reimbursement that flows to providers. In a revenue-neutral framework, complementary strategies that increase payments would generally be funded by savings from another arena, service or provider.

#### **Shared Savings/Shared Risk**

In this strategy, providers are offered a portion of savings achieved for managing the care of a population, with savings based on a target cost benchmark. “Shared savings” agreements can be framed to also incorporate downside risk for providers, such that they are accountable for excess expenditures, thus “sharing risk” with the purchaser [21, 25].

Agreements that allow providers to share in savings and risk seek to increase incentives for high-value care and cost-containment. The most common use of shared savings and shared risk models is within an ACO, which is a single integrated organization that is accountable for the care and health of a defined population [21]. Shared savings/shared risk agreements can be used with most payment models to introduce provider accountability for total costs, and are often tied to particular quality targets in addition to financial goals [26].

#### **Enhanced Payments for Additional Services**

This strategy involves increased reimbursement for desirable activities, such as care coordination or patient follow-up. Payments may be enhanced by increasing base payment rates, offering per member-per month (PMPM) bonus payments, or defining newly reimbursable services [6].

A key example of this strategy is the medical home model, in which primary care providers receive enhanced payments to support a higher level of care [6, 27], either for the general population or for specific targeted populations such as those with chronic illness. Supplemental

payments to medical homes are often in the form of additional PMPM payments layered over the underlying FFS system.

### **Pay-for-Performance**

Pay-for-performance (P4P) programs are agreements that establish financial rewards or penalties tied to performance on quality-of-care benchmarks [7]. P4P agreements may focus on meeting specific targets or on improvements over historical performance. Commonly, P4P initiatives are based on process or outcome measures of quality or patient satisfaction, although some innovations in P4P that incorporate cost of care are being implemented [28].

P4P agreements allow purchasers to target specific desired care processes. Many providers already participate in P4P programs under Medicare. Two alternative takes on P4P can be found in practice: penalty arrangements and pay-for-reporting programs.

#### *Penalty Arrangements: Downward Payment Adjustments for Lapses in Quality*

This variation on traditional P4P penalizes providers for quality failures, such as the occurrence of “never events” (serious adverse events that are preventable and should never occur) or hospital-acquired conditions [29]. Such programs establish unacceptable outcomes for which providers will not be reimbursed. An alternative approach penalizes providers who do not meet specified quality targets by reducing the underlying base payment by a set amount (usually 1-2 percent) for each year of poor performance.

#### *Pay-for-Reporting*

An intermediate step toward true P4P or other reform strategies, pay-for-reporting programs offer incentives to providers in return for submitting data to purchasers or other authorities. Most hospitals currently participate in pay-for-reporting under Medicare.

### **Provider Warranty**

In this strategy, providers explicitly agree to a warranty for their services, such that they must absorb the cost of specific pre-defined failures in care. This method is often used with bundled episode payments or condition specific capitation [30]. Warranties are best suited for care that is

associated with clearly defined complications that may be preventable and are in the provider's control (as opposed to negative outcomes due to patient behavior or other factors).

Warranty agreements can be structured such that the base payment agreement is unchanged, but subsequent payments for complications would be limited, thus requiring the provider to share in the costs. An alternative model would prospectively increase the provider's base payment to include a portion of the predicted costs of potentially avoidable complications. If few or no complications occur, the provider retains the additional payment as revenue/profit; however, if complications do occur the provider will be accountable for the excess costs [30].

### *b) Strategies that Provide Decision Makers with Information to Allow Them to Make Decisions Based on Relative Value*

This second category of complementary strategies uses information to realign the decision making processes of purchasers, providers and consumers. This category includes several "benefit design" tools that strategically modify covered benefits and cost-sharing.

Several strategies create financial incentives for consumers [6]. In most insurance settings (except high-deductible coverage), patients are blinded to cost because they pay a set amount (e.g., a defined co-payment) regardless of the cost of the service. These methods generally attempt to address this feature of insurance by increasing the price sensitivity of consumers.

#### **Reference Pricing**

In reference pricing, a purchaser establishes a uniform payment for a specific drug, procedure, service, or bundle of services, which then applies to all providers. Sometimes called a "reverse deductible," it establishes a set maximum amount the purchaser will contribute toward a particular service. Consumers who use a provider charging more than the reference price are required to pay the difference out-of-pocket [31].

This method reduces variation in paid prices. Options for price setting include the median price or the cost of the lowest-price alternative. However, reference prices always incorporate quality standards [31]. A modified version of reference pricing defines a "cap" on potential payment for

a specific service and allows providers to bid rates at or below that level thus achieving “below reference” costs.

### **Tiered or Limited Networks**

Tiered provider networks establish cost- and quality-based classes of providers. Purchasers rank providers into value tiers and use corresponding cost-sharing tiers to make consumers more price-conscious [7, 32]. This method is similar to reference pricing in concept, but is not specific to individual services or bundles of services. Rather, providers such as hospitals are ranked for overall performance [33]. In some applications of tiered networks, lowest-tier providers may eventually become excluded from the network if they fail to improve value over time.

A targeted application of tiered network design (often called “Centers of Excellence”) designates high-value providers and restricts beneficiaries to these providers for specific services. This method “channels” patients to specific providers and increases purchasers’ negotiating leverage. In some cases purchasers cover travel expenses for patients, and designate Centers of Excellence in low-volume markets that are willing to accept lower payments in return for increased business [34].

### **Value-Based Insurance Design**

In value-based insurance design, purchasers make strategic adjustments to cost-sharing to encourage use of high-value services [32]. This method generally focuses on eliminating or lowering cost-sharing for desirable service use, through initiatives such as formulary management or preventive care promotion programs [35]. The Affordable Care Act employs value-based insurance design in eliminating cost-sharing for preventive services.

An alternative strategy in value-based insurance design offers a cash payment incentive to consumers in return for compliance with desired behaviors, such as quitting smoking, completing a medication regimen, or participating in self-management education programs [36, 37].

### **Technology Assessment/Evidence-Based Purchasing**

Technology assessment programs use comparative effectiveness studies to assess the value of specific services. Such programs are designed to address the prevalence of technologies with

limited efficacy that are widely used [32]. Comparative effectiveness assessments can be used to inform a variety of decisions and actions by consumers, providers, and/or purchasers, including: development of publicly reported ratings or provider decision-support tools such as practice guidelines; exclusion of specific services from benefit packages; or strategic changes in cost-sharing.

This process may be applied to a range of health care services, including surgical devices and procedures, medical equipment, and diagnostic tests [38]. Several states or other entities have pursued evidence-based purchasing that includes cost-effectiveness data [39, 40], and some experts argue it is an essential step for Medicare to pursue [41].

**Performance Reporting**

In this method, quality and/or price data are disseminated to consumers. Comprehensive price information including provider-specific estimates of out-of-pocket costs for consumers may incentivize consumers to select more affordable or higher quality providers, particularly if the consumer has a high-deductible insurance plan [42]. Purchasers can employ price transparency tools to complement other methods in this category designed to promote value-based care decisions.

**Summary of Complementary Strategies that Adjust the Base Payment Model**

Complementary strategies can be combined with base payments and with each other to fine-tune the incentives experienced by providers and consumers. Table 3 highlights the attributes of complementary strategies as they are most frequently structured. Although some of the strategies are generally structured to focus only on quality (which may include coordination and safety goals), these could be designed to incorporate cost information and focus on value.

**Table 3: Key Attributes of Complementary Strategies**

	Focuses on:		Incentivizes:	
	Quality	Value	Consumers	Providers
Shared Savings/Shared Risk		✓		✓
Enhanced Payment for Additional Services	✓			✓

	Focuses on:		Incentivizes:	
	Quality	Value	Consumers	Providers
Pay-for-Performance	✓			✓
Provider Warranty		✓		✓
Reference Pricing		✓	✓	✓
Tiered or Limited Networks		✓	✓	✓
Value-Based Insurance Design		✓	✓	
Technology Assessment/Evidence-Based Purchasing		✓		
Performance Reporting	✓		✓	✓

✓ = attribute of the model.

Each of the complementary strategies has a number of prerequisites and potential challenges. These tools do not make fundamental changes to provider payment agreements and may therefore be easier to implement from an administrative and political standpoint. However, they are less likely to result in significant changes to health system functioning. In addition, they generally add to the complexity of payment systems and can be technologically challenging to implement.

Additional prerequisites and challenges specific to each model are listed in Table 4.

