Introduction
The Affordable Care Act (ACA) and other federal initiatives are fostering the emergence of a coherent vision for chronic disease prevention that has never before existed in the United States. This investment in population health and prevention comes not a moment too soon. Health care costs are proving very difficult to control and are rising at an unsustainable rate, driven in part by sky-rocketing chronic disease rates.¹

This article looks at how a health system can engage in prevention activities beyond the clinical setting and makes a strong case that these interventions will result in documented cost savings. We first examine an individually targeted strategy that helps patients obtain health insurance coverage. This strategy furthers a hospital's goal of receiving reimbursement for care while also having the social benefit of increasing patients' economic stability. Next we look at a medical-legal partnership (MLP), which takes a holistic approach to addressing patients' social needs by helping them stabilize certain aspects of their lives, such as income, housing, and insurance status. MLPs are primarily an individually focused intervention, but, as we will illustrate, some also work on policy strategies to respond to trends they see among patient populations. Third, we look at a sugar-sweetened beverage reduction initiative that uses institutional policy to facilitate healthy beverage choices and limit unhealthy choices for patients, employees, and the broader community served by the health system.

National Vision of Prevention That Addresses the Social Determinants of Health
The leading causes of death in the United States are tobacco use, insufficient physical activity, and an unhealthy diet.² These risk factors are linked to increased incidence of a wide range of chronic diseases from cardiovascular disease to cancer.³ The treatment of these chronic diseases places a tremendous financial burden on our health care system; however, health care delivery and access are just a small part of the solution to our chronic disease crisis.⁴ Increasingly, strategies that address the social determinants of health — “the conditions into which people are born, grow, live, work and age” — are the ones that hold the most promise.⁵

In 2011, as directed by the ACA, the National Prevention Council released the National Prevention Strategy⁶ which calls for integration of services at all levels of government and across the public and private sectors. It is divided into four strategic directions: (1) healthy and safe community environments; (2) clinical and preventive services; (3) empowered people; and (4) the elimination of health disparities.⁷ The Strategy emphasizes that prevention activities must move beyond interventions in the clinical setting to address the social determinants of health.

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Hospital systems that want to shift their business model to incorporate non-clinical interventions can consider them as lying on a continuum, with individually focused interventions that address a single determinant of health at one end and policy interventions that address chronic disease at a population level at the other end. On this continuum, individually based interventions such as one-on-one counseling are the most resource intensive, and population-focused policy changes that make the default choice a healthier one are the most cost-effective.\(^8\) The Strategy encourages health care providers to take a broad view of the definition of preventive services and to consider incorporating these kinds of non-clinical interventions into their practices.\(^9\)

**Connecting Prevention Strategies to Payment Reform**
Many commentators have catalogued the problems endemic in the U.S. health-care system, which include fragmented care, inconsistent quality, and ever-increasing costs.\(^10\) The accountable care organization (ACO)\(^11\) is one model intended to address these issues for providers serving Medicare beneficiaries. ACOs are groups of doctors, hospitals, and other health care providers that come together voluntarily to give coordinated care to their patients.\(^12\) Rather than using a traditional fee-for-service model that focuses on set payments for individual procedures, the ACO payment structure creates incentives to provide cost-effective coordinated care to patients by sharing the savings between private providers and insurers. Patients should receive appropriate care that meets certain quality indicators while reducing duplication and fragmentation of services.\(^13\)

ACOs are expected to coordinate care among health providers, which ideally leads to increased quality of care, streamlined services, lowered costs, and improved population health. Providers are held accountable for achieving measured quality improvements while also reducing the rate of spending growth.\(^14\) If an ACO meets certain quality metrics and reduces health care spending to levels below projected costs, it shares the savings with the insurers.\(^15\) Thus, ACOs have the potential to align many different incentives in order to improve health system quality and reduce health care costs.\(^16\)

Because this model incentivizes health systems to maintain the health of large patient populations rather than provide expensive treatments to individuals, institutions have a reason to look at all the factors that might negatively affect patients’ health status, including the social determinants of health. They also have incentives to promote healthy choices to their patient population, their employees, and the communities they serve, as those choices reinforce the preventive orientation of the health care delivered within an ACO. The most innovative ACOs will pursue a range of nonclinical interventions that address social norms at an individual and population level, both because these interventions align with their mission and because they are a cost-effective way to implement prevention.

