Annual Report on the Health Status of Rural Residents and Health Workforce Data Collection

Calendar Year 2021

Rural Health and Primary Care Section
Bureau of Public Health Systems, Policy and Performance
Division of Public Health Services
Department of Health and Human Services

December 27, 2021

NH DIVISION OF
Public Health Services
Improving health, preventing disease, reducing costs for all

EXECUTIVE SUMMARY

The State Office of Rural Health (SORH) is required to submit a report annually on the health status of rural residents, incorporating current data. This report shall also include aggregate data and information on current and projected primary workforce needs and the participation rate on surveys completed by clinicians for the Health Professions Data Center.

The health status of rural residents was assessed using measures that reveal access, delivery and utilization of primary care. Demographic data highlights population risk factors associated with access to and utilization of primary care. The health status indicators highlighted in this report are those in which there was determined to be a likely statistical significance between rural and non-rural residents. Rural residents were more likely to be older, disabled, low income, uninsured, and veterans than non-rural residents. These demographic differences are consistent with the previous year's report. An analysis of barriers to care showed geographic disparities when considering travel to primary care appointments and population without a personal doctor or health care provider.

Regarding substance use and mental health, increased rural rates for alcohol- and/or drug-related inpatient admissions and improved rates of alcohol- and/or drug-related emergency department (ED) visits in non-rural New Hampshire eliminated the geographic disparities for these two indicators found in last year's report. However, a closer look at PHR rates found significant differences among these regions within the state; notably higher rates were found in both rural Winnipesaukee and non-rural Greater Manchester. Conflicting with the trend of improved rates of substance-related and self-harm ED visits for non-rural populations, non-rural suicide rates jumped in the rate.

When looking at the maternal health disparities between rural and non-rural NH we consider no or late prenatal care, post-term delivery, and smoking during pregnancy. Post-term delivery (42+ weeks) in rural dropped from last year's analysis resulting in no significant geographic differences this year. Though there was no significant disparity of no or late prenatal care rates by rurality, rates in Winnipesaukee are considerably higher than any other PHR. Rural residents continue to have higher rates of smoking during pregnancy than their non-rural counterparts, though rural rates have improved since the previous year.

Rural residents screened at lower rates than their non-rural counterparts for colonoscopy and mammography. These findings are consistent with the previous year's report. Medical checkup rates increased for both rural and non-rural populations but the rate is statistically higher in non-rural New Hampshire. No geographic disparity of dental visits was found this year.

Finally, select health outcomes were also statistically different between rural and non-rural New Hampshire. Prevention Quality Indicators (PQIs) are a measure of inpatient admissions that could have been avoided with proper access to primary care. Consistent with last year's findings, the rates of chronic composite and overall composite PQIs were statistically higher in non-rural New Hampshire compared to rural. In other words, non-rural residents were more likely to be admitted to the hospital for preventable medical complications than their rural counterparts. For both chronic and overall PQIs, the rates in Greater Manchester are markedly higher. The late-stage proportional rate of breast cancer is rural is significantly greater than in non-rural, suggesting a disparity in access and utilization of primary care services between the geographic regions. While there was no statistical difference between rates of death from all causes by rurality, a few PHRs stood out against the rest with considerably higher age-

adjusted rates. Rates of death from all causes were highest in Winnipesaukee, North Country, and Strafford County.

The Health Professions Data Center (HPDC) collected full workforce data on physicians, physician assistants (PAs), psychologists, registered dental hygienists (RDHs), and alcohol and drug counselors in 2020 and 2021 and will have full workforce data for advanced practice registered nurses (APRNs), dentists, and mental health practitioners in 2022. Data summaries for the medical (physicians, PAs, APRNs) and behavioral (psychiatrists, mental health practitioners, psychologists, alcohol and drug counselors) workforces compare supply and capacity difference between the provider types when considering practice status, demographics, distribution, practice capacity, retention, and access to care.

INTRODUCTION

The Department of Health and Human Services, Division of Public Health Services, Bureau of Public Health Systems, Policy and Performance, Rural Health and Primary Care (RHPC) Section includes the Primary Care Office (PCO) and the State Office of Rural Health (SORH); under which the Medicare Rural Hospital Flexibility Program (Flex), which supports the Critical Access Hospitals and the Small Rural Hospital Improvement Program (SHIP), the State Loan Repayment Program (SLRP) and the Health Professions Data Center (HPDC) exist. The mission and function of RHPC is to support communities and stakeholders that provide innovative and effective access to quality health care services with a focus on the low income, uninsured, and Medicaid populations of New Hampshire (NH). In order to achieve this, RHPC focuses efforts on the following goals:

- Access - To increase access to quality health care services for rural and underserved populations.
- Quality - To improve the quality of care provided at Critical Access Hospitals and Rural Health Clinics.
- Sustainability – To improve financial and operational outcomes of Critical Access Hospitals and Rural Health Clinics.
- Workforce – To quantify and increase the number of health care providers serving rural and underserved populations.

In 2008, the NH SORH was established in RSA 126-A:5, XVIII(a) to

1. Link rural health and human service providers with state and federal resources;
2. Seek long-term solutions to the challenges of rural health;
3. Increase access to health care in rural and underserved areas of the state;
4. Improve recruitment and retention of health professionals in rural areas;
5. Provide technical assistance and coordination to rural communities and health organizations;
6. Maintain a clearinghouse for collecting and disseminating information on rural health care issues and innovative approaches to the delivery of health care in rural areas;
7. Coordinate rural health interests and activities; and
8. Participate in strengthening state, local, and federal partnerships.

Following the establishment and charges of the SORH, HB 1692 (Chapter 114, 2010) authorized the SORH to collect and organize data regarding the current and anticipated supply of health care professionals who make up the state's primary care workforce and the current and anticipated demand for primary care services in the future by planning and budgeting for a NH Health Professions Data Center to collect this data.

RSA 126-A:5, XVIII-a(e) requires that the State Office of Rural Health (SORH) submit a report on or before December 1, 2019, and annually thereafter to the speaker of the house of representatives, the senate president, the governor, the oversight committee on health and human services established under RSA 126-A:13, the chairs of the house and senate executive departments and administration committees, the chairs of the house and senate policy committee having jurisdiction over health and human services, and the commission on primary care workforce issues established by RSA 126-T:1, on the health status of rural residents, incorporating current data from the Bureau of Health Statistics and Data Management.

In 2019, RSA 126-A:5, XVIII-a was amended to include that the SORH shall receive and collect data regarding surveys completed by participating licensees pursuant to RSA 317-A:12-a, RSA 318:5-b, RSA 326-B:9-a, RSA 328-D:10-a, RSA 328-F:11-a, RSA 329:9-f, RSA 329-B:10-a, RSA 330-A:10-a, and RSA 330-C:9-a. Annual reports submitted by the SORH shall incorporate aggregate data and information on current and projected primary workforce needs and the participation rate on surveys completed by clinicians.

All reports produced by the RHPC can be found on the Department's Rural Health and Primary Care Section website publications page https://www.dhhs.nh.gov/dphs/bchs/rhpc/publications.htm. They include the State Loan Repayment Program reports, Primary Care Needs Assessments and Health Professions Data Center reports.

SUMMARY OF ACTIVITIES FOR CALENDAR YEAR 2021

Health Status of Rural Residents

New Hampshire is one of the oldest states in the country; originating as a land grant in 1623 and becoming a state in 1775. With its 1,300 lakes and ponds, 40,000 miles of river and 18 miles of seashore, NH is the 45th largest state at 190 miles long and 70 miles wide. NH is bordered by Canada on the north and by Massachusetts on the south. On the east is the Atlantic Ocean and Maine and on the west is Vermont. New Hampshire's scenic rivers, mountain ranges, lakes and agricultural lands define the state's culture and geography but also create physical boundaries and barriers to the resources that improve health. The topography lends itself to difficult driving and long distances between places, particularly for rural residents. Access to primary and specialty medical, oral, behavioral health care can be a significant challenge due to New Hampshire's geographical location and landscape.

Over 37% of the population and 84% of the landmass in New Hampshire is considered rural;[1] most of the land area lies north and west of the capital Concord. The majority of New Hampshire towns are considered rural, with non-rural areas located in the south east and south central regions and primarily rural areas in the western, central and northern sections. The White Mountain National Forest separates the northernmost rural section of the state, which consists of Coos County. Coos County, known as the North Country, has the largest landmass but the smallest population by county. The three (3) most urban

[1] Economic Research Service, United States Department of Agriculture, 2017 New Hampshire State Data. Retrieved on 10/09/2018 from https://data.ers.usda.gov/reports.aspx?ID=17854; Division of Forests and Lands, New Hampshire Department of Natural and Cultural Resources. Retrieved on 10/09/2018 from https://www.nhdfl.org/reports/forest-statistics.

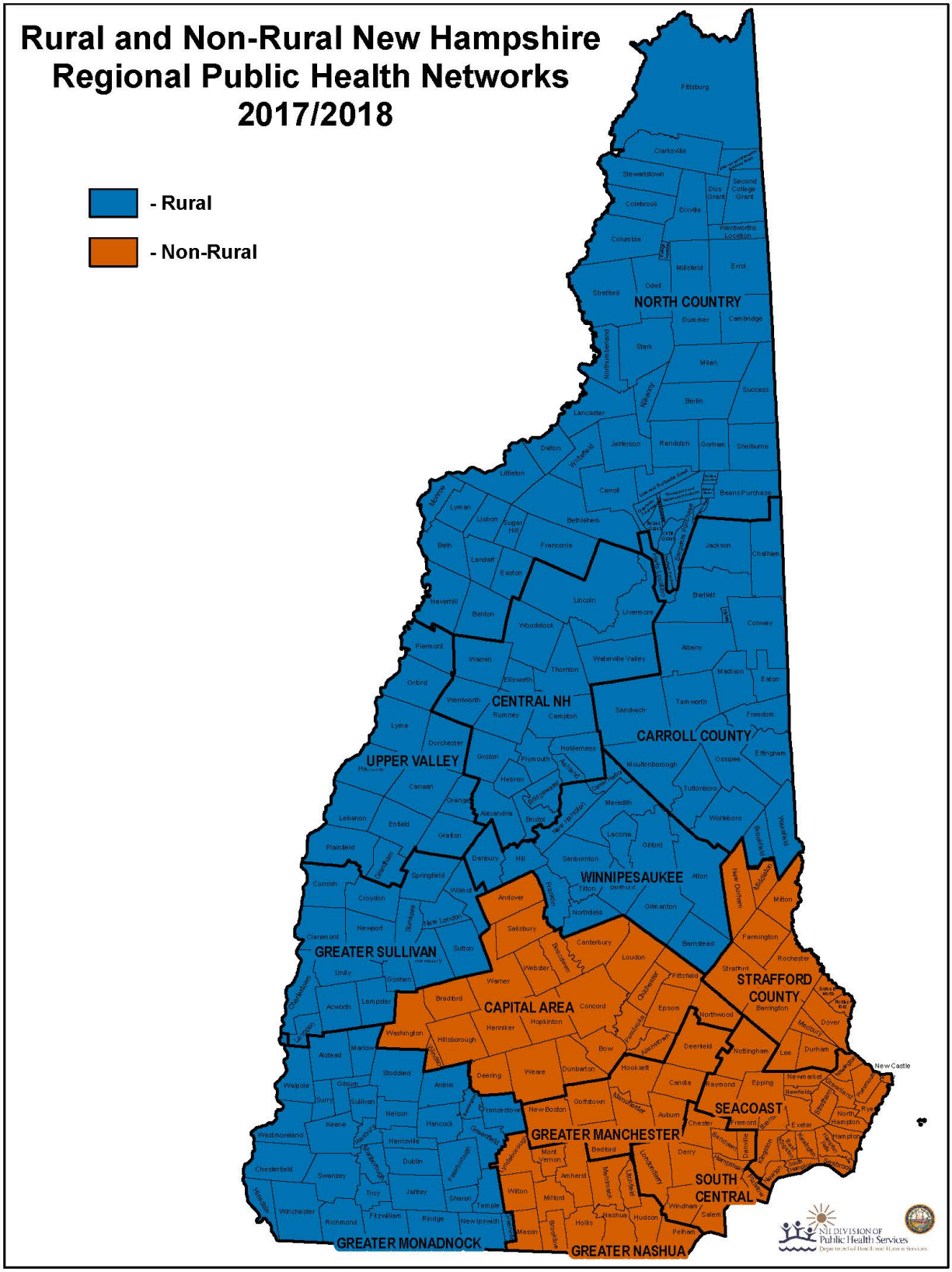
or metro areas of NH are Manchester, Nashua and Concord, all located in the state's southern tier where the majority (53%) of the population lives. NH's population is disproportionate as density increases from North to South. Population density ranges from 20 people per square mile in Coos County to 775 people per square mile in the Greater Nashua region.[2]

In July 2013, the NH DHHS, through the Bureau of Drug and Alcohol Services (BDAS) and Division of Public Health Services (DPHS) established a strategic partnership to align multiple regional and local public health partnerships into one integrated system. The Regional Public Health Networks (RPHNs), a network of 13 NH regions, integrates multiple public health initiatives and services into a common network of community stakeholders for communities with comparable public health issues and priorities in order to improve health outcomes specific to these regions. In place of counties or other geographically defined areas, DPHS, including Rural Health and Primary Care (RHPC), uses these RPHNs when reporting on geographic areas of the state. This ensures both consistency and use of NH-appropriate definitions. RHPC defines rurality for RPHN using population and population density measures (Figure 1). RPHNs with a population of 100,000 or less and with a population density of 150 people per square mile or less are considered rural. RPHNs that don't meet these criteria are categorized as non-rural. The Greater Nashua RPHN has the highest population and population density in NH with 223,563 residents and 457 people per square mile, while North Country - which has the largest land mass of the RPHNs - is the least densely populated Region with only 18.4 people per square mile.[3]

[2] New Hampshire State Plan on Aging. Bureau of Elderly and Adult Services, DHHS. October 2015 – September 2019. Retrieved on 10/09/2018 from https://www.dhhs.nh.gov/dcbcs/beas/documents/stateplan.pdf.

