



# A Prevention Prescription for Improving Health and Health Care in America

*May 2015*



BIPARTISAN POLICY CENTER

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## **ACKNOWLEDGMENTS**

BPC would like to thank the Laura and John Arnold Foundation for their generous support.

This paper was produced by the Prevention Task Force members, with input from our distinguished Senior Advisors and support from BPC staff. BPC would like to thank Janet Collins, Darshak Sanghavi, Joann Donnellan, Steve Gortmaker, Debbie Chang, David Flemming, and Samuel Ross for their input and Katherine Hayes, Janet Marchibroda, Ashley Ridlon, and Martha Presley for their feedback, support, and direction.

## **DISCLAIMER**

This report is the product of the BPC Prevention Task Force with participants of diverse expertise and affiliations, addressing complex topics, and it is inevitable that arriving at a consensus document in these circumstances entailed compromises. Ultimately, however, this group reached consensus on these recommendations as a package of priority recommendations.

The findings and recommendations expressed herein are solely those of the task force and do not necessarily represent the views or opinions of the Bipartisan Policy Center, its founders, or its Board of Directors.

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# Executive Summary



## *The BPC Prevention Task Force*

In 2014, the Bipartisan Policy Center (BPC) convened a Prevention Task Force to focus on opportunities for investing in prevention as a way to improve health outcomes and reduce health care costs. The task force included a diverse group of experts to review the evidence on prevention and to frame a strategy for better integrating prevention in the nation's approach to health and health care.

Fundamentally, there is growing recognition that prevention—delivered correctly—holds vast potential to improve health at the individual and population level, while also reducing national spending on health care. Better health is an important goal in and of

itself, with benefits—in productivity, longevity, wellbeing, and quality of life—that extend to all levels of society, from individuals and families to communities, businesses, and government. Of course, not all prevention strategies will be effective, and not all health improvements will result in cost savings. But prevention clearly has a role to play in advancing several widely shared objectives of current health care reform efforts.

Interest in tapping that potential has gained momentum recently, spurred by major policy developments, such as the passage of the Affordable Care Act, and by growing awareness of the linkages that exist among high rates of obesity and chronic disease, rising health care costs, and poor health outcomes for many Americans.

The critical questions now center on how to pursue greater integration and overcome complex challenges—such as realigning incentives within the health care system to improving coordination, bridging the gap between clinic and community, and finding ways to evaluate interventions and measure impacts that are inherently complex and long-term.

## *A Two-Part Framework for Progress on Prevention*

The task force proposes a two-part framework to address these challenges and to begin accelerating investment in prevention-oriented strategies. This framework recognizes that preventable chronic conditions are widespread and costly, that much of the work of effective prevention strategies must occur outside the doctor’s office, that the current understanding of what approaches are effective in non-clinical settings is limited, that problems as complex as obesity and chronic disease will require multiple interventions to show impact, that accomplishing a shift toward disease prevention and wellness will require new kinds of integrated entities and financing mechanisms, and that it will be important to test the effectiveness of these new strategies and entities.

## *Recommendations*

The task force’s first set of recommendations focus on building the evidence base for prevention. To capture and translate the best available information on effective interventions and to develop appropriate metrics for evaluating progress, we recommend:

1) **The Centers for Disease Control and Prevention (CDC)** and the National Institutes of Health (NIH) should include a requirement for economic analysis (or cost-effectiveness analysis) in clinical and public health funding opportunity announcements (FOAs) to help build cost-related evidence from public health interventions. The same requirements should be applied to clinical interventions as well.

2) **The Centers for Medicare and Medicaid Services (CMS)** should include a requirement for economic analyses (or cost-effectiveness analysis) in FOAs to help build cost-related evidence from public health interventions.

3) **Public health journals** should give priority to, and thereby encourage, economic analysis in studies of prevention strategies.

4) **Public and private funders** should encourage and fund studies of the health and economic effects of proven and emerging population-level interventions and prevention strategies. In particular, funders should take advantage of “real world” natural experiments (affecting 10,000+ individuals) to investigate the population-level health and fiscal effects of integrated community prevention and clinical care interventions.

5) **Congress should assure adequate funding** for the CDC Community Preventive Services Task Force (CPSTF) with the aim of expanding the number of community-level public health interventions that can be reviewed for inclusion in, and wide dissemination through, the CDC’s Guide to Community Preventive Services and other evidence-based sources. These reviews identify interventions that are and are not ready for wide implementation, as well as the research needed to address key evidence gaps.

6) **Congressional budget committees** should direct the Congressional Budget Office (CBO) to use “present discount accounting” to bring long-term savings from prevention “up” in time and to align better with CBO’s current 10-year scoring window; these changes will help ensure that CBO is accounting for benefits that might be seen 20–25 years out.

The second part of the task force’s framework focuses on near-term opportunities to embed prevention in broader health care delivery system reforms. We recommend:

- 1) **CMS should integrate at least two** (and preferably more) population health care quality measures into the next iteration of accountable care organization (ACOs) to drive system change that supports health by reducing the prevalence of risk factors and the incidence of disease.
- 2) **CMS, through its Center for Medicare and Medicaid Innovation (CMMI)** should invest in a robust demonstration of an accountable health community (AHC) model, which could establish a concrete framework for improving population health while leveraging the existing delivery-system infrastructure.
- 3) **CMS should invest in evaluating AHC models** that focus on establishing funding mechanisms that can be both scaled and sustained over time. Investments in AHCs should include specific provisions (and funding) for (a) identifying the full suite of relevant stakeholders (including stakeholders whose downstream budgets might benefit from effective upstream prevention), (b) identifying shared outcomes as a basis for pooling financial resources, (c) providing an integrator, (d) using innovative mechanisms to address the “wrong pocket” problem, (i.e., where investments and savings may be made by/accrue to different entities), and (e) using technology to share data and support communication.
- 4) **CMS should support efforts** to synthesize and translate lessons learned from CMMI and other programs, including investing in infrastructure to help spread and scale what works and sponsoring analyses to predict likely health and economic impacts in defined populations and jurisdictions. In addition,

CMS should consider including requirements for translating and disseminating findings and results in the RFP process.

- 5) **Communities, public health officials, and hospitals** should collectively explore ways to improve Community Health Needs Assessments and better use these assessments as a tool for aligning goals and implementation plans. At the same time, communities, public health officials, and hospitals should engage with other stakeholders to identify existing organizations at the state, regional, or local level that could function as integrators, potentially with additional support from national-level organizations (e.g., the National Association of Counties, the National Association of County and City Health Officials, the Centers for Disease Control and Prevention, and the American Heart Association).

## ***Conclusion***

The work of the Prevention Task Force is motivated by a core premise: that engaging a broader array of community-level drivers and resources for disease prevention and health promotion can help more Americans enjoy longer, healthier, and more productive lives while also reducing overall health care spending. Recognizing that the U.S. health care system is still in the early phases of a transformational shift, our goal has been to identify challenges, highlight near-term opportunities for progress, and begin bringing together the diverse organizations and institutions—both within and outside the traditional health care sector—whose resources, expertise, and commitment are needed to deliver on the promise of achieving better health, better health care, and lower health costs through prevention.

As Americans, we spend an enormous amount of health care dollars treating largely preventable chronic conditions. Prevention can reduce demand on the health care system. To access the value of prevention, we must shift our focus to keeping people healthy. We also need a payment system that incentivizes the types of upfront investments that reduce downstream treatment costs.

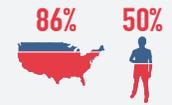
## FACING FACTS



2x

### Americans Spend Twice as Much on Health Care as Citizens of Other Developed Countries

Yet we have shorter life expectancies, and higher rates of infant mortality and diabetes.



86%

50%

### Chronic Disease Dominates Health Care Costs

Chronic diseases account for 86 percent of U.S. health care costs and affect 50 percent of the adult population.



### Social, Environmental, and Economic Factors

Where people live, work, learn, and play has a greater influence on their health than what goes on in the doctor's office, yet the health care system bears the brunt of these problems when they ultimately lead to poor health outcomes.



### Structural Barriers

The health care system has few structural or financial mechanisms for connecting effectively with the broader community beyond the clinic walls or leveraging resources to maximize health outcomes.

## THE CHALLENGES



The emerging evidence base around prevention is fragmented and lacks cost metrics, which are very important to policy makers.



Current fee-for-service payment models do not reward health care systems for working upstream to prevent illness.



There are opportunities through current Affordable Care Act provisions to better align incentives.

## ✓ Recommendations

1

### Continue building the evidence base on the value of prevention.

Federal agencies, philanthropies, public health research journals, and Congress all have roles to play in supporting the development of robust economic analysis of prevention interventions and the promotion of strategies that are proven to improve health and cut costs.

2

### Make prevention a key part of health care delivery system reform.

The Centers for Medicare and Medicaid Services has several ways to advance this, including population-based quality measures and promising models such as the Accountable Health Community model that could be tested on a broad scale through its Center for Medicare and Medicaid Innovation. On the ground, stakeholders can better capitalize on new opportunities such as the Community Health Needs Assessment to collaborate on common goals in their communities.

