

CHAPTER 6

CLINICAL CARE



INTRODUCTION

While the non-clinical drivers of health – social and economic factors, physical environment, and health behaviors – provide the context for how we live and how likely we are to be healthy, our access to affordable and quality health care can help to prevent disease or detect it as soon as possible.¹³⁶ Access to care typically begins with affordable and comprehensive health insurance. Beyond that, geographic proximity to health care providers is key to ensuring that people can physically access the care they need. Within the health care system, quality care means the provision of safe, effective treatment in a timely manner.¹³⁶

In many ways, income, employment, race, and geographic location affect where and how we receive health care.

- **Social and Economic Factors – Employment is a key mechanism for health insurance coverage in the United States, although low-income workers are less likely to receive this benefit from their employers. Individuals with less education are more likely to be employed without health insurance benefits. People of color face limitations in health care quality and access due to mistrust of the health care system, lack of representation in the health care workforce, and implicit bias in the treatment they receive.**
- **Physical Environment – People who live in rural areas are more likely to be farther from health care providers and hospitals. This impacts their ability to receive regular health check-ups and care for health conditions like pregnancy, mental health issues, or diabetes. These geographic challenges are compounded for people who lack reliable transportation.**

The HNC 2030 health indicators chosen for the clinical care topic area cover both access and quality, and even still cannot fully capture an individual's ability to access quality care. For example, insurance rates are an important indicator of access, yet even people with insurance may face large financial barriers to care if the coverage is not robust or if the monthly premiums are high.

Read the following example of how the drivers of health interact with clinical care to impact an individual's opportunities to achieve health and well-being.⁵⁵ For each health indicator, this report includes recommended evidence-informed policies and practices to address that indicator of interest. We recommend community coalitions use multi-sector partnerships to pursue all the strategies recommended.

Clinical Care and Health – John's Experience

John is a farmer in rural North Carolina. He has worked hard and loves his home, but his health has been deteriorating. John did not have health insurance until he turned 65 and hasn't been to the doctor in ten years. Although he has not been feeling well, John put off seeing the doctor until he turned 65 and was able to enroll in Medicare for health insurance. Once insured, he made an appointment with the closest primary care doctor on the other side of the county, about 40 minutes away. By the time of his appointment, his health had deteriorated so much that he didn't feel comfortable driving himself. John's niece volunteered to drive him to the appointment, but that day she got sick and couldn't take him. The appointment was rescheduled for a month later. The doctor diagnosed John with anemia and scheduled a colonoscopy two counties away. He was ultimately diagnosed with Stage III cancer of the colon. Treatment was only available at the hospital, which was also far from his house. John needs aggressive treatment requiring surgery and then weekly treatment at the hospital for the next couple of months. Although he has a source of payment now, John's prognosis would have been much better had his cancer been caught earlier.

⁵⁵ Examples are of hypothetical scenarios commonly faced by individuals with health-related social needs.

HEALTH INDICATORS:**16 UNINSURED RATE**

Decrease the Uninsured Population

17 PRIMARY CARE WORKFORCE

Increase the Primary Care Workforce

18 EARLY PRENATAL CARE

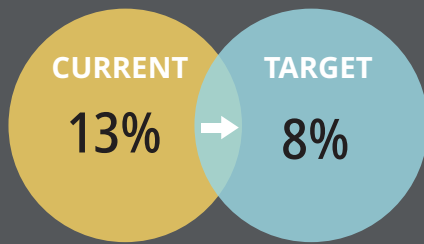
Improve Birth Outcomes

19 SUICIDE RATE

Improve Access and Treatment for Mental Health Needs

HEALTH INDICATOR 16: UNINSURED RATE

DESIRED RESULT: DECREASE THE UNINSURED POPULATION



DEFINITION

Population under age 65 without health insurance

DETAILS

Individuals age 65 years and older are eligible for Medicare

NC UNINSURED RATE (2017)

13%

2030 TARGET

8%

RANGE AMONG NC COUNTIES

9 – 20%

RANK AMONG STATES

44th*

DATA SOURCE

Small Area Health Insurance Estimates

STATE PLANS WITH SIMILAR INDICATORS

Not Applicable

*Rank of 1st for state with lowest uninsured rate

Rationale for Selection:

For most people, access to affordable health care services is dependent upon whether they have health insurance coverage. Although uninsured rates in North Carolina decreased between 2013 and 2016, they have started to rise again. Policy options available to state lawmakers have the potential to greatly reduce the number of people who are uninsured in North Carolina.

