Accelerating Population Health
Recommendations for Action, Resources, and Case Stories from the 2018 NACDD GEAR Groups
# Table of Contents

**Introduction** .......................................................................................................................... 3  
**NACDD Statement of Population Health** ............................................................................... 4  
**Recommendations for Action and Resources** ...................................................................... 5  
**2018 GEAR Group Case Stories** ........................................................................................... 14  
1. State Health Department Decision Walk Using Data: An Innovative Approach to Presenting and Disseminating a large Volume of Data (South Carolina)  
2. Health Equity and The Louisiana State Health Improvement Plan  
3. County-Level Use of Data to Drive Public Health Policy (New York)  
4. Designing Healthy Communities: Linking Planning and Public Health to Improve Population Health (Vermont)  
5. 3-4-50: A Call-to-Action to Reduce Chronic Disease in Vermont  
6. Tobacco Control and Prevention Electronic Referrals to the Oregon Tobacco Quit Line  
7. Indiana State Department of Health Asthma Program Hospital-Based Quality Improvement Project  
**Call to Action** ....................................................................................................................... 29  
**Acknowledgements** ............................................................................................................. 30
Introduction

This document provides a compilation of resources shared through 2018 NACDD Generate, Educate, Activate, and Respond (GEAR) Groups, which focused on Accelerating Population Health. GEAR Groups are NACDD’s professional development and leadership offering designed to provide peer-to-peer learning on various strategies that influence the health of populations. The content that follows was developed in large part by the NACDD members who participated in the 2018 GEAR Groups. A statement on population health is provided along with recommendations for action, resources, and a series of case studies illustrating how State Health Departments are applying strategies to accelerate population health. Each case study highlights the actions, impact, challenges, successes, and includes contact information for the individuals implementing these promising population health practices. The document closes with a brief call to action and acknowledges the exceptional work of the 2018 GEAR Group members. State, Local, and Territorial Health Departments are encouraged to use this document as a guide for implementing promising or innovative population health strategies.

The 2018 NACDD GEAR Group focus on “Accelerating Population Health” was inspired by the CDC Preventing Chronic Disease article “Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century”1 and former NACDD Board President’s challenge to all Members to “Accelerate Population Health.” Improving population and public health outcomes require enhanced collaboration across public health, the healthcare delivery system, and the broader community. While no universal definition exists, David Kindig, MD, PhD, and Greg Stoddart, PhD have defined population health as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.”2 Population health practices are influential in advancing health equity when bolstered by multi-sectoral partnerships. Increasing access to high-quality healthcare services and improving the conditions where people live, learn, work, and play can contribute to the health of individuals and communities.

All levels of state-based chronic disease practitioners were involved in NACDD GEAR Groups, from seasoned Chronic Disease Directors to newly hired program staff. NACDD completed the first six-part GEAR Groups in 2016 and another series of five GEAR Groups in 2017. The 2018 GEAR Groups convened from February to July 2018. Fifty-six state applicants were selected for participation in the five 2018 GEAR Groups (including CDC’s four domain areas and health equity). The 2018 GEAR Group participants represented the following States and Districts: Alaska, Arkansas, California, Colorado, Delaware, Florida, Georgia, Idaho, Indiana, Louisiana, Maryland, Minnesota, Mississippi, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Tennessee, Utah, Vermont, Washington, Washington DC, Wisconsin, Wyoming.

NACDD GEAR Group participants from the states above engaged in peer-to-peer learning through six participatory web conferences. Each GEAR Group reflected on the following topics as it related to the CDC domain or health equity: population health connections, social determinants of health, population health in action, engaging communities and patients; collective accountability at the state level, and implications for action. As mentioned above, GEAR Group members weighed in on the following NACDD Statement on Population Health, compiled the subsequent resources, and prepared the 7 case stories included within.

NACDD Statement on Population Health

The National Association of Chronic Disease Directors (NACDD) works to improve population health by building capacity and connecting infrastructure and strategies carried out through public health, community health, healthcare, and other public and private entities that impact all of the determinants of health.

NACDD understands that population health outcomes are the result of multiple health determinants that include social factors, environmental factors, learned behaviors, healthcare, and genetics. To address these determinants, our work promotes population-wide interventions with health equity in mind and supports targeted, culturally tailored interventions to address populations with the greatest burden. We work nationally to accelerate the coordinated, multi-sector, strategy needed to help all people achieve their full health potential.

NACDD believes that state public health leadership and expertise in chronic disease prevention and health promotion are vital to improving population health and advancing health equity. Members of our association carry out this work through the 10 Essential Public Health Services and the National Strategy for Achieving Health Equity. NACDD supports the work of state public health leaders, practitioners, and their partners to improve population health and to advance health equity by reinforcing our values of Integrity, Professionalism, Inclusivity, Leadership, and Social Justice and by:

- Fostering engagement of chronic disease and health promotion directors in all jurisdictions
- Engaging chronic disease and health promotion practitioners in a robust and responsive professional development framework
- Communicating the value and impact of public health and population health
- Compiling and distributing information on evidence-based and innovative strategies
- Facilitating learning collaboratives to improve practice
- Convening subject matter experts
- Strengthening advocacy for federal funding and support
- Advancing strategic partnerships and collaborations that connect practice to policy and that improve health locally
- Providing subject matter expertise on effective public health approaches and the engagement of threatened and priority populations
Recommendation for Action and Resources

Members of the 2018 GEAR Groups, with leadership from the Health Systems GEAR Group, identified the following recommendations for action and resources related to each topic. This resource for public health practitioners is not an all-inclusive list. It is designed to help diffuse promising practices and inspire additional innovations in the area of population health.