[3] United States Census Bureau. Census of Population and House and Geography Division. Prepared by indexmundi. Retrieved on 10/11/2018 from https://www.indexmundi.com/facts/united-states/quick-facts/new-hampshire/population-density#map.

Figure 1.


Rural and Non-Rural New Hampshire
Regional Public Health Networks
2017/2018
- Rural
- Non-Rural
NORTH COUNTRY
CENTRAL NH
CARROLL COUNTY
UPPER VALLEY
WINNIPESAUKEE
GREATER SULLIVAN
CAPITAL AREA
STRAFFORD COUNTY
SEACOAST
GREATER MANCHESTER
SOUTH CENTRAL
GREATER MONADNOCK
GREATER NASHUA
NH DIVISION OF Public Health Services

It is widely accepted that measuring the health status of a population or region is best achieved by using primary care measures. As the first point of contact for all medical concerns and the primary source of care continuity and care coordination to other networks of care, primary care measures reveal access to, delivery of and utilization of care, essential to determining the health status of the population. The health indicators included in this report come directly from the 2021 Primary Care Office Needs Assessment Report and are visualized using Tableau. Because there are no national standardized measures or consensus as to which health behaviors and outcomes best predict primary care access and utilization, the indicators contained in the report were selected from the NH State Health Improvement Plan Priority Areas as the most likely to be impacted by primary care and most indicative of the population's health status. Demographic data highlights population risk factors associated with access to and utilization of primary care.

Selected measures were classified under the following categories (for a full list of analyzed health measures, see Appendix A):

- Demographics
- Barriers to Care
- *Workforce Supply
- Substance Use and Mental Health
- Maternal Health
- **Preventive Care
- Outcomes

* Refer to the Health Professions Data Center figures on distribution.
** High blood pressure and cholesterol measures are excluded from this year's report due to collection in odd years only

Data statistics (rates and accompanying intervals at the 95% confidence level) were compiled by the Bureau of Public Health Statistics and Informatics at the NH Department of Health and Human Services and by Community Health Institute, John Snow Inc. Apart from the All-Payer Claims Database (APCD) statistics, which do not contain confidence intervals, the visualizations contained in this report represent indicators found to be statistically different - according to confidence intervals (CI) - in rural and non-rural areas of the state. Indicators with near overlapping CIs for estimated rates were also included, as these relationships warrant further investigation using statistical analysis to compute a p-value to assess statistically significant differences at the 95% confidence level. Data included in this report comes from the following sources:

Vital Records – Division of Vital Records Administration (DVRA), a division of the New Hampshire Department of State. DVRA is responsible for recording births, deaths, marriages, and divorces. Datasets utilized include Birth Certificates, 2016-2020; Death Certificates, 2016-2020. The indicator "Smoked during Pregnancy" uses percentages based on the number of live births where tobacco use was self-reported and indicated as being used in any time during pregnancy. Late prenatal care is defined as care received after the first trimester of pregnancy.

BRFSS - The Behavioral Risk Factor Surveillance System (BRFSS) is a collaborative project between all of the states in the United States (US) and participating US territories and the Centers for Disease Control and Prevention (CDC). The BRFSS is administered and supported by CDC's Population Health Surveillance Branch, under the Division of Population Health at the National Center for Chronic Disease Prevention and Health Promotion. The BRFSS is a system of ongoing health-related telephone surveys designed to collect data on health-related risk behaviors, chronic health conditions, and use of preventive

services from the noninstitutionalized adult population (≥ 18 years) residing in the United States. This dataset utilizes 2018 data.

American Community Survey (ACS) - The American Community Survey (ACS) is an ongoing survey by the U.S. Census Bureau. It regularly gathers information previously contained only in the long form of the decennial census, such as ancestry, citizenship, educational attainment, income, language proficiency, migration, disability, employment, and housing characteristics. The Census Bureau randomly sample addresses in every state, the District of Columbia, and Puerto Rico. This dataset utilizes 2015-2019 data.

Cancer Registry - The New Hampshire State Cancer Registry (NHSCR) is a statewide, population-based cancer surveillance program that collects incidence data on all cancer cases diagnosed or treated in the State of New Hampshire. This dataset utilizes 2014-2018 data. Late-stage diagnosis for colon and rectal cancer includes only distant, while late-stages for breast cancer includes both regional and distant states. The In-situ stage was excluded from all cancer events (incidence) in this analysis to target rates of invasive cancers.

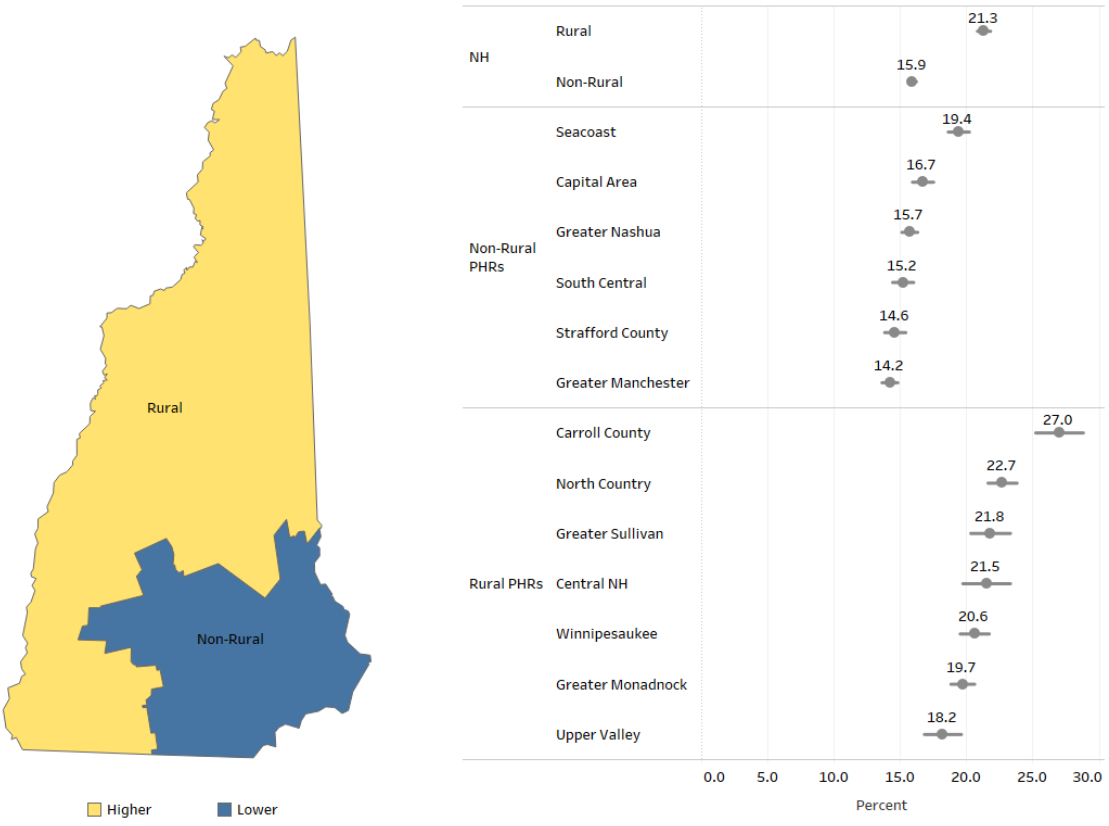
NH Uniform Healthcare Facility Discharge Dataset (UHFDDS) - The New Hampshire UHFDDS contains data on health care encounters reported by hospitals licensed by the New Hampshire Department of Health and Human Services, as well as from select specialty facilities. UHFDDS contains patient-level data with demographic variables including age, sex, and county or state of residence, and clinical variables including primary and secondary diagnoses and procedures. Drug and alcohol related visits include acute alcohol and/or drug poisoning as well as injuries/conditions related to acute drug and/or alcohol use. Records with diagnosis codes describing intentional self-harm or assault were not included in the alcohol/drug count, nor were records with only codes for chronic drug or alcohol related conditions, not indicating acute use. Dataset reflects 2019 data.

All-Payer Claims Database (APCD) – Managed by the NH Comprehensive Healthcare Information System (CHIS), the APCD contains claims data from commercial health insurers, public/government insurance programs, and self-insured employer plans. Data reflects claims in 2019.

Demographics

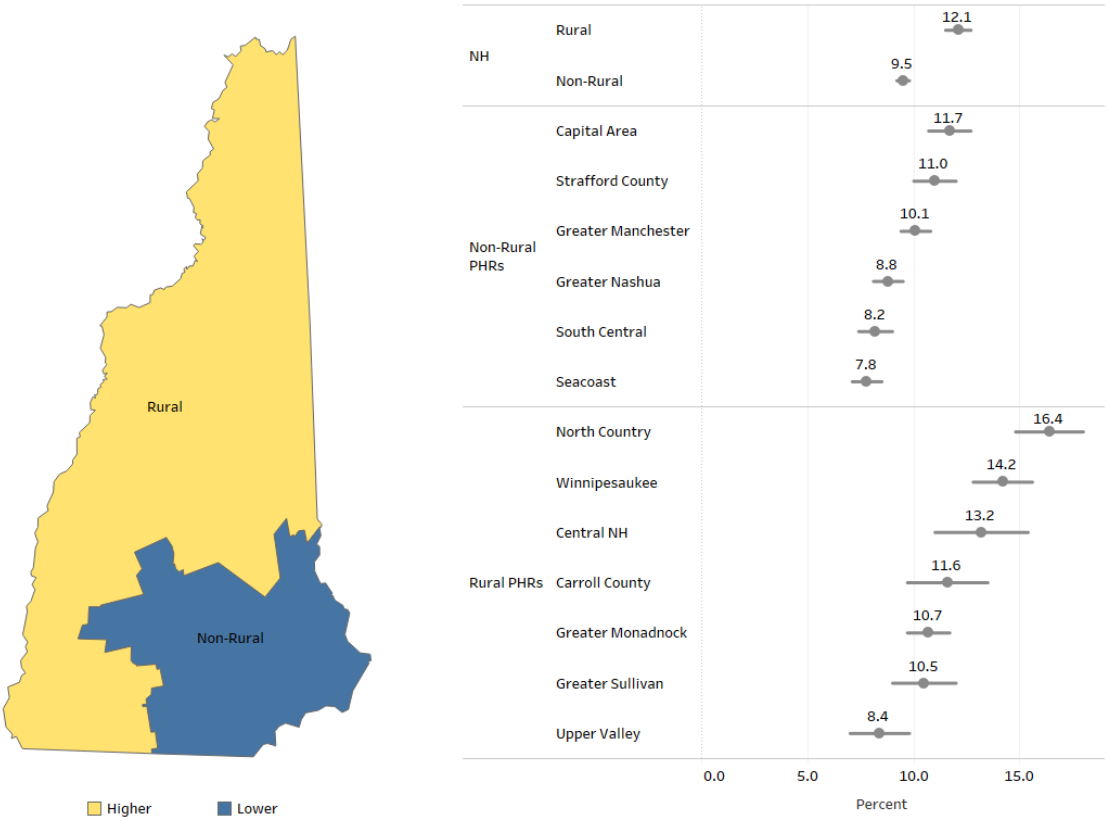
Significant demographic differences exist between rural and non-rural regions (Figures 2-8). Rural rates were higher than non-rural rates for senior age-65+ (by 34%), disability (by 27%), low income (by 41%), poverty (by 33%), uninsurance (by 39%), and veteran status (by 14%). Rates were highest in North Country for all measures with the exception of senior age and percentage uninsured, in which Carroll County rates were highest. The rate of non-fluent English speakers was twice as high in non-rural New Hampshire than in rural. These demographic differences are consistent with the previous year's report.