# Introduction



In 2014, the Bipartisan Policy Center (BPC) convened the Prevention Task Force to focus on opportunities for investing in prevention strategies that target common chronic disease risks, such as obesity, as a way to improve health outcomes and reduce health care costs. Recognizing that greater integration of community-based programs and services with traditional modes of delivering health care is key to expanding the role and reach of prevention strategies, the task force brought together experts from a broad spectrum of organizations and backgrounds to review the state of evidence on effective prevention strategies and to frame a strategy for bringing about a fundamental shift toward fully integrating prevention in the nation’s approach to health and health care.

Fundamentally, there is widespread appreciation that prevention—delivered correctly—holds vast potential, both in terms of improving health at the individual and population levels and in terms of reducing national spending on health care. Better health is an important goal in and of itself, with valuable benefits—in terms of productivity, longevity, wellbeing, and quality of life—that ultimately extend to all levels of society, from individuals and families to communities, businesses, and government. Of course, not all prevention strategies will be effective in improving health outcomes, and not all improvements in health will result in immediate or even long-term cost-savings. But a better-integrated, more prevention-focused approach to health and health care clearly has a role

to play in advancing the twin goals of better health and lower health care spending.

How best to realize the potential of prevention—including identifying the most promising avenues and understanding which players need what incentives to depart from the status quo is unclear to say the least. What we do know is that the greater part of any successful prevention strategy must happen outside clinic walls. At the same time, we recognize that the current health care delivery system drives enormous amounts of public and private spending, along with critical components of care. With passage of the Affordable Care Act (ACA) in 2010, that system is poised as never before to tap the promise of prevention for both improving health and cutting costs. In short, a health care delivery system that prioritizes value over volume changes the game when it comes to prevention.

This report identifies challenges and near-term opportunities for advancing a prevention-focused agenda based on the results of three task force meetings, a review of emerging issues and evidence, discussions with leading national experts, and a review of lessons learned from early experiments in this area. Ultimately, the Prevention Task Force's goal is to map out a more integrated approach to delivering not just health care, but health. This necessarily requires synthesizing diverse perspectives and expertise in the areas of public health, health care, and federal budget-setting. The task force has provided a venue for pooling collective experience from these historically siloed arenas and for strategizing around near-term steps that could help unlock the power of prevention to improve health outcomes and in many cases also cut costs.

We begin by briefly reviewing the case for a greater focus on prevention and by describing key concepts and elements of an integrated approach to prevention and health care. The next sections identify key challenges and promising recent policy developments and initiatives. The last section of the paper develops recommendations for reforms.

# *The Case for a Focus on Prevention*



Health and health care have been at the center of an intense policy debate in the United States for decades. Underlying this debate is a widely shared recognition—among policymakers, health experts and advocates, and the public alike—that for many citizens, the U.S. health care system fails not only to deliver cost-effective, high-quality care, but also to enhance overall population health as well. Despite the fact that Americans spend twice as much on health care as citizens of other developed countries, we are less healthy by multiple key indicators, including, for example, life expectancy, infant mortality, and prevalence of diabetes.<sup>1,2,3</sup> These shortcomings have led to a broad consensus that fundamental change is needed in the U.S. health care system. The influential Institute for Healthcare

Improvement has articulated the “triple aim” of a broader reform agenda for U.S. health care as “simultaneously improving the health of the population, enhancing the experience and outcomes of the patient, and reducing per capita cost of care for the benefit of communities.”<sup>4</sup>

Given that preventable chronic diseases now account for 86 percent of U.S. health care costs and affect 50 percent of the U.S. population, effective prevention strategies that focus on known and modifiable risk factors for these diseases are increasingly viewed as critical to advancing the twin goals of improving health and reducing health care costs.<sup>5,6</sup> This shift reflects a growing recognition that social, environmental, and economic factors are

powerful determinants of health and that where people live, work, learn, and play has a greater influence on their health than what goes on in the doctor's office. By comparison, other industrialized countries that have achieved better population health and lower health care costs invest more broadly in a full suite of health determinants.<sup>7</sup> The current U.S. health care delivery system, however, has few mechanisms for connecting effectively with the broader community beyond the clinic walls and even fewer mechanisms for combining and leveraging resources to maximize population-wide health outcomes at lowest cost.

In recent years, interest in bridging these gaps has increased, spurred in part by major policy developments such as the passage of the Affordable Care Act, but also by growing awareness of our nation's high rates of obesity and chronic disease, and of the stark disparities in health status that accompany other deep social and economic inequities. One result has already been a proliferation of new collaborations and initiatives, many of them aimed at combating common risk factors—such as poor nutrition, lack of physical activity, and tobacco use—in a wide range of settings. In addition, health advocates and care providers, as well as community leaders and public officials are looking at an even wider array of leverage points for addressing the many interconnected factors that influence health at the population level. The Robert Wood Johnson Foundation, for example, has introduced the term “Culture of Health” to describe a vision for America in which the entire population, in all its diversity, attains “the best health possible”; in which individuals and organizations, at all levels and across all sectors of society, value good health and work together to “build healthy communities and lifestyles”; and in which everyone, regardless of economic, social, or geographic differences has access to community environments that promote health and wellness and to high-quality, efficient, and affordable health care.<sup>8,9</sup>

At a time when the U.S. health care system is evolving rapidly in response to new economic pressures and technological opportunities, the difficulty is not in finding support for these broad goals or in convincing stakeholders that prevention has a critical role to play in nurturing a “culture of health,” broadly defined. Rather, the difficulty is in finding concrete, sustainable ways to embed a focus on prevention in our nation's approach to health care, while also overcoming barriers to the integration and coordination of clinical and non-clinical services, aligning incentives to support prevention-focused health investments, and marshaling the evidence needed to deploy a wide array of resources—within and outside traditional health care settings—to achieve desired outcomes at minimum cost. The next section of this report describes these challenges in greater detail.

# 1. Key Concepts

## What do we mean by “prevention”?

The term “prevention” refers to strategies that seek to avoid disease and illness by keeping people healthy in the first place and by averting the progression of disease. In practice, prevention covers a range of activities that can occur in a variety of settings, from clinic-based interventions (e.g., mammograms or immunizations) to non-clinical, community-based interventions (e.g., weight-management programs for pre-diabetics). Such activities are often classified into three tiers based on where they fit in the spectrum from health maintenance to disease management. Health promotion interventions that encourage healthy living and limit the initial onset of diseases (e.g., nutrition education or physical-activity programs) are considered the first tier of prevention. The second tier encompasses interventions aimed at the early detection of known health risks, such as screening programs that test blood sugar levels to identify individuals at risk for developing diabetes. Strategies to manage existing diseases and related complications (e.g., appropriate medication management for hypertension) are considered the third tier of prevention.\*

According to the Centers for Disease Control and Prevention (CDC), prevention must occur in multiple settings and across individuals’ entire life spans to be maximally effective. Education, social support, and a physical environment conducive to healthy living are key to sustaining a culture of wellness and to supporting the behaviors and behavior changes needed to address risk factors for many chronic diseases including healthy eating, physical activity, and smoking cessation. To achieve the

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\* A vast array of activities and investment opportunities exists to influence the factors that make up healthy lifestyles. Government, the private sector, and the philanthropic community have invested heavily in everything from safe streets to fresh food, and there is a robust literature documenting these interventions. Several high-level efforts have called attention to the challenges to healthy living that exist in many communities, as well as to strategies that might hold promise for addressing these challenges. The Robert Wood Johnson Foundation’s Commission to Build A Healthier America is one important example.