Recommendations for action

- Clearly define population health between partners and use shared language when discussing issues and identifying solutions
- Develop a shared understanding of community needs by collaborating on community needs assessments
Resources related to population health connections

- **Improving Population Health by Working with Communities: Action Guide 3.0**
  Improving Population Health Action Guide 3.0
  The Action Guide is a framework to help multi-sector groups work together to improve population health by addressing 10 interrelated elements for success and using the related resources as needed. Like a “how-to” manual, the Action Guide is organized by these 10 elements and contains definitions, recommendations, practical examples, and a range of resources to help communities achieve their shared goals and make lasting improvements in population health. It is intentionally brief and written in plain language to be as accessible as possible for all types of stakeholders at the local, state, regional, and national levels to take action.

- **CDC Health Policy Series 02, Towards Sustainable Improvements in Population Health**
  cdc.gov/policy/docs/financepaper.pdf
  This policy brief describes the U.S. healthcare delivery system’s evolution, emerging community-level integration structures and emerging financing vehicles and payment mechanisms. The U.S. healthcare system is transitioning from an episodic, volume-driven healthcare system to an integrated system that supports population health by attending to both clinical care and the non-medical determinants of health.

- **The Difference Between Population Health and Public Health, February 2016.**
  youtube.com/watch?v=GDWDb_G7Hvs
  Denise Koo, MD, MPH, CAPT, USPHS, Advisor to the Associate Director for Policy at the CDC, explains the difference between population health and public health.

**SOCIAL DETERMINANTS OF HEALTH**

**Recommendations for action**

- Include social determinants of health (SDoH) measures
- Integrate health equity into any partnership with health systems.
- Use a validated, standardized approach to assessing SDoH within health systems.
- Make resources to address SDoH readily available to health systems.
- Data should measure geographic areas specific to the size of the community: county-level information or even census block-level data provides more specific information on given neighborhoods versus regional or state-level data.
- Data must be in the context of neighborhood conditions: for example, when reporting smoking prevalence, include other risk factor information such as income levels and educational attainment to better explain the socioeconomic factors that affect the at-risk population.
Resources related to social determinants of health

- **Health Leads Social Needs Screening Toolkit 2016**
  
  Health Leads Social Needs Screening Toolkit
  
  Building on Health Leads’ experience addressing social needs as well as guidelines from the Institute of Medicine and Centers for Medicare and Medicaid Services (CMS), this toolkit shares the latest research on how to screen patients for social needs. The Social Needs Screening Toolkit is based on clinically-validated guidelines and a range of patient-centered questions enables providers to gain critical insight into patients’ social needs like food, housing, and utilities.

- **CDC Promoting Health Equity, A Resource to Help Communities Address Social Determinants of Health**
  
  Promoting Health Equity
  
  This workbook is for public health practitioners and partners interested in addressing SDoH to achieve health equity. It was created to encourage and support the development of new initiatives and partnerships to address the SDoH inequities and the expansion of existing initiatives and partnerships.

- **The National Stakeholder Strategy for Achieving Health Equity**
  
  A Practical Context for Change
  
  The fundamental purpose of the National Stakeholder Strategy is to promote systematic and systemic change that improves the overall health of the nation. Achieving this purpose will take time, including many people, and require that steps be taken incrementally while maintaining focus on the ultimate goal of achieving health equity.
NACDD Health Equity Council Tools and Resources
Defining the Social Determinants of Health
NACDD’s Health Equity Council (HEC) has developed a variety of tools and resources to aid public health professionals, policymakers, and other stakeholders in their health equity efforts.

Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity – Henry J Kaiser Family Foundation
Efforts to improve health in the U.S. have traditionally looked to the healthcare system as the key driver of health and health outcomes. However, there has been increased recognition that improving health and achieving health equity will require broader approaches that address social, economic, and environmental factors that influence health. This brief provides an overview of these SDoH and discusses emerging initiatives to address them.

POPULATION HEALTH IN ACTION

☑ Recommendations for action

• Encourage utilization of the full healthcare team to address the social determinants of health and healthcare needs, including community health workers (CHW), pharmacists, and tobacco cessation specialists
• Work with key partners to support alternative funding mechanisms to support reimbursement for all healthcare team members, including CHWs
• Support adoption and implementation of technology that facilitates team-based approaches across the full spectrum of health (medical, behavioral, oral, etc.)
• It is critical that decisions regarding how to improve population health are based on data as they relate to how the social and physical environment impacts the health of populations.

Resources related to population health in action

• A Guide for Emerging Professions
A Guide for Emerging Professions
This guide offers tips for stakeholders and advocates of emerging professions such as CHWs to professionalize and integrate with the healthcare system.
• **CHW Toolkit: A Guide for Employers**
  The purpose of this CHW Toolkit is to provide employers and prospective employers with practical guidance for organizational and practice integration of CHWs, and to understand the education and competencies of CHWs.

• **CHW Toolkit: Summary of Payment and Regulatory Processes**
  This CHW Toolkit summarizes the payment and regulatory processes for CHWs. A key goal of the document is to provide practical, step-by-step guidance on navigating the payment processes for Medicaid reimbursement for Minnesota.

• **How to Use EHRs and Data to Advance Tobacco Dependence Systems Change, Session 8, Minnesota e-Health Summit, 2017**
  This PowerPoint describes two health system case studies for tobacco cessation that includes workflows, team-based approaches, and lessons learned.