Context

Access to comprehensive, quality health care services is critical to achieve and maintain health, prevent and manage disease, and achieve health equity. Health insurance is the most common means used to obtain affordable health care services.¹³⁷ For those without health insurance, care may be inaccessible and unaffordable, resulting in poor health outcomes.¹³⁸ Those without coverage may not receive important preventive care services, may avoid treatment for acute illness and injury, and may also have poorly managed chronic health conditions.^{138,139,140} Lack of health insurance coverage can also lead to financial burdens that further negatively impact one's health. Access to affordable health care positively impacts individuals' health and well-being and overall quality of life.¹⁴¹

In the United States, there are three broad categories of insurance: private, public, and the uninsured. In 2017, slightly more than half of all North Carolina residents had private insurance (53%).¹⁴² The majority of North Carolinians with private insurance were enrolled in employer-based insurance programs that are jointly financed by employers and employees. Approximately 36% of North Carolinians were covered by public health insurance (i.e., Medicaid, Medicare, Tricare, Veterans Health Administration (VA) health care) with eligibility depending on their age, income, and military status.¹⁴² Those who do not receive health care from their employer and do not qualify for public health insurance (11%) can purchase private health insurance through the government-run health insurance marketplace, which provides subsidies based on income, or through the private insurance market. In 2018, the average annual cost of health insurance was \$6,800 for individuals and \$19,600 for family coverage.¹⁴³ Due to the high cost of insurance, both through employers and on the private market, many people cannot afford health insurance and go without.

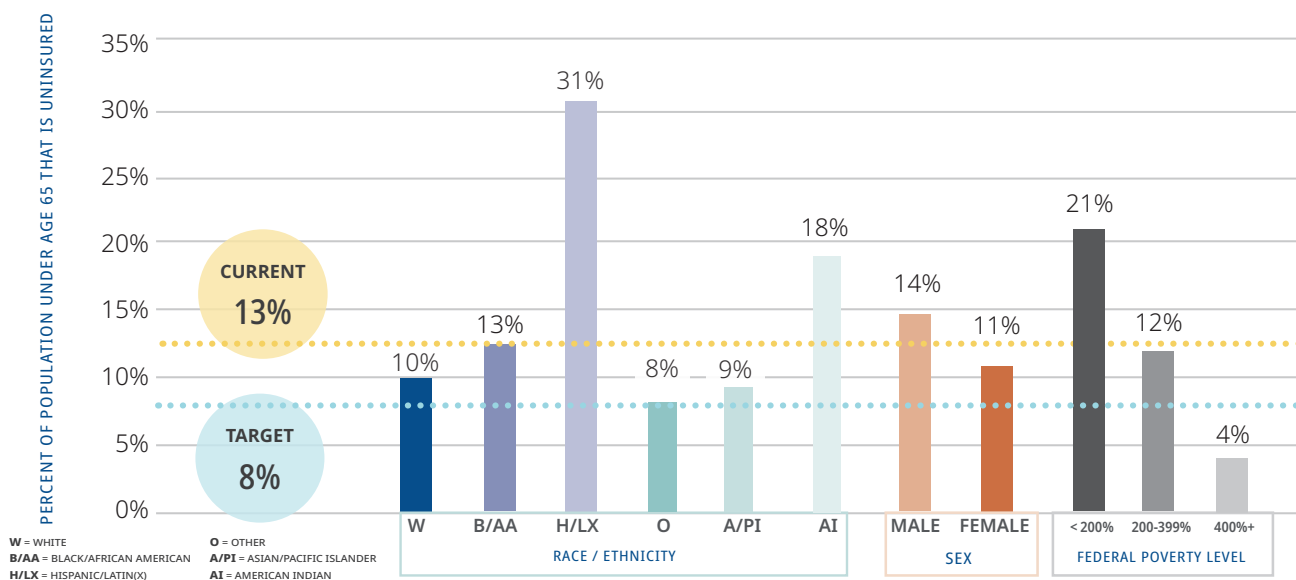
Disparities

Certain types of workers may be less likely to have health insurance.¹⁴⁴ Persons engaged in seasonal, part-time, temporary, or caregiving work or who are self-employed or are small business owners and employees may not receive employer-sponsored insurance and may not qualify for public benefits or tax credits and subsidies to purchase coverage on the marketplace.¹⁴⁵ In North Carolina, those working in the agriculture, forestry, mining, construction, hospitality, and services industries are most likely to lack health insurance.¹⁴⁴ Veteran populations too may fall into the coverage gap, as they may be ineligible for VA health care coverage and may not qualify for TriCare.¹⁴⁵

There are also racial and geographic disparities in who does and does not have insurance coverage. Hispanic North Carolinians are uninsured at higher rates than their white and African American counterparts, as members of that community may be more likely to lack access to job opportunities that provide insurance and may also face citizenship and status documentation barriers to qualifying for Medicaid and Medicare.¹⁴⁵ However, white North Carolinians account for almost half of residents in the state without health insurance.¹⁴⁴ Finally, residents of rural areas are more likely to be uninsured than their metropolitan counterparts and are more likely to be concentrated in the mountains and southern plain of the state.¹⁴⁶

FIGURE 29

Percent uninsured across populations in North Carolina and distance to 2030 target



2030 Target and Potential for Change

The HNC 2030 group reviewed data across several years and a forecasted value for North Carolina based on historical data to determine a target for 2030. They also discussed the policy options and their projected effect on the uninsured population under the age of 65 from 13% to around 8%, therefore the group chose 8% as the target for uninsured for 2030.¹⁴⁷ Analyses have shown that states where Medicaid eligibility has been expanded have seen improved health outcomes, such as decreased infant mortality, decreased cardiovascular mortality rates, improved self-reported health status, and improved rates of smoking cessation.¹⁴⁰

