

Forging New Partnerships to Build Healthier Communities for a Healthier State

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Building healthy communities is critical to reducing the rates of chronic diseases impacting millions of North Carolinians. In 2011, North Carolina's overall health status ranking was 32nd in the nation (with 1 being the best). It is well recognized that health is impacted by a variety of individual, social, environmental, and economic factors, which are complex, interrelated, and influenced by a variety of other factors. Creating healthy communities provides options for people to make health-promoting choices. Such communities include transportation alternatives, access to healthy foods and places to be active, opportunities for economic growth and education, and clean air and water. Creating communities that provide these types of options requires the work of different sectors, many of which may not have health as their main mission, such as those that focus on commerce, planning, transportation, and environmental and natural resources. This article outlines the need for healthier communities and highlights the innovative partnerships and work being done by individuals and agencies at the state, local, and national levels to build healthier communities across North Carolina.

Despite universal support for healthier communities in North Carolina, individuals, agencies, and groups may all have different ideas about what it means to be a healthy community and what it will take to achieve this vision. This issue of the NCMJ describes multiple roles and responsibilities that different partners may have as we all strive to make communities healthier. The desire for healthy communities and healthy North Carolinians is of paramount importance to many state agencies and other partners—and not just those that typically come to mind. Many of the commentaries in this issue describe ongoing collaborations between the North Carolina Division of Public Health (DPH) of the North Carolina Department of Health and Human Services, the North Carolina Department of Transportation (DOT), the North Carolina Department of Environment and Natural Resources (DENR), and the North Carolina Department of Commerce. Other commentaries and sidebars highlight what additional partners are doing to shape healthy communities, including the North Carolina Association of Regional Councils, the Appalachian Sustainable Agriculture Project, the Active Living By Design program, local and regional plan-

ners, universities, counties and municipalities. The overall message of this issue is that it will take all of these players—and many more—to affect change in our communities so that we can best promote health and well-being. Effective partnerships among these agencies and others involved in health and health care can in the long run potentially decrease demand for medical care, reduce chronic disease burden, and lower costs.

In order to truly improve the health of the state's residents, we need to make changes to the places where they live, learn, earn, play, and pray [1]. All of these locations are influenced by decisions that shape the built environment. This term refers to the human-made resources and infrastructure designed to support human activity, such as buildings, roads, parks, restaurants, grocery stores, and other amenities. The way we design our communities influences the options that individuals have, as well as their ability, to live a healthy, active life. In this context, tobacco-free policies and local food systems, which shape the communities around us, are part of our built environment, too.

What Is a Healthy Community?

For medical and public health professionals, the vision of a healthy community may include improved overall health for the entire population, a decrease in health disparities, reduced demand for medical services, and improved access to preventive care and services. When a broader community lens is applied, this vision of public health can expand to also include such variables as health equity, clean water and air, safe and reliable transportation choices, and adequate housing, income, and education. There are many parties striving for healthy communities, and some have additional variables in addition to those mentioned here that they want to include.

For example, the Department of Commerce's vision of a healthy community is one that has a healthy population, and thus healthy workers as discussed by Smith and Morck

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in their commentary [2]. An attractive community is also important to the department as it is one in which businesses will want to operate and prosper. This type of community includes high-quality schools, which both assure a pool of highly trained job applicants and maximize the likelihood that workers will relocate to or stay in the area because it provides excellent educational opportunities for their children. Because DENR is accountable for maximizing the protection of the state's natural environment and resources, its vision of a healthy community focuses on being one that has optimal air, water, and soil quality. Riegel and colleagues [3] discuss DENR's air and water quality protection efforts, brownfield revitalization projects, and integrating natural resource conservation into community planning to make communities as healthy as they can be from that department's perspective. As discussed by Conti and colleagues [4], the DOT's vision of a healthy community includes systems of transportation that not only move people and goods safely and efficiently, but that also enhance the economy, health, and well-being of the state. Thomas and colleagues [5] delve into DPH's vision for a healthy state and healthy population in their commentary on the division's partnerships with other state agencies to implement strategies to increase physical activity as a primary prevention strategy. No matter what its particular vision may be, every agency agrees that healthier and more sustainable communities are critically important in addressing the state's public health needs. McKinney and Huskins [6] discuss the North Carolina Tomorrow initiative launched in 2010 by the North Carolina Association of Regional Councils. Focused on economic development, the initiative is guided by principles related to transportation and valuing communities and neighborhoods. This initiative in many ways ties together the visions or strategies, at least in part, of many agencies concerned with promoting healthy and sustainable communities.