• **Treating Tobacco Use and Dependence: A Toolkit for Dental Office Teams**
  This toolkit is designed to assist dental offices with integrating the brief intervention recommended by the U. S. Department of Health and Human Services, Public Health Service 2008 Clinical Practice Guideline: Treating Tobacco Use and Dependence into standard office procedures and to successfully intervene with dental patients that use tobacco. It provides resources for the dental team to help patients quit.

• **Measuring the Social Determinants of Health**
  This directory contains an extensive list of existing data sets that can be used to address these determinants. The data sets are organized according to 12 dimensions, or broad categories, of the social environment.

• **Healthy Community Design Resources**
  These documents describe how planning and community development professionals can promote health through their work. Examples of successful implementation are provided regarding physical activity, healthy eating, tobacco, alcohol, and substance abuse prevention.
COMMUNITY AND PATIENT ENGAGEMENT

☑️ Recommendations for action

- Practice shared decision making that allows all partners to participate
- Support patient advisory councils or structures to engage patients and community members in decision-making
- Allow the community to share its own wisdom and experiences to help guide population health program efforts. “Community” may include individuals, groups, organizations, and associations or informal networks that share common characteristics and interests based on place-, issue-, or identity-based factors.

Resources related to community and patient engagement

  healthaffairs.org/doi/abs/10.1377/hlthaff.2012.1133

The framework for patient and family engagement presented in this article makes it clear that healthcare professionals at all levels and policy makers play a critical role in partnering with patients and families.
• **A Leadership Resource for Patient and Family Engagement Strategies**
  hpoe.org/Reports-HPOE/Patient_Family_Engagement_2013.pdf
  This resource gives hospital and health systems leaders concrete, practical steps grounded on evidence-based research to improve patient and family engagement in their organization.

• **Engaging Patients and Families in the Medical Home, Agency for Healthcare Research and Quality (AHRQ) Tools for Implementing the Patient-Centered Medical Home (PCMH)**
  pmch.ahrq.gov/page/engaging-patients-and-families-medical-home
  This webpage describes a framework for patient and family engagement in the medical home and examples of ways patients and families can become engaged through activities related to their care (examples: communication and information sharing, self-care, decision-making, and safety), practice improvement and policy development.

• **CDC Health Literacy Guidance and Tools**
  cdc.gov/healthliteracy/index.html
  This website provides information, tools, and links on health literacy research, practice, and evaluation for public health topics and situations.

• **Health Literacy Toolkit, National Area Health Education Centers**
  National AHEC Health Literacy Toolkit
  A collection of health literacy resources by category.

• **Health Literacy Toolkit, Quality Improvement Organizations, Centers for Medicare and Medicaid Services (CMS)**
  Health Literacy Toolkit, QIO_CMS
  Tools and resources to assess a medical practice, raise awareness, and target specific areas to improve health outcomes and experience of patients.

• **The National Culturally and Linguistically Appropriate Services (CLAS) Standards**
  minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=53
  This webpage provides an overview of the National CLAS Standards and links to learn more about implementing these standards.

• **Health Literacy Toolkit, a Companion to the Minnesota (MN) Action Plan to Improve Health Literacy**
  MN Health Literacy Toolkit
  In this toolkit, you will find resources such as trainings, guides, and assessment tools to complement action planning to improve health literacy.

  atsdr.cdc.gov/communityengagement/index.html
  Text that provides community members, health professionals, and researchers with clear principles to guide and assess their collaborative efforts.
**Recommendations for action**

- Develop agreements and technology for appropriate data sharing and mapping between public health, health systems, and payers.
- Consider technology that supports e-referrals and e-enrollment for resources e.g. tobacco cessation, diabetes prevention program, etc.
- Identify a central point of contact for health disparities and minority health issues (e.g., state minority health programs).
- Provide data that is timely, comprehensive, and recognizes socioeconomic factors relative to a given community.
- Data should reflect the current situation; strive to report recent findings from the past 1-2 years.

**Resources related to collective accountability at the state level**

- **Connecting Communities with Data: A Practical Guide for Using EHR Data to Support Community Health**
  Minnesota Department of Health (MDH) Population Health Toolkit
  This document serves as a practical guide that includes shared stories from local public health and healthcare providers collaborating to leverage EHR data to move data to knowledge, and knowledge to practice improving community health. It provides tools and examples such as a data use agreement and population and measure definitions.

- **Vermont Health in All Policies Dashboard**
  Vermont Health in All Policies Dashboard and Scorecard
  This dashboard shows progress on select indicators related to health in all policies.
Accelerating Population Health | GEAR Groups

IMPLICATIONS FOR ACTION: LEADING POPULATION HEALTH IN YOUR STATE

✔ Recommendations for action

- Determine how SDoH assessments are being used
- Share GEAR Group products with other GEAR participants in the organization and then with others in a Community of Practice
- Develop a population health framework and structure in the organization that can support training the workforce

Resources related to implications for action

- **Tackling Health Inequities Through Public Health Practice: A Handbook for Action**
  Tackling Health Inequities is meant to inspire readers to imagine or envision public health practice and their role in ways that question contemporary thinking and assumptions, as emerging trends, social conditions, and policies generate increasing inequities in health.

- **Leading through Health System Change: A Public Health Opportunity/Planning Tool**
  This collaborative planning tool is designed to help public health organizations begin to examine and discuss opportunities and challenges that health system changes pose. The tool's [website](#) and [interactive PDF](#) can be used individually or with a team to examine the basics of healthcare reform, apply adaptive thinking to questions related to health system change, and create a simplified implementation plan to leverage the opportunities in the healthcare reform law to improve population health.