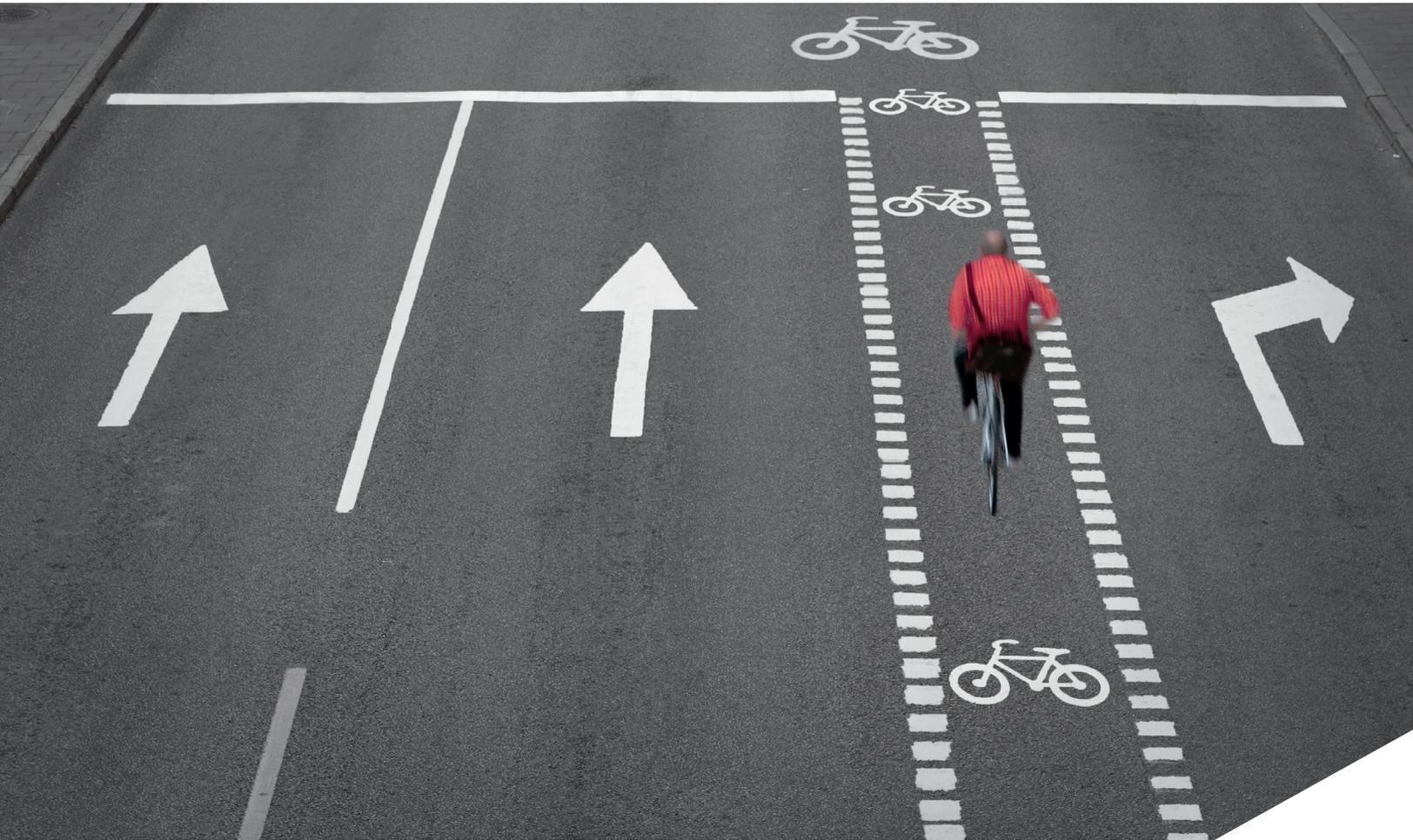
greatest reach, and maximize health impacts at the lowest cost, many prevention activities—especially first- and second-tier interventions—work to improve health at the level of groups or populations rather than focusing primarily on individuals.

## What do we mean by an “integrated approach”?

An integrated approach to population health and health care will mean different things in different contexts. Generally speaking, it describes a deliberate effort to link broad public health and community health promotion interventions that increase opportunities for healthy choices and behaviors with accessible, high-quality clinical services to reduce modifiable illness risks and provide effective care for illnesses. In some cases, integrated care may also include social service interventions to address environmental, health, and health care risks, such as lack of transportation or safe housing.<sup>10</sup> Several key design features or attributes characterize an integrated approach:

- 1) Values health and incentivizes health rather than treatment of disease.
- 2) Recognizes the important influence of upstream (i.e., community- and population-level) social, environmental, and economic factors on individual health outcomes.
- 3) Successfully combines and leverages resources and expertise from inside and outside the medical community.
- 4) Delivers flexible and comprehensive services in an array of settings where people spend their time, such as schools, work sites, and communities.
- 5) Deploys evidence-based strategies, technology, and information to achieve results efficiently and cost-effectively.
- 6) Aligns financial incentives with objectives, establishes environmental and policy changes for the long run, and is self-sustaining.

# Key Issues and Challenges



Despite broad support for a better-integrated and more prevention-focused approach to health care in the United States, achieving these goals in practice is easier said than done. As the task force sought to identify short- and long-term opportunities for progress in this area, a number of practical questions quickly came to the fore. How can we not only bridge the gaps that currently exist between clinic and community, and between medical professionals and non-medical social service providers, but also develop active mechanisms for better integrating and coordinating their activities and resources? What evidence gaps need to be filled, in terms of the underlying causes of poor health, obesity, and chronic disease and the interventions available to improve outcomes? How do we balance the need for change within the health care delivery

system—including changes aimed at better integrated care—with the need to expand health-promoting opportunities in the broader community, recognizing that organizations and individuals in both worlds can work together and independently to achieve desired outcomes? How can communities themselves become agents for change and take the lead, not only in experimenting with innovative prevention strategies but also in overcoming current funding and coordination barriers? How can health care providers, public health advocates, and community leaders collectively target and implement prevention strategies and measure what works in a way that is convincing to policymakers and decision-makers? How can we begin to align financial incentives within the health care system to help drive investment in effective prevention programs?

How do we account for the complex nature of prevention and the relatively long time frames required to show the impacts of interventions at a population level? Finally, in an environment of tight budgets and growing competitive stresses on traditional care providers, how can we combine different sources of funding to expand and sustain population-based health interventions?

None of these questions has simple or obvious answers, but it is clear that all of them will need to be addressed to bring about meaningful change in the current system. The remainder of this section lays out some of the specific challenges the task force identified. Many of the issues involved are closely interconnected, but for clarity, the discussion of challenges is divided into three broad categories: funding and incentives, integration and coordination, and measurement and evaluation.

### *Challenges Related to Funding and Incentives*

As in other sectors of the economy, the allocation of resources within the health care system is ultimately driven by financial incentives. Thus, a critical challenge is to develop sustainable funding sources for prevention by aligning financial incentives with a focus on promoting health and wellness. Efforts are already underway on a number of fronts to experiment with mechanisms that would shift the U.S. health care system away from the current fee-for-service model, which rewards volume over value and disease treatment over disease prevention. Many of these efforts, because they aim to redirect incentives to foster an outcome-focused, integrated system of care delivery, also create new opportunities to support a greater emphasis on prevention (a number of specific examples, including several initiatives launched under the ACA, are discussed in the next section of this report).

Nonetheless, formidable practical barriers stand in the way of a fundamental realignment of current funding and incentive mechanisms. Monetizing positive outcomes such as health and wellness is inherently difficult. And measuring streams of savings over time, even in relatively simple cases, can be challenging. For example, a single intervention such as a vaccination program can

yield large savings for an entire at-risk population over time. But valuing those savings and identifying who benefits from them in subsequent years is difficult, since the impacts of the intervention can include not only the avoided costs of treating a particular disease, but also the myriad consequences of a longer and healthier life for the affected population. In terms of tracking their long-term impacts, many lifestyle interventions are even more complex. The broader point is that effective prevention strategies, by reducing the need for expensive health care services over the long term, produce cost-savings. These savings may accrue to individuals, to those individuals' insurance providers, and to society as a whole. Less clear is how the savings can be converted to a stable revenue stream that would support the intervention in question. Moreover, a funding model that relies on health care cost-savings to generate revenue for prevention strategies will eventually run into the problem of diminishing returns on investment: few programs can be expected to achieve a fixed percentage improvement in outcomes or a continuous reduction in costs, year after year.

Several promising approaches have been proposed to deal with these issues and a number of real-world experiments with payment reforms—some of them discussed in the next section of this report—are currently underway. An example of an innovative funding mechanism that has emerged over the past several years as a viable option for local and state government to finance specific upstream solutions to local problems is the “social impact bond.”<sup>11</sup> In a social impact bond, a private investor provides the upfront funding to start and run a program. Once predetermined outcome metrics—including targets for government savings—are met, the government uses those savings to pay back the principal investment plus interest. Established investment firms, such as Goldman Sachs, are beginning to pioneer social-impact bonds and other innovative financing mechanisms to finance programs that can deliver substantial public savings over time but that may be difficult for state and local governments to launch because of their upfront implementation costs.

In the meantime, incentives for investment in many highly cost-effective prevention strategies will continue to suffer from the “wrong pocket” problem—that is, a situation where the cost-savings from a successful intervention, even if they can be rigorously documented, don’t flow back to the investor or sponsor of the intervention. In Delaware, for example, the Nemours Hospital System is sponsoring an innovative childhood asthma-prevention program with promising results so far (see box 6, in next section). However, the savings from this program will accrue largely to the families and to the insurance companies that cover the children. For the hospital system, success will mean fewer asthma patients—and less revenue. Integration to align incentives so that the sponsor of the prevention program (in this case the hospital) can be rewarded for its investments is clearly a critical step. At the same time, the Nemours example underscores another important point: even with better integration and realigned incentives, successful investments in prevention will mean that some entities in the current health care system can expect to see reduced demand for the goods and services they provide in the future. In the health sector, as in any other sector of the economy, major systemic change—such as a transition away from the existing fee-for-service system toward new models for delivering health and health care—is bound to create winners and losers.