The Health of North Carolinians and the Costs of Poor Health

While many of the above measures are more about the health of the community, which certainly affects the health of individuals, there are excellent indicators to measure the health status of North Carolinians. Perhaps the best indicator is the state's overall health status ranking, which was 32nd in the nation in 2011 (with 1 being the best) [7]. In 2010, 66.9% of deaths in North Carolina were caused by chronic diseases, this equates to 144 average deaths per day due to chronic disease [8]. Although many other factors are involved, much of the death and disability in North Carolina is attributable to diabetes, heart disease, stroke, and cancer and can be linked to the use of tobacco, poor nutrition, and low physical activity levels of North Carolinians. In 2011, 1.4 million of the state's adults smoked and 2.1 million were obese [7]. In North Carolina and across the nation, there are disparate health outcomes among different segments of the population. For example, the prevalence of diabetes in

adult North Carolinians in 2009 was higher among African Americans (15.6%) and Native Americans (14.2%) than among Hispanics (6.1%) and whites (8.4%), and the prevalence of diabetes was 3 times higher among adults whose annual household income was less than \$15,000 than it was among those whose household income was \$75,000 or more [8]. Additionally, 72% of African Americans and 69% of Native Americans in North Carolina in 2010 were overweight or obese, compared with 64% of whites [9]. All of these statistics bring attention to the need we have in this state to do more to improve health.

In his commentary, Chenoweth [10] discusses some of the economic considerations of physical inactivity and community design. He notes that in North Carolina, the direct medical care and lost productivity costs of physical inactivity were approximately \$8.3 billion in 2010. Adding in tobacco use and low dietary intake of fruit and vegetables increases these costs. An estimated \$14 billion in direct medical costs and lost-productivity costs in North Carolina were attributable to those 3 preventable risk factors in 2010 [11]. Because of these costs and also the burden and suffering to individuals, communities and regions are coming together to make positive changes that impact leading health behaviors such as physical activity, tobacco use, and poor nutrition. For example, in her sidebar, Shoe [12] tells the story of how the Cabarrus County Board of Commissioners approved a tobacco-free policy for all Cabarrus County parks. Creamer and Dunning [13] review the impact of local food systems on local economies and individuals' fruit and vegetable consumption, while Cramer [14] shares the work of the Appalachian Sustainable Agriculture Project to build healthy communities through connections to local food.

The Role of the Built Environment in Health

The health of individuals is clearly a product of their individual characteristics and behaviors, but it is also a product of their social, economic, and physical environments. In essence, the community in which people live greatly influences their health.

Designing communities in a way that considers health effects on the entire population requires a comprehensive approach to planning, designing, and building. Such community designs need to ensure that plans and policies do not disproportionately affect some segments of the population or increase health disparities between populations. It requires that those who work in health and health care partner with those whose decisions affect community-level built environments, such as planners, elected officials, environmental protection experts, and representatives from the business community and school boards. In his commentary, Silver [15] notes the importance of this type of collaboration and reviews the history of the planning and public health professions and how these two worlds are once again coming together, but this time to tackle the issue of suburbanization and associated health effects. Bors and Lee [16] discuss

in their sidebar how the national program, Active Living By Design, has worked with various partners on policy change and community design efforts to support active living in North Carolina.

The focus of this issue is on the many partners working together across North Carolina to create healthy communities and built environments that provide options for healthy living. It is about the state and local partners who are working together to ensure that the entire population has access to clean air and water, employment opportunities, and physical activity, and to decrease the population's need for health services. But healthy communities can only be achieved through implementation at the local level. Morrow and Lovette [17] share built environment and other changes in 2 local health department districts to make communities more active, and thus healthier. The Shape Your World movement in the state, discussed by Thomas and colleagues [18], intends to engage people at the local level by helping people better understand active living, its components, and what their communities need. For local level implementation to occur, all community partners will need to align their roles and responsibilities so that all efforts support one vision of a healthier community. Different partners will play different roles as a community implements the changes needed to achieve such a vision. However, it is important that coordination occurs at the regional level and that statewide policies are supportive.

