CHAPTER 1

INTRODUCTION

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Overview of Healthy North Carolina 2030

Healthy people and healthy communities are the foundation of a thriving, prosperous state, and improving the health, safety, and well-being of North Carolinians is a core part of the work of state government.[B] In parallel with the national Healthy People initiative run by the United States Department of Health and Human Services, the North Carolina Department of Health and Human Services (NC DHHS) has released Healthy North Carolina (HNC) goals at the beginning of each decade since 1990. HNC is a set of health indicators with 10-year targets designed to guide state efforts to improve health and well-being. Identifying key indicators and targets allows NC DHHS, the Division of Public Health (DPH), local health departments, and other partners across the state to work together toward shared goals.

One of the goals of NC DHHS is to ensure that all North Carolinians have the opportunity for health. Health equity is the opportunity for all people to attain the highest level of personal health regardless of demographic characteristics.[1] Although traditionally discussions around health have focused on clinical health care, research has shown that clinical care only accounts for around 20% of health outcomes. While access to medical care is important, health begins long before medical care is needed.

Health begins in families and communities, and is largely determined by the social and economic contexts (responsible for 40% of the variation in health outcomes) in which we grow up, live, work, and age; the healthy behaviors (30%) that those contexts make easier or harder[2], and our physical environments (10%). Some of the social, economic, behavioral, and environmental factors that affect health include:

- safety of families and communities,
- exposure to environmental contaminants in air, water, and soil,
- quality of housing and education,
- access to transportation and healthy food,
- availability of employment opportunities and a living wage,
- exposure to and use of alcohol, tobacco, and other drugs, and
- opportunities for physical activity.

These factors are called drivers of health (also known as social determinants of health) and they directly affect health outcomes like development of disease and life expectancy. Underlying these drivers of health are the public policies that influence opportunities for education, employment, and safety; shape our communities; and promote or discourage various behaviors.

EXAMPLES

Drivers of Health and their Effects on Health Outcomes

44% of asthma cases in children are related to home-based exposures (Lanphear, 2001)

Food insecurity significantly affects adult Type 2 diabetes mellitus outcomes (Seligman, 2012)

Living in a neighborhood with economic disadvantages increases risk of coronary heart disease (Diez Roux, 2001)

When opportunities or resources to be healthy are not available, people's health and well-being are negatively impacted. Health inequities are created when people cannot attain optimal health because of unjust, unnecessary, and avoidable circumstances (e.g., greater barriers to accessing healthy foods, transportation, physical activity, and health care in historically segregated, low-income and racial and ethnic minority communities).[3] These inequities lead to health disparities, or differences in health status and outcomes between groups based on characteristics like race, ethnicity, gender, geography, educational attainment, and income.[4]

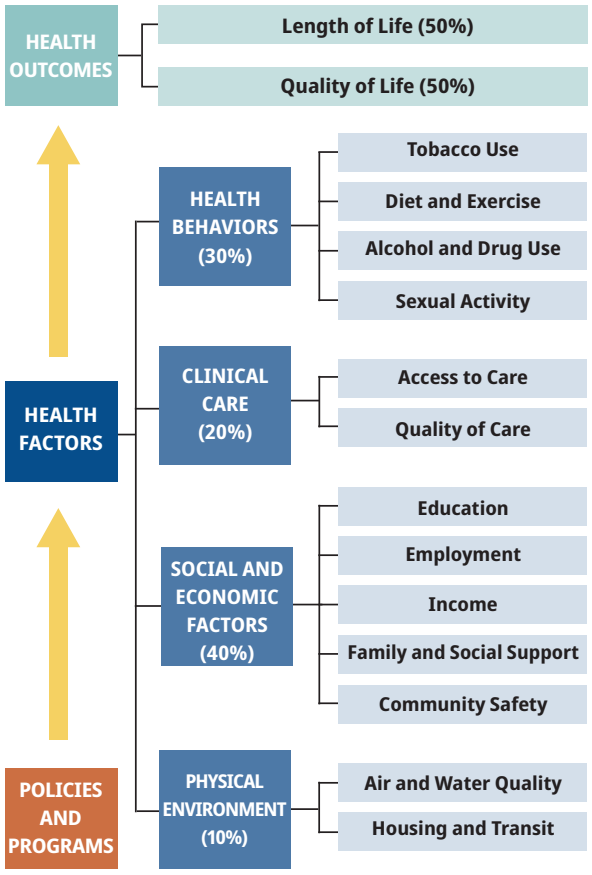
Long-term sustainable improvements in the health and well-being of North Carolinians will only occur by addressing the social, economic, and place-based challenges that keep people from achieving optimal health. National and state public health leaders are focusing on health equity by shifting focus from individual health topics to overall drivers of health outcomes, including social and economic factors, physical environment, health behaviors, and clinical care.