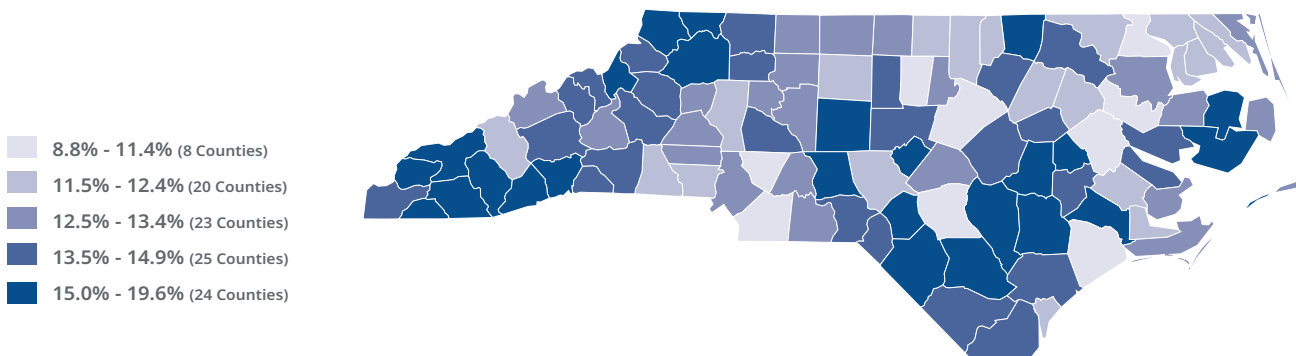
Levers for Change

(Collins, Bhupal, & Doty, 2019)

- Expand Medicaid eligibility criteria
- Support bans or limitations on short-term health plans
- Increase publicity and navigator funding for open enrollment
- Increase public education about insurance options

FIGURE 30

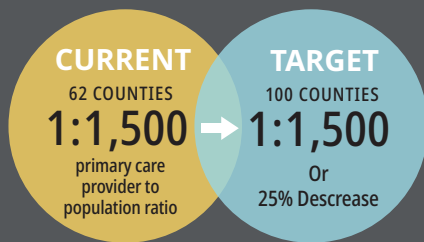
Percent of Population who is Uninsured in North Carolina Counties: Residents Less than 65 years old, 2017



Source: U.S. Census Bureau, Small Area Health Insurance Estimates, https://www.census.gov/data-tools/demo/sahie/#/?s_state

HEALTH INDICATOR 17: PRIMARY CARE WORKFORCE

DESIRED RESULT: INCREASE THE PRIMARY CARE WORKFORCE



DEFINITION

Primary care workforce as a ratio of the number of full-time equivalent primary care clinicians to county population

DETAILS

Includes physicians, nurse practitioners, physician assistants, and certified nurse midwives; provider location defined by primary practice location on licensure information

NC PRIMARY CARE WORKFORCE (2017)

62 counties with a 1:1,500 primary care provider to population ratio

2030 TARGET

100 counties reaching the 1:1,500 ratio or achieving a 25% decrease in the provider to population ratio

RANGE AMONG NC COUNTIES

1:6,278 – 1:365

RANK AMONG STATES

Not Applicable

DATA SOURCE

Cecil G. Sheps Center for Health Services Research analysis of licensure data from North Carolina Medical Board and North Carolina Board of Nursing

STATE PLANS WITH SIMILAR INDICATORS

Not Applicable

Rationale for Selection:

Access to primary care can encourage preventive health care and improve health outcomes. Many rural areas of North Carolina lack adequate access to medical professionals, including those providing primary care.

Context

Primary care providers typically serve as the entry point into the health care system and provide a wide array of services including preventive, diagnostic, chronic disease management, and urgent care. As such, primary care providers play an integral role in maintaining and improving the overall health and well-being of communities.¹⁴⁸ Access to primary care is associated with fewer health care disparities and better health outcomes across socioeconomic circumstances.¹⁴⁸