- **AHRQ Practice Facilitation Handbook**
  The Practice Facilitation Handbook was developed to aid safety net practices in implementing the chronic care model in their practices.

- **Organizational Learning and Communities of Practice**
  This webpage describes the principles of communities of practice.
State Health Assessment Decision Walk Using Data: An Innovative Approach to Presenting and Disseminating a Large Volume of Data

Location: South Carolina
Focus area: Epidemiology and surveillance

Description:
Health departments seeking to receive national public health accreditation from the Public Health Accreditation Board must first complete a health assessment of the population served by the health department. The South Carolina Department of Health and Environmental Control (SC DHEC) created an internal state health assessment (SHA) data team to collect and analyze more than 150 indicators broken down by age, race/ethnicity, income, sex, and county. SC DHEC also convened a group of external stakeholders named the External Accreditation Work Group (EAWG), representing state agencies and individuals with an interest in health to help complete the South Carolina State Health Improvement Plan, another requirement for the public health accreditation process.

Actions:
From August to October 2017, the SHA data team reviewed information, identified data gaps and determined possible ways to present the large volume of surveillance data to the External Accreditation Work Group. SC DHEC decided a Decision Walk Using Data or “Data Decision Walk” would be a useful way to present the large volume of surveillance data given the limited time and varied educational and professional backgrounds of the intended audience. In the Data Decision Walk approach, information is presented at “data stations” and viewed by audience members in a rotating fashion.

The SC DHEC Data Decision Walk exercise began with an initial orientation and discussion on cross-cutting issues. The SHA data team created foam poster boards depicting the state-specific data and health indicators on seven focus areas: social
environments, infectious disease, maternal and child health, healthy eating/active living, environment, preventive care, and access to care. EAWG participants split into groups and reviewed the data stations in a rotating fashion. A content expert stationed at each table presented talking points to stimulate discussion which included six cross-cutting issues and how these issues impact health: demographics, poverty, crime, mental health, education, and neighborhoods. Participants were allowed fifteen minutes at each station and given sticky notes to leave comments and questions.

Impact:
The Data Decision Walk exercise proved to be a useful way to present a large volume of surveillance data to accelerate population health planning efforts in South Carolina. The data walk planning process also gave the SC Health Department a head-start in determining areas to prioritize prior to presenting data to the External Accreditation Work Group. The External Accreditation Work Group used results of the Data Decision Walk and state health assessment to determine priorities and areas of emphasis for South Carolina’s State Health Improvement Plan. South Carolina continues efforts to complete the public health accreditation process.

Considerations:
SC DHEC recommends that anyone interested in completing a Data Decision Walk in their state consider the following three aspects: 1) ensure enough space is available; 2) make sure individuals have enough time to ask questions with ample space to review the posters; and 3) set the date well in advance so stakeholders are in attendance and can provide solid follow-up.

Contact:
Virginie Daguise, MSPH, PhD, Director Bureau of Chronic Disease and Injury Prevention, South Carolina Department of Health and Environmental Control, Chronic Disease Division, (803) 898-0713, daguisvg@dhec.sc.gov.
Health Equity and the Louisiana State Health Improvement Plan

**Location:** Louisiana  
**Focus area:** Health Equity

**Description:**  
The Bureau of Minority Health Access works to advance the mission of the Louisiana Department of Health (LDH), which is to protect and promote health and to ensure access to medical, preventive, and rehabilitative services for all citizens, but with attention to minority populations in the state of Louisiana. The bureau facilitates the collection, analysis, dissemination, and access to information concerning minority health issues.

**Action:**  
The Louisiana five-year strategic plan establishes the mission, vision, core values, and strategic priorities, representing a shared understanding of the organization. This plan better equips the office to bring about health in the state through programs, infrastructure, and people. State-specific comprehensive strategic plans, or state health improvement plans, set priorities, identify resources and partnerships, strengthen partnerships and operations, streamline approaches, and help ensure that all stakeholders and agencies are working toward common goals.

**Impact:**  
There will be states and communities that are following a strategic health improvement plan that promotes health equity in all communities within individual states and nationally. Additionally, these plans promote the health and wellness of all populations regardless of their socio-economic status and geographic locations. Education is a key component of the successful implementation of the proposed strategic health improvement plan(s). It is highly recommended that communities, states, and partners strengthen and update the plan according to their population needs. The impact of harnessing community power to create sustained changes for better health outcomes is profound and life-changing for community members.

**Challenges:**  
One identified challenge is the lack of funding to ensure that statewide health improvement plans are comprehensive in their approach to promote and address health
equity. The State Offices of Minority Health can aid in educating and promoting the plan to racial and ethnic partner organizations, but funding these efforts is challenging. The lack of community engagement in creating and implementing health improvement plans is problematic. Representatives from all communities should be involved in the health improvement plan planning process to prevent paternalistic approaches and to ensure trust is built among government and community partners. Trainings on cultural competence, coalition building, coalition evaluation, cultural humility, health equity, health literacy, and the social determinants of health are critical for staff who want to create better health outcomes through community engagement. The LDH Office of Public Health established a data collection methodology along with an analysis and reporting mechanism to collect data, examine progress, and report results to stakeholders. As a newer concept in public health, many State Health Departments continue to explore emerging strategies for integrating SDoH data into their state health assessments and state health improvement planning.