More immediately, the “wrong pocket” problem can create a powerful impediment to pooling resources from different sources that might otherwise be used to expand investments in prevention. In many cases, multiple stakeholders share an interest in a given health outcome, but no mechanism exists for sharing the burden of an intervention to achieve that outcome. Furthermore, legal and institutional barriers often stand in the way of “braiding” funding from multiple sources, even when this approach—besides producing obvious economies of scale—could reduce duplicative activities, increase engagement, and improve the odds of success. In the Hennepin County initiative (discussed in box 6 in the next section), the construction of a sobering center reduced costs for the county jail as well as the local hospital emergency room. If a mechanism existed to

capture these savings, the county government might have an incentive to help co-fund this type of facility rather than have the entire burden fall on the hospital. In sum, developing sustainable funding models (see box 2) is crucial if prevention strategies are to expand beyond isolated experiments and initiatives to become a prominent and permanent feature of the larger health delivery landscape.

## *2. Key Elements of a Sustainable Funding Model for Prevention*

- Establish payment structures that reward value over volume.
- Design mechanisms for sharing risks and savings/benefits that allow for reinvestment in the system.
- Develop innovative, alternative financing options to correct the “wrong-pocket” issue.
- Introduce a portfolio of vehicles that allow differentiation between short-term and long-term investments and returns.
- Use existing funds more efficiently through operational improvements and to “braid” or pool funding from different sources. (This may include addressing some legal issues.)
- Provide for funding continuity and certainty—for example, via mandatory funding vehicle.

### *Integration and Coordination Challenges*

A second core set of challenges centers on successfully linking the existing care delivery system with community-based assets and other nontraditional stakeholders. Exceptions exist—some hospitals, for example, communicate well with out-patient clinics and certain social service providers—but health care providers have historically operated with little or no connection to community-based health and social service organizations, and to date, there have been relatively few examples of the systemic

collaboration necessary to improve population health. To a large degree, this is because the work required to coordinate multiple stakeholders is rarely if ever within anyone's job description. A related challenge is the lack of data-coordination and information-sharing that currently impedes efforts to coordinate traditional health care services with community services. Filling these gaps will be critical to achieving integration and improving interoperability throughout the system. To provide the best health care, providers need information about other community programs or social services that might be relevant for their patients; in addition, they need information about other issues, such as housing status, for example. Moreover, the need for information runs both ways: community-based providers could often benefit from more complete information about the clinical care provided to their clients or members.

At present, there are few data related to community health needs, and while a number of efforts are underway to advance data-sharing throughout the health care system and beyond, many of these efforts are in the early stages. Meanwhile, those information-sharing systems that do exist suffer from a number of gaps. For example, some 3,000 hospitals in the United States are currently required to conduct a community health needs assessment (CHNA) every three years to maintain their nonprofit status under Internal Revenue Service and ACA rules (approximately two-thirds of all U.S. hospitals operate as nonprofits). At the same time, there are some 3,000 public health departments across the country charged with safeguarding and improving the health of the communities they serve. If one goal is to improve integration between prevention services and care delivery across clinical and non-clinical settings, there may be opportunities to align the missions of these two types of institutions around a common CHNA. This approach would have the benefit of leveraging an existing requirement that hospitals and public health departments are already familiar with, rather than creating a new infrastructure. An important shortcoming of the current CHNA requirement and process, however, is that it typically does not also pull in the social service arm.

The Medicare Quality Improvement Network—Quality Improvement Organizations (QIN-QIOs) are currently leading other important information-sharing efforts as part of their 11th “Scope of Work” contract with the Centers for Medicare and Medicaid Services (CMS). Specifically, the QIN-QIOs are convening acute, long-term and post-acute care, and social service providers and mapping cross-sector partnership intervention strategies to improve care coordination and health outcomes in hundreds of communities throughout the country. Furthermore, Aging and Disability Resource Centers<sup>12</sup> and participants in a number of reform models currently being sponsored by CMS's Center for Medicare and Medicaid Innovation (CMMI), are employing broad cross-sector community strategies. (CMMI and a number of CMMI initiatives are discussed in a later section.)

At present, however, many of these efforts are in the early stages. Moreover, those information-sharing systems that do exist suffer from a number of gaps related to the presence and visibility of a shared care plan across settings, the existence of appropriate feedback loops, and access to important data—such as an accurate list of all medications a patient is taking—for those who need the information to improve care.

More broadly, establishing and sustaining linkages is difficult: the process requires leadership, commitment, and, ultimately, an intentional, focused, and durable infrastructure for maintaining effective coordination and collaboration over time. For this reason, a number of expert groups have concluded that one or more entities must be identified, funded, and explicitly charged with the task of coordinating prevention strategies and improving population health outcomes.<sup>13,14,15</sup> In addition, clear goals and accountability for the organization(s) that serve this “integrator” function are important, as is an incentive structure that helps drive all parties to work together to achieve desired outcomes.<sup>16</sup> The main point, however, is that leaving the role of integrator to emerge organically or by chance will not work, particularly because success requires strong relationships with all parties and

transparency to create and sustain trust. A designated integrator is also vital to addressing the information/evaluation and funding challenges discussed previously, since the integrator is in a unique position to collect data, synthesize and translate key findings, and find ways to align incentives and pool resources.

### **3. Key Elements of Integrator Function**<sup>17,18,19</sup>

- Establish method for defining community.
- Define near-term and long-term goals.
- Employ evidence-based programs/interventions that maximize population health impact and return on investment.
- Define measures of success.
- Define value proposition for full range of partners and integrator organizations.
- Define money flow/risk-sharing.
- Ensure accountability by providing shared methods for measuring, evaluating, and reporting the effectiveness of community programs and investment portfolios.

#### ***Measurement and Evaluation Challenges***

The ability to identify effective prevention strategies and measure their impact is obviously critical—both to ensure that scarce resources are deployed to deliver optimal results and to convince public and private decision-makers, from state comptrollers to CEOs to mayors and federal legislators, that upfront investments in prevention pay off in ways that they value, either in terms of improved health outcomes, lower costs, or both (see box 4). Numerous efforts are currently underway, both to develop new tools for estimating health and economic impacts at the population or community level, and to evaluate the effectiveness of specific types of prevention-focused interventions (see box 5).<sup>20</sup> A benefit-cost model developed by the Washington State Institute for Public Policy (WSIPP), for example, is designed to identify public policies

that have been shown to improve outcomes and to estimate an expected economic return on investment in areas ranging from criminal and juvenile justice to early education, public health, and employment.<sup>21</sup> By providing an evidence-based tool and metrics for evaluating “what works,” WSIPP’s larger objective is to inform the budgetary and policy process in Washington state.

Other organizations are specifically focused on developing the evidence base for policies in the area of prevention and community-based health. The CDC’s Community Preventive Services Task Force (CPSTF), for example, convenes scientific experts with broad health care and public health expertise to oversee rigorous and transparent reviews of community-level prevention research.<sup>22</sup> Highly skilled CDC staff conduct the reviews in collaboration with a wide range of government and academic partners. The results of these reviews are used to develop the CDC’s Guide to Community Preventive Services, which provides information on health and economic outcomes as well as effects in population groups of varied age, race/ethnicity, and income, and which serves as a valuable resource for identifying and recommending effective intervention strategies. Assuring adequate funding for the CPSTF and the unique, independent scientific-review process it uses to develop the Community Guide is vital to support continued progress in this area (see recommendations in the next section).

At present, however, it is still the case that adequate measurement tools and robust cost and effectiveness data for many kinds of preventive, community-based interventions are lacking (although it is worth emphasizing that this lack of measurement tools and data applies to many clinical preventive and remedial-care services as well). In fact, systematic evaluation of prevention strategies has historically been limited, particularly with respect to economic impacts and long-term outcomes, not only because such evaluations are difficult to implement in many cases but also because most funding prioritizes program delivery rather than careful evaluation of outcomes.

Even where cost and effectiveness data exist, the appropriate use of these data remains a subject of active debate. For some kinds of population health interventions, quantifiable outcomes may be difficult or even impossible to measure, especially in the near term. Many also question the emphasis on conventional measures of cost-effectiveness and (perhaps even more controversial) metrics like cost-benefit and return on investment, preferring to focus instead on the value of investment and on comparisons that take into account the cost of failure to intervene or prevent risk factors. Others point out that cost-effectiveness remains an unavoidable factor in much public and private budget-setting, with the methodologies used in some settings— notably in congressional committees and in the Congressional Budget Office’s “scoring” of different government programs and policies—being especially consequential for the health sector.

## 4. Metrics: Measuring the Value of Prevention

Different types of evidence are commonly used to value investments in the health care realm and elsewhere. Deciding which metrics are appropriate and how to apply them is crucial to advancing a prevention agenda. The following are some of the most commonly used prevention metrics. It is worth noting that the evidence “bar” for medical interventions is often not as high, requiring a show of efficacy and effectiveness, but rarely cost-effectiveness. In addition, it is important to differentiate between health outcomes and economic or cost outcomes—both are important, independently and in combination. For example, with respect to health outcomes, does a given intervention achieve a significant and meaningful effect in terms of improved health and/or reduced incidence of disease, measured at the population level as well as at the level of the individual? With respect to economic or cost outcomes, what is the unit cost of an intervention, and what is its cost-effectiveness and cost-benefit?

**Effectiveness:** Public health and intervention research typically focuses on the effectiveness of various strategies and policies in terms of producing better health outcomes at the individual or population level. Often, follow-up studies report results in terms of changes in beliefs or knowledge about health issues, changes in specific behaviors, biomarkers, or health outcomes.