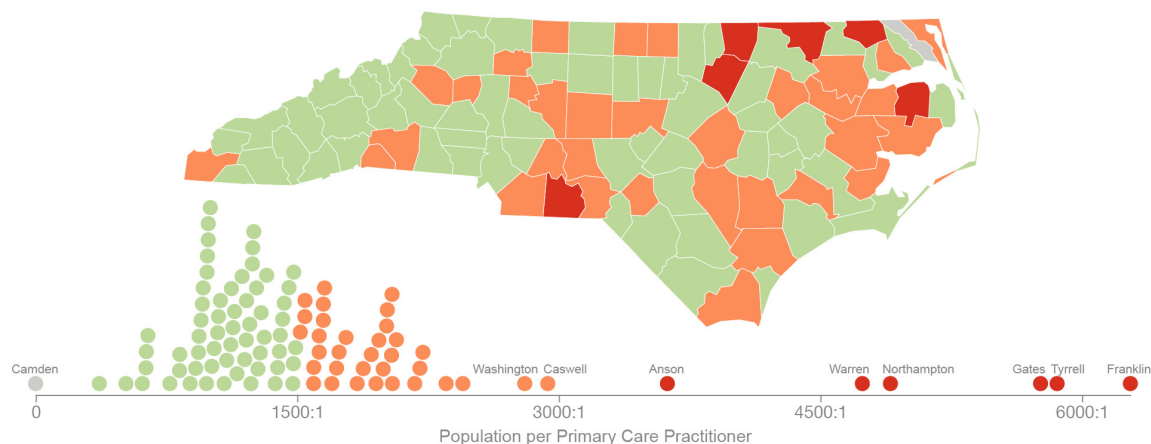
Ideally, people would have access to high quality primary care, dental care, and behavioral health care in their communities. However, 38 counties in North Carolina do not meet the recommended ratio of one primary care provider per 1,500 residents^{VV} (see Figure 31), with many counties also experiencing shortages of dental and/or behavioral health providers. The primary care workforce is experiencing increases in demand due to aging baby boomers requiring more care, overall growth in the population, and increasing numbers of people living with chronic illnesses. Despite overall growth in the primary care workforce in the last 30 years, North Carolina's most underserved and rural areas face persistent primary care shortfalls. Rural communities often struggle to recruit and retain health care professionals due to professional, economic, infrastructure, and cultural challenges. Shortages of health care professionals in rural areas impede residents' ability to get the care they need. To access services, those services must be available, obtainable in a timely manner, and affordable. Barriers to access, including shortages of health professionals, result in unmet health care needs, delays in receiving care, forgoing preventive care, preventable hospitalizations, and death.¹⁴⁹

Nationwide, the number of medical school graduates choosing primary care has been on the decline, arguably due to high costs of medical education and a large disparity between the earnings of primary care physicians and those of most specialists.¹⁵⁰ At the same time, the primary care workforce has been supplemented by increasing numbers of advanced practice nurses (e.g., nurse practitioners) and physician assistants (PAs) entering the work force. Similar to physicians, non-physician clinical providers often pursue medical subspecialties and work in specialty practices, although this is more true for PAs than for advanced practice nurses.^{151,152,153} Also, like physicians, the percent of PAs practicing in rural areas has fallen, although a larger percent of PAs than physicians who practice in primary care are practicing in rural areas.¹⁵⁴ In contrast, there has been national growth in the number of primary care nurse practitioners practicing in rural areas.¹⁵⁵

^{VV} Recommended provider to population ratio based on analysis by the Cecil G. Sheps Center for Health Services Research, which concluded that counties with ratios between 1:1,500 and 1:3,000 are likely to have populations that periodically experience delays in access to care or conditions that require them to seek primary care outside their county and counties with ratios of 3,000 or more will have populations with regular difficulties seeing a local practitioner and will require special programs or procedures to overcome the lack of local, in-county primary care access.

FIGURE 31

Population per primary care provider in North Carolina



Notes: Primary care physicians, physician assistants, and nurse practitioners are defined as in Spero, J. C., & Galloway, E. M. (2019). Running the Numbers. *North Carolina Medical Journal*, 80(3), 186-190. Physicians with a primary area of practice of obstetrics/gynecology were weighted as 0.25 of a full-time equivalent (FTE) primary care practitioner. All other primary care physicians were weighted as 1 FTE. Primary care physician assistants, nurse practitioners, and certified nurse midwives were weighted as 0.75 FTE. Physician and physician assistant data are derived from licensure data provided by the North Carolina Medical Board. This analysis only includes physicians who are not residents-in-training and are not employed by the Federal government. Nurse practitioner and certified nurse midwife data is derived from licensure data provided by the North Carolina Board of Nursing. Data include active, licensed practitioners in practice in North Carolina as of October 31, 2017. Practitioners are assigned to counties based on primary practice location. County populations were adjusted for age and gender according to primary care use rates described in data from the Medical Expenditure Panel Survey. The raw (unadjusted) population data was from the NC Office of State Budget and Management (<https://www.osbm.nc.gov/demogcounty-projections>).

**SHEPS HEALTH
WORKFORCE NC**

Disparities

Provider distribution is a critical barrier to meeting the primary care needs of the population. For a state where 1 in 5 residents lives in a rural area, this access barrier is particularly acute. Of the state's 100 counties, 40 counties have a primary care ratio that exceeds the recommended access threshold (see [Figure 31](#)).^{WW} At present, some incentives exist to encourage providers to relocate to rural communities, such as loan repayment. However, providers with families may be dissuaded by school systems with fewer resources, fewer career opportunities for partners or spouses, and slow economic development in rural areas, and may be concerned about the financial viability of opening practices when faced with low patient volumes.^{156,149}

2030 Target and Potential for Change

Currently, only 62 of North Carolina's 100 counties have a provider to population ratio of 1:1,500 or fewer. To set the target for this indicator, the group reviewed data across counties in North Carolina. Considerations included the fact that county borders do not limit access to health care (i.e., individuals can cross from one county to another to see their provider) and that it may not be possible for all counties in the state to meet the optimal 1:1,500 ratio. The group set the 2030 target of all counties being either at or below the 1:1,500 ratio or see a 25% decrease in provider to population ratio for counties that have not yet met the 1:1,500 ratio.^{XX} The aim toward decreasing, rather than meeting a specific ratio, is a more attainable goal for counties that currently have high population to provider ratios.