**Considerations:**
States seeking to achieve health equity can consider these recommendations:
- Adopting state-specific, comprehensive strategic plans (state health improvement plan) that help ensure health equity strategies exist in all programming and will enable fair opportunities to reach ideal health and wellness for all populations. The plans will address the causes (social, economic, environmental, etc.) impacting and propagating health disparities, and the cultural competencies, sensitivities, and humility as it relates to health.
- State Health Departments must become knowledgeable of the root causes of health inequities and health disparities by understanding the conditions in which people live, work, and play as measures of population health.
- State offices of minority health should serve as a partner in developing and disseminating data as it relates to racial and ethnic health disparities and inequities.
- States should also nurture cross-sector collaborations to access and monitor data relating to poverty, housing, jobs, education, safety, food access, etc. In some states, this will require policymakers to appropriately allocate resources, funding, and staffing.

**Contact:**
D’Andra Bradford-Odom, MPA-Public Policy, Minority Health Outreach Director, Louisiana Department of Health, Bureau of Minority Health Access, D’andra.BradfordOdom@la.gov, (318) 914-1199
County-Level Use of Data to Drive Public Health Policy

Location: New York
Focus area: Epidemiology and Surveillance

Description:
The New York State Department of Health created a statewide performance-based incentive program for local health departments to gain more experience in completing a community health assessment. Local health departments (LHD) were tasked with completing a comprehensive health assessment of constituents in their county following guidelines provided in the New York State Prevention Agenda. The New York State Prevention Agenda is a blueprint for state and local action to improve the health of New Yorkers. This document is available online at health.ny.gov/prevention/prevention_agenda/2013-2017.

Actions:
Completed LHD health assessments presented information from multiple data sources including, but not limited to hospitalization discharge data for rates of hospitalizations due to heart disease, respiratory disease, diabetes, substance abuse, pregnancies, and injuries; vital records information for mortality rates due to heart disease, stroke, cancer, injuries, and assaults; Behavioral Risk Factor Surveillance System and other related health survey data for indicators of tobacco use, obesity, physical activity, and healthy eating; census findings including socio-demographic indicators on number of families in poverty, median household income, education levels, insurance status, and number of families with children; and cancer incidence rates for major cancer sites including lung, breast, prostate and colorectal cancers. The LHD’s analyzed data by demographic categories including gender, age, race, and ethnicity.

Counties were required to demonstrate competency to identify trends in health problems, determine relevant behavioral risk factors, detect potential environmental public health hazards, and demonstrate social and economic factors that affect the public’s health.

Impact:
A county health assessment completed by Sullivan County Public Health Services in New York State identified the following key indicators:
- high prevalence of adult smoking compared to neighboring counties,
- elevated rates of smoking-related morbidity and mortality statistics,
- a significant young adult population (18-21 years) in the county, and
- high tobacco retailer density in low-income neighborhoods.
Interventions to reduce tobacco use were identified as priority initiatives for chronic disease prevention. Sullivan County Public Health Services solicited and gained the support of vested community partners including the county attorney, Sheriff’s office, schools, hospital, legislators, elected officials, and the New York State Tobacco Control Program’s funded partners. Collaborative efforts resulted in the implementation of a county law that would raise the minimum legal sales age for tobacco products to 21, make all government property sites tobacco-free and prevent the issuance of permits for new tobacco vendors located within 1,000 feet of a school. Reducing the density of tobacco sales and marketing for tobacco products is one step toward improving health equity in the county.

Successes:
Through continued focus on reducing the alarmingly high rates of chronic disease in the county and improving health outcomes as the overarching goal, the Sullivan County Public Health Services led stakeholders through a lengthy and arduous process of public hearings, coordinated trainings, maintained ongoing communications with local legislators, and education to the public. Success was achieved in the signing of a local law increasing the legal age to purchase tobacco products to 21 years of age effective Sept. 1, 2017. In addition, Sullivan County agreed it would not issue permits for new tobacco vendors located within 1,000 feet of a school.

Sullivan County Public Health Services used data gathered from local health assessments and the County Health Rankings to demonstrate the significant impact of tobacco use on chronic disease, poor maternal and child health, premature morbidity and mortality, heart and lung disease, and cancer on the health of county residents. Citizens then successfully used this data to spearhead the implementation of new local public health policy.

Contact:
Theresa Juster, MPH, Research Scientist, New York State Department of Health, Chronic Disease Prevention Division, 518-474-2255, theresa.juster@health.ny.gov
Designing Healthy Communities: Linking Planning and Public Health to Improve Population Health

**Location:** Vermont  
**Focus area:** Policy, Systems and Environmental Approaches

**Description:**  
Community design affects public health and quality of life. The strategies for creating economically vibrant and socially-connected communities are the same strategies needed for creating healthy communities: higher density mixed-use development; pedestrian- and bicycle-friendly environments; access to parks, recreation, and green space; and access to healthy foods. Approaching these community planning initiatives with a population health lens provides an opportunity to improve and strengthen the health outcomes of communities. Sustained healthy community design benefits the people who live in these communities, encourages them to stay, work, raise families, and contribute to local and regional economic growth.

**Actions:**  
The Vermont Department of Health developed a [Healthy Community Design Resource Guide (Guide)](https://www.healthvermont.org/healthy-community-design-resource-guide) with the goal of reducing the rate of obesity in the state. The Guide provides tools and resources to local health professionals, planners, and community members for efforts to foster and encourage active living and healthy eating. The Guide links the land use planning process with evidence-based strategies for creating healthy communities – improving access to parks, recreational facilities, open space, and access to healthy foods. The Health Department distributed a competitive request for proposals and funded select communities for implementation. This was followed by publication of examples of how communities used the guide to increase physical activity and healthy eating as well as to prevent tobacco, alcohol, and drug abuse. The department's [online dashboard](https://www.healthvermont.org/online-dashboard) was used to track and communicate progress over time.

