Incorporate Prevention and Public Health in a Reforming Health Care System

**Current Status:**
Traditionally, medical care services and public health programs have operated separately. As health care providers are reforming the way they do business, following implementation of the Affordable Care Act (ACA), they are looking at new approaches to coordinate public health and medical care. For example, public and private health systems around the country are developing new models that move away from disjointed fee-for-service care and are instead focusing on improving health outcomes and containing costs.

One new approach to providing health care is through the use of ACOs.\(^1\) ACOs are groups of health care providers that prioritize coordinated care and quality goals to help achieve improved overall health for their patients while reducing health care costs. Under ACOs, health care providers meet certain standards of care, and can share in any savings that result from improved care and cost reduction. Many private ACOs have emerged around the country over the past several years.

Another model that a number of public and private health care providers are exploring is “global payments” or “global budgets,” which set a fixed fee for a system’s health care spending, based on a flat fee for each patient in a given insurance pool. Providers are then held accountable for the management of the total cost of care for their patient population. Many experts believe that an approach combining global payments with incentives to improve quality of care can lead to better value in terms of health and cost outcomes.\(^3\) Global budgets incentivize cost containment and may improve the overall health of the community served, and, like Accountable Care Organizations (ACOs), shift away from disjointed fee-for-service care.

**Why Prioritizing Prevention and Public Health in Reforming Health Care Models Matters:**
- Disjointed fee-for-service approaches and siloed systems have dis-incentivized coordinated care, and have been ineffective at reducing disease rates, improving health outcomes or controlling costs. New approaches, such as ACOs and global payment models, focus on improving the overall health of an insurance pool and offer strong incentives to providers to deliver the most effective care strategies possible, and to maximize effectiveness, they can take an integrated approach to include community-based prevention and public health to provide support for patients to be able to follow doctor’s advice in their daily lives.

- Investing in prevention offers stronger potential for returns for reformed systems using health outcomes and cost savings as measures. For instance, under a global budget system, the overall health of a community directly impacts the bottom line of that system. Incentivizing payment for evidence-based prevention programs can reduce rates of disease, prevent the development of complications from diseases and reduce the number of a patient’s doctors’ visits.
Recommendations:

- New health system approaches, including ACOs and global health budgeting, must incorporate community prevention and public health to be successful in reaching goals to improve health and lower costs. As health systems are developing reforms, they should be encouraged to incorporate community-based prevention and public health into their systems. Investing in prevention as part of these overall models can help providers more easily and effectively reach their goals of healthier communities and lower health care costs. Incentives and mandates should be explored to encourage this integration, including developing models for sharing savings achieved through prevention. Integrating prevention and public health with the larger health care system can be implemented in a variety of ways, including through coordination with health care providers and existing public health programs and departments.

  - ACOs should expand to an Accountable Care Community (ACC) model. The creation of ACOs has inspired a new model, ACCs, which expands on the idea of the ACO to coordinate care inside and outside the doctor’s office. ACCs work across a range of sectors, including employers, housing, transportation, education and Chambers of Commerce, and work together with health care providers and public health officials to find ways to improve health while also achieving other critical goals. ACCs are based on the recognition that different sectors interact with public health. For example, being healthy is important to being productive at work; stable and safe housing impacts community members’ health; and a quality education helps improve health and economic prospects. As with the ACOs, a comprehensive approach works to improve the overall health of individuals and can result in health care savings. The range of organizations involved can then benefit from these shared cost savings, and everyone benefits by having a healthy and more productive community. ACC models leverage the resources and capabilities of all of the partners and share the cost savings achieved by lower health care costs.

  - If global budgets are adopted, they should invest in community-based prevention programs. States and organizations with global budgets have a strong incentive to identify and invest in strategies to improve the health of the community they serve. To be as strategic as possible, global budgets should include investments in community-based prevention. Including community prevention directly in global health models can help improve health and bring down overall costs, which, in turn, would provide more resources to reinvest in the health care system.

HOW IT’S WORKING:

- The Accountable Care Community in Akron, Ohio — a Community Transformation Grant (CTG) recipient — reduced the average cost per month of care for individuals with type 2 diabetes by more than 10 percent per month over 18 months with an estimated program savings of $3,185 per person per year. This initiative led to a decrease in diabetes-related emergency department visits (from nine to six visits for people in the higher glycated hemoglobin ranges, and from six to three visits for people in the lower glycated hemoglobin ranges). In 2011, the nonprofit organization Austen BioInnovation Institute (ABIA) in Akron brought together a wide range of 70 different groups to launch the first-of-its-kind ACC to coordinate health care inside and outside of the doctor’s office for patients with type 2 diabetes. The initiative received a CTG from CDC of $500,000 per year for five years for capacity building.

