Chronic Disease Prevention and Management

Health Care Safety-Net Toolkit for Legislators
Chronic diseases are among the most prevalent and costly health conditions in the United States. Nearly half of Americans suffer from at least one chronic condition, and the number is growing. Chronic diseases—such as cancer, diabetes, hypertension, stroke, heart disease, respiratory diseases, arthritis, obesity, and oral diseases—can lead to hospitalization, long-term disability, reduced quality of life and, often, death.¹ In fact, such persistent conditions are the nation’s leading causes of death and disability.

According to the Centers for Disease Control and Prevention, more than two-thirds of deaths in the United States are the result of chronic diseases. Heart disease, cancer, respiratory diseases and stroke are the leading killers of Americans; the top two alone account for nearly half of all deaths annually. Diabetes is on the rise among Americans, and follows close behind as the seventh leading cause of death.²

The prevalence of chronic disease has increased steadily among people of all ages in recent years. At the turn of the century, 125 million Americans had at least one chronic condition; by 2005, that number had grown to 133 million, and by 2020, experts project that 157 million will be affected.³

These diseases affect more than one in two adults and more than one in four children in the United States. More than 25 percent live with multiple chronic conditions.⁴ The incidence of multiple, concurrent diseases is also on the rise.⁵ People with multiple chronic conditions have more complicated health needs than their peers—adding another layer of complexity and cost to their health care. Due to the nation’s rapidly aging population and a nationwide increase in risk factors for chronic disease—such as obesity—this trend shows no sign of abating.⁶

### What Is Chronic Disease?

A chronic disease is generally considered a condition that lasts one year or more, requires ongoing medical attention and/or limits a person’s daily activities.⁷ Some of the most common chronic conditions are listed below.

- Heart disease
- Hypertension (high blood pressure)
- Stroke
- Cancer
- Chronic respiratory diseases
- Diabetes
- Arthritis
- Asthma
What Legislators Need to Know About Chronic Disease

- Chronic diseases and conditions are the leading cause of death and disability in the United States, causing seven in 10 deaths nationwide. Approximately one quarter of Americans live with a disability caused by a chronic illness.

- Many chronic diseases are among the most preventable of all U.S. health problems.

- Seventy-five percent of health care spending in the United States goes to treat chronic conditions. This figure is even higher for Medicaid, where 80 cents of every $1 is spent on chronic conditions.

- Heart disease and cancer account for 47 percent of all U.S. deaths.

- Chronic disease affects the majority of Americans: 51 percent of adults have at least one chronic condition, and 26 percent live with multiple chronic diseases.

- The number of people with chronic conditions is increasing rapidly; by 2020, an estimated 47 percent of the nation’s population will have a chronic condition.

- Significant racial, ethnic and geographic disparities exist in the prevalence of chronic disease.

- Numerous policy options are available to states that are interested in preventing and managing chronic disease to improve health and reduce costs.
Cost Implications
The rise in chronic diseases not only has serious consequences for the nation’s health and health care systems, but also significantly contributes to health care costs. Seventy-five percent of U.S. health care spending goes to treat people who have chronic diseases. In Medicaid, too, beneficiaries who have complex needs significantly influence health care costs and account for an even larger portion of spending.

The economic effects of chronic disease extend beyond the cost of health care. The increasing prevalence of chronic diseases reduces economic productivity through higher rates of absenteeism and poor job performance. A study by the Milken Institute, a nonpartisan think tank, found that the seven most common chronic diseases—cancer, diabetes, hypertension, stroke, heart disease, respiratory conditions, and mental disorders—cost the U.S. economy nearly $1.3 trillion annually, including $277 billion for treating chronic conditions and $1 trillion in lost productivity. The study also found that minimal changes in unhealthy behaviors could prevent or delay chronic conditions and reduce these costs, although exactly how much can be saved and over what time period are subject to debate.

Policy Options for Prevention and Management of Chronic Disease
The debilitating, costly effects of chronic conditions often can be prevented, delayed or mitigated. Numerous policies and programs are available to help state policymakers prevent and manage chronic diseases among their constituents. The following overview highlights various options some states have undertaken in an attempt to improve health and/or reduce the cost of health care and chronic diseases.