Levers for Change

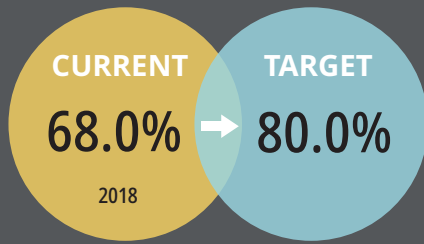
- Support pipeline programs in rural areas to encourage high school and college students to pursue careers in medicine (Abernathy & Byerley, 2019)
- Identify rural provider champions and increase support for physicians in ongoing practice (Fraher & Spero, 2015)
- Increase residency positions in rural areas (Fraher & Spero, 2015)
- Invest in rural economies (Holmes, 2018)
- Increase telehealth primary care initiatives in rural areas (McGranaghan, 2018)
- Increase access and payment for specialist consults
- Support increased funding for provider loan repayment programs that incentivize primary care providers to practice in medically underserved areas

^{WW} Analysis and calculations by Spero, JC and Galloway, EM of the Cecil G. Sheps Center for Health Services Research.

^{XX} Achieving this goal by 2030 would mean that 20 of the 30 counties currently above the optimal primary care provider to population ratio would reach a ratio of 1:1,500 or lower by 2030. For those 11 counties that are closer to the 1:1,500 goal, a 25% decrease would bring them to ratios at or below the optimal 1:1,500. The 8 counties with the highest ratios would see meaningful increased access through a 25% decrease in their ratios.

HEALTH INDICATOR 18: **EARLY PRENATAL CARE**

DESIRED RESULT: **IMPROVE BIRTH OUTCOMES**



DEFINITION

Percent of women who receive pregnancy-related health care services during the first trimester of a pregnancy

DETAILS

First trimester is the first three months of pregnancy

NC EARLY PRENATAL CARE RATE (2018)

68.0%

2030 TARGET

80.0%

RANGE AMONG NC COUNTIES

41.4% - 86.9%

RANK AMONG STATES

Tied for 36th*

DATA SOURCE

NC State Center for Health Statistics, Vital Statistics

STATE PLANS WITH SIMILAR INDICATORS

Not Applicable

*Rank of 1st for state with greatest use of prenatal care

Rationale for Selection:

Receipt of early prenatal care is a protective factor for many negative health outcomes for mothers and their babies. In North Carolina, only 68% of pregnant women receive care within the first trimester. Those who do not receive care are disproportionately women of color and teenage mothers.

Context

Women who receive early prenatal care have lower rates of negative pregnancy outcomes such as low birth weight and infant death (see Page 32).¹⁵⁷ Early prenatal care services include screening for substance use, chronic conditions like diabetes and hypertension, and fetal abnormalities.¹⁵⁸ Wellness visits early in a pregnancy can also ensure that women are connected to social support systems and programs that can help them navigate their pregnancy safely and healthily.¹⁵⁸ In North Carolina, only 68% of pregnant women receive necessary early prenatal care services, a figure that falls below the national average of 77%.¹⁵⁹

“In North Carolina, only 68% of pregnant women receive necessary early prenatal care services, a figure that falls below the national average of 77%.”