**Table 4: Prerequisites and Potential Challenges Associated with Complementary Strategies**

Strategy	Key Prerequisites and Potential Challenges
Shared Savings / Shared Risk	<ul style="list-style-type: none"> <li>• Requires patient allocation</li> <li>• May cause providers to avoid high-risk/high-cost patients without adequate risk adjustment</li> <li>• Savings are highly sensitive to method of projecting expenditures</li> <li>• Calculation of savings/risk payments may be delayed by several years</li> <li>• Unclear how to structure agreements after initial “savings” have been achieved</li> </ul>
Enhanced Payments for Additional	<ul style="list-style-type: none"> <li>• Requires patient allocation</li> <li>• Must be funded through savings from other areas to be budget neutral</li> <li>• Does not change volume-based incentives when used with FFS base payments</li> </ul>

Strategy	Key Prerequisites and Potential Challenges
Services	<ul style="list-style-type: none"> <li>• Generally not thought to be a cost-containment strategy in the near-term</li> <li>• The medical home model specifically:               <ul style="list-style-type: none"> <li>○ Does not directly impact inpatient and specialty care patterns</li> <li>○ May be hard for smaller practices that do not meet standards</li> <li>○ Enhanced levels of care may not be appropriate for the general population</li> </ul> </li> </ul>
Pay-for-Performance	<ul style="list-style-type: none"> <li>• Requires measure definition and data collection; can be administratively burdensome</li> <li>• Real causes of gaps in quality (lack of time or knowledge, fatigue, failures of teamwork) may not be addressed by this method [36, 43]</li> <li>• Improvements in reporting/documentation may be more likely than true improvements in quality/outcomes</li> <li>• May simply reward already high-performing providers</li> <li>• May cause providers to avoid high-risk/high-cost patients without adequate risk adjustment</li> <li>• Must be funded through savings from other areas to be budget neutral</li> <li>• Does not change volume-based incentives when used with FFS base payments</li> </ul>
Provider Warranty	<ul style="list-style-type: none"> <li>• May cause providers to avoid high-risk/high-cost patients without adequate risk adjustment</li> </ul>
Reference Pricing	<ul style="list-style-type: none"> <li>• Method for setting reference price may be complicated; can result in paying some low-cost providers more than they would otherwise receive</li> <li>• Harder to ensure quality standards</li> <li>• Requires extensive consumer education about financial consequences</li> <li>• Requires consumer protections to preserve access to care</li> <li>• May not be feasible in rural areas/areas with limited competition</li> <li>• May not alter behavior of high-income consumers who are less price-sensitive</li> </ul>
Tiered or Limited Networks	<ul style="list-style-type: none"> <li>• Harder to ensure quality standards</li> <li>• Requires extensive consumer education about financial consequences</li> <li>• Requires consumer protections to preserve access to care</li> <li>• May not be feasible in rural areas/areas with limited competition</li> <li>• As providers improve over time, tiers may become more alike</li> </ul>

Strategy	Key Prerequisites and Potential Challenges
	<ul style="list-style-type: none"> <li>• May not alter behavior of high-income consumers who are less price-sensitive</li> </ul>
Value-Based Insurance Design	<ul style="list-style-type: none"> <li>• Services should be carefully selected based on: <ul style="list-style-type: none"> <li>○ Evidence of long-term benefits</li> <li>○ Evidence of underuse due to cost barriers</li> </ul> </li> <li>• May increase short-term costs as utilization increases in response to reduced cost-sharing</li> <li>• Unclear whether increased utilization of the targeted service (and associated increases in costs) will result in savings in other areas</li> </ul>
Technology Assessment / Evidence-Based Purchasing	<ul style="list-style-type: none"> <li>• Can be costly to conduct adequate comparative effectiveness studies</li> <li>• Some consumers and advocates may object to coverage decisions that incorporate cost data</li> </ul>
Performance Reporting	<ul style="list-style-type: none"> <li>• Unclear whether information alone will influence consumer behavior</li> <li>• Not sustainable because eventually all or most providers will become compliant at which point payments no longer incentivize improvement</li> </ul>

### ***(3) Investments to Improve Health Outcomes at the Population Level***

This final category of system and payment reforms channels funds toward strategic investments in prevention and wellness initiatives with the goal of improving population health and reducing preventable illness. These investments have the potential to produce long-term savings with delayed but potentially substantial return on investment.

For the purposes of this report, this third category of expenditures will be limited to *non-clinical* prevention and wellness efforts. This includes expenditures such as workplace wellness and hospital community benefit programs, but excludes preventive services and screenings offered by health care providers. Therefore, these strategies do not constitute forms of provider payment, but are rather overarching health system expenditures. A broader conceptualization of this category of reform is possible, but it falls outside the scope of California's SIM initiative.

In a budget-neutral setting, investments for non-clinical prevention and wellness programs may be funded through savings from other areas or may focus on coordinating, redirecting, or restructuring existing expenditures for prevention and wellness. The following section describes specific reforms that invest in population health.

### **Global Budget**

The concept of global budgets, which was discussed as a base payment strategy, carries inherent incentives to promote population health. When a single total budget for health care expenditures is established, providers have a strong incentive to prevent illness. Global budgets could theoretically be structured to incorporate both health care and public health funding streams, thus further integrating these domains of health expenditure and encouraging investments for population health.

### **Wellness Trust**

Wellness trusts can be generally defined as a public health fund managed by a coalition or board that distributes money for prevention and wellness activities at the population level. Wellness trusts can be funded through a range of mechanisms and can vary in scope and size.

State-led wellness trusts would identify prevention priorities and fund agencies and community partners to carry out programs in those areas. Current expenditures made by the health care system, such as hospital community benefit programs [44] or prevention and wellness investments made by employers, health plans, and purchasers could be redirected to a wellness trust. The advantages of organizing these expenditures within a wellness trust are pooling of resources, unified goals and objectives, and coordinated and sustained effort.

A more extreme model for a wellness trust has also been suggested. This approach would create a network of national and state agencies that acts as the primary provider of prevention services in the U.S., carving them out of the health insurance system [14, 45]. This type of approach has not been attempted in the U.S. to date.

### **Social Impact Bond**

A social impact bond is a relatively new concept in which private and philanthropic funders invest in programs designed to meet social goals or promote health and wellness. The programs are delivered by a contracted provider, often a nonprofit. If the program ultimately meets performance targets, the public sector reimburses investors for the program [46, 47]. Currently being implemented in the United Kingdom and in select examples in the U.S. [48-52], and recently given a boost by the White House [53], this method creates a risk-free opportunity for governments to support innovative prevention or social programs, ensuring that they only pay for positive results.

### **Community Health Collaborative/Health in All Policies**

A community health collaborative involves representatives from a broad spectrum of fields including public health, health care, and community-based agencies. Using community monitoring, needs assessment, and shared goal setting, collaborators would work together to promote health outcomes at the community level [54]. This concept can be extended to several other frameworks, including a regional health improvement collaborative [55] or a health in all policies framework, which would incorporate health and wellness objectives into both health and non-health sector policies, programs and expenditures, such as community development funds [56]. This approach, which would not redirect money from the health system, could nevertheless improve population health outcomes. It would use health impact assessments sponsored by states or other convening organizations to incorporate health-related factors into decisions related to infrastructure, housing, education policy, and other arenas, thereby addressing non-healthcare determinants of health including social and environmental factors [57-59].

## **EXISTING PAYMENT REFORM INITIATIVES AND POTENTIAL COST SAVINGS**

Payment reforms have been increasingly implemented throughout the U.S. in the public and private sectors. There are innumerable ways to structure payment reforms, customizing and combining approaches to address the structure of the health care delivery system. Most examples

of payment reform initiatives have used complementary strategies to modify incentives of existing base payment arrangements, rather than altering the base payment. However, there are growing numbers of programs that make more fundamental changes to base reimbursement models. Most commentators argue that reforms to base payments are necessary to achieve significant changes in total health care costs. In general, movement toward more aggregated or integrated payment systems is supported by health care financing experts.

This section of the framing report describes payment reform experiments around the U.S. This is not intended to be an exhaustive list of payment reform initiatives; rather it is designed to provide an overview of the general status of payment reform, to describe the major reforms that are currently in place, and to characterize the strategies that are most commonly used by public and private purchasers. It is important to note that the vast majority of initiatives listed in this section have not been evaluated and therefore no evidence is available regarding their effectiveness. All payment reform demonstrations are further described in [Appendix C](#).

After providing an overview of payment reform activity, this section summarizes the state of current evidence related to the potential or actual results of different strategies, including both cost savings and health outcomes.

## *Examples of Payment Reform Initiatives*

### **Programs that Alter the Base Payment Method**

We identified a range of programs that change the base payment made to providers for a specific patient population or array of services. [Appendix C Table 1](#) contains a summary listing of all identified programs with references to additional resources for each.

Global budget agreements can be found in Oregon [60-62], Massachusetts [63-66], and Minnesota [67, 68], but are relatively uncommon in the U.S. In contrast, global payment/capitation is commonly used, and some extensions of this method to new populations or payers are occurring such as California's Coordinated Care Initiative for dual eligibles [69]. Medicare is operating several major demonstrations in the area of bundled payments focused around inpatient episodes [8, 10, 22, 64, 70-73]. Other bundled payment initiatives include Prometheus payment [74-76], Integrated HealthCare Association Bundled Episode Payment and

Gainsharing program in California [11, 74, 77], and the ProvenCare program in Geisinger Health System in Pennsylvania [64, 74, 78, 79].

[Appendix C Table 2](#) contains more detailed descriptions of selected payment reform initiatives within this domain.

### **Programs that Use Complementary Strategies to Adjust Incentives of the Base Payment Model**

There are numerous examples of programs using complementary payment strategies to increase incentives for quality and coordination, or to encourage value-based care decisions. [Appendix C Table 3](#) contains a summary listing of all identified programs with references to additional resources for each.

Shared savings programs, usually supported by an ACO model, exist in several settings, and are being piloted by Medicare nationally [8, 63, 71, 80, 81]. Several of these programs have achieved savings, and evidence of improved health outcomes also exists. Medical home initiatives that make enhanced payments for additional services can be found in almost any purchaser setting and vary substantially in program design. Savings in several programs have been reported, often in multi-payer settings or in initiatives targeted to chronically ill populations [82-85]. There is also some evidence of savings based on P4P programs although most experts agree that this method alone is rarely associated with substantial savings.