Ensure access to a full range of quality health services for those with chronic conditions
Access to comprehensive, quality health services is important for everyone, but even more critical for those who have chronic conditions. Access to care can improve prevention, detection and treatment of chronic health conditions, yet many people face significant barriers to accessing care. More than 45 million Americans currently lack health insurance, countless more are deterred by the high cost of care, and others live in communities where services are difficult to access or unavailable. Studies indicate nearly one-third of uninsured, working-age U.S. adults have at least one chronic condition.

The 2010 Affordable Care Act (ACA) aims to improve access to health insurance through establishment of Health Insurance Exchanges and the optional Medicaid expansion.

Federally Qualified Health Centers (FQHCs) also enhance access by providing primary medical, dental, behavioral and social services to people who lack access to care, including the uninsured, residents of rural and underserved areas, and many Medicaid patients. Community health centers provide services regardless of an individual’s ability to pay and are well-equipped to address the needs of people with chronic conditions. In fact, patients of health centers are more than three times as likely to seek care for chronic conditions as patients who receive care in other primary care settings.

Legislators may wish to consider the following policy options to help ensure access to a full range of quality health services for people with chronic diseases.

- Adjust state funding to support community health centers. Many states support health
centers through general fund appropriations or tobacco settlement funds.

- Support measures that increase the number of people with health coverage, such as strengthening employer-sponsored insurance, supporting health insurance exchange outreach and enrollment, supporting Medicaid and CHIP coverage and more.
- Support health care workforce initiatives. Loan repayment programs and other incentives address clinical workforce shortages by supporting primary care providers who practice in underserved areas.
- Review facility licensure laws. Exempt certain providers, such as rural health centers, from specific laws or regulations to make it easier for them to operate in underserved areas.
- Review health professional licensing and scope of practice laws. Create policies that allow primary care providers to practice to the full extent of their training.
- Encourage Medicaid reimbursement for oral, behavioral and other health services.
- Support other, evidence-based policies that aim to lower the cost and improve the quality of health care.

**Support establishment of medical and health homes**

Designed to meet patient needs, the patient-centered medical home—or health home model of care—aims to improve access to and coordination of patient care. The model consists of a team of health care providers—such as physicians, nurses, nutritionists, pharmacists, community health workers and social workers—who focus on a person's overall health and provide coordinated, comprehensive care for those whose needs are complex, such as people with chronic conditions. Medical homes coordinate care across health, behavioral, community and long-term services; offer extended office hours and enhanced communication between providers and patients to improve access to care; and educate patients about how best to manage their conditions. This delivery system not only offers an opportunity for states to reduce costs and improve care for the chronically ill, but also reflects states’ movement toward support of team-based health care.

Legislators may want to consider the following policy options to support the medical home model.

- Adopt policies and programs to advance medical homes. As of April 2013, 43 states were planning or implementing the medical home model for certain Medicaid or CHIP beneficiaries. Many focus on people with chronic conditions and other high-cost beneficiaries.
- Support payment reform. Provide reimbursement for supplemental primary care services, such as care coordination, patient education and disease self-management.
- Review health professional licensing and scope of practice laws. Develop policies that allow providers to practice to the full extent of their training to help facilitate team-based care.
- Provide financial incentives for providers to switch to more team-based care. Develop policies that encourage training health care professionals on team-based care.
- Establish health homes to coordinate care for Medicaid beneficiaries. Under Section 2703 of the Affordable Care Act, states can obtain 90 percent federal matching funds for two years for developing health homes that integrate and coordinate all primary, acute, behavioral health and long-term services and supports for Medicaid beneficiaries who have two or more chronic conditions; have one chronic condition and are at risk for a second; or have one serious and persistent mental health condition.
Support policies that improve coordination of care between health settings, such as health information technology (HIT) improvements

People with chronic conditions, and especially those with multiple chronic conditions, receive care from numerous providers in various settings and regularly juggle multiple prescription drugs, making care coordination key. Coordinating care between providers and across settings potentially can improve patient health, use resources more efficiently and reduce costs. Evidence suggests that use of health information technology—such as electronic health records—can help manage chronic diseases more effectively. Electronic health records facilitate communication and improve patient safety by reducing duplicative tests, procedures and costly medical errors. HIT use among providers has increased since enactment of the Affordable Care Act and the Health Information Technology for Economic and Clinical Health (HITECH) Act. However, only a little more than half of U.S. primary care physicians currently use electronic health records. States can influence care coordination and HIT use through their role as purchasers, planners, regulators and providers and through supporting infrastructure, innovation and workforce development. To improve care coordination across settings, legislators may want to consider the following policy options.