**The Example of Steward Health Care System**
For several years, Steward Health Care System (Steward) in Massachusetts has been implementing interventions that address the social determinants of health, motivated in part by that state’s ambitious reform of its health-care system in 2006,\(^17\) which led the way for the ACA. In 2011, Steward was selected to participate in the Pioneer ACO Model, an initiative sponsored by the Center for Medicare & Medicaid Innovation.\(^18\) Headquartered in Boston, Steward is the second largest private employer in the state, with 11 hospitals and 17,000 employees serving more than 1 million patients annually in 150 communities.\(^19\) Its size means that when it makes system-wide changes, it also influences community practices. Steward has implemented initiatives which illustrate the new opportunities for health care delivery systems. Under the ACO model, these initiatives have the potential to generate revenue or cost-savings for the system.

**Community Health Advocate Outreach and Enrollment Program**
The ACA aims to increase health insurance coverage in part by significantly expanding Medicaid coverage. In 2006, Massachusetts implemented an expansion of MassHealth, its Medicaid program, as part of state-wide reforms. Steward set up a pilot program in 2012 called the Community Health Advocates Initiative. The program has four main goals: (1) to increase the number of eligible patients enrolled in MassHealth; (2) to reduce the level of bad debt associated with those patients; (3) to lower no-show rates at primary care provider (PCP) appointments; and (4) to reduce emergency room usage by these patients. Through a systemwide review, Steward ascertained that much of its bad debt was linked to patients who faced linguistic and cultural barriers to accessing services.

Many uninsured patients would visit the emergency department for care and start a MassHealth application but not complete it.\(^20\) Since a large number of these patients were eligible for insurance, the incomplete applications would lead to unnecessary bad debt for Steward and continued uninsured status for the patient. This finding prompted Steward to analyze bad debt by language and hire bilingual community...
health advocates to address the linguistic barriers of specific communities. During the pilot, the community health advocates visited the homes and workplaces of patients who started an insurance application during an emergency room visit but neglected to complete the application. Community health advocates equipped with iPads took snapshots of documentation and completed the applications in the field. To date, the program has enrolled over 833 individuals in MassHealth and reduced bad debt by over $1 million. Additionally, by obtaining health insurance coverage for these hard-to-reach patients using culturally appropriate services, Steward increased the likelihood that these patients obtained a follow-up appointment with a primary care physician. Furthermore, this approach enables these patients to receive preventive care rather than using the emergency department as their primary care provider, which also results in lower costs for the system.

Although Steward’s approach was strategic and guided by analytics, helping uninsured patients gain access to public insurance programs is not revolutionary. Indeed, legal aid offices have been providing this service for decades; however, the 2013 Medicaid expansion means that many more people will be eligible for insurance. By hiring community health advocates to engage in community-based, linguistically appropriate outreach, health systems can insure patients quickly. This has benefits for both patients and providers: the patient benefits from having health insurance, which increases access to appropriate services, and the provider reduces bad debt and generates sufficient revenue to pay for the cost of the community health advocate program. Due to the success of the pilot, Steward intends to expand the program across its entire system.

Medical-Legal Partnership

Steward has also formed a medical legal partnership to serve its low-income patients. This patient care model aims to improve the health and well-being of vulnerable patients by integrating legal assistance into the medical setting. The partnerships address social determinants of health and help vulnerable populations by eliminating barriers to health care. Typical cases include helping families secure benefits through the Supplemental Nutrition Assistance Program so that they can buy groceries, or advocating on behalf of a child suffering from asthma to get the patient’s landlord to address mold infestation in the family home. Attorneys also help patients access federal and state disability and public benefits programs such as Supplemental Security Income or Medicaid. The hospital system benefits from reimbursements for newly enrolled health insurance recipients and from the better health that patients experience when they have safe and secure housing, increased income support, food security, and a more stable home environment. At Steward, partnership services are available to patients with an identified legal need and income below 200 percent of the federal poverty level.

Many medical legal partnerships have acted upon trends they see in their patient populations by working on population-based policy initiatives. For example, the partnership at Children’s Hospital in Boston took on the issue of discontinuation of patients’ utility services. Before 2008, physicians in Massachusetts had to submit documentation every 30 to 90 days to certify patients’ eligibility due to medical condition for financial assistance in the event that their gas and electric services were in danger of being turned off for non-payment. This assistance is referred to as shutoff protection. Advocacy by the partnership led the Massachusetts Department of Public Utilities to revise its regulations to extend shutoff protection to households with infants or children; increase the recertification time period, giving families with a sick member more time before they need another certification letter; and expand certification to allow physician extenders, such as nurse practitioners and physician assistants, to sign letters. Though medical-legal partnership is a relatively new model, there is some initial research that quantifies its impact, both in terms of health care access and in terms of cost-benefit to health care institutions. A study of one partnership found that over the course of four years, the program successfully overturned benefit denials in 17 cases, which resulted in the patients establishing health care coverage and the medical institution receiving $923,188 in reimbursements for current and past health services rendered.