Among strategies that provide information to decision makers to allow them to make decisions based on relative value, reference pricing is the most commonly associated with savings ([Appendix C Table 3](#)). Value-based insurance design and tiered networks are common strategies in employer-led payment reforms [35]. There are several examples of other program strategies within this category, but most have not been shown to result in savings or improved health outcomes.

[Appendix C Table 4](#) provides more detailed descriptions of selected payment reform initiatives within this domain.

### **Programs that Make Investments to Improve Health Outcomes at a Population Level**

Two states have established programs that redirect money from the health care system toward population-level prevention and wellness initiatives (Massachusetts [86, 87] and North Carolina [88-90]). Evidence of savings has been established for North Carolina's program only; the others have not yet been the subject of publicly available systematic evaluation. Movement toward use of social impact bond programs also exists although this is a relatively new area of innovation and most programs are still in conceptual phases [46].

[Appendix C Table 5](#) contains a summary listing of all identified programs with references to additional resources for each. [Appendix C Table 6](#) provides more detailed descriptions of selected payment reform initiatives within this domain.

### ***Payment Reform in California***

Many payment reforms are already underway in California through Medicare, Medi-Cal, the current §1115 Waiver, Integrated Healthcare Association (IHI), California Public Employee Retirement System (CalPERS), Pacific Business Group on Health, and numerous commercial initiatives [71]. Many specific strategies for payment reform have been piloted in California, including global payment, bundled payment, shared savings/shared risk within an ACO infrastructure, medical home enhanced payments, reference pricing, tiered and limited networks, and P4P.

Interest in a single payer system exists in California. This approach, as envisioned most recently in 2011 by Senate Bill 810 (Leno) (which did not pass the third reading), would establish a single public entity that negotiates or sets fees and pays claims for all health care services, building upon California's existing payment infrastructure [91]. While this approach has potential merit in terms of health care costs and health outcomes, movement to a single-payer model in the absence of other payment reforms does not substantially alter the incentives experienced by providers and consumers and is unlikely to significantly reduce growth in health care costs.

In California, few reform initiatives are coordinated between payers and populations. The SIM initiative provides an important opportunity to develop and test multi-purchaser payment reforms at a regional or statewide level.

## *Summary of Available Evidence of Effectiveness*

Despite the large number of payment reform initiatives nationally, the evidence base for cost savings associated with any payment reform model is thin. This is due to a range of factors:

- Demonstrating savings is contingent on high-quality data with information about expected costs in the absence of the reform, both of which are not always available.
- Most savings analyses rely on projections of costs from a baseline period, a method which is highly subject to error and which can lead to greatly inflated or deflated calculated savings depending on the assumptions of the projection methodology.
- Many evaluations of payment reform initiatives were completed by a party with a stake in program success, such as the purchaser who sponsored the reform, raising questions about reliability and validity.
- Very minor adjustments in design and implementation of each payment reform strategy can alter the effectiveness of the initiative.
- Many payment reform initiatives use several different strategies concurrently, making it difficult or impossible to determine which strategy caused any observed savings.
- Formal evaluation is lacking for many initiatives, in some cases because they are still ongoing.

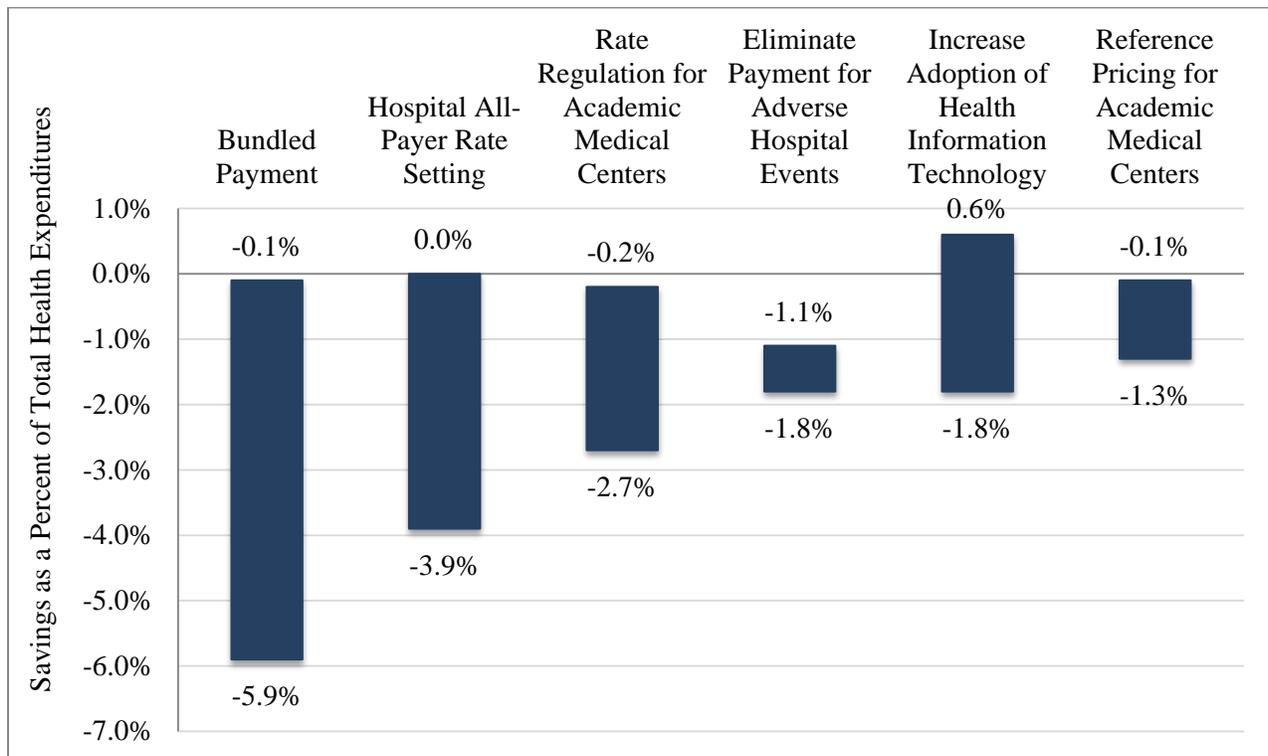
Although there is a general lack of systematic evidence related to savings associated with payment reforms, estimates of potential savings are available in the research literature. RAND Corporation, under contract to Massachusetts, reviewed a range of possible payment reforms and estimated potential savings associated with best-case scenarios related to implementation success [92]. While they did not model the same array of reforms discussed in this paper, they did explore several of the models that are currently common in the literature. Specifically, they considered the following payment and delivery system reform options:

- Bundled Payment Strategies
- Traditional Hospital All-Payer Rate Setting
- Rate Regulation for Academic Medical Centers
- Elimination of Payments for Adverse Hospital Events

- Increased Adoption of Health Information Technology (HIT)
- Reference Pricing for Academic Medical Centers
- Greater Use of Nurse Practitioners and Physician Assistants
- Growth of Retail Clinics
- Medical Homes to Enhance Primary Care – general population
- Decreased Resource Use for End-of-Life Care
- Value-Based Insurance Design
- Use of Disease Management

Among the options considered, the RAND team concluded that bundled payment, all-payer hospital rate setting or rate regulation (a form of reference pricing, similar to that instituted in Maryland), and elimination of payment for adverse hospital events (a type of P4P) were the four methods with the highest potential for cost savings. Their analysis projected potential cumulative savings over 10 years of up to 5.9 percent for bundled payments, as shown in Figure 1 below [92]. The RAND analysis may constitute the best available evidence of the *potential* for savings inherent in each payment reform model.

**Figure 1. Estimated Potential Cumulative Savings from Payment Reform Options Over 10 Years, Showing Six Strategies with Highest Savings Potential.**



Source: From Eibner, C., et al., *Controlling Health Care Spending in Massachusetts: An Analysis of Options*, 2009. The RAND Corporation [92].

Other research that simulates potential estimated savings from payment reforms is available. The Commonwealth Fund recently published an estimate of cumulative savings over 10 years of roughly \$2 trillion if a broad set of policy reforms are undertaken [93]. They modeled the combined effect of 10 “synergistic policies” that included use of medical home for complex patients, bundled payments for hospital services, value-based insurance design, global spending targets, and other strategies. Many other estimates of savings are available in the literature [93, 94], although their focus and methods vary.

Evaluations of specific payment reform demonstrations have also provided some insight into the potential for cost savings. Savings have been associated with bundled payment initiatives including the Medicare Acute Care Episode Demonstration for heart and orthopedic surgical procedures [73], the Geisinger ProvenCare program [64, 73], and the Medicare Participating

Heart Bypass Center Demonstration [95]. There is also evidence of savings from shared savings/shared risk agreements in the CalPERS Global Budget Pilot/Sacramento Pilot ACO [96], the Patient First Shared Savings Program in Alabama [97], and the Medicare Physician Group Practice Demonstration [98]. There were significant variations in savings between participating practices in the Medicare demonstration, highlighting mixed potential for savings based in part on implementation and practice characteristics.

P4P programs have generally been found to have small and short-lived impacts on health outcomes [43, 99]. Some have suggested that mixed evidence with respect to impacts of P4P programs are reflective of improved reporting, trends in hospital performance, volunteer bias among participating providers, and other concurrent quality initiatives, rather than true improvements attributable to P4P [63, 100]. One author found that greater quality improvement was associated with higher P4P rates, suggesting that increasing the size of the bonus payments may be key to achieving desired results [101]. Few evaluations of the cost savings associated with P4P are available, and evidence in this area is mixed [100].