Figure 2. Percentage of Population 65+ Years Old, Rural/Non-Rural, 2015-2019, Crude Rate



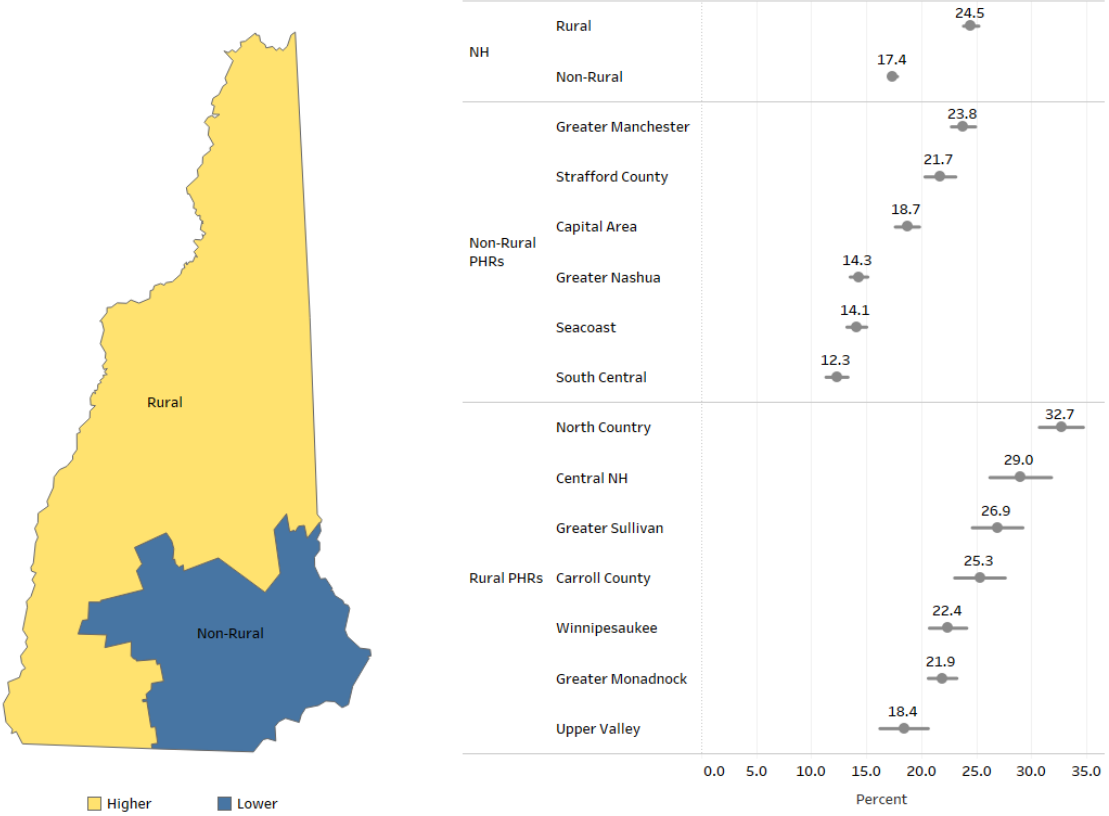
Source: U.S. Census Bureau, American Community Survey (ACS) 5 year estimates

Figure 3. Percentage of Population (18-64) Disabled, Rural/Non-Rural, 2015-2019, Crude Rate



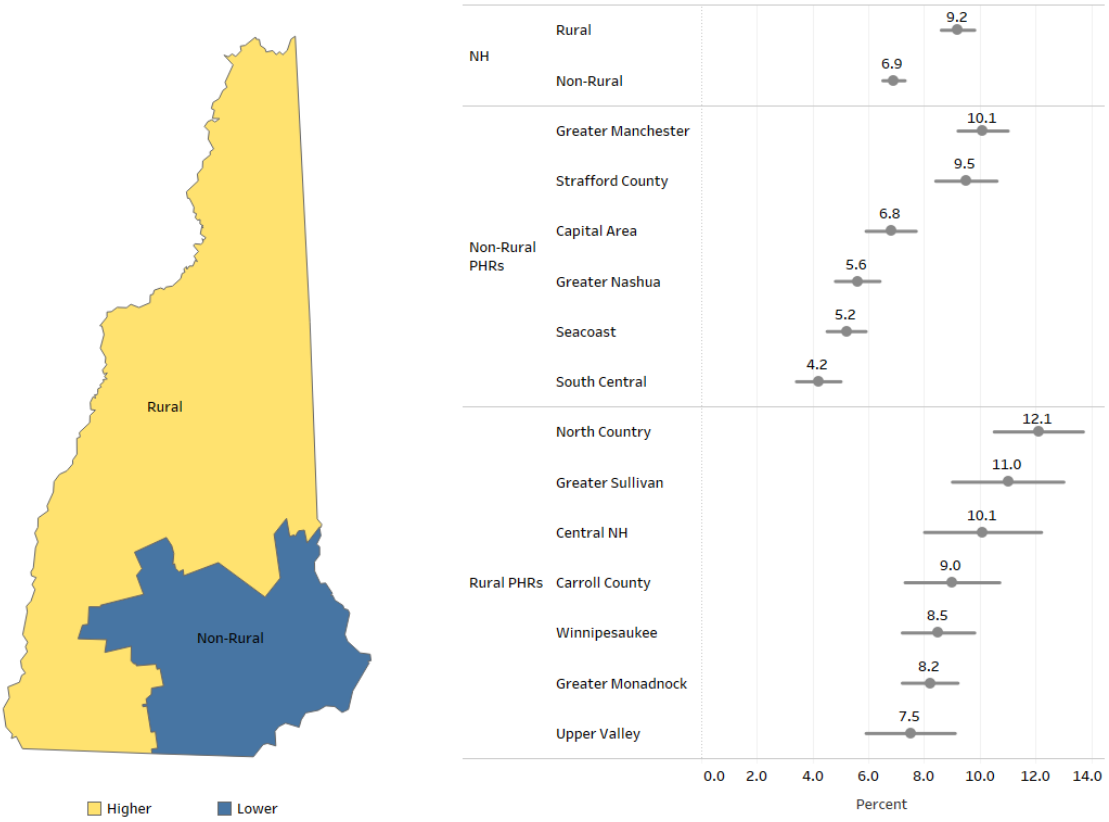
Source: U.S. Census Bureau, American Community Survey (ACS) 5 year estimates

Figure 4. Percentage of Low-Income Population (below 200% of the Federal Poverty Level, All Ages), Rural/Non-Rural, 2015-2019, Crude Rate



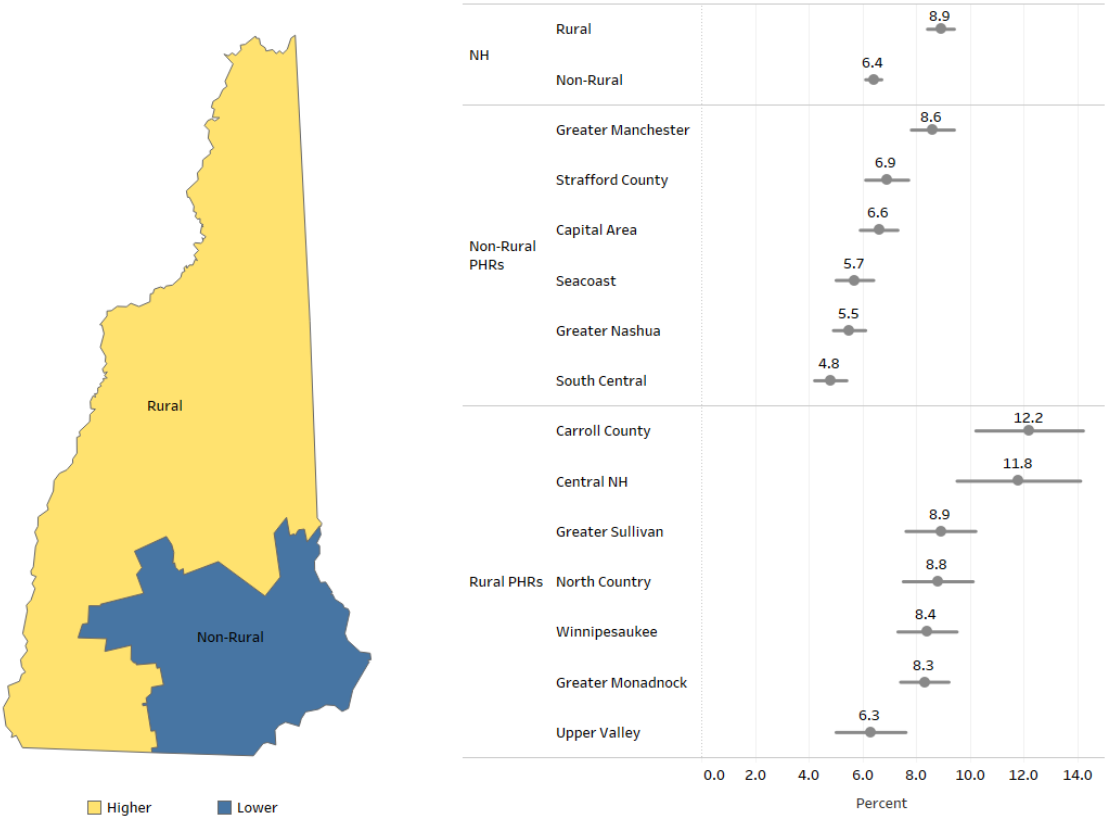
Source: U.S. Census Bureau, American Community Survey (ACS) 5 year estimates

Figure 5. Percentage of Population in Poverty (below 100% of the Federal Poverty Level, All Ages), Rural/Non-Rural, 2015-2019, Crude Rate



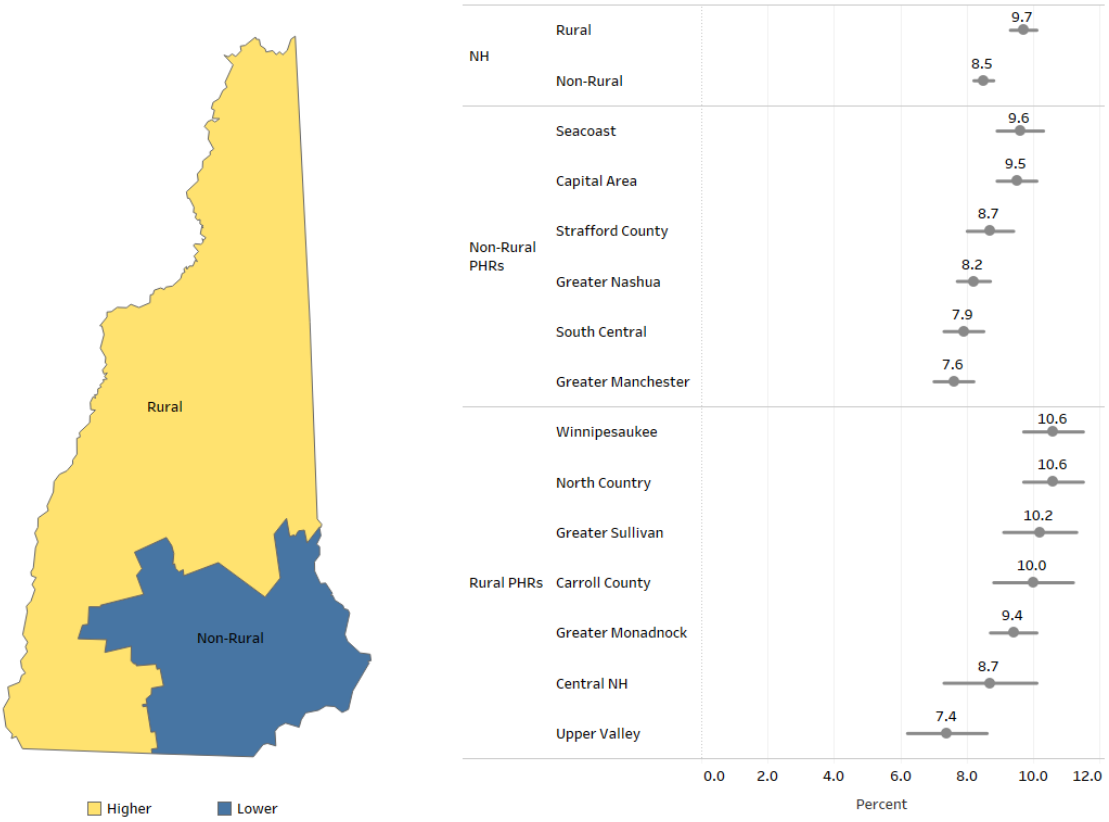
Source: U.S. Census Bureau, American Community Survey (ACS) 5 year estimates

Figure 6. Percentage of Population (<65+) Uninsured, Rural/Non-Rural, 2015-2019, Crude Rate



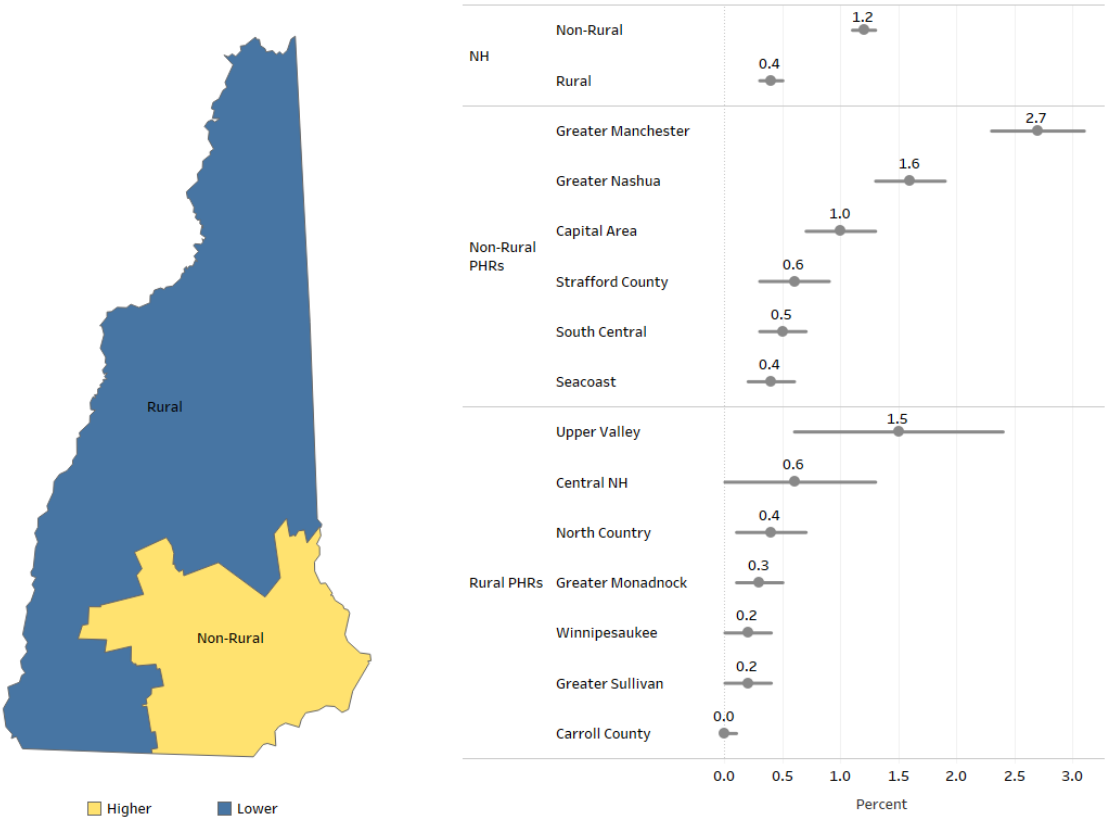
Source: U.S. Census Bureau, American Community Survey (ACS) 5 year estimates