- The Vermont Medicaid Global Budget is one example of a program that is making “upstream” investments in prevention. By providing increased support for community-based prevention programs to improve overall health of the community, global health budgets can improve the health of their entire insurance pool. For instance, providing increased access to healthy foods and safe places to exercise gives everyone in the community the ability to more easily make healthy choices in their daily lives. These programs benefit everyone in the community and provide much needed support to people who are managing chronic conditions, such as by providing diabetics with support for their on-going self-care, including opportunities for physical activity and good nutrition. This can pay dividends in reduced need for higher cost clinical care and emergency room visits and can limit the escalation of disease complications. Also, providing pre-diabetics access to evidence-based community programs can keep patients from developing full blown diabetes and keep their health care costs down.
Looking for ways to improve the vitality — particularly the economic vitality — of the community, leaders in Akron, Ohio identified health issues — particularly high rates of chronic disease and related health care costs — as a major concern.

The nonprofit ABIA brought together a wide range of 70 different groups to launch the first-of-its-kind Accountable Care Community in 2011.

The ACC is focused on improving the health of the community and incentivizing the health care system to reward improved health while delivering cost effective care. Success is measured by factors including the improved health of the whole community, cost effectiveness and cost savings in the health care system, improved patient experience for those using the health care system and job creation in Akron.

The effort began by zeroing in one of the most widespread, high cost preventable health problems in their community: type 2 diabetes.

Approximately 11 percent of adults in Akron have diabetes, and 2.1 percent more are considered pre-diabetic and are at risk for developing full blown diabetes. If current trends continue, one-third of the Akron population could have diabetes by 2050. Of the individuals with type 2 diabetes involved in Akron’s ACC, around 38 percent have private health insurance, 31 percent have public health insurance (Medicare or Medicaid) and 31 percent have no health insurance. People with diabetes have 2.3 times higher average medical costs per year than non-diabetics.

Effective approaches to prevent and control diabetes require a comprehensive approach.

Strong, regular medical care, including coverage for care, is important. But, daily self-management is also essential for individuals with diabetes. And, maintaining a healthy diet and levels of physical activity are also necessary to help those with diabetes improve their health and prevent others from developing diabetes in the first place.

There is recognition that health care must focus on improving the overall health of individuals, which requires thinking about their direct care but also how to coordinate maintaining health outside the doctor’s office. Managing health in daily life requires having information about nutrition and activity and proper self-management education for those who are living with health conditions. In addition, it is important to make healthy choices easier in people’s daily lives. This includes easier access to affordable healthy food, safe and convenient places for physical activity, mental and emotional support, and encouragement and incentives from employers, family, community- and faith-organizations and others.

The ACC built a collaboration to leverage the resources and ideas of a wide range of organizations, including the major hospitals and health care providers, employers, the Chamber of Commerce, universities, housing groups, transportation groups, economic developers and planners, a range of faith-based organizations and many others. Some of the activities and initiatives, in addition to those directly related to education and care for disease, have included community gardens, fresh food preparation, fit-minute exercise, among others.

Akron has worked on the following initiatives: (1) expansion of the concept of “public lands for public health” with the Cuyahoga Valley National Park — including extending public transportation such as bus lines to make the park more accessible to more members of the community; (2) a regional health impact assessment of the Akron Marathon; (3) partnerships with the faith-based community for health education and screening for individuals who are underserved including refugees and Native-Americans; and (4) work with the Akron Metropolitan Transportation System to better understand how to design or redesign systems transportation and the built environment to provide increased opportunities access safe places for physical activity and healthy, affordable food options.

The initiative also received a CTG from CDC to help support their activities. CTGs are awarded to communities that are taking integrated, evidence-based approaches to preventing disease. ABIA received a $500,000 per year for five years capacity-building grant in 2011.

The three major community health systems, the Akron Children’s Health System, Akron General Health System, and Summa Health System and many private provider groups in Akron participate in the ACC. Combined, around 80 percent of all of the county’s population are represented through participating hospitals, providers and social service agencies. The initiative recognizes that knowledge and information management is essential to understanding and analyzing health and cost patterns. They have developed systems for confidential sharing of patient data using an integrated data platform, which allows for the consistent and
comparable analysis of data to be able to track health trends and cost savings. Participating hospitals and providers receive a share of the health care cost savings achieved by the program, and other funds are reinvested in the ACC or other community efforts.

In just 18 months, the initiative is already seeing positive results:8

- The average cost per month of care for individuals with diabetes was reduced by more than 10 percent per month; and
- After one year of involvement, consistent reductions in costs are in excess of 25 percent.