**Cost:** Depending on the type of program, costs can be reported as the total monetary value of resources spent on implementation, or on a per capita basis.

**Cost-Effectiveness:** This metric combines the previous two to determine the investment required to achieve one unit of improvement in a given health outcome. Cost-effectiveness also allows for comparisons between alternative investments that achieve the same or similar health outcomes.

**Cost-Benefit/Return on Investment (ROI):** This is the total economic outcome, including both upfront and incremental investments (cost) and any reductions in cost generated by the outcome of the initial or ongoing investment (benefit). Cost-benefit analysis allows for the broadest comparison of alternatives but also poses inherent challenges when applied to the complex problem of chronic disease. A variant on ROI that has been developed to take into account non-tangible benefits, such as quality of life and workforce productivity, is “value of investment” or VOI.

## 5. Evaluating Obesity-Related Interventions: Select, Current Research\*

As noted in the main text, a key part of the prevention agenda is developing the analytical tools needed to support the evaluation and modeling of health and economic impacts. Non-governmental organizations (NGOs), such as the Robert Wood Johnson Foundation, are playing a major role in these efforts. In some cases, NGOs are analyzing “big data” to clarify the mechanisms that help explain the health and economic effects of multiple, interacting community and health care system interventions. And in other cases, NGOs are investing in the development of statistical modeling tools that work with a ten-year scoring window and that can project the effects of evidence-based interventions applied in defined, real-world jurisdictions (ranging from neighborhoods and communities to counties or states). These tools are designed to allow decision-makers to estimate and compare the relative health and fiscal impacts of different interventions. Three prominent research and evaluation initiatives are described below.

### Childhood Obesity Research Demonstration Project

The Childhood Obesity Research Demonstration (CORD) project is a community-level intervention that links primary care and public health for the prevention and management of obesity.<sup>23</sup> Under the ACA, the CDC received a \$25 million appropriation to conduct a four-year study of CORD. The project uses an integrated multi-level, multi-setting model to target body mass index (BMI) and obesity-related behaviors among underserved 2- to 12-year-old children in three demonstration communities in Massachusetts, California, and Texas. CORD interventions include a range of programs to encourage healthier behaviors (e.g., increased consumption of fruits and vegetables, increased physical activity, adequate sleep, reduced consumption of sugar and energy-dense foods, and reduced screen time), applied in a variety of settings (e.g., schools, health care centers, communities, and homes). Ten CORD papers published in the February 2015 issue of the

journal *Childhood Obesity* describe the purpose and structure of the project, its measurement and evaluation plan, and baseline measurements from the three demonstration communities.<sup>24</sup> CORD interventions are now in the final year of implementation with results expected in the coming years. These results will include outcomes from the specific sets of interventions undertaken in each community, as well as broader analyses of the project’s multi-level, multi-setting approach based on implementation experience across the three communities.

### Childhood Obesity Cost Effectiveness Study

A rapid increase in the prevalence of childhood obesity in recent decades has prompted numerous interventions. The Childhood Obesity Cost Effectiveness Study (CHOICES), based at Harvard’s Chan School of Public Health, aims to develop a level-playing-field methodology for comparing 40 different childhood obesity prevention strategies, so that decision-makers can assess the effectiveness, cost, population reach, and cost-effectiveness of different approaches.<sup>25</sup> The 40 interventions that will be analyzed span multiple sectors and environments, including schools, early-care and after-school-care providers, and community and government entities, as well as transportation and clinical settings.

CHOICES is using standard methods to review evidence for the potential impact of different intervention strategies on obesity prevalence and BMI, and to estimate the implementation costs associated with different strategies, the number of people directly affected, and relative cost-effectiveness over a ten-year implementation time frame (2015 to 2025). The CHOICES micro-simulation model combines information from these evidence reviews with information from numerous large, national datasets.

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\* In addition to emerging evidence on both the effectiveness and cost of various interventions, ongoing research into the underlying causes of obesity and chronic disease will continue to contribute to our understanding and discussion.

Cost-effectiveness is being measured in terms of cost-per-unit change in BMI, cost-per-percentage-point decrease in obesity prevalence, net cost of intervention, and dollars saved for every dollar spent on the intervention. Preliminary results for the first 20 interventions indicate wide variation in reach, intervention cost, and cost-effectiveness.<sup>26,27,28,29</sup> A number of the interventions are projected to be cost-saving within a few years, as they save more in subsequent health care costs than they cost to implement. Most of these childhood interventions are less expensive per unit of change in BMI than clinical interventions, such as bariatric surgery, that are commonly covered by insurance. Results from CHOICES point to the need for multiple different obesity interventions over the course of a lifetime, as single strategies have relatively limited effects. Interventions that simultaneously target childhood and adult obesity can help address the childhood obesity epidemic while also generating larger near-term reductions in disease burden and health care costs among adults. These results can also help policymakers identify the best value for money in childhood obesity prevention.

## National Collaborative on Childhood Obesity Research

The National Collaborative on Childhood Obesity Research (NCCOR) is a partnership between the Centers for Disease Control and Prevention, the National Institutes of Health, the U.S. Department of Agriculture, and the Robert Wood Johnson Foundation.<sup>30</sup> NCCOR aims to accelerate research aimed at identifying evidence-based and cost-effective strategies for reversing the epidemic of overweight and obesity among U.S. youth. Currently NCCOR is studying jurisdictions in which childhood obesity (and disparities in the prevalence, costs, and health impacts of obesity) has declined in an effort to better understand the drivers and factors influencing these declines.<sup>31</sup> Data for NCCOR are being collected and findings will be published in 2016. Recently, NCCOR initiated a project to address the need for economics research to assess cost-effectiveness and cost-savings for various childhood obesity prevention strategies. This project will provide a new platform and agenda for strategic research on the cost-effectiveness and health benefits of childhood obesity interventions.

# Recent Initiatives and Policy Developments



Implementation of the ACA is already bringing profound changes to the nation's health care system and provides an important, immediate opportunity to begin transforming and integrating the nation's approach to health care delivery and disease prevention. Several provisions of the ACA, for example, target changes to the design of current delivery systems and payment models with the aim of supporting a shift away from fee-for-service toward more quality- or value-oriented incentive structures. For example, in line with this commitment, the U.S. Department of Health and Human Services recently adopted the goal of shifting at least 30 percent of fee-for-service Medicare payments to alternative quality or value payment models by 2016 and shifting 50 percent of such payments by 2018.<sup>32</sup>

At the same time, the ACA is spurring a proliferation of innovative care delivery and payment models, such as accountable care organization (ACO), accountable health community (AHC), and patient-centered medical home (PCMH). CMS, which directly manages roughly 35 percent of the nation's overall health care spending, is a major force behind recent efforts to experiment with new models for health care delivery and payment and is overseeing a significant investment in delivery system reforms that support greater emphasis on prevention and quality measures.

Some of these initiatives already demonstrate the power of changed incentives. For example, the Hospital Readmissions Reduction Program, authorized by Section 3025 of the ACA, instituted Medicare

payment penalties for hospitals with high 30-day readmission rates for certain conditions. Furthermore, a number of agency-wide programs now provide resources and technical assistance for hospitals and community partners to improve care transitions and reduce readmissions. The combination of payment penalties with the infusion of resources and shared learning has prompted many hospitals and community partners to work together to improve post-discharge follow-up services, significantly reducing the rate at which patients end up back in the hospital for any cause in the 30 days following discharge.<sup>33,34,35</sup>

Of course, caution is warranted in extrapolating from initiatives that target discrete improvements in the existing system but that don't involve fundamental changes in the overall approach and business model for delivering health and health care services. Moreover, reducing chronic disease through effective prevention strategies presents challenges that are obviously different and arguably more complex than other quality-of-care issues where progress has recently been achieved through innovative, targeted micro-reforms (such as the use of checklists in hospital procedures to reduce infection and other complications).

Growing experience and comfort with the ACO model has also prompted interest in a newer variation of the same concept—the “accountable health community” or AHC, which goes even further in explicitly focusing on health outcomes for a population within a defined geographic area and in emphasizing the role of upstream, community-based (as opposed to clinical) interventions. The AHC concept is now being explored in a number of settings and could provide a powerful mechanism for joining clinic and community assets to deliver effective prevention strategies. An even more community-focused iteration of the same model is the “community-centered health home”—a concept that refers not to a tangible place, as the name might suggest, but to a set of practices designed to increase coordination among members of a patient's medical team and foster more comprehensive primary care.<sup>36</sup> In this approach, community health centers actively engage in clinical

prevention practices and refer patients to community and social services, in addition to providing health care services. Additionally, the ideal community-centered health home would be actively involved in identifying opportunities to improve the community environment and would advocate for community-level changes.

Another important development under the ACA has been the establishment of CMMI (the Center for Medicare and Medicaid Innovation) within CMS. As part of its mission to test new models for health care delivery and payment that will improve health system performance and quality of care while lowering costs, CMMI's State Innovation Models (SIM) initiative currently provides funding and technical support to test models at the state level. At present, a number of SIM participants are testing variations on AHC models.<sup>37</sup> In addition, CMMI has appointed a team to foster the spread of AHCs and to identify financial models that could provide balanced and sustainable funding for integrated health and health-related social services. In December 2014, CMMI announced a second round of SIM grant recipients that brought the total number of states involved to 34, plus three territories and the District of Columbia.