Figure 7. Percentage of Population (18+) that is a Veteran, Rural/Non-Rural, 2015-2019, Crude Rate



Source: U.S. Census Bureau, American Community Survey (ACS) 5 year estimates

Figure 8. Percentage of Population (5+) not Fluent in English, Rural/Non-Rural, 2015-2019, Crude Rate

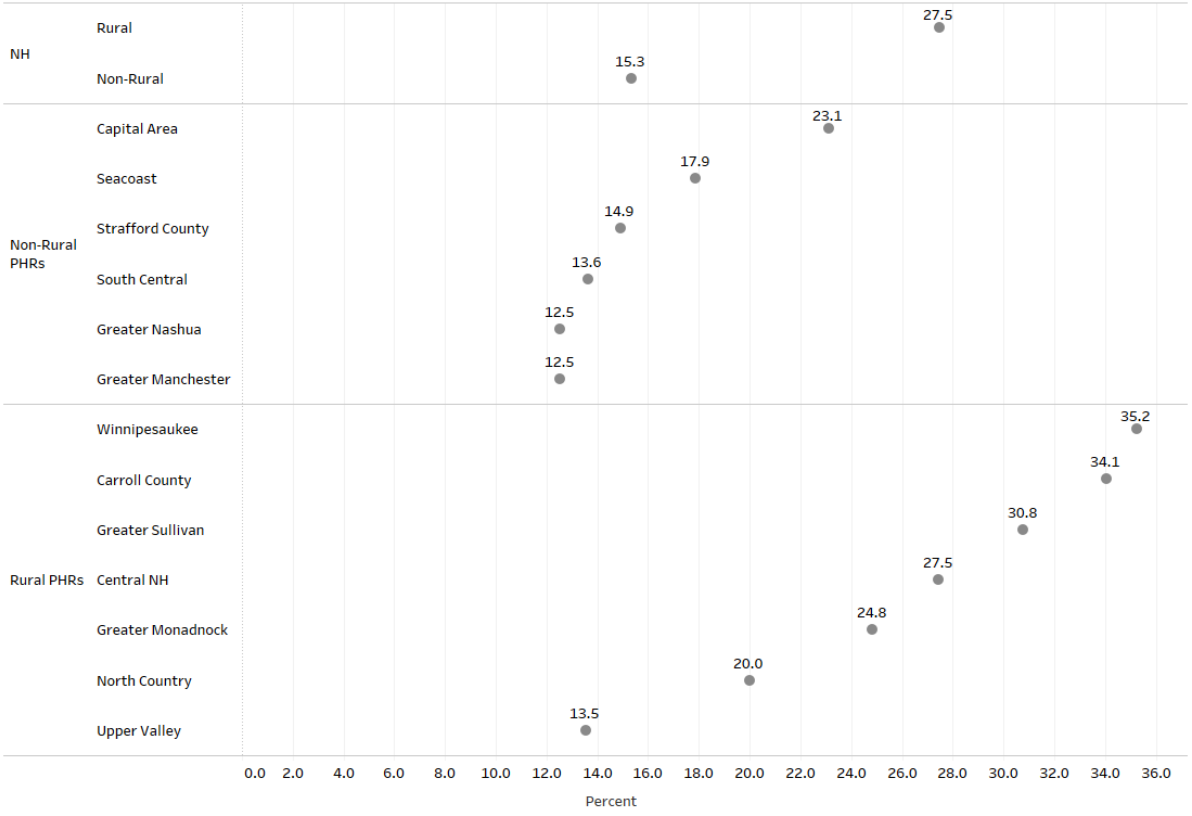


Source: U.S. Census Bureau, American Community Survey (ACS) 5 year estimates

Barriers to Care

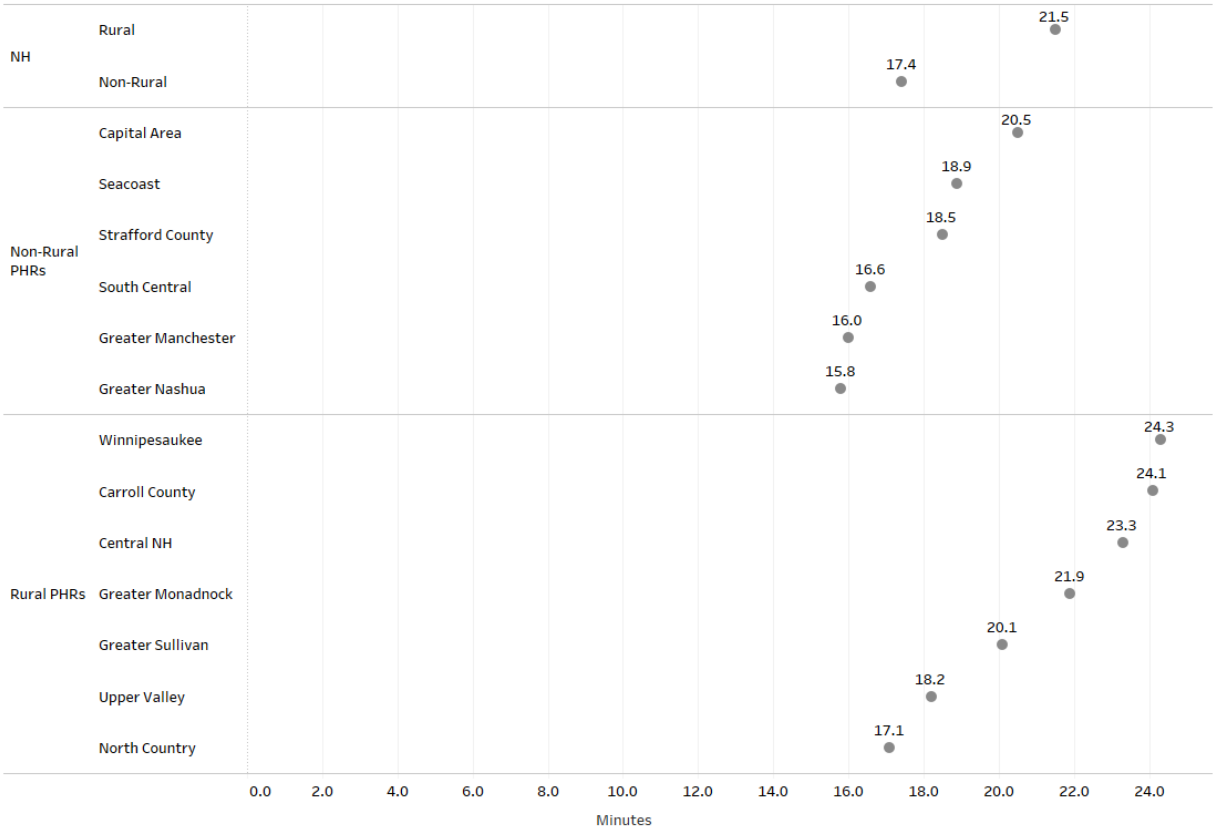
Travel times to health care visits are predictably longer for rural populations compared to non-rural, as rural residents face greater geographic barriers during travel. The percentage of primary medical care visits with travel times greater than 30 minutes, one way, is 80% higher for rural populations than non-rural (Figure 9). PHRs Winnipesaukee and Carroll County had the highest rates at 35% and 34% of visits, respectively; and as expected, the two most populated PHRs - Greater Manchester and Greater Nashua - had the lowest rates at 12.5% of visits each. The difference in mean travel time between rural and non-rural residents is less striking, with data reflecting just a four-minute difference by rurality (Figure 10). Once again, Winnipesaukee and Carroll County had the highest mean travel times (24 minutes), while Greater Manchester and Greater Nashua had the lowest (16 minutes). The percentage of New Hampshire's rural population without a personal doctor or health care provider jumped by one-third from 2017 to 2018 (13.7 v. 18.1), resulting in a statistical geographic disparity (Figure 11).

Figure 9. Percentage of Primary Medical Care Visits (All Ages) with Travel Times Greater than 30 Minutes One Way, Rural/Non-Rural, 2019, Crude Rate



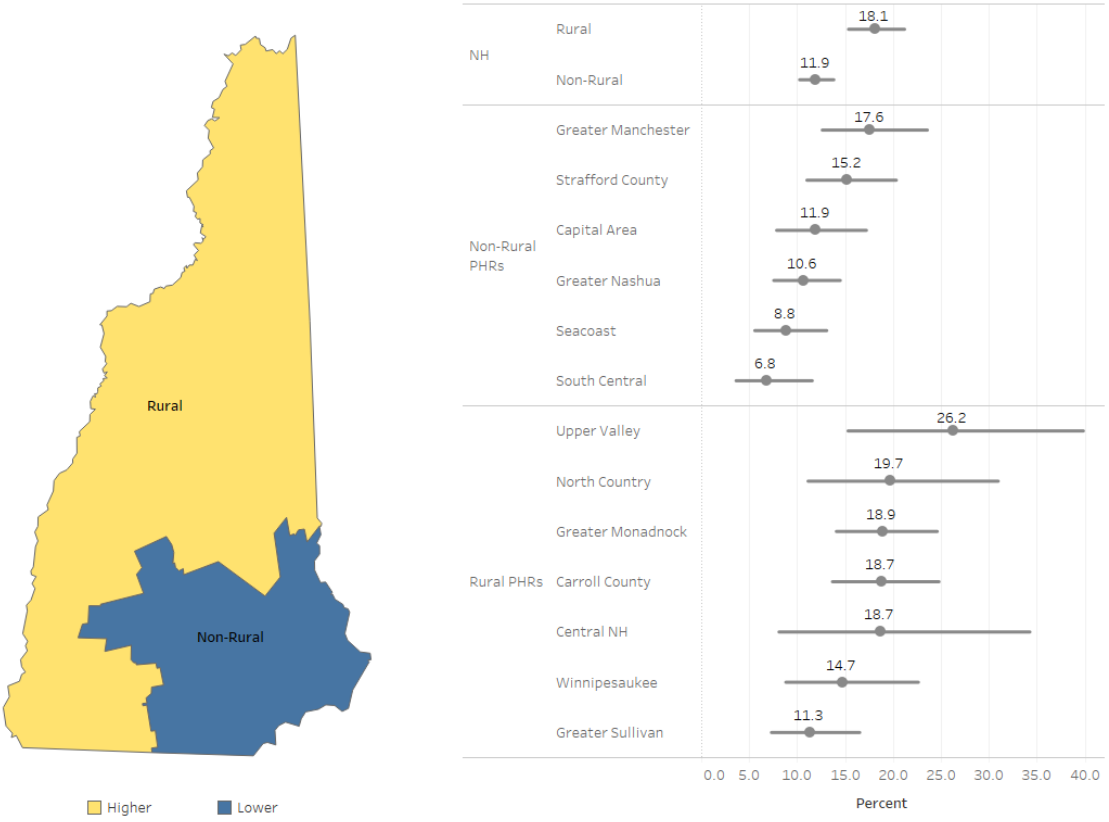
Source: New Hampshire Comprehensive Health Care Information System (CHIS)

Figure 10. Mean Travel Time to Primary Medical Care Visits (All Ages), Rural/Non-Rural, 2019, Crude Rate



Source: New Hampshire Comprehensive Health Care Information System (CHIS)

Figure 11. Percentage of Population (18+) without a Personal Doctor/Health Care Provider, Rural/Non-Rural, 2018, Crude Rate

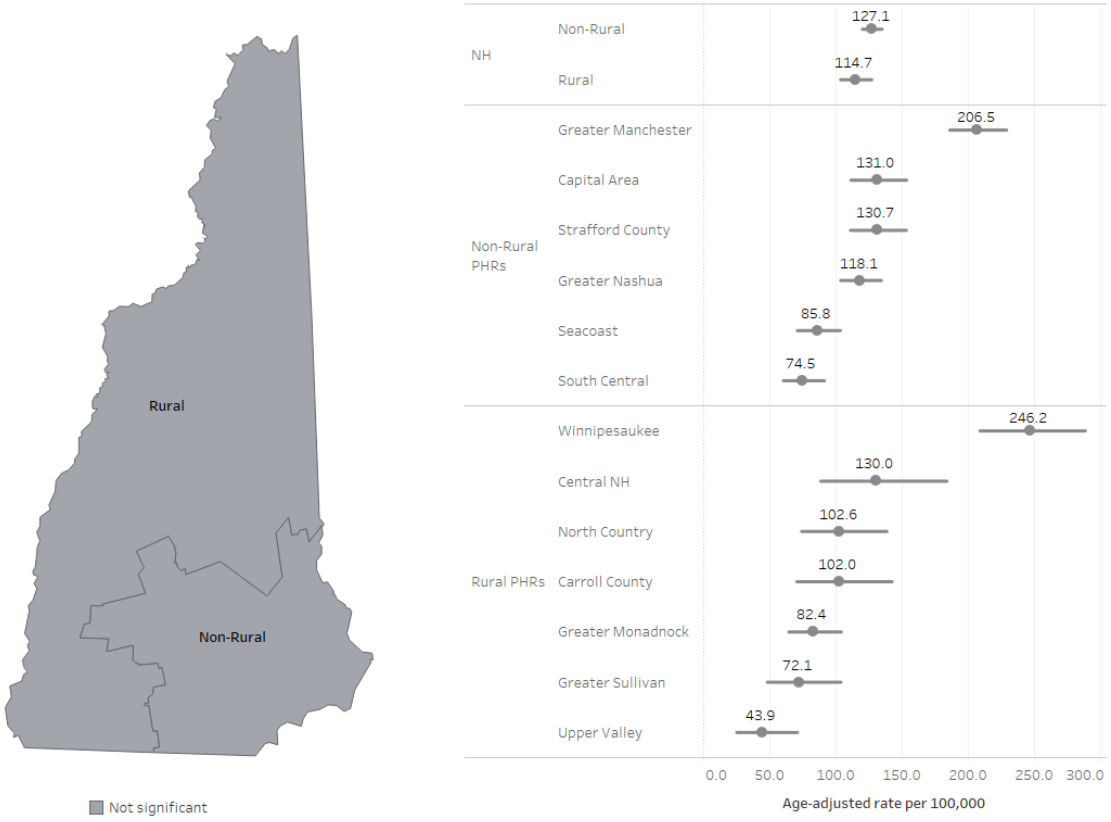


Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Substance Use and Mental Health