There is evidence of savings from several medical home demonstrations in differing settings and populations [83, 84, 102-104]. However, the specific design of medical home strategies, other aspects of the overall payment system, and methods for evaluating savings were mixed, leading to difficulty reaching clear conclusions about the potential for savings.

Savings have also been achieved in reference pricing programs, including the CalPERS reference pricing program for hip and knee replacements for which preliminary data indicate a 25 percent decrease in cost per case [31]. Arkansas instituted reference pricing for proton pump inhibitors in the state employee health plan and achieved significant reported decreases of roughly 50 percent in PMPM net plan costs for these medications [105].

Researchers from the Trust for America's Health recently produced estimates of the potential return on investment from specific types of population-health programs [106]. Focusing on evidence-based interventions to improve physical activity and nutrition and reduce tobacco use, they incorporated data from the literature on disease prevalence, expected reductions in chronic disease and associated health care costs, and the costs of program implementation. Their analysis demonstrated that that within five years, California could achieve savings of nearly \$5 for every

\$1 invested in these community-based population health investments [106]. Evidence shows that potential for savings may be greater for specific conditions and populations, indicating that carefully designed and targeted interventions may be appropriate [107]. For example, a separate analysis found that interventions to treat obesity, hypertension and diabetes among middle-aged adults could lower lifetime medical costs for individuals even if interventions were only effective for ten percent of the population at risk. Conversely, smoking cessation programs with the same level of effectiveness would increase lifetime medical costs [108].

## **CONSIDERATIONS FOR CALIFORNIA'S SIM GRANT DESIGN WORKGROUP**

### *California's Unique Environment*

California's health care environment is unique for a range of reasons. California is geographically large and highly populous, with more than 37.5 million residents [109]. Health care resources and trends in rural areas differ from more populous parts of the state. More than 80% of California's geography is defined as rural, and roughly 13% of California's population or more than 5 million people live in rural areas [110]. Health care services in California are provided through four basic financing models: group model HMOs (i.e., Kaiser Permanente), independent practice association (IPA) HMOs (with individually contracted providers), the direct FFS system (i.e., preferred provider organizations (PPOs)), and services for people without insurance financed by the government, charity care and other sources of safety net funding [111].

HMO enrollment in California is higher than in any other state, at roughly 42 percent in 2010 [17]. A majority of Medi-Cal beneficiaries were enrolled in managed care plans in 2010 [112], and Medi-Cal managed care enrollment has increased since that time with the transition of seniors and persons with disabilities from Medi-Cal FFS to Medi-Cal managed care in 2011 and 2012. However, overall enrollment in HMOs has declined over the last decade, while enrollment in PPOs and other FFS plans has increased [112]. There is significant geographic variation in HMO penetration, with some regions experiencing penetration (in 2006) in excess of 60 percent (Sacramento, Sonoma/Napa) while others are below 25 percent (Central Coast, Northern) [111].

Supply of providers, geographic factors, and other characteristics of California's substantial rural population pose unique challenges in health care access and delivery in rural areas.

The health care market has distinct regional subdivisions, but many parts of the health system in California are associated with national companies and have large geographic coverage in the state [111]. Depending on the region, different health plans and hospitals may have dominant market share [111]. A trend toward hospital and provider group consolidation exists in the state [71]. More California physicians participate in medical groups or IPAs than in other states [17, 113], and it is estimated that at least 25 percent of these providers are paid via salaried arrangements [114]. However, relatively little is known about how individual providers are compensated by provider organizations. More than 75 percent of total health insurance revenues in California in 2010 were accounted for by five insurance carriers – Kaiser, Anthem Blue Cross, Health Net, Blue Shield, and United Healthcare [112].

These factors, when taken together, have implications for multi-stakeholder payment reform in California. Given the framework for understanding payment reform options, evidence regarding payment reform from around the nation, and California's unique environment, the following section outlines key considerations for California's SIM Design Grant workgroup. This section was developed with input from the many key informants who were interviewed as part of the research process.

### *Considering a Regional Strategy*

Because of the diversity of health care markets in California, differing levels of managed care penetration, and some regionally dominant hospital systems, most experts recommend a regional approach to payment reform. To unify the overall state experience, the core goals and principles of payment reform could be uniform across different markets. Counties or regions with greater readiness could be the first to implement reforms, or reforms could be simultaneous but specialized across regions.

Each region or market will have differing characteristics, readiness, and players. Experts suggest that any effort toward payment reform should begin by completing an analysis of health care markets. Given the short duration of the SIM Design Grant period, the workgroup might consider

building on existing market assessments and expert insight to the greatest extent possible, to answer a wide range of questions: For what services is divergence between cost and outcomes greatest? Are specific purchasers or employers influential in the market? To what extent do providers function as an integrated health system? How much price variation is present in the market? These insights could then be used to identify promising avenues of reform for each market or region. The Center for Studying Health Systems Change has recently updated market analyses focused on six California regions that can provide valuable insight [115, 116]. If the SIM workgroup identifies a need for additional market analysis, Catalyst for Payment Reform has developed a publicly available market assessment tool which may be useful for this purpose [117].

### *Provider and Purchaser Readiness*

Readiness for payment reform at all levels of the health care system is an essential consideration for the SIM Design Grant workgroup. There are many aspects of readiness that could influence the design of a payment reform initiative in California such as adequacy of provider supply or extent of support from organizational leadership; we highlight three critical areas below:

#### **Health Information Technology**

Data capacity is essential to fully understand utilization patterns, identify opportunities for improvement, and effectively coordinate care. All payer claims databases (APCDs) are a possible mechanism to support health IT needs, and have been implemented or are underway in 10 states, including California (supported by the Pacific Business Group on Health) [63, 118]. While experts suggest that APCDs can support payment reform initiatives, they are not a mechanism to control costs on their own [118, 119].

In addition, individual providers and provider organizations may need to achieve specific health IT capacity goals to support changes in care delivery inherent in payment reform. While electronic health records (EHRs) are expected to facilitate improvements in health care quality and value, estimates from 2009 indicate that only roughly 16 percent of hospitals and 22 percent of office-based providers had an EHR in use [120]. EHRs may be necessary to support population health management, proactive patient engagement, and other characteristics of

integrated care inherent in models like ACOs or medical homes. However, implementing an EHR is costly and can take several years to complete.

### **Insurance Risk**

Under many payment reform models, providers are expected to take on increasing risk for the care of their patient population; in some cases including both insurance risk and performance risk. Many providers may be unable (do not meet appropriate size threshold) or unwilling to take on insurance risk, which is the risk that a patient will become ill and require treatment, a factor that is outside of the provider's control. Some experts argue that this feature of global budgets or global payments make these models less likely to be successful than bundled payments, which do not require providers to take on insurance risk.

### **Administrative Systems**

Purchasers/payers may also lack capacity to undertake some payment reforms due to the structure of claims adjudication systems. In many cases, these systems would require upgrades to manage changes to provider reimbursement. For example, purchasers that switch to a more aggregated payment structure such as bundled episode payments would need to develop a method to determine which claimed services are "in-bundle" and which are not. This allows the purchaser to distribute FFS payments for out-of-bundle service, while reimbursing via bundled payments for the defined episodes of care [6]. Providers may experience similar barriers related to the structure of administrative systems. Payment reforms that do not change the existing base payment model may be easier for providers and payers to adopt.

Some have suggested that an effective response to varied readiness for reform is to allow providers and purchasers to participate in reform incrementally or to begin with ready and willing providers [6]. However, a core principle of the SIM initiative in California is to adopt an approach to payment reform that will receive broad participation and buy-in. Providers and payers may be more willing to invest in changes to administrative systems if reforms are quickly scaled and generally uniform across purchasers; building new administrative capacity for pilot projects or reforms that impact only a small share of total business is not cost-effective.

## *Price Setting and Implementation Costs*

Appropriate price setting is critical to maximize the effectiveness of any given payment strategy. Setting prices too high may dilute provider incentives to offer efficient and coordinated care. Conversely, setting prices too low may cause payments to be insufficient to cover appropriate services for high-quality treatment and could lead providers to undertreat patients or otherwise restrict access to services for the sake of financial stability [10].

Price setting under any reform strategy will also impact the implementation costs associated with the reform. Many payment reform programs will have substantial implementation costs, both from the near-term changes in infrastructure and business practices to make the initial transition and from the long-term costs associated with making payments to providers. If the implementation costs outpace the level of savings in direct health care costs achieved from reform, the net effect may be negative. In designing a cost neutral payment reform initiative, this concept is of particular importance.

An initial period of start-up costs may be required in early stages of program implementation, to facilitate change and establish provider buy-in [6]. However, a model that does not ultimately lead to a reduction in the total cost to purchasers will only serve to change the ways in which funds flow to providers without achieving savings.

In programs that do *not* successfully achieve savings, it may be possible to adjust the set price to strengthen incentives or reduce implementation costs sufficiently to realize savings. Therefore, monitoring of implementation costs and savings and flexibility in setting prices are important to ultimate success.

## *Maximizing Administrative Efficiency*

Administrative costs constituted roughly 7% of total U.S. health expenditures in 2009 [5]. Nevertheless, administrative complexity has been estimated to be one of the top six areas of waste in the U.S. health care system accounting for as much as \$389 billion in waste in 2011 [12]. Payment reform has potential to increase or decrease administrative complexity.

Administrative simplification could be established as a priority in the design of California's payment reform initiative, regardless of the specific payment strategies employed.