Two state efforts are of particular interest here: Oregon, which is testing a new concept known as the “community care organization,” or CCO, and Vermont, which is testing a multi-payer ACO.<sup>38</sup> Oregon first instituted CCOs through a Medicaid 1115 waiver in 2012 and is currently using a SIM grant to expand this model. The CCOs assume global risk for an area's Medicaid patients and have the opportunity to receive additional payments for meeting performance metrics, such as conducting screenings and enrolling patients in medical homes. The Oregon legislature also has approved a so-called “transformation fund” for CCOs to fund improvement projects. To guide their activities, Oregon CCOs are required to establish a community advisory council, conduct community needs assessments, and develop transformation plans to meet those needs. Vermont also used an 1115 waiver and funding from the CMS's Multi-payer Advanced Primary Care Practice demonstration to create PCMHs, which were made available to a set of commercial-

market patients as well as Medicaid enrollees. Thanks to increased utilization of primary care, reduced use of specialists, fewer surgical procedures, and some reductions in emergency-room use across PCMH patients, Vermont saw a return on investment of 15.8 percent for participating commercial patients and 8.2 percent for the Medicaid population (excluding Special Medicaid Services).<sup>39</sup>

Impetus for change—and the resources to effect change—are not coming solely from the federal government. Recent years have seen an explosion of activity and innovation sponsored by state and local governments, as well as by philanthropies, hospitals, payers, and community-based organizations. Box 6 describes just a few examples from the proliferation of initiatives currently underway, from ambitious efforts by some jurisdictions to convene multiple stakeholders to pursue jointly defined community-health goals, to high-level collaborations aimed at developing better health care delivery ideas, metrics, and new programs that are already enlisting community resources to actively deliver prevention services. The recommendations described in the next section are intended to build on these efforts and to ensure that the knowledge and practical insights they produce inform a new generation of effective, cost-effective, and far-reaching programs and policies.

## 6. Innovation Drives Impact: 5 Case Studies

### HENNEPIN COUNTY, MN

In Hennepin County, Minnesota, two public health care providers, the county public health department, and the county health plan formed an ACO designed to link clinical and social services.<sup>40,41</sup> The ACO receives global payments for its Medicaid patients. As part of this initiative, Hennepin County set clear cost-reduction goals and measured results against these goals. In year one, patients were assigned care coordinators to connect them to social services, same-day dental and primary care were made available, and all service entities shared health information electronically. The ACO saw an average cost reduction of 30 percent per patient, a 50 percent reduction in Tier 3 hospital use, 50 percent reduction in effort duplication from electronic records, and a small reduction in emergency care. Savings from year one were used to build a sober center, provide transitional housing and vocational services, provide behavioral and psychiatric care, and expand primary care. Preliminary year two results indicate an expected 30 to 50 percent reduction in cost, including an 80 percent cost reduction when patients used the sober center rather than the E.R.

### NEMOURS' NAVIGATORS TAKE ON ASTHMA

Nemours, a nonprofit children's health system based in Delaware, provides one of the most successful examples of deploying an integrator to improve population health. One area of focus for Nemours is reducing E.R. visits related to pediatric asthma.<sup>42</sup> Using a grant from CMMI, Nemours hired "navigators" to help parents learn about and manage their children's asthma; replaced dusty mattresses, curtains, and carpets with hypoallergenic alternatives; and worked with education and housing partners to improve the environment for children outside of the home. After one year, asthma-related E.R. visits dropped by 40 percent.<sup>43</sup>

### YMCA OF THE USA DIABETES PREVENTION PROGRAM

The YMCA of the USA was one of the first organizations to partner with the CDC's National Diabetes Prevention Program in an effort to develop and scale the YMCA's Diabetes Prevention Program (DPP). DPP is an innovative program that is leading the way in providing clinical services in a community setting. As part of the program, YMCA-trained lifestyle coaches administer a one-year, group-based intervention that promotes healthy eating and physical activity for individuals with pre-diabetes. To date, the program has served approximately 30,000 individuals across the country at a per-participant cost that is far lower than in the original DPP trials.<sup>44</sup> Results show that this intervention helps participants lose 5 to 7 percent of their bodyweight, which the original National Institutes of Health DPP trial found reduces the incidence of type 2 diabetes by 58 percent.<sup>45</sup>

One important indicator of success is the recent decision by HealthSpan, the leading NCQA-ranked\* plan and the only Medicare five-star health plan serving the state of Ohio, to cover the cost of participation in the YMCA's DPP as a benefit for subscribers who are at risk of developing type 2 diabetes.<sup>46</sup> Unlike the 29 commercial-health plans that have contracted to provide coverage for the YMCA's DPP in the past, HealthSpan went so far as to develop a clinical plan with HealthSpan's largest provider group, HealthSpan Physicians. Together with the Alliance of Ohio YMCAs, all three entities entered into direct contracts that have engineered referrals to come directly from HealthSpan Physicians and other network providers as part of a cost-saving and quality-improvement initiative.

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\* NCQA stands for the National Committee for Quality Assurance, a national, private, not-for-profit organization that accredits and ranks health care plans.

Early experiences and evidence from the YMCA suggests that prevention-focused, community-based programs like the YMCA's DPP have the potential to improve health outcomes for some of the 86 million Americans living with pre-diabetes and to affect federal spending on diabetes-related health care over time. A recent analysis conducted by Avalere Health for the American Diabetes Association, YMCA of the USA, and the American Medical Association suggests, for example, that Medicare coverage for the DPP, as proposed in the Medicare Diabetes Prevention Act (H.R. 962/S. 452 in the 113th Congress), could produce long-term net cost-savings for Medicare on the order of \$1.3 billion over the ten-year budget window by reducing the incidence of diabetes, a chronic condition that is emerging as a major driver of health care spending for a large portion of the population.<sup>47</sup>

### SEATTLE/KING COUNTY GROUP COMMUNITY HEALTH NEEDS ASSESSMENT

Seattle and King County have a joint department of public health that runs public health clinics, emergency medical services, and all prison health care services. These multiple roles, spanning both public health and clinical services make the Seattle/King County Department of Public Health a natural integrator for the area. Realizing that the ACA creates the new opportunities to improve collaboration among health care institutions, the department convened all area hospitals and health systems to discuss ways to improve community health and to improve the Community Health Needs Assessment (CHNA) that many area health institutions are required to conduct.<sup>48</sup> This resulted in a decision to collaborate on a group CHNA for the entire area, which was released in early 2015. Going forward, the department hopes to continue to leverage the trust and relationships built during the group assessment process to coordinate and aggregate investment in the highest-risk individuals and communities.

### NASHVILLE COLLABORATIVE

In Nashville, Tennessee, former Senate Majority Leader Bill Frist is in the early stages of organizing a city-wide collaborative to tackle the dramatic disparity that currently exists between Nashville's high-quality medical infrastructure and the health and well-being of many of its citizens.<sup>49</sup> Greater Nashville's health care infrastructure is among the largest and most advanced in the country, yet Tennessee ranks 41st among states in overall health indicators. Nashville in particular suffers from high rates of obesity, child poverty, premature deaths, and crime. Multiple factors account for these poor health outcomes, but uneven and uncoordinated health services and a lack of access to community environments that enable healthy choices play a critical role overall and have a disproportionate impact on the city's poor.

Senator Frist's initiative aims to leverage the relationships and dollars that exist in Nashville to attack these problems from multiple angles and focus resources on the neediest areas. The current focus is on designing an overarching framework to pull all parties into a coordinated effort, recruit local funding, and establish a sustainable funding model. The goals and approach of the Nashville collaborative are also in line with other recent experiments involving AHCs and designated integrators.

# Recommendations



As noted in the Introduction, the task force proposes a two-part framework to accelerate investment in prevention-oriented strategies that will improve health outcomes and lower health care costs. This framework recognizes that preventable illness and chronic conditions are widespread and costly; that much of the work of effective prevention strategies must occur outside the doctor's office; that our current understanding of what approaches are effective in non-clinical settings is limited; that problems as complex as obesity and chronic disease will require multiple interventions to show impact; that accomplishing a shift toward disease prevention and wellness will require new kinds of integrated entities and financing mechanisms; and that, as with individual interventions, it will be important to test the

effectiveness of these new entities and measure their impacts.

## 1) Build the evidence base on the “value” of prevention

Specifically, this means capturing and translating the best available information about what interventions are effective in reducing identified risk factors, improving population-based health outcomes, and reducing costs. It also means developing appropriate metrics for evaluating progress toward defined prevention goals.

## 2) Embed prevention in delivery system reform

Recent efforts to shift the existing health care delivery system from volume-based to value-based care delivery and payment

create opportunities to embed prevention strategies and forge new partnerships between community organizations and traditional providers. Identifying and targeting these opportunities is a priority.

