Chronic disease public health practitioners must make measurable contributions to the prevention and control of chronic disease – and by doing so, improve quality of life, increase life expectancy, improve the health of future generations, increase productivity and help control health care spending.

It is increasingly recognized that individual health depends on societal health and healthy communities. In addition to having strong medical care systems, healthy communities promote and protect health across the lifespan, across a variety of sectors, and through a range of policies, systems and environmental supports that put health in the people’s hands and give Americans even greater opportunity to take charge of their health.

Transforming the nation’s health and providing Americans with equitable opportunities to take charge of their health requires work within four key domains.

Domain 1: Epidemiology and Surveillance: Gather, analyze, and disseminate data and information and conduct evaluation to inform, prioritize, deliver, and monitor programs and population health.

Making the investment in epidemiology and surveillance provides states with the necessary expertise to collect data and information and to develop and deploy effective interventions, identify and address gaps in program delivery, and monitor and evaluate progress in achieving program goals. Data and information come with the responsibility to use it routinely to inform decision makers and the public regarding the effectiveness of preventive interventions and the burden of chronic diseases and their associated risk factors, public health impact, and program effectiveness. The need to publicize widely the results of states’ work in public health and demonstrate to the American people the return on their investment in prevention has never been greater.

Examples of Activities

- Collect appropriate data to monitor risk factors and chronic conditions of interest through surveillance systems (such as the BRFSS, NPCR and other cancer screening data systems, Vital Statistics, and Medicare data sets), rapidly develop and disseminate data reports in easy-to-use and understand formats, describe multiple chronic conditions, and use data to drive state and local public health action.
- Conduct surveillance of behavioral risk factors, social determinants of health, and monitor environmental change policies related to healthful nutrition, physical activity, tobacco, community water fluoridation, and other areas.
- Collect cancer surveillance data to assess cancer burden and trends, identify high risk populations, and guide planning and evaluation of cancer control programs (e.g., prevention, screening and treatment efforts).
- Conduct youth and adult surveillance of tobacco-related knowledge, attitudes and behaviors (ATS/NATS, YTS/NYTS); translate and disseminate data and information for action.
• Collect, use, and disseminate data on oral diseases and risk factors and use of preventive oral health services.
• Examine administrative datasets for factors associated with risk for all-cause and cardiovascular disease mortality.
• Conduct surveillance of health behaviors and policies for women before, during, and after pregnancy using the Pregnancy Risk Assessment Monitoring System (PRAMS) to translate and disseminate data for action and collaborate with state PRAMS coordinators in using findings for program strategies and policies as appropriate.
• Link administrative, vital records, and hospital discharge data to conduct surveillance on the prevention of preterm births and pregnancy complications.

Domain 2: Environmental approaches that promote health and support and reinforce healthful behaviors (statewide in schools and childcare, worksites, and communities).

Improvements in social and physical environments make healthy behaviors easier and more convenient for Americans. A healthier society delivers healthier students to our schools and in childcare, healthier workers to our businesses and employers, and a healthier population to the health care system. These types of interventions support and reinforce healthy choices and healthy behaviors and make it easier for Americans to take charge of their health. They have broad reach, sustained health impact and are best buys for public health.

Examples of Activities

Expand access to and availability of healthy foods and beverages through a variety of strategies, including:
• Nutrition standards for food and beverages offered in settings including state, local and tribal governments, private sector businesses, schools, child care and education facilities, senior centers and other facilities serving older adults, and other settings.
• Accessible, available, and affordable healthful foods in communities, including provision of full service grocery stores, farmers markets, small store initiatives, mobile vending carts, and restaurant initiatives.
• Comprehensive school strategies to promote healthful nutrition, such as:
  o Implementing IOM recommendations on competitive foods (e.g., vending or a la carte items);
  o Increasing access to healthy foods and beverages in schools through a variety of strategies, such as offering drinking water free of charge throughout the day and implementing farm-to-school initiatives.

Promote increased physical activity through a variety of strategies, including:
• Increasing the amount of daily, quality physical education in schools;
• Increasing the amount of daily physical activity through standards in early care/after school settings;
• Increasing access to physical activity for employees through worksite wellness initiatives;
• Facilitating joint use agreements to increase the number of safe, accessible places for physical activity in communities;
• Implementing strategies for the built environment that promote active transportation (e.g., complete street designs, safe routes to school programs, promoting bicycling as a mode of transportation, health impact assessments).