Other key highlight outcomes include:9

- Estimate program savings of $3,185 per person per year;
- More than half of participants lost weight (115 pounds), decreased BMI (almost 23 points), and reduced waist size (more than 25 inches);
- Lowered cost per person per contact hour with health care providers ($25 vs. $37.50 for other leading diabetes prevention programs);
- Better management leading to decrease in glycated hemoglobin (A1C) (a measure of diabetes) and LCL cholesterol (often known as “bad” cholesterol) levels;
- No amputations because of diabetes;
- Decline in emergency department visits because of diabetes: a drop from nine to six emergency room visits for people in the higher glycated hemoglobin ranges (HbA1c>8%); and a drop from six to three visits for people in the lower glycated hemoglobin ranges (HbA1c<8%); and
- Increase in reported exercise and flexibility.

The ACC has been successful in improving quality of care, lowering the cost of treatment, delaying the progression of disease, expanding the population receiving comprehensive care, reducing the overall burden of disease in the community, and increasing productivity. The initiative is planning to expand to focus on additional health problems, such as asthma.

Akron is a healthier place with lower health care costs because of the ACC, and it is more attractive to businesses and other groups because of its more vibrant and productive workforce.

ABIA developed the ACC model so it could be replicated in other communities around the country, and has had more than 200 requests for more information or consultation from other communities.

AUSTEN BIOINNOVATION INSTITUTE IN AKRON

ABIA is a unique biomedical innovation institute, founded in 2008 by Akron Children’s Hospital, Akron General Health System, Northeast Ohio Medical University, Summa Health System, The University of Akron and the John S. and James L. Knight Foundation. The City of Akron and the County of Summit are key participants in the initiative.

“As we think about the Accountable Care Community, we have the opportunity to impact quality of life, and also the economic vitality of our community, not only for us but also serving as a national model and transporting to other parts of the United States.”

– Janine E. Janosky, Ph.D., Vice President, Head, Center for Community Health Improvement, ABIA

AKRON — SOME VITAL STATISTICS FROM COUNTY HEALTH RANKINGS AND ROADMAPS (2012) FROM RWJF AND THE UNIVERSITY OF WISCONSIN POPULATION HEALTH INSTITUTE10

Health Facts
- 11 percent of adults have diabetes
- 30.4 percent of adults are obese and an additional 37.3 percent are overweight*
- 21 percent of adults smoke

Health Care Facts
- 14 percent of adults have not had health care insurance
- $9,749 average health care costs per adult per year

Community Facts
- 540,000 approximate Summit County, Ohio (Akron) population
- 24.8 percent of adults are physically inactive
- 77.7 percent consume less than the recommended five servings of fruits and vegetables a day*
- 57 percent of restaurants in the county are fast food restaurants
- 86 percent of working adults commute alone to their jobs
- 19 percent of adults have inadequate social support

Economic Facts
- 9.9 percent of adults are unemployed
- 22 percent of children live in poverty
- $45,768 is the median household income
- 34 percent of residents pay 30 percent of more of their income on housing

*Source: ABIA White Paper11
Transforming Health by Developing an Accountable Care Community

By Janine Janosky, Vice President, Head, Center for Community Health Improvement, Austen BioInnovation Institute in Akron

The Austen BioInnovation Institute in Akron (ABIA) is a collaboration of Akron Children’s Hospital, Akron General Health System, Northeastern Ohio Medical University, Summa Health System, The University of Akron and The John S. and James L. Knight Foundation. Not surprisingly, this partnership mirrors the Akron and Summit county communities, as healthcare and education are the region’s largest economic sectors.

Our region is also home to a vital community, with an extensive park system that includes biking, hiking and running trails, cross-country skiing, lakes and much more.

However, in the Akron Metropolitan Statistical Area (MSA), which encompasses Summit County, 10.8 percent of the population has been diagnosed with diabetes, with an additional 2.1 percent reporting pre-diabetes or borderline diabetes as a diagnosis. This compares to a rate of 10.1 percent for the state of Ohio and 8.3 percent for the United States.

With regard to diabetes-related risk factors in the Akron MSA, 24.8 percent of the population reports no physical activity in the past month; and 77.7 percent of adults consume less than the recommended five servings of fruits and vegetables per day. In addition, 37.3 percent of adults are overweight, and 30.4 percent are obese.

Clearly, The Akron MSA represents an at-risk community that would benefit from health interventions.