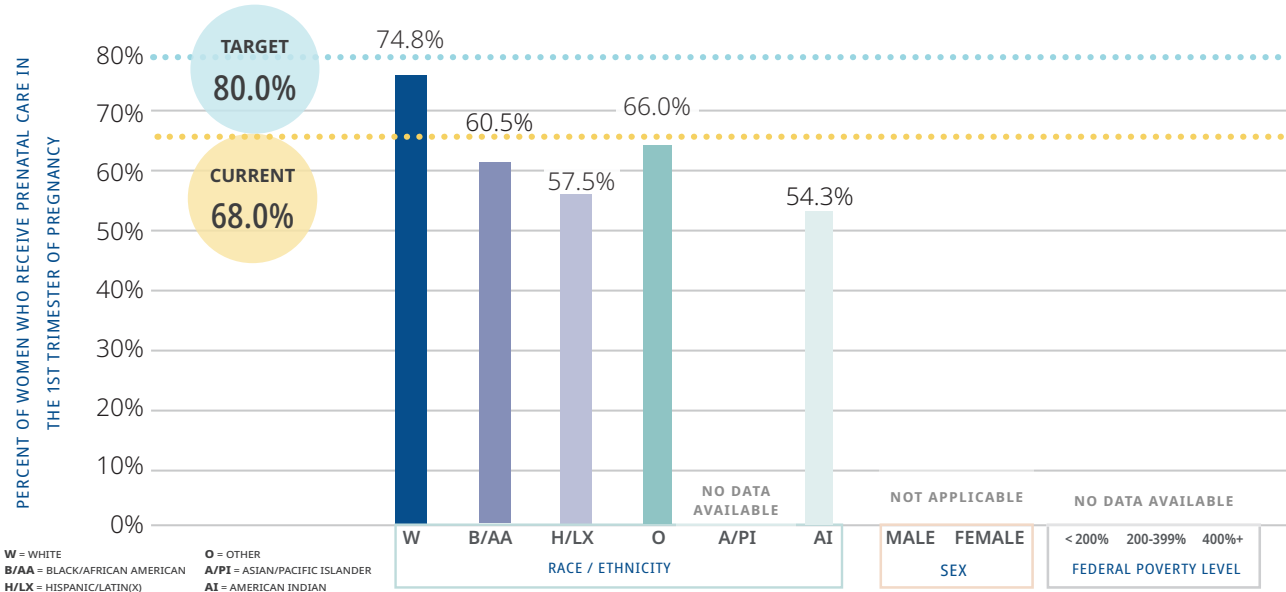
Disparities

There are sharp disparities between those who receive and do not receive early prenatal care in North Carolina. Income is a key indicator of whether a mother will receive early prenatal care, as low-income mothers may be uninsured^{160,159} and unaware of their Medicaid eligibility, or may lack the funds needed to seek care.¹⁵⁷ In North Carolina, Medicaid for Pregnant Women is available for women with incomes up to 200% of the federal poverty level for the duration of the pregnancy and ends 60 days postpartum.¹⁶¹ Medicaid for Pregnant Women covers prenatal care, delivery, postpartum care, childbirth classes, and services to treat conditions that may complicate pregnancy.¹⁶¹ Undocumented immigrant women are ineligible for Medicaid coverage of prenatal care, an option available under the Children's Health Insurance Program and utilized by 16 states.

The age of the mother is associated with early initiation of prenatal care, with teenage mothers and mothers in their early 20s seeking early prenatal care at lower rates than older mothers.¹⁵⁹ Race and ethnicity are also associated with rates of early prenatal care. African American women, Hispanic women, and American Indian women are less likely to receive early prenatal care than their white counterparts (see Figure 32).^{162,45} In addition, studies show that implicit bias in health care delivery may prevent African American women from receiving sufficient patient education in the prenatal period about risks to maternal and fetal health,¹⁶³ and may also contribute to African American women's increased risk of life-threatening conditions such as preeclampsia and postpartum hemorrhage.^{164,165,166}

FIGURE 32

Early prenatal care use across populations in North Carolina and distance to 2030 target



2030 Target and Potential for Change

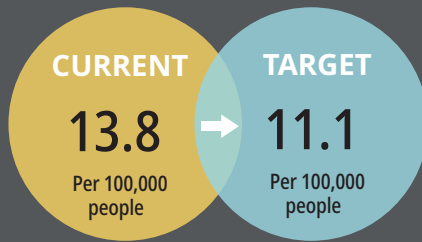
The HNC 2030 work group reviewed data across several years and a forecasted value for North Carolina based on historical data to develop a target for the percentage of women receiving early prenatal care. The group chose 80% of women receiving care in the first trimester as the target for 2030. This would reflect a reversal of a negative trend seen over the past 10 years and represent a substantial move toward ensuring that all pregnant women in the state get care within the first trimester of pregnancy.

Levers for Change

- Ensure group prenatal care, childbirth education, and doula services are covered services by Prepaid Health Plans
- Use community health workers to provide outreach and education to women of childbearing age in underserved communities
- Expand Medicaid eligibility
- Encourage workforce diversity and cultural competence in the delivery of prenatal care services
- Support quality improvement efforts to standardize treatment protocol to minimize provider bias
- Expand safe and reliable public transit options (PRAMS, 2005)
- Take advantage of the Children’s Health Insurance Program option to provide coverage for comprehensive prenatal care to undocumented immigrant women

HEALTH INDICATOR 19: SUICIDE RATE

DESIRED RESULT: IMPROVE ACCESS AND TREATMENT FOR MENTAL HEALTH NEEDS



DEFINITION

Age-adjusted number of deaths attributable to self-harm per 100,000 population

DETAILS

Not Applicable

NC SUICIDE RATE (2018)

13.8 per 100,000 people

2030 TARGET

11.1 per 100,000 people

RANGE AMONG NC COUNTIES (2014-2018 AVERAGE)

2.2 – 33.6 per 100,000 people

RANK AMONG STATES

16th*

DATA SOURCE

NC State Center for Health Statistics, Vital Statistics

STATE PLANS WITH SIMILAR INDICATORS

Not Applicable

*Rank of 1st for state with lowest suicide rate

Rationale for Selection:

Mental health and access to treatment services are often overlooked in our health care system. One indicator of mental health outcomes – suicide – has been on the rise for years. Some special populations, such as veterans and LGBTQ youth, have seen elevated rates of suicide that will require targeted prevention strategies.