- Leverage state purchasing power through Medicaid and/or the state employee health plan to drive adoption of health information technology.
- Convene stakeholders through a study commission or advisory committee to address HIT. Evaluate HIT needs and resources, recommend state policy changes to facilitate HIT, and/or develop a statewide action plan.
- Modify existing statutes to ensure that health information can be exchanged electronically while maintaining patient privacy.
- Develop incentives for HIT adoption. Offer tax credits, link medical school loan repayment to HIT competency, or link facility licensure to HIT implementation and meaningful use.
- Provide funding for HIT efforts. Include HIT initiatives in general appropriations; create a dedicated funding stream from dues, bonds, insurer assessments or user fees; or provide targeted funding through grants and loans to groups such as community health centers.
- Support statewide development of HIT infrastructure.
- Encourage adoption of electronic health records (EHR).
- Support reforms that reward providers for care coordination and smooth transitions between health care settings.

Support policies that ensure an adequate health care workforce

Studies suggest that one of the most effective ways to address chronic disease is through team-based care. However, the primary care providers necessary for these teams are in short supply in some geographic areas. The strain on the primary care workforce will only increase as millions of Americans, newly insured under the Affordable Care Act, seek medical care in primary care settings in 2014. More available providers will be needed to ensure that new enrollees have adequate access to primary and preventive care to effectively treat their conditions. Legislators may want to consider the following policy options to ensure their state workforce is able to meet the growing demand for health care.
• Provide financial incentives to recruit and retain primary care providers. Offer tuition assistance, loan repayment programs, scholarships and other incentives to recruit providers to practice in underserved areas.
• Review health professional licensing, regulation and scope of practice laws. Develop policies that allow providers to practice to the full extent of their training in a wide range of settings.
• Establish reimbursement policies that compensate for chronic disease prevention and case management. Consider use of enhanced Medicaid payments for providers that act as medical homes; provide monthly payments for care coordination and case management; or reimburse providers for care coordination for Medicaid beneficiaries.
• Consider system-wide changes, such as shifting the emphasis of the health care delivery system to primary and preventive care.

Promote health and wellness programs at schools, worksites, health care and community-based settings
Healthy behaviors—such as eating a nutritious diet, being physically active and not smoking—can prevent, mitigate and even eliminate some chronic health problems. States across the nation are implementing wellness policies, programs and incentives to help people become and stay healthier. Initiatives address a wide range of preventable risks for chronic conditions such as cancer, heart disease and type 2 diabetes. These include wellness programs that encourage tobacco-free living, healthy eating and availability of nutritious food and promote active lifestyles and development of healthy, safe environments for physical activity. Legislators may wish to consider the following strategies that some states have adopted to promote community health and wellness.

• Implement smoke-free policies for all public places, including workplaces, restaurants and bars. At least twenty six states currently have smoke-free laws that cover all these locations.\textsuperscript{26}
• Support and enforce programs that reduce youth access to tobacco and/or increase the age limit for purchasing tobacco products.
• Offer financial incentives—such as tax credits, sales tax exemptions and support for public-private partnerships—to improve access to healthy, fresh, low-fat and whole-grain food. At least six states and the District of Columbia have enacted such policies.\textsuperscript{27}
• Encourage or require schools, prisons and state-licensed child care facilities to serve healthy foods and snacks.
• Specify physical education requirements in schools, school wellness policies, and physical activity during recess.
• Promote community designs that facilitate physical activity, such as sidewalks and bicycle lanes.
• Develop state employee and citizen wellness programs statewide.