### *Targeted Interventions*

There are two basic ways of thinking about targeted reforms: the first would focus on current cost-drivers such as individuals who are high-risk. The second would focus on maintaining the health of low-risk populations.

Targeted reforms may have a higher likelihood of achieving savings in the demonstration period. Moreover, if targeted reforms can yield greater short-term success, such an approach may help establish momentum and buy-in among purchasers, providers, and other stakeholders.

Specific candidate targets for reforms might include conditions or services that affect a large number of patients or those where there is strong leadership or wide interest in change. Other criteria for targeted reform might be services that constitute a large volume of expenditures, or where there is evidence of overutilization, or services where high variation in cost or quality is observed [17]. Some experts have suggested specific types of service that may be good candidates for reform, such as end-of-life care, which constitutes a large share of total medical expenditures, or maternity care for which prices are varied despite a fairly predictable course of treatment.

Experts suggest that reforms will be most successful in achieving substantial cost savings if they shift incentives for hospitals and specialists in addition to or versus primary care providers. Hospitals account for a large share of total medical spending and may have greater potential to yield savings than outpatient providers.

Advocates also argue that there may be high potential for cost savings and improvements in quality of care for particular populations such as the chronically ill or other high-cost/high-risk individuals [32, 121-123]. Other potential population-based parameters for payment reform may include individuals with behavioral health comorbidities or individuals who are likely to become ill or disabled in the absence of intervention. However, some experts argue that focusing on high-cost individuals may perpetuate the short-term "illness" focus of the health system, to the extent that they fail to maintain the health of low-cost populations.

Any targeted reform should be selected based on evidence for tractability of costs and outcomes and potential savings. Historically, reform initiatives have in some cases been implemented in settings where savings were unlikely due to limited mutability of disease progression, high cost of intervention relative to potential savings, or other factors. Evidence-based selection of potential targets for payment reform is essential, particularly in light of the short duration of the SIM testing phase.

### ***Protecting Vulnerable Populations***

There are important concerns that payment reforms could negatively impact already vulnerable populations by creating or increasing incentives for providers to avoid these patients if reform initiatives are not appropriately structured [63]. Most payment methods require careful risk adjustment to mitigate these potential adverse incentives, and any program that is implemented should be monitored for impacts on disparities in access and outcomes.

Another area of concern related to vulnerable populations involves payment reforms that require increasing out-of-pocket contributions when consumers make low-value choices. Some argue that vulnerable groups may have less ability or opportunity to select a high-value provider, particularly if they must travel to access that provider. Therefore, such programs may need careful design considerations to ensure adequate consumer supportive services [6].

### ***Market Consolidation and the Regulatory Framework***

A major goal of payment reform is to better integrate care. Strategies that incentivize increased provider coordination and/or lead to creation of integrated provider organization such as ACOs have potential to reduce duplicative services, improve quality of care and produce savings. Moreover, increases in patient volume and market share can be an incentive for providers to meet value goals, particularly if they have excess capacity or experience low demand. However, to the extent that providers or organizations control an increasing share of the market, competition may decrease and, in time, those providers may gain undue market leverage.

Economists generally agree that market consolidation is a major driver of increasing costs. Several experts argue that California already experiences insufficient provider competition. In

fact, some suggest that one goal of payment reform might be to generate increased competition between provider groups [33, 124-127]. While increasing competition on its own may be unlikely to reduce expenditures, it is an important underlying feature of successful payment reform.

After selecting candidate payment reform strategies, the Design Grant workgroup should assess any necessary statutory or regulatory changes or waivers from the federal government. The impacts of regulatory structure on reform options in California, including legislative and political feasibility, are an important factor that are best acknowledged and addressed early in the Design Grant process.

### *Consumer Perceptions*

A fundamental challenge in payment reform is that consumers may perceive lower cost to mean lower quality and providers often believe that higher quality requires higher cost [6]. Experts agree that consumers are highly price-sensitive and will select a lower-cost provider when information is available to support similar quality among low and high-cost options. Consistent price and quality information that includes a clear explanation of consumer cost-sharing is essential to support value-based decision making. Movement toward clearly distinguishing cost and quality will be an important step toward expenditure reductions.

### *Framework for Defining Costs and Savings*

The Design Grant workgroup must establish a framework for how California will define savings under the SIM initiative; the CMMI Model Testing requires that the payment reform achieve savings over the three-year demonstration period. Savings can be achieved at many levels, ranging from the patient level to the provider organization level, the payer/purchaser level, the regional level, or the state level. Defining savings at a broad level will help prevent increases in cost-shifting. Understanding the savings goal early in the design process will help the workgroup create a successful payment reform model.

## *Aligning Payment Reforms and Incentives*

The workgroup should consider beginning the process of designing a payment reform strategy by establishing agreement on the core principles of reform and desired provider incentives. Several specific aspects of payment reform that are critical to align across payers and purchasers to the greatest extent possible are outlined by Harold Miller (2008), including: the types of providers and patients who will participate, the methods of measuring quality and value, and the payment levels and types of services to be included. Above all, purchasers must agree on the incentives to be fostered by the reformed payment system [6].

In addition to alignment at the purchaser/payer level, payment reform could seek to better understand the incentives experienced by individual providers. More detailed information about how payments are dispersed from provider organizations to individual providers would be helpful in assessing and increasing alignment of incentives at the organizational and practice levels.

## CONCLUSIONS

Provider payment methods have inherent incentives which drive care delivery systems and behavior. Payment reforms seek to better align payment systems with goals and priorities for long-term health and wellness, while achieving reductions in cost growth. There is broad national discussion about health care payment reform underway, and examples of initiatives in the public and private sectors abound. We developed a typology of health care payment models to better describe the range of possible strategies for payment reform. There are three major domains of health care payment strategies for reform:

- 1) Providers are reimbursed for the delivery of services via a ***base payment model***, which may make payments for individual services or people or groups of services or people.
- 2) ***Complementary strategies*** are used to adjust incentives of the base payment model by:
  - a) Adjusting payments to achieve a secondary aim like improving quality and coordination; or

- b) Providing decision makers (purchasers, providers or patients) with information to allow them to make decisions based on relative value.
- 3) Investments are made to *improve health outcomes at a population level*.

There are many possible variations on the specific strategies within each domain and most reform initiatives combine multiple approaches to achieve specific aims and meet local market needs. Incremental reforms that make small adjustments to the incentives felt by providers and consumers are commonly found around the nation. These programs use complementary strategies to modify the incentives of the base provider payment method, without modifying the fundamental way in which providers are reimbursed for services.

Some argue that incremental reforms do not sufficiently alter incentives in the health system to yield the substantial changes in health care costs needed. Reforms that change the base provider reimbursement method may be most suitable if they can be successfully implemented.

Ideally, payment reforms and their associated incentives will be coordinated between purchasers to maximize their impact on system, provider, and consumer behavior. A coordinated multi-payer approach to payment reform is ideal for many reasons, including the complex nature of provider contracting, the administrative burdens associated with changing care delivery and business practices, and the delay in savings associated with many services and strategies, such as prevention-focused initiatives [6, 13-15].

No single payment reform strategy is clearly identifiable as the ideal approach to be adopted under California's SIM initiative. There are many ways in which provider and consumer incentives can be modified to more closely align care with the triple aim of better health, better care, and lower costs. The SIM initiative creates an opportunity for California to build broad engagement in reforming the health care system. The charge for the SIM Design Grant workgroup will be to recommend a comprehensive payment reform strategy that moves the state toward value-based care.

■ ■ ■ ■ ■

## **APPENDIX A: Excerpted Language from the State Innovation Model Funding Opportunity Announcement**

### **Funding Opportunity Announcement, Section 5. A. iv. [2]**

“As part of the development of their State Health Care Innovation Plans and designs for new payment and service delivery models, states must consider levers and strategies that can be applied to influence the structure and performance of the health care system, such as:

- a) Creating multi-purchaser (including Medicare, Medicaid, CHIP, and state employee health benefit programs) strategies to move away from payment based on volume and toward payment based on outcomes;
- b) Developing innovative approaches to improve the effectiveness, efficiency and appropriate mix of the health care work force through policies regarding training, professional licensure, and expanding scope of practice statutes, including strategies to enhance primary care capacity, and better integrate community health care manpower needs with graduate medical education, training of allied health professionals, and training of direct service workers;
- c) Aligning state regulatory authorities, such as certificate of need programs (if applicable), to reinforce accountable care and delivery system transformation or developing alternative approaches to certificate of need programs, such as community-based approaches that could include voluntary participation by all providers and purchasers;
- d) Restructuring Medicaid supplemental payment programs to align the incentives with the goals of the state’s payment and delivery system reform Model;
- e) Creating opportunities to align regulations and requirements for health insurers with the broader goals of multi-purchaser delivery system and payment reform;
- f) Creating mechanisms to develop community awareness of and engagement in state efforts to achieve better health, better care, and lower cost through improvement for all segments of the population by:
  - a. developing effective reporting mechanisms for these outcomes;
  - b. developing community-based initiatives to improve these outcomes;
  - c. developing potential approaches to ensure accountability for community-based outcomes by key stakeholders, including providers, governmental agencies, health plans, and others;
  - d. coordinating efforts to align with the state’s Healthy People 2020 plan, the National Prevention Strategy, the National Quality Strategy, and the state’s health IT plan; and
  - e. coordinating state efforts with non-profit hospitals’ community benefits/community building plans;