Healthy Beverage Program

The interventions described above go beyond traditional clinical care to address the social determinants of health for individual patients. The next logical step for health systems is to work at a population level driving policy change. A health system can establish initiatives to address institutional practices that undercut the health of its patients and employees. One such example is Steward’s Healthy Beverage Program. This is the type of approach that the Institute of Medicine envisioned when it called upon health care organizations to serve as models for the incorporation of healthy eating and active living into worksite practices and programs.

In 2011, two Steward hospitals piloted a healthy beverage program. Using the Boston Public Health Commission’s “Rethink Your Drink” campaign as a guide, all beverages in the hospital cafeteria, vendor

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machines, and soda fountains were categorized as red, yellow, or green. “Red” beverages are those high in sugar, sodium, and/or fat content; “yellow” beverages are artificially sweetened or contain moderate amounts of sugar and sodium; and “green” beverages have no added sugars or artificial sweeteners. The hospitals were tasked with increasing the offerings of “green” and “yellow” beverages and decreasing “red” beverages. In February 2012, St. Elizabeth’s Medical Center, one of the two institutions piloting the program, reported a 54 percent decrease in sales of sugary beverages and a 35 percent increase in sales of healthier beverages like water. In September 2012, a year after implementation of the program, St. Elizabeth’s Medical Center reported that only 8 percent of customers’ purchases were “red.”

The population health delivery model embodied by ACOs embraces traditional prevention practices such as patient screening and health education. However, the most innovative organizations will also take on the challenge of influencing the social determinants of health. These interventions serve multiple goals:
- they reinforce an institution’s investment in clinical preventive services;
- they support the social mission of a hospital as a critical community asset;
- and initial research suggests that they reduce costs.

With the success of the pilot, a systemwide effort was initiated at all Steward hospitals. These efforts were led by healthy beverage committees at each facility that included members from Food & Nutrition Services, Human Resources, Employee Health, Facilities, Marketing and Communications, and Community Benefits as well as hospital labor unions, with support from the senior leadership team. Procurement practices were changed to increase the number of “yellow” and “green” beverages offered and reduce the number of “red” beverages. Price changes and choice architecture (the framing of choice options found effective in food advertising) were used to encourage consumers to buy healthier drink options. To ensure staff understood the initiative, the committee also put together an education campaign.

All Steward hospitals have seen a reduction in sales of “red” beverages and increases in sales of “green” and “yellow” beverages. Steward has typically seen a 6 to 25 percent decrease in red beverage sales after four months of implementing the healthy beverage initiative. Some hospitals have seen much larger reductions, and one hospital successfully instituted a full ban on red beverages. In addition, Steward has instituted a systemwide vendor contract strategy with the following goals: sugar-sweetened beverages may make up no more than 15 percent of all beverage selections available in vending and retail outlets; sugar-sweetened beverages must be priced at a premium above healthier beverages and placed in less desirable locations; sugar-sweetened beverage signage and marketing materials is prohibited; and sugar-sweetened beverages cannot be sold or served at catering events. Steward is working with each hospital individually to develop strategies for building upon the success of the program and connecting efforts to community-based public health activities. As this effort illustrates, hospitals are uniquely positioned to be leaders within the business community on cutting-edge strategies that change social norms and improve population health.

Moving beyond their own institutions, hospitals can become champions for changes in public policy that support their population health goals.

**Conclusion**

The population health delivery model embodied by ACOs embraces traditional prevention practices such as patient screening and health education. However, the most innovative organizations will also take on the challenge of influencing the social determinants of health. These interventions serve multiple goals:
- they reinforce an institution’s investment in clinical preventive services;
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While this may be new terrain for both public health advocates and health systems, it is crucial that these connections are made to realize the full potential of the ACA.
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3. Id.
7. Id., at 7.
9. See National Prevention Council, supra note 6, at 18-21.
13. Id., at 12.
21. D. Liu, “Community Health Advocate Program,” presentation at the Steward Health Care Community Benefits Advisory Committee quarterly meeting, Boston, Massachusetts, October 9, 2012.
23. Id.
25. Id.
28. Id.
29. Id.
35. M. Reid., “Healthy Beverage Campaign” presentation at the Steward Health Care Community Benefits Advisory Committee quarterly meeting, Boston, Massachusetts, October 9, 2012. All calculations were based on sales data provided by hospital cafeteria managers, and purchasing data provided by system wide drink vendors.
36. Id., at 35.
37. Id.