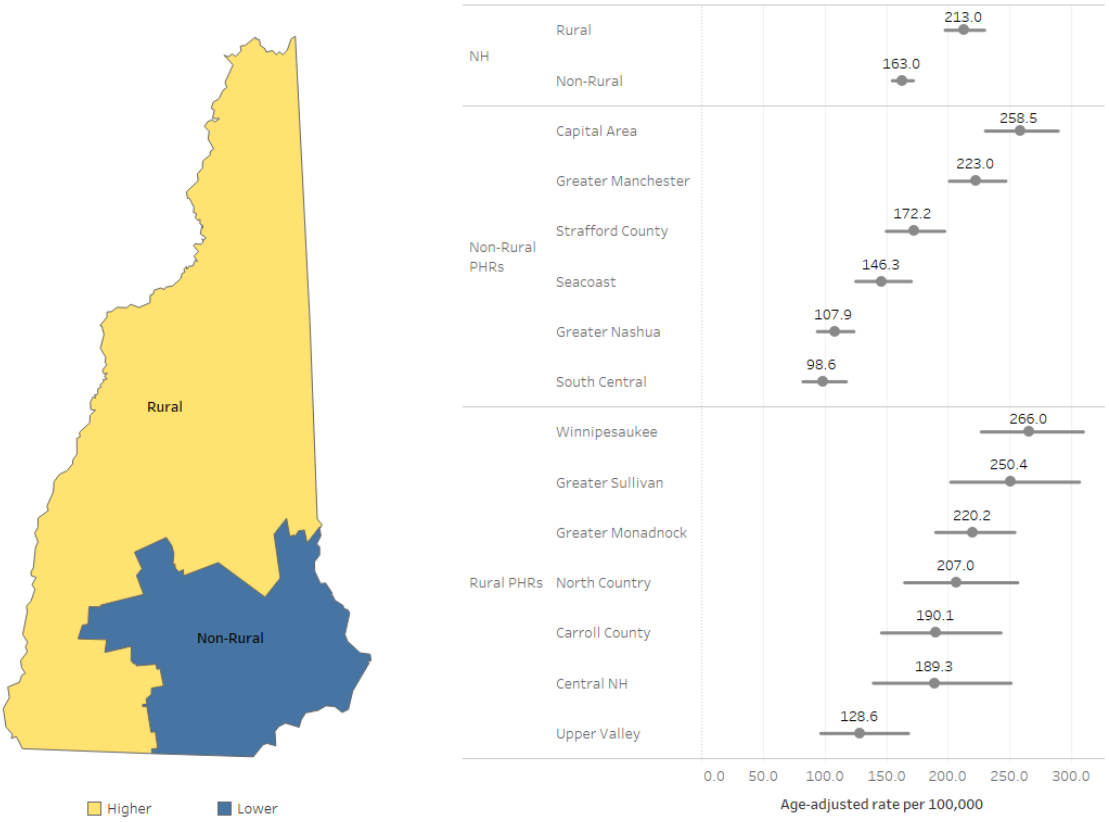
Figures 12 and 13 present the substance use and mental health indicators found to be statistical different by geography. Due to a 38% increase in the rural rate of alcohol- and/or drug-related inpatient admissions between 2018 and 2019 (15.1 v. 20.8), the geographic rates by rurality were not found to be significantly different, as they were in last year's report. Similarly, but as a result of improved rates in non-rural New Hampshire, the rates of alcohol- and/or drug-related emergency department (ED) visits were also not found to be significantly different between rural and non-rural New Hampshire, as was found in last year's analysis (148.1 v. 127.1; a 17% drop). However, it's worth noting that both rural Winnipesaukee and non-rural Greater Manchester PHR rates stand out as significantly higher than any other individual PHR; aggregated region by rurality; and the state, overall (Figure 12). ED admission rates were over twice as high in Winnipesaukee as the aggregated rural estimate and 63% as high in Greater Manchester than the aggregated non-rural estimate. ED visits for self-inflicted harm were found to be significantly different by rurality this year (Figure 13), as a result of an 18% drop in non-rural rates from 2018 to 2019 (191.8 v. 163.0). Conflicting with the trend of improved rates of substance-related and self-harm ED visits for non-rural populations, suicide rates were not found to be significantly different by geography this year due to a jump in the non-rural rate. While the suicide rate for rural New Hampshire increased by a negligible amount (3%), there was a 12% increase in the non-rural rates (15.4 v. 17.2.).

Figure 12. Drug & Alcohol Related Emergency Department Visits (All Ages), Rural/Non-Rural, 2019, Age-Adjusted Rate



Source: NH Hospital Discharge Data Set (HDDS)

Figure 13. Self-Inflicted harm - Emergency Department Visits (All Ages), Rural/Non-Rural, 2019, Age-Adjusted Rate

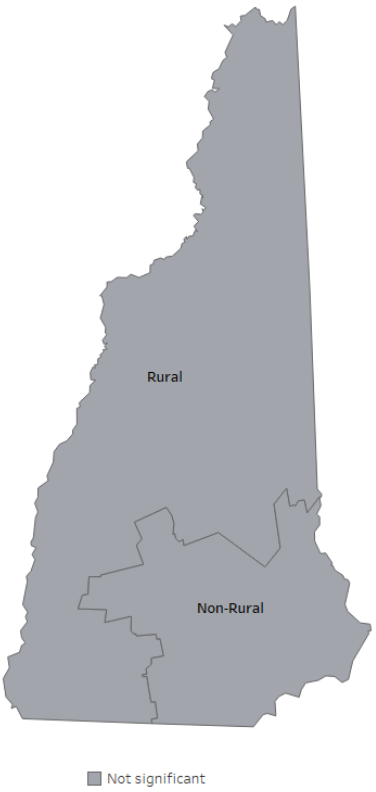


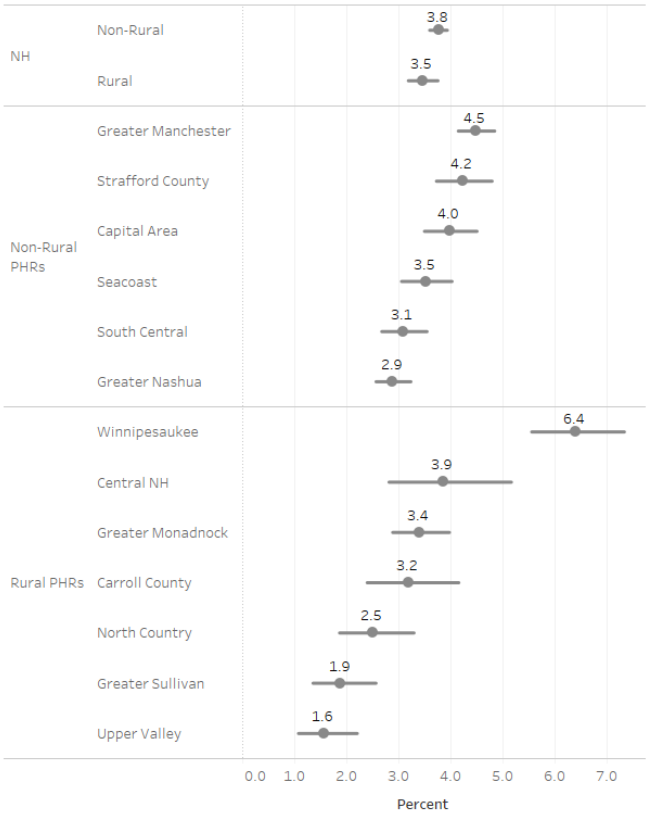
Source: NH Hospital Discharge Data Set (HDDS)

Maternal Health

Figures 14 and 15 visualize the maternal health disparities between rural and non-rural NH when considering no or late prenatal care and smoking during pregnancy. Due to an almost 40% drop in post-term delivery (42+ weeks) in rural from last year's analysis of vital records (1.0 v. 0.7), no significant geographic differences were found this year. Though there was no significant disparity of no or late prenatal care rates by rurality, rates in Winnipesaukee are considerably higher by a significant margin when compared to rates by PHR, aggregated region by rurality, and the state (Figure 14). Rural residents continue to have higher rates of smoking during pregnancy than their non-rural counterparts (Figure 15), though the rural rates have fallen by 15% since last year's data pull (16.6 v. 14.4).

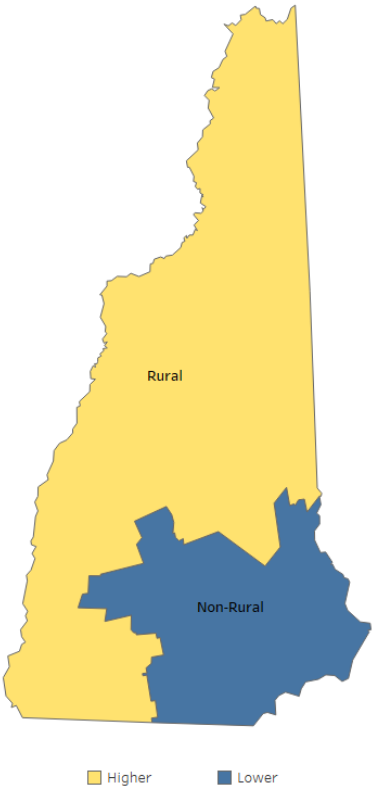
Figure 14. Percentage of Population (Females, Live Births, All Ages) that Received No or Late Prenatal Care, Rural/Non-Rural, 2016-2020, Crude Rate





Source: NH Vital Records Birth Certificate Data

Figure 15. Percentage of Population (Females, Live Births, All Ages) that Smoked during Pregnancy, Rural/Non-Rural, 2016-2020, Crude Rate