In a fiscally constrained environment, where decision-makers are faced with difficult choices among competing priorities, increasing investment in prevention depends at least in large part on the quality and relevance of available evidence on what works. Specifically, decision-makers will want to see strong evidence on the health impacts and costs of prevention—and on the relationship between impact and cost. For this reason, the task force believes that current data-collection and analysis efforts should focus as much as possible on the needs of decision-makers. This will help ensure that five and ten years from now, results from the current explosion of experiments in prevention-oriented policies and programs are captured in ways that help fill existing evidence gaps. In particular, we focus on the need for more and better data concerning the cost and cost-effectiveness of certain interventions, as well as on the challenges inherent in gathering and interpreting data given the relatively long time frames needed to see results—both in terms of health outcomes and cost consequences. Finally, the testing of new models is critical to the next generation of efforts to build the evidence base on what works.

The task force recommends the following specific changes and actions be taken to build out the evidence base on the value of prevention:

1) **The Centers for Disease Control and Prevention (CDC)** and the National Institutes of Health (NIH) should include a requirement for economic analysis (or cost-effectiveness analysis) in clinical and public health funding opportunity announcements (FOAs) to help build cost-related evidence from public health interventions. The same requirements should be applied to clinical interventions as well.

2) **The Centers for Medicare and Medicaid Services (CMS)** should include a requirement for economic analyses (or cost-effectiveness analysis) in FOAs to help build cost-related evidence from public health interventions.

3) **Public health journals should give priority to**, and thereby encourage, economic analysis in studies of prevention strategies.

4) **Public and private funders** should encourage and fund studies of the health and economic effects of proven and emerging population-level interventions and prevention strategies. In particular, funders should take advantage of “real world” natural experiments (affecting 10,000+ individuals) to investigate the population-level health and fiscal effects of integrated community prevention and clinical care interventions.

5) **Congress should assure adequate funding** for the CDC Community Preventive Services Task Force (CPSTF) with the aim of expanding the number of community-level public health interventions that can be reviewed for inclusion in, and wide dissemination through, the CDC’s Guide to Community Preventive Services and other evidence-based sources. These reviews identify interventions that are and are not ready for wide implementation, as well as the research needed to address key evidence gaps.

6) **Congressional budget committees** should direct the Congressional Budget Office (CBO) to use “present discount accounting” to bring long-term savings from prevention “up” in time and to align better with CBO’s current 10-year scoring window; these changes will help ensure that CBO is accounting for benefits that might be seen 20–25 years out.

As discussed in previous sections of this report, a number of innovative efforts are underway to actively embed prevention in the U.S. health care delivery system. Continued experimentation

in this area is vital to develop effective strategies for overcoming the barriers to better integration and population- and prevention-based approaches that exist within the current system. At the same time, it will be important to synthesize and communicate results from early projects so that successful policies and programs can be scaled to reach a larger group of beneficiaries. CMMI has funded a number of promising models, for example, but it is not yet clear how CMS intends to use the data gathered from them to improve care for other Medicare and Medicaid recipients. The task force recommends focusing on these opportunities and on better leveraging existing tools and structures to overcome current funding and integration challenges. Specifically, the task force recommends that the following specific actions be taken to advance the goal of embedding prevention in the U.S. health care delivery system:

- 1) **CMS should integrate at least two** (and preferably more) population health care quality measures into the next iteration of accountable care organization (ACOs) to drive system change that supports health by reducing the prevalence of risk factors and the incidence of disease.
- 2) **CMS, through its Center for Medicare and Medicaid Innovation (CMMI)** should invest in a robust demonstration of an accountable health community (AHC) model, which could establish a concrete framework for improving population health while leveraging the existing delivery-system infrastructure.
- 3) **CMS should invest in evaluating AHC models** that focus on establishing funding mechanisms that can be both scaled and sustained over time. Investments in AHCs should include specific provisions (and funding) for (a) identifying the full suite of relevant stakeholders (including stakeholders whose downstream budgets might benefit from effective upstream prevention), (b) identifying shared outcomes as a basis for pooling financial resources, (c) providing an integrator, (d)

using innovative mechanisms to address the “wrong pocket” problem, (i.e., where investments and savings may be made by/accrue to different entities), and (e) using technology to share data and support communication.

- 4) **CMS should support efforts** to synthesize and translate lessons learned from CMMI and other programs, including investing in infrastructure to help spread and scale what works and sponsoring analyses to predict likely health and economic impacts in defined populations and jurisdictions. In addition, CMS should consider including requirements for translating and disseminating findings and results in the RFP process.
- 5) **Communities, public health officials, and hospitals** should collectively explore ways to improve Community Health Needs Assessments and better use these assessments as a tool for aligning goals and implementation plans. At the same time, communities, public health officials, and hospitals should engage with other stakeholders to identify existing organizations at the state, regional, or local level that could function as integrators, potentially with additional support from national-level organizations (e.g., the National Association of Counties, the National Association of County and City Health Officials, the Centers for Disease Control and Prevention, and the American Heart Association).

# Conclusion



The work of the BPC Prevention Task Force is motivated by a core premise: that a more integrated approach to health and health care is crucial to unlocking the potential of prevention strategies to help more Americans enjoy longer, healthier, and more productive lives while also reducing overall health care spending. The task force recognizes that the current health care delivery system is still in the early phases of a transformational shift toward encompassing and integrating a broader array of upstream, community-level drivers and resources for disease prevention and health promotion. This report has attempted to draw on the varied expertise of individual task force members to identify a small handful of action priorities and policy changes that can accelerate progress toward the widely shared goal of improved integration.

Important elements of a near-term reform agenda are captured in the recommendations and include developing better evidence on cost and effectiveness and engaging federal agencies—particularly CMS—on the policy side.

Over the next 12 months, task force members will engage targeted stakeholders and decision-makers in multiple sectors, public and private, to advance these policy objectives. In addition, the task force will refine key messages and develop a communications plan to help shift the conversation around the value of prevention and health. Ultimately, our goal is to help bring about a fundamental change in the roles of—and interactions between—traditional health care providers (such as hospitals) and the broad array of

organizations and institutions that have a role to play in delivering effective prevention strategies and achieving tangible progress toward the universal goals of better health, better health care, and lower health costs.