Reduce tobacco use, preventing youth initiation, and eliminating exposure to secondhand smoke through a variety of evidence-based strategies, including:

• Comprehensive smoke-free air policies in workplaces and public places; smoke-free policies in multi-unit housing and outdoor areas; and tobacco-free campus policies for colleges, workplaces, and health care settings, among others;

• Strategies to reduce youth access to tobacco products (e.g., reducing the affordability, availability, and visibility of tobacco products).

Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water.

**Domain 3: Health system interventions to improve the effective delivery and use of clinical and other preventive services in order to prevent disease, detect diseases early, and reduce or eliminate risk factors and mitigate or manage complications.**

Health systems interventions improve the clinical environment to more effectively deliver quality preventive services and help Americans more effectively use and benefit from those services. The result: some chronic diseases and conditions will be avoided completely, and others will be detected early, or managed better to avert complications and progression and improve health outcomes. Health system and quality improvement changes such as electronic health records, systems to prompt clinicians and deliver feedback on performance, and requirements for reporting on outcomes such as control of high blood pressure and the proportion of the population up-to-date on chronic disease screenings can encourage providers and health plans to focus on preventive services. Effective outreach to consumers and reducing barriers to accessing these services is also key, as coverage alone will not ensure use of preventive services.

**Examples of Activities**

• Delivery of high-quality screening for breast, cervical, and colorectal cancers that promotes high rates of appropriate use, including timely referral and follow-up.

• Organized systems of care to deliver high-quality clinical and other preventive services (as recommended by the U.S. Preventive Services Task Force and the Community Guide):
  - Electronic health records with registry function, decision support, and electronic reminders;
  - Team-based care;
  - Population care across panel of patients;
  - Systems to ensure adequate follow-up of abnormal screening tests, and timely treatment;
  - Patient-centered medical and dental home.

• Health care information systems with automated physician prompts or patient reminder letters for screening and follow-up clinical counseling or referral.
• Quality improvement of clinical care for cancer screening and control of A1C, blood pressure, BMI, and cholesterol.
• Birthing hospitals using Baby Friendly Hospital Initiative policy recommendations and implementing “Ten Steps for Successful Breastfeeding in Hospitals.”
• Delivery of smoking cessation services and treatments - including providing quitline coaching and cessation treatments as covered benefits.
• Increase access to and use of clinical and preventive oral health services
• Provision of quality, accessible, and confidential family planning services, including contraceptive methods and services.

Domain 4: Strategies to improve community-clinical linkages  ensuring that communities support and clinics refer patients to programs that improve management of chronic conditions. Such interventions ensure those with or at high risk for chronic diseases have access to quality community resources to best manage their conditions or disease risk.

Community-clinical linkages help ensure that people with or at high risk of chronic diseases have access to community resources and support to prevent, delay or manage chronic conditions once they occur. These supports include interventions such as clinician referral, community delivery and third-party payment for effective programs that increase the likelihood that people with heart disease, diabetes or prediabetes, and arthritis will be able to “follow the doctor’s orders” and take charge of their health – improving their quality of life, averting or delaying onset or progression of disease, avoiding complications (including during pregnancy), and reducing the need for additional health care.

Examples of Activities

• Available, accessible arthritis, diabetes, chronic disease self-management education programs, including physical activity programs, to reach at risk populations in community settings, such as worksites, YMCA/YWCAs, schools, senior centers, and other local organizations.
• Increase use of the CDC-approved evidence-based lifestyle change program to prevent or delay onset of type 2 diabetes among people at high risk.
• Implement systems to increase provider referrals of people with prediabetes or multiple diabetes risk factors to sites offering the CDC-approved lifestyle change program.
• Use of allied health professionals to enhance management of high blood pressure/cholesterol, A1C (e.g., pharmacist and/or dental provider model).
• Use of allied health providers (nurses, dentists, etc.), community health workers, and/or patient navigators in supporting control of high blood pressure, high cholesterol, and A1C.
• Develop guidelines and systems within clinical care and community settings to address cancer survivorship by ensuring appropriate follow up care and promoting lifestyle interventions to reduce risk of recurrence.
• Effective outreach to the population to increase use of clinical and other preventive services.
• Delivery of school-based dental sealant programs.
• Safe and effective use of contraception appropriate for women and men with chronic medical conditions.
• Coverage/reimbursement for diabetes self-management education and chronic disease self-management support programs.