Support programs that focus on eliminating racial and ethnic health disparities
Significant disparities exist in the prevalence of chronic diseases. In reality, Americans’ health often varies by their population group or ZIP code. Even when researchers control for income and health insurance coverage, they find that racial minorities generally live with more diseases, die sooner than whites and suffer more with many chronic diseases. Nearly half of African Americans are obese, compared to 40 percent of Hispanics and 34 percent of whites.\textsuperscript{28} African-American children are twice as likely to have asthma as white children, are twice as likely to be hospitalized or visit an emergency department for the condition, and four times more likely to die from it.\textsuperscript{29} In ad-
dition, African-American and non-Hispanic white American men are more likely die from heart disease than any other group. Economic, social and environmental conditions—such as poverty, education level, lack of access to health care, and physical environment—contribute to these disparities. For example, poverty limits access to health insurance, health care and resources to manage health. The communities in which people live affect whether they have access to fresh, healthy food and safe areas where they can be physically active. Policymakers who are interested in reducing the economic and human costs of such disparities may wish to consider options that increase access to high-quality, culturally competent chronic disease management among groups that are disproportionately affected; some of these are listed below.

- Expand access to health care services through low-cost health insurance, Medicaid, support for medical homes, community health centers and other delivery system reforms.
- Develop health system integration and payment reform based on data-driven measures that account for race, ethnicity, language and income.
- Develop a statewide strategic plan to reduce health disparities among minority populations.
- Develop initiatives to recruit and retain minority health care professionals to enhance the diversity of the health care workforce.
- Provide state loan repayments and other incentives to providers who agree to practice in underserved areas.
- Support culturally competent, team-based care, such as that provided in community health centers.
- Develop guidelines related to cultural competency for health care providers.
- Include community health workers as part of team-based health care to better serve diverse communities and improve the health of underserved communities.

**Support efforts to effectively educate the public about health and prevention of chronic disease**

Research shows that, when patients are actively involved in managing their own health and engaged in health care decisions, their health is more likely to improve. Educating people about their chronic conditions, teaching self-management skills and involving patients in the medical decision-making process thus can help improve health outcomes and reduce costs for those with chronic diseases.

Community health centers and medical homes incorporate chronic disease self-management skills in the services they provide. Community health workers (CHWs)—also known as outreach workers or promotores de salud—offer services similar to medical homes, but on a smaller scale. CHWs help educate residents in the communities they serve, providing linguistically and culturally competent assistance, helping people understand risky behaviors and motivating them to manage those risks. Some policy options to support public education and disease self-management are listed below.

- Support the medical home model, community health centers and other team-based care.
- Allow federally qualified health centers to include community health workers as providers and to reimburse them for services.
- Develop a statewide standardized curriculum for CHWs and authorize Medicaid reimbursement for CHWs supervised by medical or mental health professionals.
- Enact legislation related to occupational regulation for CHWs, and similar peer health educators.
• Support integration of CHWs at the state level. State health departments can collaborate with other stakeholders to develop a comprehensive approach to developing policies for CHWs.

State Program Examples
A few states are incorporating many of the policy options mentioned in this report into comprehensive systems to prevent and manage chronic conditions, improve care and reduce costs.

Vermont Blueprint for Health
Vermont Blueprint for Heath aims to improve health and control costs by delivering comprehensive, well-coordinated care statewide. Launched in 2003 by then-Governor James Douglas, the public-private partnership offers an innovative delivery system based on a foundation of patient-centered medical homes and community health teams (CHTs). The Blueprint focuses on four broad areas: transitioning providers to the patient-centered medical home model, improving individual self-management of chronic conditions, developing health information systems and improving availability of community health care. Three years after its inception, Blueprint was codified by the General Assembly as part of Act 191.