The Healthy Environments Collaborative (HEC) and the North Carolina Sustainable Communities Task Force (SCTF)

The commentaries by leaders from the DOT, the Department of Commerce, DENR, and DPH show the progress that North Carolina has made in recent years in building supportive statewide programs and policies that affect built-environment decisions and therefore community and individual health. Success in the state has been facilitated by the work of the North Carolina Healthy Environments Collaborative (HEC) and the North Carolina Sustainable Communities Task Force (SCTF). Both of these partnerships have increased the attention paid to health considerations during the decision-making process. The health impact assessment discussed by Hebert [19] is a relatively new tool being used in the state to ensure public health concerns are included in planning efforts.

The HEC, first organized in 2006, is composed of representatives from the DOT, DENR, the Department of Commerce, and DPH. The mission of this group is to integrate and align departmental efforts to improve the health of North Carolina's people, economy, and environments. This partnership played a critical role in North Carolina receiving Community Putting Prevention to Work (CPPW) funding (from the American Recovery and Reinvestment Act [20]) aimed at supporting active living in the state. Active living is a way of living that integrates physical activity into an

individual's daily routine. Environments that support active living include such amenities as bike lanes, parks that people can walk to and play in, and transit stops within walking distance of people's homes. Active living happens when people live in a community that provides them with options for choosing to be more active.

The SCTF is a more recent and expanded partnership among state agencies and other stakeholders that are working to support the integration of health considerations into community design. The North Carolina General Assembly established the SCTF in July of 2010 in recognition of the need to use resources strategically to plan for and accommodate the rapid growth of the state, given the economic challenges facing North Carolina. The goal of the SCTF, as established in article 7 of chapter 143B of the General Statutes as part of North Carolina Session Law 2010-180, [21] is healthy and equitable development that does not compromise natural systems or the needs of future generations of North Carolinians. To meet that goal, the task force is taking several steps. First, it is educating professionals and the public on the practical benefits of sustainable-community strategies and showing them how to integrate these strategies into their current efforts. Second, the task force is working to better align the decisions made by different agencies and by federal, state, and local governments. Last, it is building the capacity of local communities and regions to incorporate benefits to and other impacts on the health of North Carolinians into the decision-making process for a range of development and infrastructure policies and investments.

Members of the SCTF include representatives from 6 state agencies (the Departments of Administration, Commerce, Environment and Natural Resources, Health and Human Services, and Transportation, and the North Carolina Housing Finance Agency), the building industry, the banking industry, a nongovernmental organization, and city, county, and regional governments. The SCTF mirrors the federal Sustainable Communities Partnership between the US Department of Transportation, the US Department of Housing and Urban Development, and the US Environmental Protection Agency. North Carolina is the first state to enact a parallel program and begin implementation. The SCTF members can work with their respective federal counterparts to bring lessons learned in other states to North Carolina communities.

Conclusion

The great momentum toward healthy and sustainable communities described in this issue is intended to inspire medical, public health, and other allied health professionals, as well as policy makers, to join the movement to promote healthier communities in which everyone can thrive—communities that offer transportation alternatives, access to healthy foods and places to be active, opportunities for economic growth and education, and clean air and water. The

adverse effects of chronic disease and the medical costs associated with the outcomes of physical inactivity cannot be decreased without creating healthy communities outside the clinical setting. Medical, public health, and other allied health professionals have a key role to play in creating healthy options within their communities. Physicians are leaders in promoting health within their communities. They can serve as experts on the medical conditions facing their communities, promote dialogue between community members and the many local entities needed to change communities to promote health, and encourage communities to take action. Levin [22] is one North Carolina physician who has taken a stance on this issue. After years of seeing poor health among his patients—in part due to lack of physical activity—he decided to become involved in making his community one that promotes active living as he discusses in his sidebar about the Blue Ridge Corridor project. New and expanded partnerships are needed to create healthier communities, because the task is complex, and it will take many experts working together to plan, design, and allocate resources. Only by approaching the task from many different angles and by forging new relationships will we reach the common goal of healthier people in healthier communities. NCMJ

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