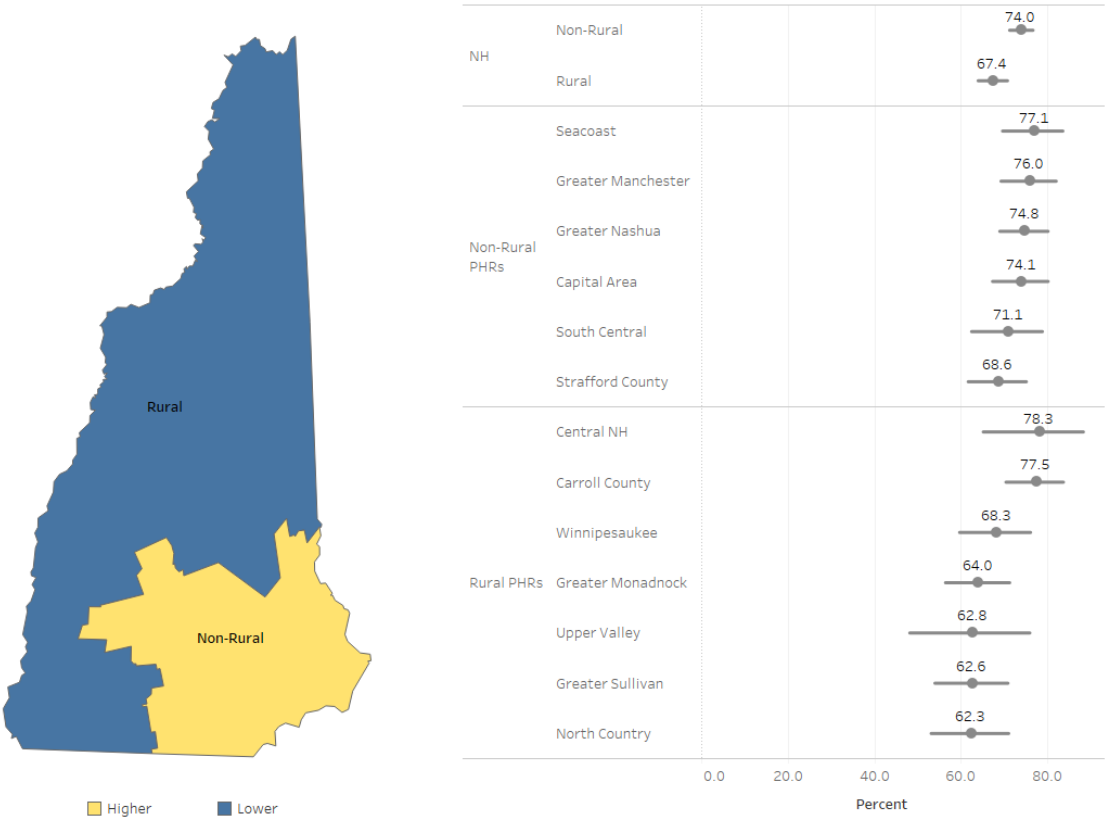


Source: NH Vital Records Birth Certificate Data

Preventive Care

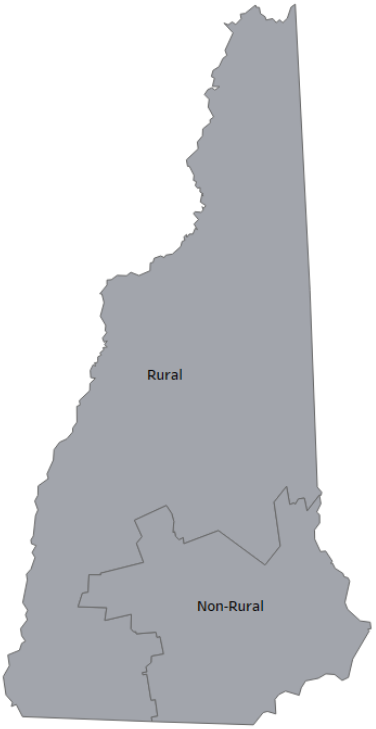
As illustrated in Figures 16 and 17 below, rural residents screen at lower rates than non-rural residents for colonoscopy and mammography. Because the confidence intervals for colonoscopy were so close (0.5%) and mammography rates overlapped by an equally slight margin (0.3%) – statistical analysis to compute p-values will better assess whether differences exist by rurality. These findings are consistent with the previous year's report. Although Winnipesaukee figures throughout this report show the PHR to have elevated risk when considering many primary care indicators, this region had the second-highest rate of mammography, less than 1% lower than Upper Valley's rate, which contains Dartmouth Hitchcock Medical Center (Figure 17). While the percentage of both rural and non-rural populations that had a medical checkup in the last year increased from 2017 estimates; the rate is statistically higher in non-rural New Hampshire, as shown in Figure 18 (though the CIs overlap by less than 0.2%). No geographic disparity of dental visits was found this year, as the percentage of non-rural residents that reported no dental visit within the past year increased by 15% from 2016 to 2018 (26.0 v. 29.8).

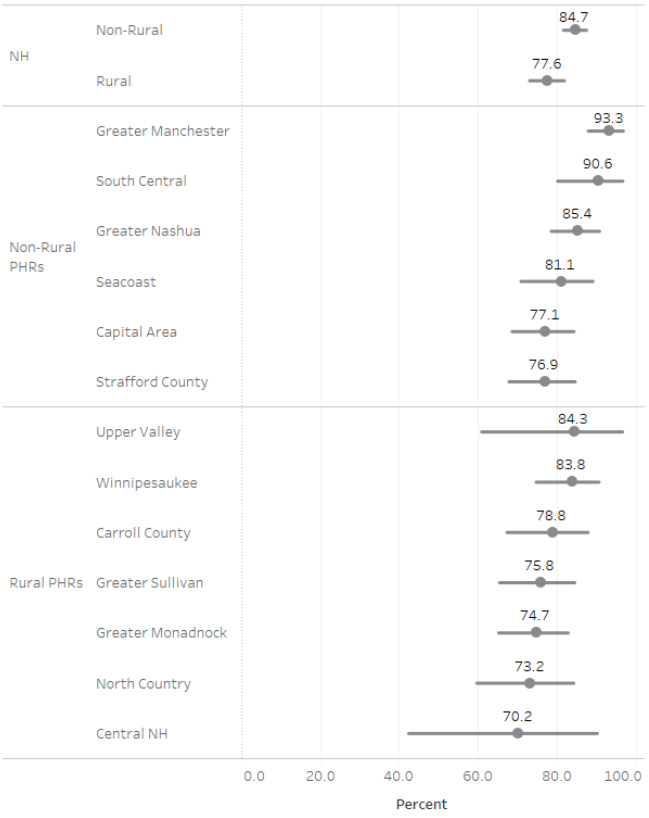
Figure 16. Percentage of Population (50-75) that had a Colonoscopy in the past 10 Years, Rural/Non-Rural, 2018, Crude Rate



Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Figure 17. Percentage of Women (50-74) that had a Mammogram in the past 2 Years, Rural/Non-Rural, 2018, Crude Rate

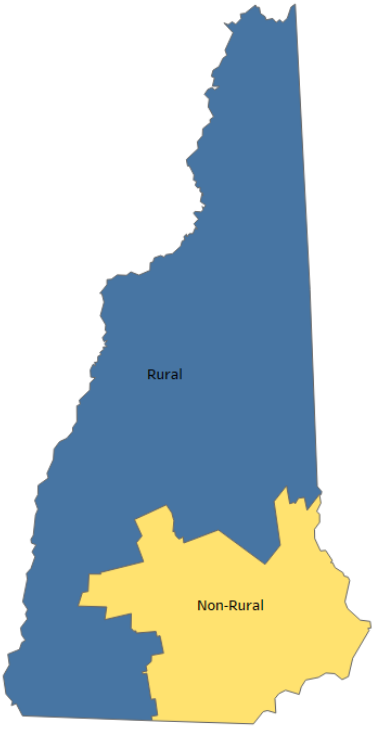


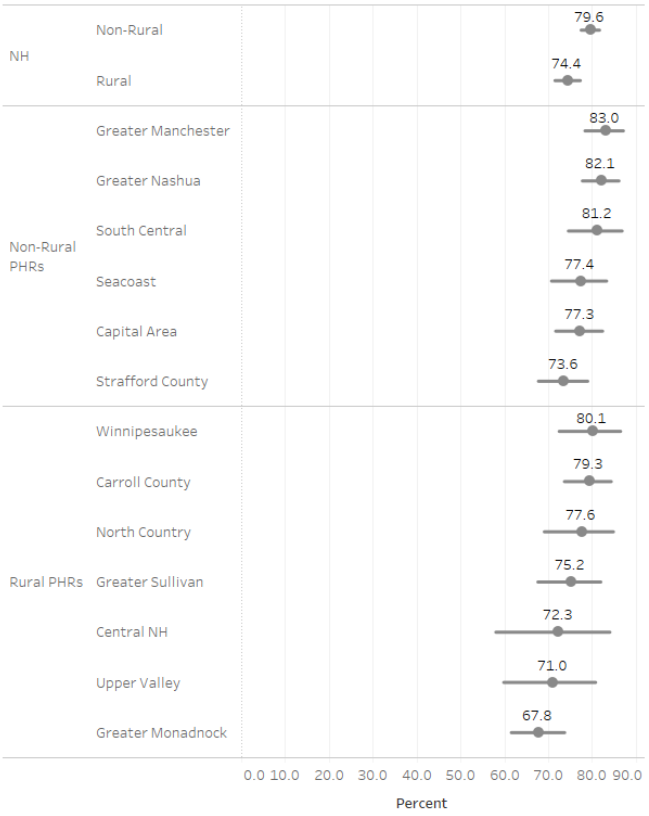


Not significant

Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Figure 18. Percentage of Population (18+) who had Check-Up in the past Year, Rural/Non-Rural, 2018, Crude Rate





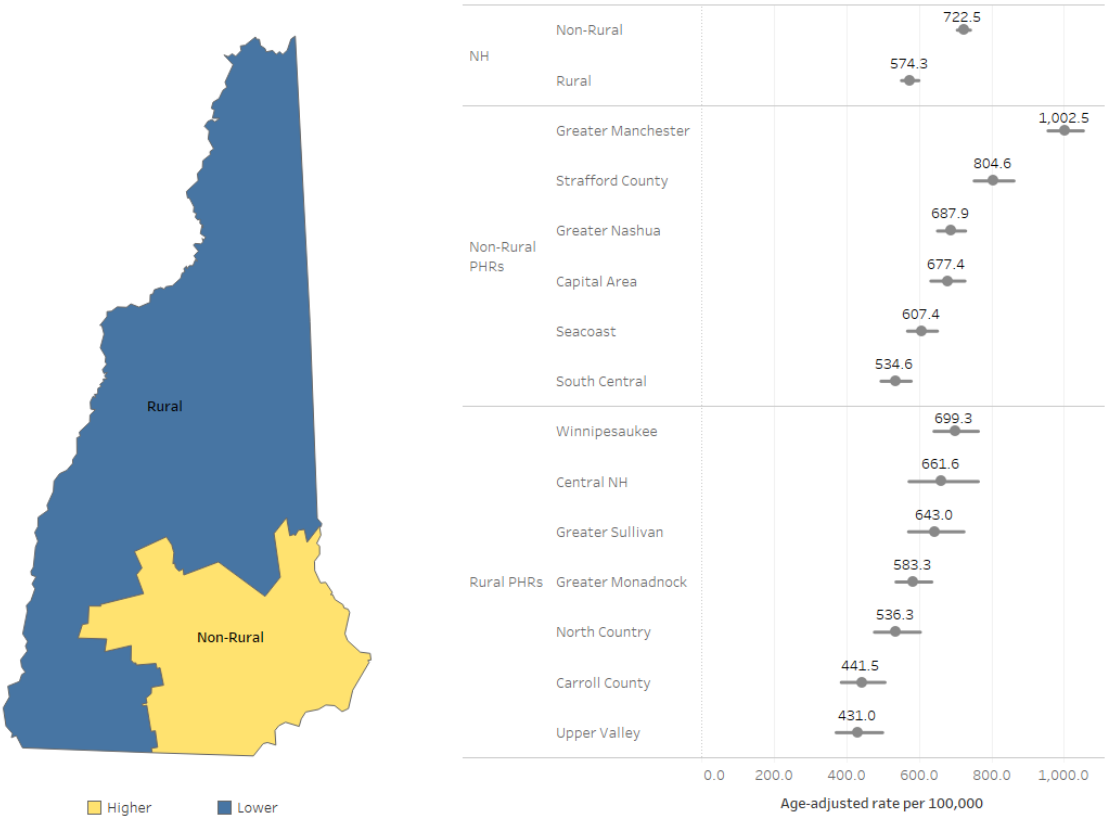
Higher Lower

Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Outcomes

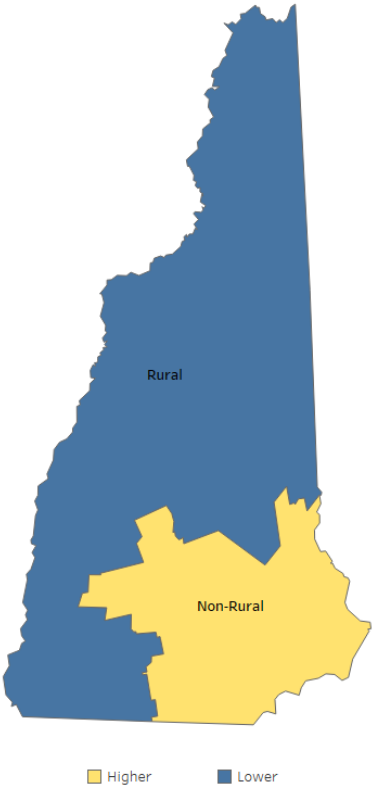
Prevention Quality Indicators (PQIs) are a measure of inpatient admissions that could have been avoided with proper access to primary care. Consistent with last year's findings, the rates of PQIs were statistically higher in non-rural New Hampshire compared to rural. In other words, non-rural residents were more likely to be admitted to the hospital for preventable medical complications than their rural counterparts. Chronic composite rates were over one-quarter higher and overall composite rates about 20% higher for non-rural compared to rural populations (Figures 19 and 20). For both PQIs, the rates in Greater Manchester are markedly higher than any other individual PHR; aggregated region by rurality; and state rate.

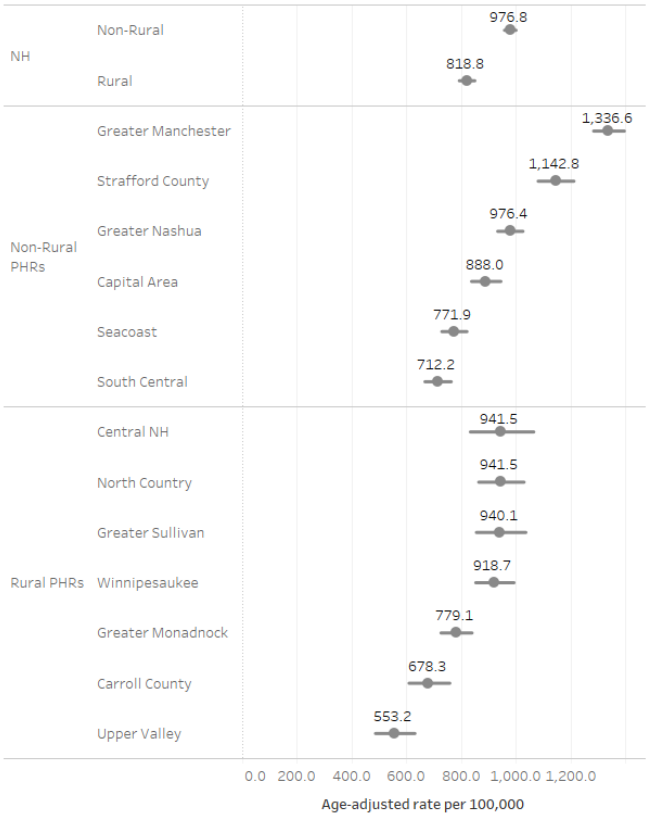
Figure 19. Preventation Quality Indicators (PQI): Chronic Composite - Inpatient Admissions (18+), Rural/Non-Rural, 2019, Age-Adjusted Rate



Source: NH Hospital Discharge Data Set (HDDS)

Figure 20. Preventation Quality Indicators (PQI): Overall Composite - Inpatient Admissions (18+), Rural/Non-Rural, 2019, Age-Adjusted Rate