Community health teams—multidisciplinary, locally based teams—provide a link between primary care and community-based services, connecting patients to medical, social and economic support. CHTs offer individual care coordination, behavioral health counseling, and health and wellness coaching, and also teach self-management skills. Teams consist of a variety of professionals and effectively expand the capacity of primary care practices by providing patients direct support and individualized follow-up. Services are available to all primary care practices that are recognized or certified as patient-centered medical homes participating in Blueprint. The model minimizes barriers to health care in Vermont, serving patients regardless of their insurance status, without copayments, prior authorization or eligibility restrictions.35

Blueprint has received continual support from state lawmakers. In both 2010 and 2011, the state legislature called for full implementation of the delivery system in every willing primary care practice by 2013. As an incentive for participation, Blueprint provides enhanced per-member per-month payments to providers that achieve medical home status. Participating providers also receive the support and assistance of community health teams. In addition, Blueprint offers guidance, support and advice to medical practices that are making the transition to the medical home model. As of December 2012, 106 primary care practices were engaging in patient-centered medical home activities and were serving more than 420,000 people. Vermont also allows its health care workforce to function at its highest capacity. Nearly one-third of primary care providers who work in recognized medical homes are mid-level providers, such as nurse practitioners, advanced practice registered nurses and physician assistants. Blueprint has further expanded the available workforce by formally recognizing naturopathic physicians as primary care providers, making them eligible to receive benefits—such as payment reform and access to community health teams for their patients—when recognized as a medical home. Blueprint also is developing a statewide health information exchange and helping providers achieve meaningful use of electronic health records.36

According to a recent qualitative analysis of Vermont Blueprint for Health, patients with chronic conditions are seeing providers more frequently. Providers have responded favorably to the patient support community health teams provide, which allows them to address both clinical and nonclinical patient needs. An analysis of one pilot program
found the model also significantly decreased hospital admissions, emergency department visits and related costs.

Community Care of North Carolina
In 1998, North Carolina began implementing an enhanced medical home model of care for Medicaid beneficiaries, aimed at improving quality and cost-effectiveness of care.\(^{37}\) Community Care of North Carolina (CCNC) is a public-private partnership that focuses on four elements: developing networks of physicians and local community health organizations that provide coordinated care to high-cost Medicaid beneficiaries with chronic conditions; using population management tools to support primary care providers; providing case management and clinical support to medical home providers that manage patients with complex medical, social and behavioral conditions; and collecting data and feedback on patient health and opportunities for improvement.

Each network of providers and community services is responsible for linking beneficiaries with a medical home, providing disease management and care coordination, and implementing quality improvement initiatives—for which they receive an enhanced per-member per-month fee. Case managers, such as social workers, nurses or other clinicians, are an integral part of the team. They work with physicians to coordinate care, provide disease management education, and collect and report data as part of continuous quality improvement efforts. Community Care of North Carolina emphasizes evaluation; data monitoring and reporting facilitate ongoing quality improvement for providers, regional networks and the program overall. Data on performance are collected, compared to regional and national benchmarks, and shared with participating practices.

As of May 2011, 14 community care networks consisting of more than 5,000 providers covered 100 counties in the state and provided services to more than 1.2 million patients (including both Medicaid enrollees and some low-income, uninsured residents). Results appear positive. One recent study estimated that Community Care of North Carolina saved the state nearly $1 billion between 2007 and 2011.\(^{38}\) Another determined that individual health care use patterns of CCNC enrollees are consistent with other high-performing medical homes. Compared to non-CCNC participants, CCNC enrollee inpatient hospital and emergency department use were consistently lower and primary care visits were higher.\(^{39}\)

Missouri Community Mental Health Center (CMHC) Healthcare Homes
Missouri has established an innovative initiative that provides care coordination and disease management for Medicaid beneficiaries with both severe mental illness and chronic conditions. Developed in partnership by the Missouri Department of Mental Health, MO HealthNet (the state Medicaid agency), and the Missouri Coalition of Community Mental Health Centers, the program uses community mental health centers (CMHCs) as a medical home for people with severe mental health conditions.\(^{40}\) Because Medicaid beneficiaries with severe mental illness are two to three times more likely to have a chronic medical condition, it is fitting to provide services that focus on the “whole person” at a location where those with mental illness already receive care.\(^{41}\)

The CMHC-based health home model relies on the existing mental health system and provides additional training to providers on chronic diseases and use of data and analytic tools. For Medicaid beneficiaries who do not have a regular primary care provider, community mental health centers
become the site of central care coordination. Case managers coordinate care, providing services typical of both behavioral and medical health case management. CMHCs screen for common chronic conditions, promote physical activity, and provide smoking cessation counseling, instruction on obesity and weight reduction for diabetes, and other services. Key to this innovative program is the partnership between the state Medicaid agency and the Department of Mental Health.