[B] *https://www.ncdhhs.gov/about/dhhs-mission-vision-values-and-goals/mission-vision*

HNC 2030 embodies this shift to a focus on health equity and overall drivers of health outcomes, whereas HNC 2020 focused on specific clinical and health behavior topics. HNC 2030 uses the County Health Rankings population health model developed by the Robert Wood Johnson Foundation (**see Figure 1**)[5], which identifies the primary drivers of health, as well as their proportional contribution to overall health outcomes.

FIGURE 1

Population Health Model



Source: County Health Rankings & Roadmaps, County Health Rankings Model. https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model

Although the framework used for HNC 2030 has required broader consideration of factors that affect health and well-being, the total number of health indicators has been reduced to 21 from 40 in 2020 and 100 in 2010 in order to focus attention, energy, and resources on a narrower set of priorities.

NC DHHS, DPH, and local health departments will remain at the forefront of HNC 2030 efforts; however, they cannot achieve these goals alone. The inclusion of factors traditionally outside the sphere of public health (e.g., education, employment, housing) means that achieving the HNC 2030 goals will require engaging partners across multiple sectors to improve population health and drive health equity over the next decade (See Appendix A for list of all health indicators and targets).

Process

The NC DHHS and DPH is accountable for developing HNC 2030 and partnered with the North Carolina Institute of Medicine (NCIOM) to lead the process. Funding for this work was provided by the Blue Cross and Blue Shield of North Carolina Foundation, The Duke Endowment, and the Kate B. Reynolds Charitable Trust. This work involved a total of eight months of meetings throughout 2019 with an overall Task Force, Work Groups for each of the driver of health topic areas (Social and Economic Factors, Physical Environment, Health Behaviors, and Clinical Care), and Community Input Sessions. The overall Task Force was chaired by Ronny Bell, PhD, MS, Professor and Chair of the Department of Public Health and Associate Director of the Center for Health Disparities, East Carolina University; John F.A.V Cecil, MIM, President, Biltmore Farms, LLC; Laura Gerald, MD, MPH, President, Kate B. Reynolds Charitable Trust; and Elizabeth Cuervo Tilson, MD, MPH, State Health Director and Chief Medical Officer, NC DHHS. Each of the Work Groups was co-led by two individuals who were also members of the Task Force: Social and Economic Factors – Wanda Boone, PhD, Executive Director of Together for Resilient Youth and Donnie Varnell, Special Law Enforcement Projects Consultant, North Carolina Harm Reduction Coalition and Investigator, Dare County Sheriff's Office; Physical Environment – Myron Floyd, PhD, MS, Professor and Head, Department of Parks, Recreation, and Tourism Management, North Carolina State University and Larry Michael, REHS, MPH, Chief,