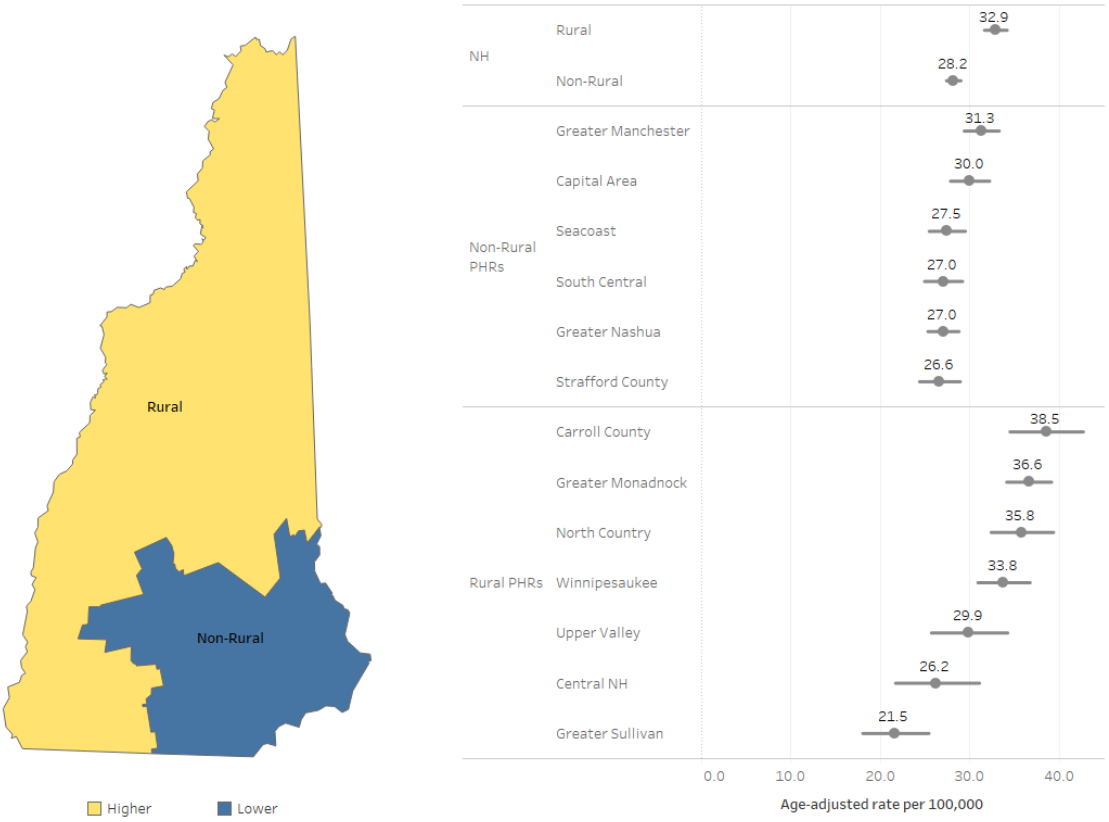




Source: NH Hospital Discharge Data Set (HDDS)

Because this report aims to capture disparities in access and utilization of primary care services between rural and non-rural areas, we used the proportion of all breast cancer incidence diagnosed at a late stage to measure geographic differences as opposed to late-stage rate. Figure 21 illustrates the disparity in late-stage proportional rates between rural and non-rural residents, with late-stage diagnosis rates 17% higher for rural than non-rural populations.

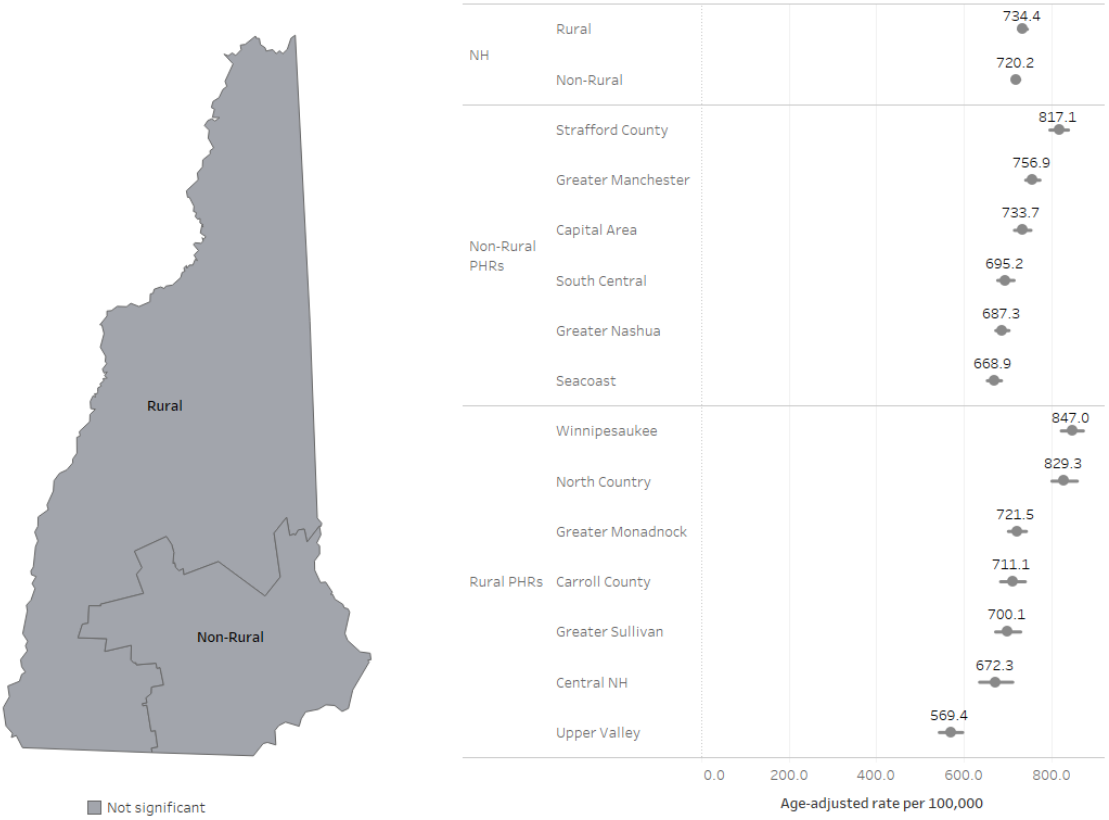
Figure 21. Late-Stage Breast Cancer Diagnosis (Female, All Ages), Proportional Rate, Rural/Non-Rural, 2014-2018, Age-Adjusted Rate



Source: NH State Cancer Registry (NHSCR)

While there was no statistical difference between rates of death from all causes by rurality, a few PHRs stood out against the rest with considerably higher age-adjusted rates. Rates of death from all causes were higher in Winnipesaukee, North Country, and Strafford County compared to all other geographic estimates (individual PHR, rurality, state).

Figure 22. Deaths - All Causes (All Ages), Rural/Non-Rural, 2016-2020, Age-Adjusted Rate



Source: NH Vital Records Death Certificate Data

Health Professions Data Center

Since the amendment to RSA 126-A:5, XVIII passed in July 2019, the Health Professions Data Center (HPDC) has collected full workforce data from all participating provider types except for dentists, who will begin completing the survey requirement with license renewal starting in 2022. The Health Professions Division inside the Office of Professional Licensure and Certification renews provider licenses biennially, every two years, after the initial license is issued. As a result, full data collection for all participating provider types is achieved every two years. Administrative rules for the survey requirement were established for dental providers (registered dental hygienists and dentists) at the end of 2020, prior to the 2021 renewal cycle for registered dental hygienists.

Initial legislation established in June 2017 (HB322) required the NH State Office of Rural Health (SORH) to collect workforce data by surveying participating licensed providers during the license renewal cycles. Administrative rules were amended for survey implementation and data was collected for participating provider types beginning in 2018. Because the legislation did not require participation as a condition of license renewal until the July 2019 amendment (HB127) passed, responses and the corresponding data collected before SFY20 is limited. The 2019 provider workforce data summaries are included in this report and, as such, represent data collected from a portion of renewing providers. With the exception of dental providers, the 2019 provider workforce reports will be released in December 2021 for all participating provider types.

The HPDC collected full workforce data for physicians, physician assistants (PAs), psychologists, registered dental hygienists (RDHs), and alcohol and drug counselors (MLADCs/LADCs) in 2020 and 2021 and will have full workforce data for advanced practice registered nurses (APRNs), dentists, and mental health practitioners in 2022.

With the survey requirement in place, the HPDC collected workforce data from nearly all renewing physicians, physician assistants (PAs), psychologists, registered dental hygienists (RDHs), and alcohol and drug counselors in 2020 and 2021 and can anticipate an equally high response rate for advanced practice registered nurses (APRNs), dentists, and mental health practitioners in 2022.

The Data Center secured funding for an additional data analyst to expedite the turnaround time between data collection and dissemination. The position is currently vacant. As a result, workforce reports will continue to be released two years after the close of the collection periods (see Future Plans below). With the exception of dentists and RDHs, who have even and odd year renewals, respectively, workforce data reports will be released annually for all other participating provider types.

Reports are developed in Tableau and accessed on the HPDC page of the RHPC website (https://www.dhhs.nh.gov/dphs/bchs/rhpc/data-center.htm). Workforce reports include the following sections:

- Response rate
- Practice status
- Demographics
- Capacity – sites, hours, and specialties
- Distribution
- Access – payment and wait time

- Recruitment - education/training
- Retention – years in practice, NH ties, and anticipated capacity
- Statically significant rural associations

Provider Response Rate Data

Table 1 contains the response rate statistics for data collection cycles ending in 2019. This includes the data collection period, the number of licensees who met the survey requirement by completing the survey or the opt-out form, the number who completed the opt-out form of those who met the survey requirement, and total renewals from those due to renew. Of note is the near-complete response rate for physician assistants, as this provider type was the first to have the survey requirement implemented.

Table 1. Provider Response Rate Data, 2019

Provider Type	Data Collection Period	Met Survey Requirement	Opt Outs	*Total Renewals
Physician Assistant (PA)	Oct-Dec 31, 2019	812 (**97.8%**)	12 (1.5%)	830 of 896
Psychologist	Apr-Jun 30, 2019	158 **(43.6%)**	4 (2.5%)	358 of 405
Physician	Mar-Jun 30, 2019	2,105 (**70.3%**)	24 (1.1%)	2,993 of 3,542
Alcohol & Drug Counselor (MLADC/LADC)	Apr-Jun 30, 2019	88 **(53.4%)**	0 (0%)	161 of 200
Advanced Practice Nurse Practitioner (APRN)	Jul 1, 2018-Jun 30, 2019	759 **(54.1%)**	0 (0%)	1,403 of 1,598
Mental Health Practitioner - Independent Clinical Social Worker (LICSW) - Clinical Mental Health Counselor (LCMHC) - Marriage & Family Therapist (LMFT) - Pastoral Psychotherapist (LPP)	Jul 1, 2018-Jun 30, 2019	597 **(53.7%)**	7 (1.2%)	1,112 of 1,260

** Of licensees due to renew*

Provider Supply

Table 2 identifies changes in provider supply in the state by calculating the net change with providers lost and providers gained during the data collection period ending in 2019. The PA and physician workforces saw small gains (<5%), while both the mental health practitioner and alcohol and drug counselor workforces saw more moderate gains. Both the psychologist and APRN workforces saw a small net loss of providers during this period. Note that the highest gains and losses are found with the two workforces – psychologists and alcohol and drug counselors - with the lowest volume of providers. Due to low numbers, small changes in workforce numbers have a larger analytical effect. Despite the fact that a net gain of only 27 alcohol and drugs counselors occurred during this time, this resulted in a 13.5% provider increase because the number of total licensed providers in this analysis was 200. Other current and anticipated supply indicators reported by the HPDC – and which are included in the workforce data summaries within this report - include active practice status of providers who renewed, provider 60+ years old, and anticipated practice in five years.

Table 2. Net Change of Provider Supply, 2019

Provider Type	Year	Eligible to Renew	*Providers Lost	**Providers Gained	Provider Change	Net Change
Physician Assistant (PA)	2019	896	66	108	42	**4.7%**
Psychologist	2019	405	47	34	-13	**-3.2%**
Physician	2019	3,542	549	648	99	**2.8%**
Alcohol & Drug Counselor (MLADC/LADC)	2019	200	39	66	27	**13.5%**
Advanced Practice Nurse Practitioner (APRN)	Jul 1, 2018-Jun 30, 2019	1,598	195	172	-23	**-1.4%**
Mental Health Practitioner (LICSW/LCMHC/LMFT/LPP)	Jul 1, 2018-Jun 30, 2019	1,260	148	259	111	**8.8%**

* *Non-renewals*
** *Initial licenses issued*

SFY19 Workforce Data Summary – Medical Providers

Supply and capacity indicators of the surveyed provider workforces actively practicing in NH

Definitions:

- APRNs – Advanced Practice Registered Nurses (Masters level)
- PAs – Physician Assistants
- Physicians – Includes psychiatrists

Table 1. The percentage of licensed physicians who are actively, clinically practicing in New Hampshire is considerably less than PAs and APRNs. Just under 40% of physicians who maintain a medical license in New Hampshire are not clinically practicing.

Practice Status	Physicians	PAs	APRNs
Active, Clinical Practice	64.4%	95.2%	77.8%

Includes full-time/part-time practice and practice as a locum tenens at a NH location for one year or longer.