- g) Coordinating state-based Affordable Insurance Exchange activities with broader health system transformation efforts;
- h) Integrating the financing and delivery of public health services and community prevention strategies with health system redesign models;
- i) Leveraging community stabilization development initiatives in low income communities and encouraging community investment to improve community health. For example, the Federal Reserve Bank’s Healthy Communities Initiative was designed to enable cross-sector approaches to revitalizing low-income communities and neighborhoods and improving community health;
- j) Integrating early childhood and adolescent health prevention strategies with the primary and secondary educational system to improve student health, increase early intervention, and align delivery system performance with improved child health status;
- k) Creating models that integrate behavioral health, substance abuse, children’s dental health, and long-term services and support as part of multi-purchaser delivery system model and payment strategies;
- l) Creating or expanding models such as the Administration on Community Living’s Aging and Disability Resource Centers and CMS’ Money Follows the Person Program and Balancing Incentives Payment Program to strengthen long-term services and support systems in a manner that promotes better health, reduces institutionalization, and helps older adults and people with disabilities maintain independence and maximize self-determination; and
- m) Other policy levers that can support delivery system transformation. Part of the expectation for states participating in the SIM initiative is that they will assess and consider the application of policy authorities available to them to create a successful and sustainable health system transformation.
- n) Leveraging health IT, electronic health records (EHRs), and health information exchange technologies, including interoperable technologies, to improve health and coordination of care across service providers and targeted beneficiaries.”

**Funding Opportunity Announcement, Section 5. B. iv.**

“The following are areas that are out of scope and will not be considered under the State Innovation Models initiative:

1. Medicare or Medicaid eligibility changes;
2. Coverage or benefits reductions in Medicare or Medicaid or any changes that would have the effect of rationing care;
3. Increases in premiums or cost-sharing;
4. Increases in net federal spending under the Medicare, Medicaid or CHIP programs;
5. Medicare payments directly to states, including shared savings;

6. Medicaid FMAP formula changes;
7. Changes to the EHR incentive program for eligible professionals and eligible hospitals;
8. Changes in State Financial Alignment Models;
9. Reductions in Medicare beneficiary choice of provider or health plan, or Medicaid choice of provider or health plan beyond those allowed today; or changes to maintenance of effort requirements
10. Changes to CMS sanctions, penalties, or official denial of participation currently in effect.”

## APPENDIX B: Brief Definitions of Payment Strategies within Three Domains

Appendix B Table 1: Three Major Domains of Health Expenditure

1. BASE PAYMENT MODELS	
<b>Global Budget</b>	Provides a total <i>fixed dollar amount for the care of a defined population</i> over a set period of time. Can also be structured to provide a budget for a specific organization such as a hospital.
<b>Global Payment/Capitation</b>	Provides a <i>fixed dollar amount for the total cost of care per member</i> across settings and conditions for a defined period of time.
<b>Condition-Specific Capitation</b>	Provides a <i>fixed dollar amount for the total cost of care per member for a specific condition</i> , across settings and over a defined period of time. This method would be used encompass all care for chronic conditions like diabetes or asthma.
<b>Bundled Episode Payment</b>	Provides a <i>single grouped reimbursement for all of the services delivered to a patient within a single treatment or episode of care</i> over a defined period of time. This payment may bridge settings and providers, but is linked to one episode of treatment for a specific condition or procedure.
<b>Fee-for-Service</b>	Provides <i>distinct reimbursement for each service</i> used by a patient.
2. COMPLEMENTARY STRATEGIES THAT ADJUST INCENTIVES OF THE BASE PAYMENT MODEL	
a. Adjust payments to achieve a secondary aim like improving quality and coordination	
<b>Shared Savings/Shared Risk</b>	Allows providers to receive a portion of the savings achieved for managing the care of a population, with savings based on a target cost benchmark. Shared savings agreements can

also be structured to incorporate “downside” risk for providers, such that they are accountable for excess expenditures.

**Enhanced Payments for Additional Services**

Provides additional or enhanced payments to providers for care coordination activities and other beneficial activities that are generally not reimbursable. Payments may be issued via per member bonuses, through creation of new billing codes, or by elevating base payment rates. An example is the additional payment made to primary care providers under the medical home model.

**Pay-for-Performance**

Establishes financial rewards or penalties for providers or provider groups tied to performance on quality of care benchmarks. Also called Value Based Purchasing.

**Provider Warranty**

Creates financial incentives to reduce costs associated with avoidable complications, by requiring providers to incur part of the costs for these events through an effective warranty that they will not occur. Can be structured to include potential for shared savings.

**b. Provide decision makers with information to allow them to make decisions based on relative value**

**Reference Pricing**

Purchasers establish a uniform, reasonable maximum amount they will contribute toward a specific drug, procedure, service, or bundle of services, which the purchaser then applies to all providers. Consumers pay the difference in cost if they use a provider whose cost is higher than the reference price.

**Tiered or Limited Networks**

Purchasers establish cost- and quality-based tiers of providers and use corresponding cost-sharing tiers to encourage consumers to use higher value providers.

This method may be extended to establish “Centers of Excellence,” high-value providers for specific services. Consumers may be restricted to these providers, or may be able to use non-designated providers but at a much higher out of pocket cost.

**Value-Based Insurance Design**

Purchasers use strategic adjustments to cost-sharing to encourage consumers to use high-

value services. This method generally focuses on eliminating or lowering cost-sharing for desirable service use.

**Technology Assessment/Evidence-Based Purchasing**

Uses comparative effectiveness methods to assess the value of specific services. These assessments can be used in publicly reported ratings, provider decision-support tools and practice guidelines, and benefit package or cost-sharing decisions by purchasers.

**Performance Reporting**

Quality (and sometimes cost) data are publicly reported for use by consumers.

**3. INVESTMENTS TO IMPROVE HEALTH OUTCOMES AT A POPULATION LEVEL**

**Global Budget**

The concept of global budgets, which was discussed as a base payment strategy, carries inherent incentives to promote population health. When a single total budget for health care expenditures is established, providers have a strong incentive to prevent illness.

**Wellness Trust**

A public health trust fund managed by a coalition or board that establishes coordinated prevention strategy at the community or population level and manages and distributes money for these activities. Wellness trusts can be funded from various sources, such as by pooling current prevention/wellness expenditures by hospitals, health plans, employers, and purchasers, and can vary in scope and size.

**Social Impact Bond**

Private or philanthropic investors fund programs with social or prevention goals, with capital and profit returns guaranteed by the government but contingent on program success.

**Community Health Collaborative /Health in All Policies**

Representatives from a broad spectrum of fields including public health, health care, and community-based agencies would collaborate to promote health outcomes at the community level. A health in all policies framework would incorporate health and wellness objectives into non-health sector policies, programs and expenditures, using tools such as health impact assessment to inform policy and program decisions across sectors.

## APPENDIX C: Summary of Existing Payment Reform Demonstrations

The following tables catalog major or notable payment reform experiments that are currently underway or have been completed around the U.S. Appendix C Table 1 lists initiatives that alter the base payment methodology. Appendix C Table 3 lists initiatives that use complementary strategies to change provider or consumer incentives. Appendix C Table 5 lists initiatives that make investments to improve health outcomes at the population level. Appendix C Tables 2, 4 and 6 provide detailed descriptions of selected initiatives within each domain.

This is not intended to be an exhaustive list of payment reform initiatives in the U.S. Rather it is designed to provide an overview of the general status of payment reform, to describe the major reforms that are currently in place, and to characterize the strategies that are most commonly used by public and private purchasers. Cost savings and/or health outcomes are denoted if the authors identified documentation of evaluation findings that support these outcomes in the literature. It is important to note that the vast majority of listed initiatives have not been evaluated, and therefore no evidence is available regarding their effectiveness.

**Appendix C Table 1. List of Payment Reform Initiatives that Change the Method of Base Payment**

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Global Budget	Rochester Hospital Global Budget Agreement [68, 128]	New York	All-Payer agreement with hospitals in Rochester, NY, during 1980s	✓	
Global Budget with Shared Savings	Oregon Coordinated Care Organizations (CCO) [60-62]	Oregon	Medicaid managed care, encompasses physical, behavioral and dental health care		
Global Budget with Tiered Providers	Patient Choice Model [67, 68]	Minnesota	Members of employer-based, commercial plans		
Global Payment with Pay-for-Performance	Alternative Quality Contract (AQC) [63-66]	Massachusetts	Blue Cross Blue Shield of Massachusetts	✓	

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Global Payment	Coordinated Care Initiative [69]	California	Dually eligible Medicare and Medi-Cal beneficiaries in eight demonstration counties		
Bundled Episode Payment	CMS Bundled Payments for Care Improvement initiative [8, 22, 71]	National	Medicare		
Bundled Episode Payment	CMS National Pilot Program for Payment Bundling [8, 64, 70, 71]	National	Medicare		
Bundled Episode Payment	Acute Care Episode Demonstration for heart and orthopedic surgical procedures [8, 10, 72-74]	National	Medicare beneficiaries at participating hospitals in Texas, Oklahoma, New Mexico and Colorado.	✓	
Bundled Episode Payment	Participating Heart Bypass Center Demonstration [95, 129, 130]	Regional	Medicare, four selected hospitals	✓	
Bundled Episode Payment; transitioning to also include Condition-Specific Capitation	PROMETHEUS Payment [8, 74-76]	National	Hospitals; selected acute care episodes and surgical procedures in Pennsylvania, Illinois and Michigan. Also being developed for chronic conditions.		
Bundled Episode Payment	Diagnosis Related Group Hospital Inpatient Payment Methodology [131]	California	Medicaid		
Bundled Episode Payment	Integrated HealthCare Association Bundled Episode Payment and Gainsharing program [11, 71, 74, 77]	California	Members of Commercial PPO, HMO, Medicare Advantage, and Medi-Cal Managed Care programs		

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Bundled Episode Payment	Minnesota Baskets of Care Program [67, 74, 132]	Minnesota	Optional program that does not apply to services paid for by Medicare, state public health care programs through fee-for-service or prepaid arrangements, workers' compensation, or no-fault automobile insurance.		
Bundled Episode Payment, Provider Warranty	ProvenCare [64, 74, 78, 79]	Pennsylvania	Geisinger Health System Surgical procedures	Implied	

Source: Authors' review of the literature as of November 2012.