# References

- <sup>1</sup> Organization for Economic Co-operation and Development. OECD Health Statistics 2014: How does the United States compare? Paris: OECD.org, 2014. Available at: <http://www.oecd.org/unitedstates/Briefing-Note-UNITED-STATES-2014.pdf>.
- <sup>2</sup> Central Intelligence Agency. The World Factbook 2013-14. Washington, DC: Central Intelligence Agency, 2013. Available at: <https://www.cia.gov/library/publications/the-world-factbook/index.html>.
- <sup>3</sup> Cho, Nam Han, et al. IDF Diabetes Atlas, Sixth Edition. Brussels, Belgium: International Diabetes Federation, 2013.
- <sup>4</sup> Institute for Healthcare Improvement. "Triple Aim for Populations." Institute for Healthcare Improvement, 2015. Available at: <http://www.ihl.org/Topics/TripleAim/Pages/default.aspx>.
- <sup>5</sup> Centers for Disease Control and Prevention. "Chronic Disease Prevention and Health Promotion." Centers for Disease Control and Prevention, 2015. Available at: <http://www.cdc.gov/chronicdisease/>.
- <sup>6</sup> Ward, Brian, Jeannine Schiller, and Richard Goodman. "Multiple Chronic Conditions Among US Adults: A 2012 Update." *Prevention of Chronic Disease* 11.4 (2014).
- <sup>7</sup> Corrigan, Janet, Elliott Fisher, and Scott Heiser. "Hospital Community Benefit Programs, Increasing Benefits to Communities." *Journal of the American Medical Association*. Published online February 02, 2015. Available at: <http://jama.jamanetwork.com/article.aspx?articleid=2108842>.
- <sup>8</sup> Lavizzo-Mourey, Risa. "President's Message: Weaving the Threads of Health." Robert Wood Johnson Foundation, 2015. Available at: <http://www.rwjf.org/en/about-rwjf/annual-reports/presidents-message-2015.html>.
- <sup>9</sup> Plough, Alonzo. "Building a Culture of Health, Challenges for the Public Health Workforce." *American Journal of Preventive Medicine* 47.5S3 (2014).
- <sup>10</sup> Lavizzo-Mourey, Risa. "President's Message: Weaving the Threads of Health." Robert Wood Johnson Foundation, 2015. Available at: <http://www.rwjf.org/en/about-rwjf/annual-reports/presidents-message-2015.html>.
- <sup>11</sup> Hester, James, and Paul V Strange. A Sustainable Financial Model for Community Health Systems. Washington, DC: Institute of Medicine IOM, March 6, 2014. Discussion paper.
- <sup>12</sup> Aging and Disabilities Resource Center. "Aging and Disability Resource Center, Options Counseling, Care Transitions, Systems Integration and the Enhanced Options Counseling Initiatives." Department of Health and Human Services, 2014. Available at: <http://www.adrc-tae.acl.gov/tiki-index.php?page=ADRCHomeTest>.
- <sup>13</sup> Roundtable on Obesity Solutions. Integrated Clinical and Social Systems for the Prevention and Management of Obesity. Washington, DC: Institute of Medicine, January 14, 2015. Briefing Book.
- <sup>14</sup> Institute of Medicine. An integrated framework for assessing the value of community-based prevention. Washington, DC: The National Academies Press, 2012. Available at: <http://www.iom.edu/Reports/2012/An-Integrated-Framework-for-Assessing-the-Value-of-Community-Based-Prevention.aspx>.
- <sup>15</sup> Chang, Debbie. "Integrator Role and Functions in Population Health Improvement Initiatives." Wilmington, DE: Nemours, May 2, 2012. Available at: [http://www.improvingpopulationhealth.org/Integrator%20role%20and%20functions\\_FINAL.pdf](http://www.improvingpopulationhealth.org/Integrator%20role%20and%20functions_FINAL.pdf).
- <sup>16</sup> Chang, Debbie. "Integrator Role and Functions in Population Health Improvement Initiatives." Wilmington, DE: Nemours, May 2, 2012. Available at: [http://www.improvingpopulationhealth.org/Integrator%20role%20and%20functions\\_FINAL.pdf](http://www.improvingpopulationhealth.org/Integrator%20role%20and%20functions_FINAL.pdf).
- <sup>17</sup> Chang, Debbie. "Integrator Role and Functions in Population Health Improvement Initiatives." Wilmington, DE: Nemours, May 2, 2012. Available at: [http://www.improvingpopulationhealth.org/Integrator%20role%20and%20functions\\_FINAL.pdf](http://www.improvingpopulationhealth.org/Integrator%20role%20and%20functions_FINAL.pdf).
- <sup>18</sup> Chang, Debbie. Personal interview. December 18, 2014.
- <sup>19</sup> Corrigan, Janet, Elliott Fisher, and Scott Heiser. "Hospital Community Benefit Programs, Increasing Benefits to Communities." *Journal of the American Medical Association*. Published online February 02, 2015. Available at: <http://jama.jamanetwork.com/article.aspx?articleid=2108842>.
- <sup>20</sup> Lee, Stephanie, et al. What Works and What Does Not? Benefit-Cost Findings from WSIPP. Olympia, WA: Washington State Institute for Public Policy, February, 2015.
- <sup>21</sup> Washington State Institute for Public Policy. Benefit-Cost Technical Documentation. Olympia, WA: Washington State Institute for Public Policy.
- <sup>22</sup> The Community Guide. "What is the Task Force?" USA.gov, June 2, 2014. Available at: <http://www.thecommunityguide.org/about/aboutTF.html>.
- <sup>23</sup> Centers for Disease Control and Prevention. "Childhood Obesity Research Demonstration Project (CORD)." Available at: <http://www.cdc.gov/obesity/childhood/researchproject.html>.
- <sup>24</sup> Davison, Kirsten, and Brook Belay, eds. "The Childhood Obesity Research Demonstration (CORD) Project." *Childhood Obesity* 11.1 (2015).

- <sup>25</sup> Harvard School of Public Health. "CHOICES: Childhood Obesity Intervention Cost-Effectiveness Study." Harvard School of Public Health, 2015. Available at: <http://www.hsph.harvard.edu/prc/projects/choices-childhood-obesity-intervention-cost-effectiveness-study/>.
- <sup>26</sup> Long, Michael, et al. "Cost-effectiveness of a sugar-sweetened beverage excise tax in the United States." APHA Annual Meeting and Exposition. Boston, MA. November 5, 2013. Conference session.
- <sup>27</sup> Barrett, Jessica L, et al. "Cost-effectiveness of a state policy requiring minimum levels of moderate and vigorous physical activity during elementary school physical education classes." APHA Annual Meeting and Exposition. Boston, MA. November 5, 2013. Conference session.
- <sup>28</sup> Sonneville, Kendrin, et al. "Potential impact of eliminating the tax subsidy of food and beverage television advertising directed at children and adolescents on BMI, dalys and healthcare costs in the United States." APHA Annual Meeting and Exposition. Boston, MA. November 5, 2013. Conference session.
- <sup>29</sup> Wright, Davene R, et al. "Impact and cost-effectiveness of childcare center policy changes on BMI and healthcare costs in the United States." APHA Annual Meeting and Exposition. Boston, MA. November 5, 2013. Conference session.
- <sup>30</sup> The National Collaborative on Childhood Obesity Research (NCCOR). "About NCCOR." Available at: <http://nccor.org/about/index>.
- <sup>31</sup> The National Collaborative on Childhood Obesity Research (NCCOR). "Childhood Obesity Declines: Exploring Promising Approaches." Available at: <http://nccor.org/projects/obesity-declines>.
- <sup>32</sup> U.S. Department of Health and Human Services. "Better, Smarter, Healthier: In Historic Announcement, HHS Sets Clear Goals and Timeline for Shifting Medicare Reimbursements from Volume to Value." HHS.gov, January 26, 2015. Available at: <http://www.hhs.gov/news/press/2015pres/01/20150126a.html>.
- <sup>33</sup> Lavenberg, Julia, et al. "Assessing Preventability in the Quest to Reduce Hospital Readmissions." *Journal of Hospital Medicine* 9.9 (2014).
- <sup>34</sup> Conway, Patrick. "Delivery System Reform." *Alternative Payment Models to Improve Quality and Value of Health Care in America*. Bipartisan Policy Center, Washington, DC. January 22, 2015.
- <sup>35</sup> Kripalani, Sunil, et al. "Reducing Hospital Readmission Rates: Current Strategies and Future Directions." *Annual Review of Medicine* 65 (2014).
- <sup>36</sup> Valdovinos, Erica, et al. *Community Centered Health Homes: Bridging the Gap Between Health Services and Community Prevention*. Oakland, CA: Prevention Institute, February, 2011.
- <sup>37</sup> Corrigan, Janet, Elliott Fisher, and Scott Heiser. "Hospital Community Benefit Programs, Increasing Benefits to Communities." *Journal of the American Medical Association*. Published online February 02, 2015. Available at: <http://jama.jamanetwork.com/article.aspx?articleid=2108842>.
- <sup>38</sup> Plaza, Carla, et al. *Financing Prevention, How States are Balancing Delivery System & Public Health Roles*. Oakland, CA: ChangeLab Solutions, April 2014. Available at: [http://changelabsolutions.org/sites/default/files/Financing\\_Prevention-NASHP\\_FINAL\\_20140410.pdf](http://changelabsolutions.org/sites/default/files/Financing_Prevention-NASHP_FINAL_20140410.pdf).
- <sup>39</sup> Department of Vermont Health Access. *Vermont Blueprint for Health. 2012 Annual Report*. Williston, VT: Department of Vermont Health Access, February 15, 2013.
- <sup>40</sup> Plaza, Carla, et al. *Financing Prevention, How States are Balancing Delivery System & Public Health Roles*. Oakland, CA: ChangeLab Solutions, April 2014. Available at: [http://changelabsolutions.org/sites/default/files/Financing\\_Prevention-NASHP\\_FINAL\\_20140410.pdf](http://changelabsolutions.org/sites/default/files/Financing_Prevention-NASHP_FINAL_20140410.pdf).
- <sup>41</sup> *Preventing Epidemics Protecting People, 2013*. Trust for America's Health. *Twin Pillars of Transformation: Delivery System Redesign and Paying for Prevention*. Washington, DC: Trust for America's Health, 2014.
- <sup>42</sup> Marks, James, Jeanne Ayers, David Bailey, and Giridhar Mallya. "Roundtable on Putting Population Health into Practice: Three Case Studies." *National Forum on Hospitals, Health Systems and Population Health*. Robert Wood Johnson Foundation. Hyatt Regency, Washington, DC. October 22, 2014. Plenary Session.
- <sup>43</sup> Chang, Debbie. Personal interview. December 18, 2014.
- <sup>44</sup> Longjohn, Matt. "YMCA of the USA Diabetes Prevention Program." BPC Prevention Task Force Meeting. Bipartisan Policy Center, Washington, DC. February 11, 2015.
- <sup>45</sup> Diabetes Prevention Program Research Group. "Reduction in the Incidence of Type 2 Diabetes with Lifestyle Intervention or Metformin." *New England Journal of Medicine* 346.6 (2002).
- <sup>46</sup> Longjohn, Matt. "YMCA of the USA Diabetes Prevention Program." BPC Prevention Task Force Meeting. Bipartisan Policy Center, Washington, DC. February 11, 2015.
- <sup>47</sup> Avalere Health. "Estimated Federal Impact of H.R. 962/ S. 452 'The Medicare Diabetes Prevention Act.'" Alexandria, VA: American Diabetes Association, February 24, 2014. Available at: <http://www.diabetes.org/assets/pdfs/advocacy/estimated-federal-impact-of.pdf>.
- <sup>48</sup> Fleming, David. Personal interview. January 6, 2015.
- <sup>49</sup> Frist, Bill. "Presentation on Nashville, TN." BPC Prevention Task Force Meeting. Bipartisan Policy Center, Washington, DC. February 11, 2015.



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