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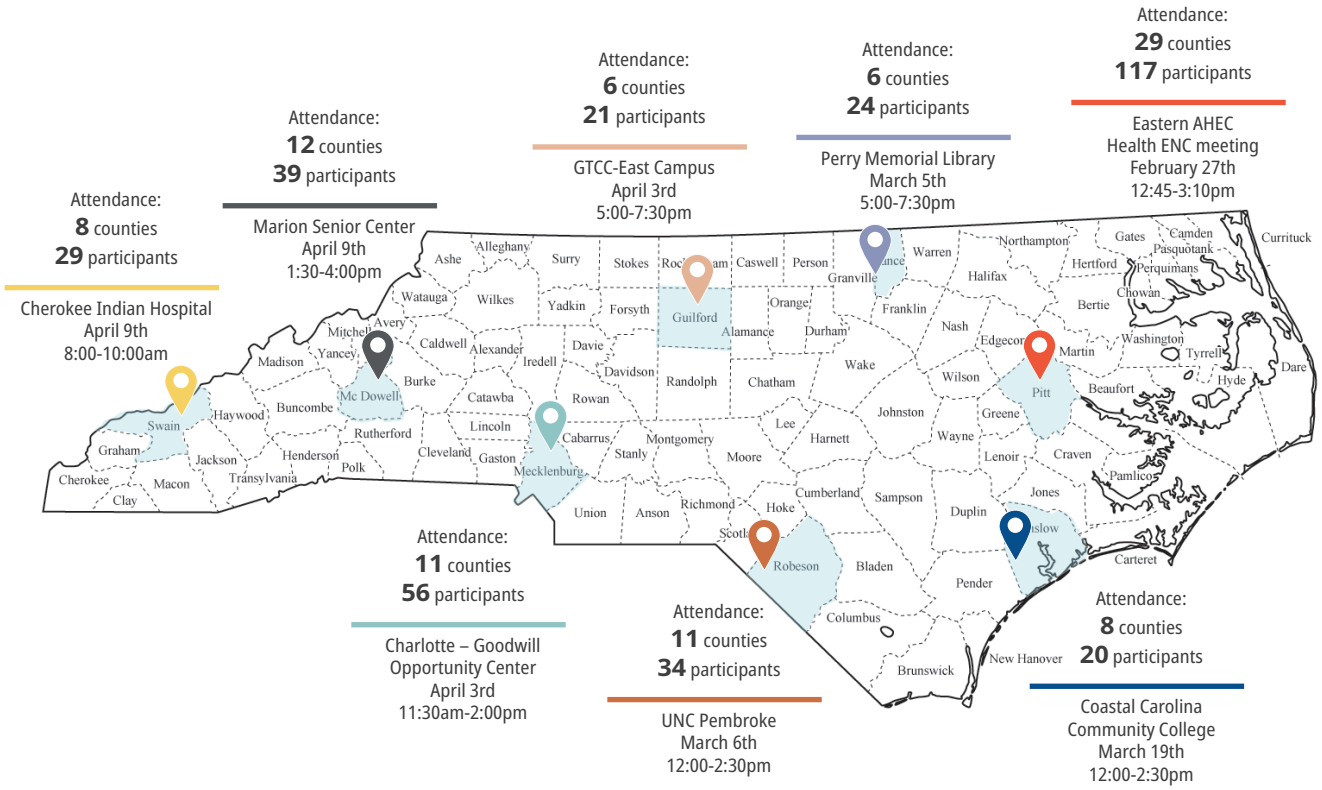
Environmental Health Section, Division of Public Health, NC DHHS; Health Behaviors – Susan Kansagra, MD, MBA, Section Chief, Chronic Disease and Injury Section, Division of Public Health, NC DHHS and Carrie Rosario, DrPH, MPH, CHES, Associate Professor and Associate Department Chair, Department of Public Health Education, School of Health and Human Sciences, University of North Carolina-Greensboro; and Clinical Care – Randy Jordan, JD, MPA, Chief Executive Officer, North Carolina Association of Free and Charitable Clinics and Kia Williams, MD, MSPH, Associate Medical Director, BlueCross BlueShield of North Carolina. They were joined by 40 Task Force members who represented a wide range of expertise and interests from across the state. Seventeen Task Force members were also members of one of the Work Groups. A fourteen-person Steering Committee helped guide the process.

The HNC 2030 process integrated input from communities across the state through a series of eight Community Input Sessions, which took place from February to April 2019 (**see Figure 2** for dates, locations, and number of participants). The integration of community input was a new and intentional effort to represent the voices of people around the state in choosing the population health goals for the next decade. Of note, two of the community input sessions were held in the traditional homelands of the two largest American Indian tribes in the state (Eastern Band of Cherokee Indians and the Lumbee Tribe of North Carolina). While all sessions were open to any member of the community to attend, most participants represented public health or the health professions.

For more details about the HNC 2030 indicator selection process and timeline and results from Community Input Sessions, please see **Appendix B and C**.

FIGURE 2

Dates, locations, and attendees at HNC 2030 Community Input Sessions



Priorities for Indicator Selection

Participants considered several priorities during the HNC 2030 process. Because the HNC 2030 indicators represent issues across many sectors of society, it is important that they be understandable to a broad audience. Each indicator needs to be measurable using existing data sources, with a preference for data measured at least every three years to allow for monitoring between now and 2030. When possible, there was also a preference for data available at the county level to allow for comparisons within the state. In addition, the Task Force tried to align with statewide health improvement plans and measure sets when possible, including the Early Childhood Action Plan and the Opioid Action Plan. The Task Force and Work Groups prioritized health equity by selecting indicators related to health disparities within the state.