**Development Phase:** Through a contractor hired to work on the development of the guide in 2004, the Health Department convened a planning committee included health and non-health partners. Committee members included representatives of community planning entities, transportation, economic development, children’s services, elected officials, agriculture, the American Lung Association, American Cancer Society, and AARP. The planning and development process occurred during a two-year period. These partners received information on the connection between community design and health, were invited to various planning events, reviewed and provided input on content and strategies, shared technical assistance, and provided essential information on different community programs that would use the Guide.

**Implementation and Dissemination:** The Guide has been made available at the Health Department website and was shared throughout the department and distributed...
to local planning agencies, community garden/farmer’s markets, and area hunger councils. The Vermont Association of Planning and Development also distributed the guide to its members. All were encouraged to use it in their community development work. In addition, 16 coalitions and organizations received implementation funding to pilot community design and health work and to attend statewide trainings on the use of the resource guide.

**Monitoring and Evaluation:** Monitoring and evaluation are an integrated component of this initiative. In the early phases, outreach and partnership development were tracked. The department developed the [Physical Activity and Nutrition Program Dashboard](#) to track progress during implementation. Several of the measures were incorporated into a [Health in All Policies Dashboard](#) allowing for specific attention to the following “Outcomes of Equity” measures statewide:

- access to healthy, affordable, and local food
- access to healthcare and physical, mental, and substance use prevention services
- access to recreation, parks, and natural resources
- access to safe and efficient transportation
- affordable, safe, quality housing
- live, work, and play in clean and sustainable natural environments
- access to family wage jobs and economic prosperity

Twice a year, grantees reported information for select measures. The dashboards display scorecards for each measure, showing data trends, a summary of the trends, key partners involved, what is working to achieve the measure, why the measure is important and notes on methodology.

**Impact:**

- State level, disease-specific advocacy groups came together as part of the planning process and have continued collaborating on other shared priorities.
- Multiple jurisdictions developed and implemented bicycle and pedestrian master plans, walkable community guides, and active transportation guides.
- Multiple communities adopted regional food system plans.
- Multiple communities adopted smoke-free policies for beaches, parks, campuses, and offices.
- Multiple communities adopted policies to prevent the misuse of alcohol and drugs.
Challenges:
- **Healthy community design was a new concept for partners involved in developing the guide.** To overcome this challenge, partners were invited to discussions designed to raise awareness about the project. Agendas were tailored to partners’ expertise and desired role. During the development phase, partners received sections of the draft document to review and offer feedback.
- **Healthy community design was a new concept for the local health departments and local coalition members involved in implementation.** Training was provided to these entities when the guide was distributed. Communities were encouraged to start with small wins. Through early, small successes, partners gained trust in one another. Planning and health partners started to see the mutual and community benefits of this partnership, gleaning opportunities from the other’s area of expertise that this new paradigm presented.
- **The application of the mixed-use development section of the guide proved difficult for Community Coalitions.** This continues to be a challenge. Vermont’s Agency of Transportation and partners are gaining a better understanding of the planning, implementation, and evaluation process of this component for the next initiative and have developed strong partnerships with planners who are experts in this content.
- **Sustaining community coalitions after funding.** Local coalitions established to support this work continue to struggle with sustainability after short-term funding runs out. The Health Department uses various communication channels to maintain awareness of the resource and continues to provide technical assistance upon request.

Considerations: For those interested in launching a healthy community design initiative in your state, consider these recommendations:
- When engaging new partners, demonstrate how their goals align with improving community health and celebrate how their current efforts already support health.
- Get to know the priorities of your partners. Share your expertise and be a resource to help meet their goals. This can include offering letters of support, assistance reviewing grant applications, and/or helping to develop proposals for funding.
- Keep elements of guidance documents simple and concise.
- Help communities learn from one another throughout the implementation process.
- Build agreement on how success will look and create measures to track progress over time.
- Think long-term and have patience. Building partnerships and adopting environmental changes take time.
- Celebrate successes! Share results via written success stories disseminated through media outlets, community newsletters, and other mechanisms.

Contact:
Suzanne Kelley, Healthy Communities Coordinator, Vermont Department of Health, (802) 657-4202, Suzanne.Kelley@vermont.gov.
3-4-50: A Call-to-Action to Reduce Chronic Disease in Vermont

**Location:** Vermont  
**Focus area:** Community Clinical Linkages

**Description:**  
Vermont’s 3-4-50 initiative is a simple, but powerful concept to understand, communicate and inspire action to reduce the overwhelming impact of chronic disease and close the gap in health disparities in Vermont. 3-4-50 signifies 3 behaviors – lack of physical activity, poor diet, and tobacco use – that lead to 4 chronic diseases – cancer, heart disease and stroke, type 2 diabetes, and lung disease – resulting in more than 50 percent of all deaths in Vermont.

**Action:**  
3-4-50 calls on leaders from all sectors to focus on improving these three behaviors within their areas of influence. This layered approach helps ensure the healthy choice is available and easily accessible where we live, work, learn, and play. The Vermont Department of Health’s Division of Health Promotion and Disease Prevention has spread the message of 3-4-50 statewide with the 12 local health offices and other health systems partners, including other state agencies, Vermont’s Accountable Care Organizations, Accountable Communities for Health, and local and regional hospitals and healthcare practices. The local health offices have been recruiting 3-4-50 partners and gathering success stories from businesses, schools, and communities that have taken steps to address the three behaviors.