In response to the region’s and nation’s need for a collaborative and shared approach to community health, about 18 months ago, ABIA’s Center for Community Health Improvement began the effort to usher in a new health culture in the Akron region by developing an Accountable Care Community (ACC), a new health model which aims to foster collaborations borne of shared responsibility among various sectors to transform health in Northeast Ohio.

The ACC is a collaborative, integrated, and measurable strategy that focuses on health promotion and disease prevention, access to quality services, and healthcare delivery. As such, the ACC is not dependent upon healthcare systems adopting specific public or private payer initiatives. Rather, it builds on initiatives to encompass not only the area’s medical care providers, but also the public health system and community stakeholders whose work, taken together, spans the spectrum of the determinants of health. In addition, the ACC focuses on health outcomes of the entire population of a defined geographic region, i.e., Summit County, OH instead of silos of populations of health consumers selected by a health insurance entity or provider participant.

When we developed the ACC, it was important to fundamentally change health and health care delivery from silos to a more integrated and coordinated system that utilizes existing resources in the community, for example: concepts such as patient-centered medical home, care coordination, shared accountability, collective impact, and value-based payment.

Specifically, the ACC model is structured around the following components:

1. Development of integrated medical and public health models that deliver clinical care in tandem with health promotion and disease prevention efforts;

2. Utilization of interprofessional teams including, but not limited to, medicine, pharmacy, public health, nursing, social work, mental health, and nutrition to align care management and improve patient access and care coordination;

3. Collaboration among health systems and public health, to enhance communication and planning efforts;

Other communities around the U.S have implemented smaller initiatives around community-based approach to care with promising results. Some examples include the Sagadahoc (Maine) Health Improvement Project, the Community Care of North Carolina Program and the Aligning Forces for Quality (AF4Q). These examples of integrated, community-based health improvement efforts have both informed and accelerated the ACC initiative to impact.
Development of a robust health information technology infrastructure, to enable access to comprehensive, timely patient health information that facilitates the delivery of appropriate care and execution of effective care transitions across the continuum of providers;

Implementation of an integrated and fully mineable surveillance and data warehouse functionality, to monitor and report systematically and longitudinally on the health status of the community, measuring change over time and assessing the impact of various intervention strategies;

Development of a dissemination infrastructure to rapidly share best practices;

Design and execution of a robust ACC implementation platform and impact measurement tool; and

Policy analysis and advocacy to facilitate ACC success and sustainability.

Significant progress has been made within the initial 18 months of designing, developing, and implementing the ACC. After analyzing and evaluating the needs to improve population health, we identified diabetes as the initial priority. We focused on the spectrum of health promotion and diabetes prevention, diabetes self-management, secondary and tertiary prevention of diabetes complications, and the care and services of individuals currently living with diabetes.

ABIA was positioned as the hub for the development and execution of the ACC including series of targeted, multi-party interventions.

The first project encompassed a cohort of individuals with diabetes who were linked to care and services within the ACC. Available to each of the individuals, based upon their needs, was augmented medical care, programs and initiatives for self-management, and secondary and tertiary prevention. These included diverse interventions such as education for self-care, nutrition, physical activity, mindfulness for social and emotional wellness, among many others.

After we linked these individuals with community resources, we found beneficial health outcomes and cost of care outcomes, showing improvements in biometrics e.g., reduction in weight and/or waist measurement, decline in blood sugar and increase in self-reported fitness levels. In addition, we have found an approximate 10 percent cost savings in the utilization of care for these individuals.

The second project focused on a diabetes self-management program that was an educational and experiential program in a small group setting with participants drawn from diverse practice sites.

For this cohort, studied microscopically, over a six month period, we found that those individuals born before 1965 (baby boomers and older) were the most successful at decreasing their BMI, and lost an average of 2.166 points of BMI. For all individuals, overall, they showed a decrease in their Hemoglobin A1c (HbA1c) percentage by approximately 0.45, with no differences by age, generation, race, and limitations. This decrease showed their diabetes is better controlled and also led to an estimated savings of $3,185 per person, per year in medical costs. In addition, from the decrease in body weight, medical care costs, and losses from work, the cost of absenteeism decreased by $580 per person, per year.

As a group, the number of emergency department visits was also lower during this period when compared to the six months prior. We have compared our findings to national findings, and the cost of our programs and our improved health and cost savings are well ahead of the norm. The analysis not only demonstrated the biometric successes of the program, but also reduced costs and improved overall individual community health. These data show that through an ACC positive outcomes along the Triple Aim (improving the individual experience of care, improving the health of populations, and reducing per capita costs of care for populations, according to Health Affairs) can be achieved.

As we move forward, with the support of the ABIA partners and an expanding network of community stakeholders, the ACC will enable Akron and Summit County, Ohio to become a guiding force for better health across all portions of our society.