While the indicators selected for HNC 2030 are all important for North Carolina's population health status, they are not the only important health indicators for the state. HNC 2030 indicators were selected to represent a broad range of important issues for health in North Carolina and oftentimes represent larger issues. For example, primary care providers per population and health insurance status are indicators of broader health care access issues but are not the only important characteristics of that access. The discussions within each indicator description will provide the broader context within which that indicator was selected.

NEXT STEPS:

Partnerships to Improve Health – A Model for Addressing HNC 2030

Public health leaders across the state are charged with working toward the goals set by Healthy North Carolina. The new framework for HNC 2030 includes broader issues related to social and economic factors and the physical environment than those with which public health traditionally engages. The wide range of indicators selected for HNC 2030 brings new opportunities for public health to partner across sectors to address many drivers of health.

In addition, the NC DHHS has a vision to "optimize health and well-being for all people by effectively stewarding resources that bridge our communities and our health care system."[6] To do this, NC DHHS is taking a multi-layered approach to addressing the drivers of health, including:

1. Creating standardized screening questions to identify resource needs,
2. Deploying a statewide digital resource and referral platform to connect health and social services NCCARE360,
3. Mapping social drivers of health indicators,
4. Building infrastructure to support the recommendations of the Community Health Worker Initiative,
5. Implementing Medicaid transformation through Medicaid Managed Care to address whole person health including medical and non-medical drivers of health,
6. Testing public-private pilots of Accountable Care Community-style models focused on people enrolled in Medicaid Managed Care, and
7. Fostering multi-payer alignment around accelerating value-based payment and addressing non-medical drivers of health.

The NCIOM Task Force on Accountable Care Communities (ACC) published a report that describes a new model of multi-sector partnership at the community level and provides twenty-four recommendations to policymakers, public health leaders, providers, payers, human services organizations, and communities to promote ACC development. A guide for community members looking to develop these partnerships is also available online. Local health departments across the state may be natural leaders in developing the partnerships needed to address many of the issues related to health that were chosen as goals for HNC 2030. This is reflective of the Public Health 3.0 call to action for cross-sectoral collaboration to drive collective action.[7] To complement the development of ACC models, the NC DHHS framework for addressing the drivers of health seeks to provide many of the tools to start addressing these issues. Partners from a variety

Accountable Care Communities (ACCs) address health from a community perspective. ACCs bring together a coalition of cross-sector stakeholders that share responsibility to address the drivers of health while reducing, or holding steady, health spending.

of sectors will need to engage with public health leaders to develop strategies to improve the variety of social, economic, environmental, and behavioral factors that influence our health outcomes. Community members should also be engaged in these efforts so that local voices are always a part of any strategies for action at the local level.

Structure of this Report

The presentation of the HNC 2030 health indicators is divided into five sections based on the drivers of health: Social and Economic Factors (**Chapter 3**); Physical Environment (**Chapter 4**); Health Behaviors (**Chapter 5**); Clinical Care (**Chapter 6**); and Health Outcomes (**Chapter 7**). At the beginning of each chapter is a description of how those issues drive health. Selected health indicators are presented within their topic areas, including a description of how the indicator impacts health, disparities across populations, how the target for HNC 2030 was selected, and potential levers for change. Current data across populations is provided, when available, for race/ethnicity, sex, and poverty status with calculations showing the distance to the target for each of those populations. Indicators are numbered for reference purposes only. At the end of each section is a discussion of developmental measures, which are measures that would provide useful information about an aspect of population health that participants were interested in but could not select because of issues with the availability or quality of data.

Language

Throughout this report, data are referenced from surveys, vital statistics, and research studies. Population-specific data from these sources vary in reporting of Hispanic ethnicity with race. Data sources also vary in reporting terminology for Black/African American populations. References to racial groups have been standardized throughout the report as African American, American Indian, Asian, and white. Unless otherwise noted, these groups are all non-Hispanic and data for individuals indicating Hispanic ethnicity are reported separately.