**Appendix C Table 2. Descriptions of Selected Programs that Alter the Base Payment Method**

The **Alternative Quality Contract (AQC) in Massachusetts** is a global payment program between Blue Cross Blue Shield of Massachusetts and 11 provider groups. The program makes a fixed global payment per member adjusted for the health of the patient, to cover all care services delivered. Several methods are used to increase incentives for value: providers may elect to participate in a P4P system, receiving bonus payments of up to 10 percent based on quality of care targets. In addition, some providers have 50 percent shared savings/shared risk agreement, and all providers are required to purchase a reinsurance policy to cover excess spending. Independent researchers found reduced medical spending and improved quality relative to a comparison group with FFS reimbursement. Although average expenditures increased in both the AQC group and the control group, the increase in the AQC group was lower, leading to a 2.8 percent average savings over two years.[63-66]

The **Minnesota Patient Choice Model** uses a global budget system for defined populations. Under this program providers organize themselves into delivery systems, and bid on the risk-adjusted total cost of care for a population. Providers continue to use FFS billing codes, but the fee levels that are actually paid are adjusted to keep total payments within a budget. The budget is based on the provider's bid but is risk adjusted to account for the characteristics of the actual covered population. Care systems are divided into tiers based on costs and quality, and consumers pay increased out of pocket expenses if they select a higher-cost care system.[67, 68]

**Appendix C Table 3. List of Payment Reform Initiatives that Employ Complementary Strategies to Adjust Base Payment Incentives**

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
<b>A. Adjust payments to achieve a secondary aim like improving quality or coordination</b>					
Shared Savings/Shared Risk over capitated payments, using target global PMPM budget	CalPERS Global Budget Pilot/ Sacramento Pilot ACO [11, 96]	California	Enrollees in CalPERS Blue Shield HMO plan	✓	
Shared Savings	Patient First Shared Savings Program [97, 133]	Alabama	Medicaid, primary care providers	✓	
Shared Savings	Medicare Physician Group Practice Demonstration [63, 80]	National	Medicare	✓	✓
Shared Savings/Shared Risk within a global budget target, with no change to existing FFS or capitated payments	Health Care Delivery Systems Demonstration (HCDS) [134-136]	Minnesota	Non-dually eligible adults and children in Medical Assistance and MinnesotaCare enrolled under both fee-for-service and managed care programs		
Shared Savings/Shared Risk over FFS payments	Medicare Shared Savings Program (MSSP) [8, 71, 81]	National; forty states	Medicare		
Shared Savings/Shared Risk over FFS payments; transitioning to partial capitation	Pioneer Accountable Care Organization [81]	National	Medicare		
Medical Home enhanced payment	Boeing Intensive Outpatient Care Program [137]	Washington	Boeing self-funded non-HMO plan enrollees in Puget Sound	✓	✓

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Medical Home program enhanced payment with base FFS payments and shared savings agreement	Priority Care [138, 139]	California	High-intensity primary care for CalPERS beneficiaries in Anthem PPO, Humboldt County		
Medical Home enhanced FFS payments	Colorado Children's Medical Home Initiative [140]	Colorado	Medicaid and CHIP		
Medical Home Grants, with Shared Savings incentive	Chronic Care Initiative [82, 85, 141]	Pennsylvania	Six major commercial payers, Medicaid managed care and Medicare managed care	Implied	✓
Medical Home PMPM enhanced payment with base FFS and P4P agreement	High Value Patient Centered Care Demonstration [139, 142]	Oregon	High-intensity primary care for complex patients in five health plans and four state purchasing groups.		
Medical Home PMPM enhanced payment	Medicaid-Medicare Advanced Primary Care Demonstration Initiative (APC) [8, 143-145]	Eight states	Medicare joining established multi-payer efforts in Maine, Vermont, Rhode Island, New York, Pennsylvania, North Carolina, Michigan, and Minnesota.		
Medical Home PMPM enhanced payment	Maine's Multi-payer Patient Centered Medical Home Pilot [140, 146]	Maine	Medicaid, Medicare FFS, and commercial payers		
Medical Home PMPM enhanced payment	MaineCare Primary Care Case Management (PCCM) program [147, 148]	Maine	Medicaid		

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Medical Home PMPM enhanced payment over FFS or capitated payments	New York Medicaid's Statewide Patient-Centered Medical Home Incentive Program [149]	New York	Medicaid		
Medical Home PMPM enhanced payment over FFS payments	Accountable Care Collaborative [102, 150-152]	Colorado	Medicaid FFS enrollees	✓	
Medical Home PMPM enhanced payment over FFS payments	Wellpoint's New York PCMH Demonstration [84]	New York	Wellpoint	✓	✓
Medical Home PMPM enhanced payment over FFS payments with regional community health teams; transitioning to include Shared Savings	Vermont's Pay-for-Population Program /Vermont Blueprint for Health [140, 153-155]	Vermont		✓	
Medical Home PMPM enhanced payment over FFS payments, with health IT adoption grants	Chronic Care Sustainability Initiative (CSI-RI) [68, 141, 156, 157]	Rhode Island	All Medicaid-contracted health plans, all state regulated commercial insurers, several large employers, Medicare Advantage plans, and Medicare fee-for-service		
Medical Home PMPM enhanced payment over FFS payments, with Shared Savings	Accountable Communities ACO [147]	Maine	Medicaid		

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Medical Home PMPM enhanced payment over FFS payments; some payers also offered pay-for-performance bonuses	New Hampshire Citizens Health Initiative Multi-Stakeholder Medical Home Pilot [84]	New Hampshire	Four commercial payers	✓	--
Medical Home PMPM enhanced payment over FFS, with pay-for-performance bonuses	Colorado Multi-Payer Patient-Centered Medical Home Pilot [83-85]	Colorado	Medicaid, Medicare, UnitedHealthcare, Anthem-WellPoint, Aetna, Cigna, Humana, and the state's high-risk pool carrier	✓	✓
Medical Home PMPM enhanced payment over FFS, with pay-for-performance bonuses	SoonerCare Choice [140, 158]	Oklahoma	Medicaid	✓	✓
Medical Home PMPM enhanced payment over FFS, with pay-for-performance bonuses and regional community health teams	Adirondack PCMH Multi-payer Demonstration [159]	New York	Medicaid, CHIP, Medicare FFS, commercial payers		
Medical Home PMPM enhanced payment with regional community health teams	Community Care of North Carolina (CCNC) [8, 85, 104, 160]	North Carolina	Medicaid	✓	✓
Medical Home PMPM enhanced payment with Shared Savings	Massachusetts Patient-Centered Medical Home Initiative [25]	Massachusetts	Thirteen public and private payers		

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Medical home enhanced payments with Shared Savings and Shared Risk	Medicare Comprehensive Primary Care Initiative (CPCI) [8, 105, 147]	Seven selected markets in eight states	Medicare and private payers		
Pay-for-performance and Medical Home PMPM	Michigan Physician Group Incentive Program [161, 162]	Michigan	Blue Cross Blue Shield of Michigan, voluntary program open to primary care providers and specialists	✓	
Pay-for-Performance	Integrated HealthCare Association Pay-for-Performance Program [11, 63, 163-165]	California	Commercial HMO members from eight health plans		
Pay-for-Performance	Local Initiative Rewarding Results program [63, 101, 166, 167]	California	Medicaid and Healthy Families	--	Mixed
Pay-for-Performance	Delivery System Reform Incentive Program (DSRIP) [71, 168, 169]	California	Medicaid, public hospitals only		
Pay-for-Performance	Indiana Health Information Exchange Quality Health First [170]	Indiana	Medicaid, state employee health benefit programs, major private insurers, and Medicare		
Pay-for-Performance	Maryland Hospital Acquired Conditions (MHAC) initiative [171]	Maryland	All payers and all hospitals	✓	
Pay-for-Performance	MassHealth hospital-based pay-for-performance program [63, 172]	Massachusetts	Medicaid	--	
Pay-for-Performance	Premier Hospital Quality Incentive Demonstration Project/Hospital Value-Based Purchasing Program [63, 71, 99, 173, 174]	National	Medicare, initially a voluntary program for hospitals in the Premier, Inc. alliance; expanded to all hospitals nation wide		--