With prevention as the primary focus, the Vermont Department of Health’s Health Promotion and Disease Prevention Division, along with key stakeholders, created a structure in which the initial epiphany can be translated into action using a “bite, snack, meal” approach. The “bite” is sharing simple, sector-specific tips and resources to get started. The “snack” is the sign-on form where they commit to taking key action steps to improve their policies or environment to promote healthy behaviors. Examples include offering routine biometric screening to employees and onsite fitness opportunities. Finally, for those entities ready to take on the “meal,” sector-specific toolkits help the partners take a deeper dive into creating a holistic culture and environment that...
supports health. Local health office staff provide technical assistance and support as needed.

Impact:
Since the 3-4-50 campaign launched in 2016, over 75 Vermont entities have signed-on across the state to address the causes of chronic disease and positively impact the health of Vermonters. Together with community and clinical partners, the Health Promotion and Disease Prevention Division uses a 3-4-50 scorecard to monitor the impact on prevention. The scorecard uses the most recent data available to track indicators related to smoking, physical activity, and nutrition as well as the four chronic disease conditions and related deaths. Though altering disease outcomes is a long-term goal, behavior change indicators are vital to monitoring progress toward that goal. healthvermont.gov/scorecard-3-4-50

Challenges:
Despite the straightforward nature of the campaign, 3-4-50 has not been immune to challenges. The project has had no consistent, dedicated funding since its inception. This has created additional reliance on partners from all sectors to share the message of 3-4-50. Because 3-4-50 relates to multiple program areas, the funding barrier has been addressed by integrating the message into all Health Promotion and Disease Prevention initiatives. Thus, 3-4-50 has the power of sustainability in addition to a clear message and call-to-action.

Contact:
Julie Arel, MSW, MPH, Division Director-Health Promotion and Disease, Vermont Department of Health, julie.arel@vermont.gov; or Rebecca O’Reilly, MS, RD, Diabetes Program Manager, Vermont Department of Health, rebecca.oreilly@vermont.gov, (802) 863-7330
Tobacco Control and Prevention Electronic Referrals to the Oregon Tobacco Quit Line

**Location:** Deschutes County, Oregon  
**Focus area:** Community-Clinical Linkages

**Description:**  
Oregon Health Authority, Public Health Division (OHA-PHD) has prioritized the development of electronic referrals (e-referrals) to the Oregon Tobacco Quit Line. The goal is to increase tobacco users’ access to evidence-based cessation services and, ultimately, to reduce the number of tobacco users and improve statewide health outcomes.

Prior research suggests that e-referral systems significantly increase the percentage of tobacco-using patients referred to quit line services. Before this project was initiated, only fax referrals could be made to the Oregon Quit Line. In Central Oregon, fewer than 0.5% of estimated tobacco users accessed these cessation services.

**Impact:**  
An e-referral pilot project was completed in August 2017 by multiple Central Oregon agencies, including Deschutes County Health Services, the regional Coordinated Care Organization PacificSource Community Solutions, and the Central Oregon Health Council. The project built out OHCIN Epic electronic health record (EHR) functionality so their clinics could make e-referrals to the Oregon Quit Line. This change facilitated an immediate and significant increase in referrals.

Between August 2017 and January 2018, the nine participating Central Oregon clinics made 207 referrals to the Oregon Quit Line, compared to 5 referrals during the same period the previous year. This is more than a 4,000% increase in referrals. As a result, the percentage of adult tobacco users in Central Oregon referred to Quit Line services increased from 0.3% to 13.9%. In addition, the interface is now a closed loop referral, meaning the outcome of the referral is communicated back to the referring provider with cessation medications imported back into the individual's EHR.

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Challenges:
Based on the success of the pilot, OHA-PHD is working to expand e-referrals to Quit Line services to additional partners. The initial investment in the pilot minimizes costs for any health system using OCHIN Epic, the most common EHR in the state. However, this e-referral functionality is not yet available to clinics using one of the other EHR systems in Oregon.

The buildout of other EHRs would require significant investment and duplicating the project for each system. In addition, privacy concerns presented unique challenges. For example, in the early stages of the rollout, the Oregon Quit Line did not leave voicemail messages for patients. Technical staff within the clinics resolved this by adding an EHR function to confirm consent for voicemails and included this information in the e-referral to the Oregon Quit Line. While clinics using OCHIN Epic can now turn on the e-referral function relatively easily, provider training was also essential to the project’s success.

Contact:
Shira Pope, Health Systems Policy Specialist, Oregon Health Authority, Public Health Division, (917) 673-1052, shira.r.pope@state.or.us.
Indiana State Department of Health Asthma Program
Hospital-Based Quality Improvement Project

**Location:** Marion General Hospital, Grant County, Indiana

**Focus Area:** Community-Clinical Linkages

**Description:**
In 2017, the Indiana State Department of Health Asthma Program partnered with rural county hospitals to reduce emergency department (ED) return rates for patients with a primary diagnosis of asthma through support for the expansion of existing hospital programs. In response, the Marion General Hospital (MGH) expansion project incorporated new activities as well as built on existing outreach projects, including the MGH Parish Nurse Program.

The MGH Parish Nurse program began in 1999 with the first group of nurses completing their basic education in 2000. To date, more than 150 nurses have completed basic education, and many have continued their education to better serve their congregations by providing health education, referral and navigation to community partners, screenings, and integration of faith and health. This dedicated workforce has assisted in providing community outreach and education, ensuring a patient-centered holistic approach that the community needs. In addition to providing support for efforts of external community partners, including the Parish Nurse Program, MGH also has increased quality improvement efforts within the health system through development of a rapid response to any ED visit with an asthma diagnosis—primary and secondary.