Context

Suicide accounted for 1,499 deaths in North Carolina in 2018.¹⁶⁷ This corresponds with a national trend of rising suicide rates during the last decade.¹⁶⁸ The impact of suicide is felt on both the personal and community level. Family and friends of the deceased bear both emotional and financial burdens.¹⁶⁹ The state also shoulders a financial burden, losing an average of \$1.1 million in “lifetime medical and work loss cost” in 2017.¹⁶⁷

Suicide is inextricably linked to mental health care and well-being. Studies show that many persons who die of suicide either had diagnosed mental illnesses¹⁶⁹ or experienced high-stress traumas such as financial insecurity, housing instability, or physical illness.¹⁷⁰ Suicide is also connected with insurance status, as people who are uninsured or underinsured are less likely to seek mental health care and treatment for health conditions that may contribute to mental and financial strains.¹⁷¹ However, for those who are able to access care, one study has shown that suicide prevention strategies are not a large focus of mental health provider training.¹⁶⁹ Rather, strategies to treat underlying mental health conditions are emphasized, without specific attention to suicidal ideation or patient safety planning.¹⁶⁹ The suicide rate can be used as a downstream indicator of access to comprehensive high-quality health care.

Disparities

Suicide affects populations disproportionately based on gender, age, racial or ethnic group, and geography. Men, adults over the age of 45,¹⁷² American Indians and whites,¹⁴¹ and rural residents all face higher rates of suicide than their respective demographic counterparts.¹⁷³

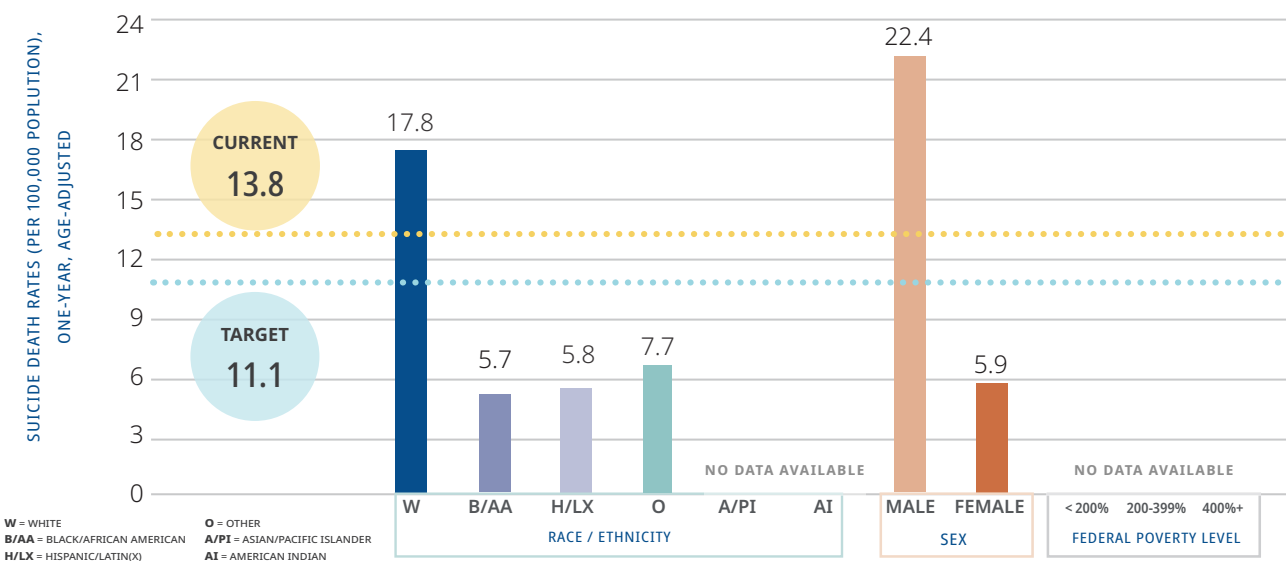
The suicide rate among veterans is 1.5 times that of the non-veteran population.^{yy,174} Veterans face unique mental health, financial, and insurance coverage challenges that contribute to the increased rate within the population.¹⁷⁵ Veterans are also more likely to have access to firearms, a factor that increases the likelihood of fatal self-harm.^{176,175}

Elevated suicide rates are also seen in LGBTQ populations. There is no comprehensive data source for the suicide rate amongst LGBTQ persons, as sexual identity is not a component of death records. However, survey data indicates that among LGBTQ youth, the rate of suicidal ideation is 4.5 times higher than their heterosexual peers. Additionally, 40% of transgender adults report a suicide attempt.¹⁷⁷ This disparity is only magnified in the young adult population, and among racial and ethnic minorities.^{178,179} Discrimination, social

^{yy}This figure is adjusted by age and gender.