In 2012, Missouri established CMHC Healthcare Homes, using health home funding under the Affordable Care Act to expand the existing CMHC model. Initially, more than 15,000 high-cost Medicaid beneficiaries with a serious mental illness, mental health condition, substance abuse disorder, or one of the above and a chronic condition were enrolled. Still in its initial phases, this initiative has been used by the state to expand the number of primary care nurse managers and primary care physician consultants at community mental health centers. Data are not yet available on how this model will affect hospitalization rates and emergency department visits.

**Federal Action**

Through the Affordable Care Act and other initiatives, the federal government is working to prevent and manage chronic conditions. The ACA contains significant funding opportunities for states to help reduce the burden of chronic disease. Provisions aim to improve access to care, move toward the health-home model of team-based primary care, improve care coordination and offer incentives to maintain health and wellness. The law also includes various workforce training and development provisions and initiatives to recruit and retain primary care providers in medically underserved communities. In addition, the federal government funds federally qualified health centers, an integral provider of chronic disease prevention and management services for those who lack other access to care.

The U.S. Department of Health and Human Services’ Health Resources and Services Administration also recently announced new funding to help eight states in the Delta region—parts of Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee—address specific chronic conditions that disproportionately affect that area of the country.

**Conclusion**

As some of the most common, costly and preventable health problems, chronic diseases and conditions place a significant burden on society. Not only do they affect the lives of millions of Americans, they result in lost productivity, missed school and work days, and high health care costs. Many states are developing policies, programs and initiatives to redesign health care delivery and payment systems to improve health, reduce costs, and better prevent and manage chronic disease.
For More Information: Chronic Disease Prevention and Management Resources
CDC, Chronic Disease Prevention and Health Promotion
www.cdc.gov/chronicdisease/index.htm

NCSL Wellness Overview

BPHC/HRSA, Primary Care: The Health Center Program
http://bphc.hrsa.gov/index.html

HRSA, Health Professions
http://bhpr.hrsa.gov/

HRSA, Health Information Technology and Quality Improvement
www.hrsa.gov/healthit/index.html

HealthIT.gov
www.healthit.gov/

HRSA, Delta State Rural Development Network Grant Program
www.hrsa.gov/ruralhealth/about/community/deltaprogram.html;
www.hrsa.gov/about/news/pressreleases/130118deltahealth.html

National Health Service Corps, Loan Repayment
http://nhsc.hrsa.gov/loanrepayment/
Notes


3. Centers for Disease Control and Prevention, Chronic Diseases and Health Promotion (Atlanta, Ga.: National Center for Chronic Disease Prevention and Health Promotion, CDC, 2012), www.cdc.gov/chronicdisease/overview/index.htm; Anderson, Chronic Care.

4. Ibid.


11. Ward, “Prevalence of Multiple Chronic Conditions.”


20. One-quarter of Americans with chronic diseases see four or more doctors each year, and nearly half report taking four or more medications. Anne-Marie Audet and Shreya Patel, The Care Coordination Imperative: Responding to the Needs of People with Chronic Diseases (New York, N.Y.: The Commonwealth Fund, 2012), www.commonwealthfund.org/Blog/2012/Feb/Care-Coordination-Imperative.aspx.


23. Ibid.


25. By 2020, the Health Resources and Services Administration anticipates there will be more than 1.2 million job openings for nurses, 305,000 for physicians and surgeons, and hundreds of thousands more for other primary care providers.


34. J. Nell Brownstein, Talley Andrews, Hilary Wall, and Qaiser Mukhtar, Addressing Chronic Disease through Community Health Workers: A Policy and Systems-Level Approach (Atlanta, Ga.: National Center for Chronic Disease Prevention and Health Promotion, CDC, n.d.).


42. “Missouri: Pioneering Integrated Mental and Medical Health Care.”


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