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Pay-for-Performance	End-Stage Renal Disease Bundled-Payment and Quality Incentive Program (QIP) [175]	National	Medicare, dialysis facilities		
Pay-for-Performance	Medicare Physician Value-Based Payment Modifier [175]	National	Medicare, initially for select physicians; expanding nationally by 2017		
Pay-for-Performance	CMS Hospital-Acquired Conditions (Present on Admission Indicator) [71, 176]	National	Medicare		
Pay-for-Performance	Medicare Advantage Plan Bonus Demonstration [63, 177]	National	Medicare		
Pay-for-Performance	NovaHealth ACO [178]	Maine	Aetna Medicare beneficiaries	✓	✓
Pay-for-Reporting	Physician Quality Reporting Initiative/System [179, 180]	National	Medicare		
Pay-for-Reporting	Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU) program [181]	National	Medicare		
<b>B. Provide decision makers with information to allow them to make decisions based on relative value</b>					
Reference Pricing	Arkansas reference pricing program for PPIs [31, 105]	Arkansas	Arkansas State Employee Benefits Division (EBD) plan members	✓	
Reference Pricing	CalPERS Reference Pricing for Hip and Knee Replacements[31, 182]	California	CalPERS Anthem Blue Cross PPO members	✓	

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Reference Pricing	Safeway Reference Pricing Program [31, 37, 182, 183]	National	Safeway employees - 40,000 self-insured preferred provider organization plan, in addition to 150,000 unionized employees in separate health plans		
Reference Pricing /Rate Setting	Health Services Cost Review Commission Hospital Rate Setting Program [184, 185]	Maryland	Statewide program for all payers and all hospitals	✓	
Tiered/Limited Networks	Blue Shield of California Tiered Hospital Programs [186-188]	California	Blue Shield of California HMO members		
Tiered/Limited Networks	Massachusetts Tiered Network Products [65, 68]	Massachusetts	All health plans		
Tiered/Limited Networks	Minnesota Provider Peer Grouping System [67]	Minnesota	State employee health plan members, state public insurance programs, local government, and private health plans		
Tiered/Limited Networks	CalPERS Centers of Excellence Program for Hip and Knee Replacements [182]	California	CalPERS Blue Shield of California HMO members		
Tiered/Limited Networks	Lowe's Centers of Excellence Program for Nonemergency Cardiac Procedures [183]	National	Optional benefit for Lowes employees in HMO or self-insured PPO plans.		
Value-Based Insurance Design	MHealthy: Focus on Diabetes [189, 190]	Michigan	University of Michigan Employees	--	
Value-Based Insurance Design	Post-Myocardial Infarction Free Rx Event and Economic Evaluation (MI FREEE) [191, 192]	National	Aetna	Insig.	

PROGRAM SUMMARY				EVIDENCE OF OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Technology Assessment	New England Comparative Effectiveness Public Advisory Council [193]	New England	General, provides information		
Technology Assessment	Washington State Health Technology Assessment Program [38, 40, 68, 194, 195]	Washington	All public payers		
Technology Assessment	Institute for Clinical and Economic Review (ICER) [196]	General	Contracted to states or purchasers		
Technology Assessment/Evidence-Based Purchasing	Washington Medicaid Evidence based purchasing policy [40, 68, 188]	Washington	Medicaid		✓
Evidence-Based Purchasing	Washington Formulary Management Program [197, 198]	Washington	Medicaid		
Performance Reporting	Smart Buy Alliance (SBA) [67]	Minnesota	Purchaser Coalition including public and private purchasers		
Performance Reporting and Pay-for-performance	Minnesota Community Measurement (MNCM) and Bridges to Excellence [55, 67, 165]	Minnesota	Multi-stakeholder collaborative		

Source: Authors' review of the literature as of November 2012.

## Appendix C Table 4. Descriptions of Selected Programs that Use Complementary Strategies to Adjust Incentives of the Base Payment Model

The **Health Care Delivery Systems Demonstration (HCDS) in Minnesota** is a shared savings/shared risk program beginning in 2012 for non-dually eligible adults and children in Medical Assistance and Medicaid FFS and managed care programs. Savings are determined against a risk-adjusted target total cost of care for all qualifying participants attributed to the system during the performance period. To be eligible to share savings, provider organizations must have a minimum of 1,000 attributed patients. Only integrated delivery systems with 2,000 or more patients are eligible to share risk. The total cost of care target is calculated using risk-adjusted claims and encounter data, and savings/risk determinations are made annually. Shared savings are contingent on performance on quality and patient experience outcomes. Providers continue to receive base FFS or capitated payments.[134-136]

The **Pioneer ACO** is a shared savings/shared risk program led by CMS for Medicare beneficiaries. Starting in 2011, the program was targeted to 32 organizations. Providers are initially reimbursed via partial capitation, with a shared savings/shared risk agreement. Providers can receive shared savings payments if they generate savings for Medicare based on a spending target, but they will pay financial penalties to Medicare if they accelerate growth in spending for the patient population. In the final demonstration year, successful provider organizations can shift to a fully capitated model for a portion of their patients.[81]

The **Physician Group Practice Demonstration (PGPD)** was a Medicare shared savings program that ran from 2005-2010. Providers 10 large physician group practices participated, accounting for 220,000 Medicare beneficiaries. The practices received bonuses if they slowed cost growth relative to local controls, contingent on meeting quality targets in several chronic conditions. Evaluation of the program demonstrated an improvement in quality but only a modest reduction in spending growth on average totaling approximately \$121 per beneficiary over five years. There was significant variation in savings across practices, ranging from an overall mean per-capita annual saving of \$866 (95% CI, \$815-\$918) to an increase in expenditures of \$749 (95% CI, \$698-\$799). Much more uniform and larger cost reductions were achieved for beneficiaries who were dually eligible, averaging \$532 per member per year.[63, 80]

**Community Care of North Carolina (CCNC)** is a statewide medical home initiative for Medicaid beneficiaries. The program seeks to link small practices in rural areas to care coordination resources. The program is made up of 14 regional networks that link primary care, safety net, and specialty providers in collaboration with hospitals and local health and social services departments. Provider enrollment is optional. Those who participate receive access to services including allied health professionals, and receive an enhanced payment of \$2.50 PMPM. The regional

network receives an additional \$3 PMPM to spend as needed. The program is moving toward enrollment of dually eligible and Medicare-only beneficiaries under a 646 waiver. Several independent evaluations of the program have demonstrated savings.[85, 104, 160]

**Colorado’s Multi-payer Patient-Centered Medical Home Pilot** is a voluntary multi-payer medical home program that ran from May 2009 to April 2012. Approximately 100,000 patients with commercial insurance, Medicaid, Medicare, or employer self-insurance participated. Six health plans participated—United Healthcare; Anthem-WellPoint; Aetna; Cigna; Humana; and Cover-Colorado, the state’s high-risk pool carrier. Providers received FFS payment, with an enhanced PMPM care management fee and P4P bonuses. Each plan had authority to set PMPM fee amounts, which ranged from \$4 to \$8 depending on medical home level attainment (using the National Committee for Quality Assurance (NCQA) standard). P4P bonuses were based on quality (60 percent) and costs (40 percent). Preliminary results show improvements in quality and reductions in acute care episodes particularly for patients with multiple chronic conditions. Anthem-WellPoint reported a return on its investment of 250 percent to 400 percent.[83-85]

**Tiered and limited network strategies in the California Public Employee Retirement System (CalPERS)** have been used to address price variation for members in their Blue Shield of California HMO plan. CalPERS excluded 38 hospitals from their HMO network based on tiers established by Blue Shield of California, which were created by comparing average cost and quality indicators across hospitals in regional and teaching status groups. This led to “virtual tiering” for CalPERS members, since beneficiaries that wanted to use higher cost hospitals could join the PPO option at a higher out of pocket cost. Similarly, CalPERS established a centers-of-excellence strategy for hip and knee replacements. For this service, the network is limited to a single hospital in each of nine regional markets, and beneficiaries receive travel expenses if they live more than 50 miles from a designated center of excellence.[182, 186-188]

**Appendix C Table 5. List of Payment Reform Initiatives that Make Investments to Improve Population Health Outcomes**

PROGRAM SUMMARY				OUTCOMES	
Strategy	Program Name	Context	Purchaser(s), population, services	Costs	Health
Wellness Trust	Massachusetts Prevention and Wellness Trust [86]	Massachusetts	General, community-based grants		
Wellness Trust	North Carolina Health and Wellness Fund [88-90]	North Carolina	General, community-based grants	✓	✓
Social Impact Bond	Adolescent Behavioral Learning Experience [46, 49, 50]	New York	Incarcerated youth at Rikers Island		

Source: Authors' review of the literature as of November 2012.

**Appendix C Table 6. Descriptions of Selected Programs that Make Investments to Improve Health Outcomes at a Population Level**

The **Massachusetts Prevention and Wellness Trust** will invest \$60 million over 4 years in evidence-based community prevention activities starting in 2013, with the goal of reducing costly preventable health conditions. The majority of funds will be awarded through competitive grants to: municipalities or regional collaborations of municipalities; community organizations, health care providers, or health plans working in collaboration with one or more municipalities; and regional planning agencies.[86] The program is funded by a tax on insurers and an assessment on some larger hospitals.[87]

**New York's Adolescent Behavioral Learning Experience** is a social impact bond program that was designed to reduce recidivism among incarcerated youth at Riker's Island. Funded by private sector investors from Goldman Sachs and Bloomberg Philanthropies, the program was announced in 2012 and will run for four years. An independent evaluator will assess success of the program in reducing re-incarceration. The City will reimburse Goldman Sachs if the program is successful; at least a 10 percent reduction in re-incarceration is needed for the investors to be fully repaid, but investors may make a return on their investment if a greater reduction is achieved. [46, 49, 50]

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