FIGURE 33

Suicide rate across populations in North Carolina and distance to 2030 target



ostracism, family rejection, financial barriers, and health care barriers all contribute to an increased mental health burden on this population that corresponds with an increased rate of suicidal behavior.¹⁷⁷

Suicide is also on the rise among children age 10-17 and is now the second leading cause of death among this age group with rates doubling over the past decade.^{180,181} In 2017, 8.2% of high schoolers reported they attempted suicide, with highest levels among African American high schoolers (11.1%), Hispanic high schoolers (9.3%), and high schoolers reporting their race as Other (17.9%).

2030 Target and Potential for Change

The HNC 2030 work group reviewed data across several years and projected the future trend of suicide rate to develop a target. The group chose 11.1 as the number of deaths per 100,000 population by 2030. As the age-adjusted suicide rate has risen steadily over the last decade in North Carolina, and is expected to continue rising, movement toward this target would represent a meaningful reversal in this trend.

Levers for Change

- Expand Medicaid eligibility criteria to increase access to mental health services
- Increase state funding for mental health services provided through local mental health systems
- Implement policies targeted to decrease access to lethal means
- Improve access to social services and other supports
- Increase programs that provide mental health services and support for LGBTQ youth
- Increase programs that provide mental health services and support for veterans
- Continue to support the integration of physical and mental health
- Expand access to tele-mental health services
- Create trauma informed schools with access to mental health providers

DEVELOPMENTAL MEASURES

The clinical care measures below are ones that the HNC 2030 group feels is important to population health but does not have data available at this time. A description of the data needed for this measure is listed as “developmental data needs.” State entities should consider identifying methods for collecting this data.

Social Determinants of Health Screening

The NC DHHS seeks to fundamentally change how we think about health and drivers of health. Rather than focusing just on the provision of health care, NC DHHS is highlighting the need to view health as a person’s well-being and to understand their social drivers of health status. One aspect of their work has been the development of a standardized set of questions related to food, housing, transportation, and interpersonal violence.^{ZZ} This standardized set of questions is mandated for use by Medicaid managed care plans^{AAA} at enrollment of members. However, the NC DHHS is encouraging the adoption of the screening questions across all populations, regardless of insurance status. This data will provide information critical to painting a more accurate picture of the non-clinical health needs of residents. From a clinical perspective, measuring the implementation of the screening (i.e., percentage of patients with a completed social determinants of health screening in the past year) was viewed as a potentially important measure of clinical care.

Developmental data needs:

- With Medicaid managed care implementation beginning in winter 2020, there has been no systematic data collected and reported yet on the social determinants of health screenings for the population enrolled in Medicaid. Data should be collected on the use of the screening by managed care organizations and other insurance and health care providers, potentially through NC HealthConnex.
- De-identified statistics on the non-clinical health needs across populations would be useful to evaluate the drivers of health across the state into the future.

Underinsurance

Health insurance generally encourages people to use preventive health services and is meant to protect people from high medical bills. However, many people covered by health insurance face high deductibles and out-of-pocket spending for health care. These individuals are underinsured. People who are underinsured are less likely to access preventive services and can face challenges paying their medical bills. For example, a 2018 survey of Americans found that 25% of people who are underinsured did not fill a prescription (compared to 11% of people who are insured), 23% skipped recommended tests, treatments or follow-ups (10% insured), 24% did not see a doctor for a medical problem (11% insured), and 17% did not get needed specialty care (7% insured).^{BBB} The same survey found that the number of adults who are underinsured is increasing, with 29% in 2018 up from 23% in 2014.^{BBB,183} The largest growth in underinsurance is in employer-sponsored plans, with 28% of these plans leaving adults underinsured in 2018, compared to 20% in 2014.

Developmental data needs:

- Ongoing monitoring of the underinsured population in North Carolina through surveys would help to identify populations that are facing high out-of-pocket health care spending. This information would be useful for policy-making purposes.

^{ZZ} Screening for health-related social needs is a sensitive matter that should involve considerations of trust and privacy. To have a successful screening process, individuals being screened need to trust that their information is safe and will be shared in a limited way to improve their health or access to services. Screening should be non-judgmental, performed by trained staff, offered in private settings, and enhance access to services. The NCIOM Task Force on Accountable Care Communities made recommendations about ensuring individuals are informed about personal data collection and sharing. (NCIOM, 2019)

^{AAA} Instead of reimbursing health systems and providers directly, under Medicaid managed care NC DHHS will contract with Prepaid Health Plans (PHPs) to deliver health services to enrollees. PHPs will receive a monthly capitated payment for each enrollee. NC DHHS will provide monitoring and oversight of the PHPs, which will be required to meet quality and outcome metrics and other requirements. All PHPs will be required to use the standardized screening questions to measure beneficiary needs. Results will be used to determine the need for care management and will be shared with primary care providers.

^{BBB} The Commonwealth Fund survey defines underinsured as having yearly out-of-pocket costs, excluding premiums, that are 10% or more of household income, or equal to 5% or more of household income for people living under 200% of the Federal Poverty Level, or deductibles that are 5% or more of household income.