Parish nurses have embraced individual congregations to: host health fairs; provide medication review and education with pharmacist assistance; offer additional services as needed such as grief support groups, chronic disease education, and management for conditions including asthma and diabetes; host blood drives, and discounted lab screenings; and provide emotional/spiritual guidance to impact more than 75 different congregations throughout the county.

Through MGH’s Community Outreach Department, of which the Parish Nurse Program is a part, MGH can impact various areas of population health through the hospital endeavors. Endeavors in community outreach and community responsibilities include distribution of education packets for flu, diabetes, smoking, and asthma complications; increasing the number of smoking cessation providers; and providing asthma education.
via presentations for the Respiratory Department, Emergency Department, Pediatric Department, and outpatient pediatric provider offices within the health system.

**Impact:**
MGH has shown promise in accelerating population health through the use of community partners, including the MGH parish nurses and Grant County school nurses. Parish nurses have embraced individual congregations to: host health fairs; provide medication review and education with pharmacist assistance; offer additional services as needed such as grief support groups, chronic disease education, and management for conditions including asthma and diabetes; host blood drives, and discounted lab screenings; and provide emotional/spiritual guidance to impact more than 75 different congregations throughout the county. Additionally, MGH is working with school nurses to promote and develop smoke-free policies for all five public school corporations in Grant County to impact more than 10,000 students, along with providing support for four private and parochial schools for asthma training and the development of tools and resources for schools.

**Challenges:**
One challenge faced in the use of parish nurses for population health is the changing congregational landscape as individuals and families have multiple physical and co-morbid conditions and emotional and socioeconomic needs. To address this challenge, continued expansion of partnerships with other community agencies and programs may provide parish nurses with additional resources and opportunities to positively impact the well-being of their congregants.

**Contact:**
Indiana State Department of Health Asthma Program: Judi Magaldi, Asthma Program Director Jmagaldi@isdh.IN.gov

Marion General Hospital: Pamela G. Leslie, MSN, RN, MGH Parish Nurse Coordinator pam.leslie@MGH.net

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CALL TO ACTION

The 2018 GEAR Group members increased their understanding of population health by examining definitions and sharing resources and examples of innovative approaches for accelerating population health in healthcare and non-medical settings. Public health practitioners understand access to high-quality healthcare services and the conditions where people live, learn, work, worship, and play can contribute to the health of individuals and communities.

State, Local and Territorial Health Departments are encouraged to continuously identify, investigate, and translate innovative models that can be used to accelerate population health. They can use this document as a guide for implementing promising or innovative population health strategies.
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GEAR Group 1
Sara Byers, BS-Public Health, Nev.
Charlene Cario, MHS, Idaho
Virginie Daquise, MSPH, PhD, S.C.
Rahel Dawit, MPH formerly Fla.
Cheryl Edora, BA-Psychology, MPH Calif.
Chelsea Frand, MPH, formerly Texas
Theresa Juster, MPH, N.Y.
Ashley Miller, MPH, S.D.
Emily Payne, MSPH, Colo.
Wanda Simon, MS, Ark.
Yanyan Qui, PhD, Nev.

GEAR Group 2
Van Cleary-Hammarstedt, PhD, MA, N.Y.
Shayla Compton, BA-Sociology, MPH, Ark.
Sharon Crocco, MPH, MBA, Colo.
Ashley Fogarty, MPH, R.I.
Yvette Mack, PhD, MSPH, Tenn.
Lori Phillips, MPH, S.C.
Eileen Sparling, Ed.M., Md.
Skylar Swords, MPH, Fla.

GEAR Group 3
Augusta Bilbro, BS, Miss.
Megan Fallon, MS, R.I.
Stephanie Gans, MSW, N.C.
Brittany Guerra, MPH, Utah
Lindsay Handelsman, MPH, CHES, D.C.
Michele James, MSW, S.C.
Sangamithra Krupakar, MD, MSPH, N.C.

GEAR Group 4
Randi Belhumeur, MS, RD, CDOE, R.I.
Tracey Bonneau, BA, Nev.
Julie Chytil, MPA, CHES, Nev.
Melissa Coull, BS-Nursing, S.D.
Hannah Herold, MPH, MA, Wy.
Hilde Hinkel, MPH, Ore.
Janice Ibezim, RNC, BSN, CPM, MPA, N.J.
Jennifer Krupp, MPH, MBA, Nev.
Judith Magaldi, BS, Ind.
Rebecca O’Reilly, MS, RD, Vt.
Rae Waddington, MPH, Nev.

GEAR Group 5
D’Andra Bradford Odom, MPA-Public Policy, La.
Marilyn Dold, MS Counselor Education, Wash.
Karen Doster, BA, Wis.
Oluwayomi Fabayo, MPH, PhDc, Ga.
Christa Hernandez, MS, Minn.
Lisa Henry, MS Health Services Administration, Del.
Aulas Liendo, MA, MPH, Alaska
Lisa Rawson, MA, Calif.
Laura Streich, MPA, S.D.
Desiree Valdez, MA, Minn.

(Group 3 continued)
Nicole Lukas, MA, Vt.
Megan Mackey, MPH, Idaho
Shana Scott, JD, MPH, Ga.
Cherylee Sherry, MPH, MCHES, Minn.
Beth Wyatt, MPH, Colo.

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