In February, 2012, we released an ACC White Paper (available at http://www.abiakron.org/Data/Sites/1/pdf/accwhitepaper12012v5final.pdf), which has received more than 50,000 hits to the website, with over 15,000 downloads, and approximately 200 direct contacts. These direct contacts are inquiries referencing working with health systems, universities, public health entities, local governments, and so forth to develop and implement an ACC in their communities. Quite simply, our ACC model of shared responsibility can be implemented and adapted for other communities throughout the nation.
In 2009, Blue Cross Blue Shield (BCBS) of Massachusetts began a modified global payment plan, establishing a fixed cost for the care of patients during a specified time frame and including bonus incentives for achieving quality goals. According to a 2012 study in Health Affairs, health spending for patients covered by this program was 1.9 percent lower in the first year and 3.3 percent lower in the second year than for patients covered via fee-for-service programs, and the 4,800 doctors in the global payment program also scored higher on measures of quality care. The study found many doctors took cost-cutting steps such as switching to less-expensive lab companies or extending their office hours to cut down on their patients’ emergency room needs.

In August 2012, Massachusetts passed a law aimed at controlling health care costs, which included replacing traditional fee-for-service payments for providers with alternative models, such as global budgeting. Some policymakers in the state project the law could lead to $200 billion in health care savings over the next 15 years.

The global payment approach is bolstered by community-focused prevention and public health programs, which supported the BCBS beneficiaries and other Massachusetts residents. In 2012, the state was also the first in the nation to pass its own Prevention Fund to help reduce obesity, tobacco use and other high-impact health problems in the state.

In 2012, Oregon received a waiver from CMS for a risk-adjusted global budget for the state’s Medicaid program as part of instituting Coordinated Care Organizations (CCOs) throughout the state. Their approach is grounded in the idea that “better health = lower costs.”

Currently, 16 percent of Oregonians receive support from Medicaid and/or the Children’s Health Insurance Program (CHIP) services and 11 percent of the state’s overall budget goes toward Medicaid/CHIP. 

The new approach will focus on coordinated care, including increased recognition of the need to support health improvement both inside and outside the doctor’s office. The global resources will help allow for increased support for proven community prevention efforts to help improve the overall health of the community, which in turn helps bring down overall costs.

Some recent advances have made global budgets easier to implement than they have been in the past for small, medium-sized and large provider networks, including:

- Electronic health records help give providers increased, accessible information about their patients to deliver better coordinated care and track the population health outcomes of their patients and their communities;
- Integrated management systems give providers increased information about the range of potential services and programs that can help their patients, including how to connect them with services and programs that can provide support to manage their health concerns in their daily lives;
- Integrated billing systems help with the administration of global budgets and linking payment to care; and
- Risk adjustment strategies have been developed so the health status of the patient pool is factored into the payment levels, which mitigates against denying coverage or exclusion of less healthy patients.

Improving the health of the community — or insurance pool — is one key to the success of global health budgets.
Vermont Global Budget

In FY 2006, Vermont began a five-year “Global Commitment to Health” demonstration agreement (which has been extended until the end of 2013) with the federal government to test the impact of a federal funding cap on Medicaid spending to give the state increased flexibility to manage Medicaid health services. The state pursued this approach to help improve cost containment and expand coverage to the uninsured — approximately one in four Vermonters receives some form of Medicaid assistance. Vermont has been receiving monthly payments to cover the needs of all Medicaid beneficiaries.

The state has a longer-term goal of having a set global health budget for all Vermonters, including those covered by public and private insurance. Currently, Green Mountain Care serves as a hub for low- or no-cost insurance options in the state.

Independent actuaries determined the global budget pool for the state, and if the state was able to control spending under the agreed upon cap, it could keep the difference, but if it exceeded the agreed upon cap, the state would absorb the difference.

The state was able to keep spending significantly below the agreed upon amount, and also invested some of these funds to help improve the health of the population, which in turn helps limit their health care needs, further reducing costs.

The Global Commitment to Health program has helped provide support for public health approaches to improve the health status and quality of life beyond the doctor’s office. Some programs of community investments include: school health services, a strategic blueprint for health in the state, Vermont Information Technology Leaders (VITL), tobacco cessation program support, community mental health services, non-traditional programs like respite services, and increases support for the Women, Infant, & Children (WIC) program.

Global Commitment

- Waiver Savings: Above projected expenditures
- MCO Savings: May be used for health-related expenditures under four broad parameters
- MCO Expenditures: Cost to provide existing services for existing populations
ENDNOTES


5 Ibid.


9 Ibid.