Table 2. While the vast majority of APRNs and over two-thirds of PAs are female, the physician workforce continues to be male dominated. The medical provider workforces are primarily non-Hispanic White, to a greater extent with PAs and APRNs (~95%) than physicians. While over half of the PA workforce is under 40 years old, only about 15% of physicians fall into this age bracket. Younger providers may offset workforce shortages that result from retiring providers.

Demographics	Physicians	PAs	APRNs
Female	34.3%	67.9%	86.9
Non-Hispanic White	85.2%	94.5%	93.3%
Under 40 Years Old	15.9%	52.6%	28.7%

Table 3. Medical practice is limited in rural NH; between 25-35% of health care practice exists in rural regions, across provider types. The highest FTE in the state is in non-rural, Greater Manchester Public Health Region and the lowest is in rural, Central NH Public Health Region. About half of physicians and PAs, and 60% of APRNs, practice in outpatient settings.

Distribution			Physicians	PAs	APRNs
Total FTE in Rural Regions			35.3%	25.5%	31.8%
Public Health Region (PHR) by % of Total FTE	*Non-Rural*	*Greater Manchester*	18.3%	20.3%	20.6%
		Greater Nashua	12.2%	13.2%	10.0%
		Seacoast	10.9%	12.9%	12.6%
		Capital Area	9.5%	12.3%	12.3%
		Strafford County	9.4%	8.8%	7.4%
		Greater Derry	4.5%	7.1%	5.4%
	Rural	**Upper Valley*	18.0%	11.2%	10.4%
		Greater Monadnock	5.1%	4.0%	4.6%
		North Country	3.2%	3.7%	5.3%
		Winnipesaukee	3.1%	1.9%	4.7%
		Carroll County	2.7%	2.3%	2.8%
		Greater Sullivan	1.7%	1.5%	2.7%
		Central NH	1.5%	0.9%	1.3%
Practice in Outpatient Setting			51.6%	50.6%	60.5%

Note: PHRs are not exclusively sorted by FTE value for all provider types
**DHMC in Lebanon sits within Upper Valley*

Table 4. APRNs and physicians have similar proportions of outpatient, primary care practice; which accounts for 27% and 26% of the provider practices, respectively. Just under 20% of PA practice falls under outpatient primary care. Across provider types, family medicine is overwhelmingly the most practiced primary care specialty; while obstetrics and gynecology is extremely limited, with less than 10% of the total primary care practice in this care category.

Specialties		Physicians	PAs	APRNs
*Outpatient, Primary Care Practice by % of Total FTE		25.7%	18.9%	27.0%
**Primary Care Specialty by Total Primary Care FTE (%)	*Family Medicine/General Practice*	46.4%	75.4%	65.5%
	Internal Medicine	24.1%	19.6%	10.1%
	Pediatrics	19.9%	1.3%	13.1%
	Obstetrics and Gynecology	7.3%	1.5%	7.5%
	Gynecology only	1.1%	0.2%	1.7%
	Geriatric Medicine	1.9%	0.0%	1.1%
	Adolescent Medicine	1.0%	2.0%	1.0%

** Primary care practice as indicated by primary care specialty and outpatient, primary care hours*
*** Indicated primary care hours in outpatient, primary care practice*

Table 5. Older age is a strong indicator of nearing retirement, and taken with other retention indicators, anticipated provider shortages. Physicians are about 4x as likely as PAs to be 60+ years old, with one-third of physicians falling into this age bracket. PAs and APRNs were 2.5x more likely than physicians to have ties to New Hampshire, which is associated with a greater likelihood of staying in the state; but about twice as likely to be less experienced, as indicated by practicing for less than five years. Physicians were about 50% more likely to indicate an anticipation of reduced practice in the next five years than their PA and APRN counterparts.

Retention	Physicians	PAs	APRNs
60+ Years Old	33.1%	8.1%	24.1%
NH Ties	23.0%	60.0%	60.2%
Less than 5 Years Practicing in NH	22.5%	40.8%	44.1%
*Anticipated Reduction in Capacity (by FTE) in 5 Years	29.3%	18.7%	23.2%

** Indicated by an anticipation of reduced hours, practice in another state, or no clinical practice*

Table 6. Providers across all types indicated a high percentage of new patient acceptance at outpatient, primary care practice sites. Under physician care, the average wait for new patients to access routine care was about double the wait for established patients; whereas for PAs and APRNs, the wait for new patients was about 3x the wait for established patients.

***Outpatient, Primary Care Access**	Physicians	PAs	APRNs
Accepting New Patients	75.6%	92.6%	88.5%
Average Wait for Routine Appointments, Established Patients (days)	10.3	5.0	5.2
Average Wait for Routine Appointments, New Patients (days)	19.4	15.3	13.2

**Analyzed by site count*

Tables 7-9. Chi-Square tests of independence were run for select variables to assess whether significant associations exist by geography (rural v. non-rural). The following tables contain indicators that were found to be significantly different by geography at the 95% confidence level. For test statistics, please refer to the individual provider workforce reports, available on the New Hampshire Health Professions Data Center website. There is little consistency among all three provider types. Of note is that rural physicians are more likely to be at the lower or upper age limits (i.e. <40 and 65+ years old) than those in non-rural settings. Unsurprisingly, other indicators associated with these age groups (i.e. experience, anticipated future practice) are also significantly different by geography. Rural physicians are less likely to practice a primary care specialty or work in outpatient settings than non-rural physicians, while rural APRNs are less likely than their non-rural counterparts to practice a mental health specialty or provide mental health services in an outpatient setting. Both PAs and APRNs in rural settings are more likely to work 40+ clinical hours per week, on average, than those at non-rural practices; and both rural provider types are less likely to have graduated from a school in New England or New Hampshire, respectively.

Table 7. Significant Geographic Disparities, Rural Physicians

More likely to…	Less likely to…
Be <40 years old	Practice a primary care specialty
Have graduated in the last 10 years	Practice in outpatient settings
Have practiced in NH for less <5 years	
Have NH ties prior to receiving initial NH license	
Be 60+ years old	
Anticipate a reduction in NH practice in 5 years	
Have graduated from a NH medical school	
Clinically work part time (<30 hours/week)	
Accept new patients in outpatient, primary care locations	
Train at a NH residency	

Table 8. Significant Geographic Disparities, Rural PAs

More likely to…	Less likely to…
Be male	Have graduated from a New England school
Work 40+ clinical hours per week	Have NH ties prior to receiving initial NH license
Have been practicing in NH for less than 5 years	
*Work in outpatient primary care practices with wait times >1 week for established patients	

*As indicated by the provider, not the employer

Table 9. Significant Geographic Disparities, Rural APRNs

More likely to…	Less likely to…
Work 40+ clinical hours per week	Be <40 years old
Practice at locations that offer payment assistance	Have graduated from a NH nursing school
	Have NH ties prior to receiving initial NH license
	Provide mental health services in an outpatient setting
	Practice a mental health specialty

SFY19 Workforce Data Summary – Behavioral Health Providers

Supply and capacity indicators of the surveyed provider workforces actively practicing in NH

Definitions:

- LADCs/MLADCs – Bachelors (LADC) and Masters level (MLADC) Alcohol and Drug Counselors
- MHPs – Mental Health Practitioners; Independent Clinical Social Workers (LICSWs), Clinical Mental Health Counselors (LCMHCs), Marriage and Family Therapists (LMFTs), Pastoral Psychotherapists (LPPs)
- Psychiatrists – Includes child & adolescent psychiatry

Table 1. The percentage of licensed psychiatrists who are actively, clinically practicing in New Hampshire is limited compared to other provider types. Forty percent of licensed psychiatrists are not clinically practicing in NH, whereas only about one-quarter of the other listed mental health providers are not active.

Practice Status	**Psychiatrists	MHPs	Psychologists	LADCs/MLADCs
*Active, Clinical Practice	59.6%	77.3%	74.7%	71.6%

**Includes full-time/part-time practice and practice as a locum tenens (if applicable) at a NH location for one year or longer.*

*** According to the specialty list maintained by the Board of Medicine*

Table 2. With the exception of psychiatrists, the majority of the mental health workforce is female. There is little racial/ethnic diversity within the mental health workforce, with psychiatry holding the greatest proportion, a mere 10% of providers. The mental health workforce, as a whole, has a limited proportion of providers under forty, ranging from less than 5% of psychologists to about 20% of MHPs.

Demographics	Psychiatrists	MHPs	Psychologists	LADCs/MLADCs
Female	32.2%	81.9%	52.2%	58.7%
Non-Hispanic White	89.3%	96.2%	95.6%	93.6%
Under 40 Years Old	13.8%	21.9%	4.5%	15.1%

Table 3. Mental health practice in rural NH is limited and comparable to medical practice within rural NH, ranging from 25-35% of total FTE. Mental health practice is highest in non-rural, Greater Manchester Public Health Region and lowest is in rural, Greater Sullivan Public Health Region. With the exception of psychiatrists, who are slightly more likely to practice in outpatient compared to other settings, outpatient practice is considerably higher for mental health providers than practice in other settings.

Distribution			Psychiatrists	MHPs	Psychologists	LADCs/MLADCs
Total FTE in Rural Regions			32.2%	24.9%	34.8%	33.2%
Public Health Region (PHR) by % of Total FTE	*Non-Rural*	*Greater Manchester*	15.8%	21.4%	9.3%	21.1%
		Greater Nashua	15.5%	12.7%	17.7%	12.0%
		Capital Area	10.3%	12.6%	13.9%	18.7%
		Seacoast	9.4%	11.5%	13.5%	7.4%
		Strafford County	9.4%	8.3%	9.5%	2.9%
		Greater Derry	8.2%	8.6%	1.3%	4.6%
	Rural	**Upper Valley*	9.3%	3.3%	17.0%	4.0%
		Greater Monadnock	5.5%	7.2%	9.8%	10.3%
		North Country	4.5%	3.0%	1.8%	6.2%
		Winnipesaukee	3.3%	3.5%	1.4%	7.6%
		Carroll County	3.9%	3.5%	1.3%	2.9%
		Central NH	2.8%	2.4%	2.8%	2.3%
		Greater Sullivan	2.2%	2.0%	0.7%	0.0%
Practice in Outpatient Setting			58.0%	84.7%	79.6%	72.9%

Note: PHRs are not exclusively sorted by FTE value for all provider types
**DHMC in Lebanon sits within Upper Valley*

Table 4. A significant proportion of the mental health workforce is 60 years and older, ranging from one-third of providers under the MHP and LADC/MLADC workforces, to over 60% of psychologists. While NH ties are less likely in the psychiatrist workforce, the overwhelming majority of MHPs and LADC/MLADCs, and to a lesser extent psychologists, lived or worked in NH prior to receiving their initial license. Given that the mental health workforce is older, unsurprisingly, the majority of mental health providers have been practicing in NH longer than five years. Following closely with the older age distribution under each type, psychiatrists were twice as likely and, psychologists 1.5x more likely, to anticipate a reduction in capacity than MHPs and LADC/MLADCs.

Retention	Psychiatrists	MHPs	Psychologists	LADCs/MLADCs
60+ Years Old	42.5%	32.1%	62.8%	35.9%
NH Ties	34.5%	89.5%	68.7%	95.2%
Less than 5 Years Practicing in NH	28.2%	15.4%	5.2%	27.0%
*Anticipated Reduction in Capacity (by FTE) in 5 Years	35.3%	22.3%	42.9%	21.2%

**Indicated by an anticipation of reduced hours, practice in another state, or no clinical practice*

Table 5. Overall, access to LADC/MLADC services, according to indicators of new patient acceptance and wait times, is more accessible than the other mental health provider types; though across provider types, new patient acceptance was over 75 percent. With the exception of LADCs/MLADCs, who indicated new and established patients are seen for a routine appointment, on average, within one week of scheduling, the wait for new patients is about twice that of established patients. Psychiatrists reported the longest wait period of 5-weeks before a new patient is seen.

***Outpatient, Mental Health Access**	Psychiatrists	MHPs	Psychologists	LADCs/MLADCs
Accepting New Patients	78.0%	79.1%	77.7%	94.6%
Average Wait for Routine Appointments, Established Patients (days)	18.5	7.7	11.7	4.7
Average Wait for Routine Appointments, New Patients (days)	36.6	15.5	17.9	6.9

**Analyzed by site count*

Tables 6. Chi-Square tests of independence were run for select variables to assess whether significant associations exist by geography (rural v. non-rural). The following table contains indicators that were found to be significantly different by geography at the 95% confidence level. For test statistics, please refer to the individual provider workforce reports, available on the New Hampshire Health Professions Data Center website. Due to the limited number of psychiatrists, psychologists, and LADCs/MLADCs in the state and responses we received from each provider type, only MHP data is presented here.

Significant Geographic Disparities, Rural MHPs

More likely to…	Less likely to…
Be 60+ years old	Have NH ties prior to receiving initial NH license
Anticipate a reduction in NH practice in 5 years	Have graduated from a New England school

ADMINISTRATIVE RULES UPDATE

Health Status of Rural Residents

No update.

Health Professions Data Center

DHHS administrative rules, He-C 801, established the requirements for the collection of health care provider data by the State Office of Rural Health's Health Professions Data Center and the purpose of data collection (http://gencourt.state.nh.us/rules/state_agencies/he-c800.html). The administrative rules are amended annually, to reflect the current iterations of the Health Professions Survey.

In addition to the DHHS administrative rule, each participating licensing board promulgated rules requiring licensees to fulfill the survey requirement – completion of the Health Professions Survey or completion of the opt-out form - as a condition of license renewal. All six participating health professions licensing boards have formally adopted survey rules, with the Board of Dental Examiners completing the process at the end of 2020 meeting the survey implementation deadline for the registered dental hygienist renewal cycle. The Boards of Allied Health Professionals and Pharmacy, are slotted to enter the administrative rules process two years after full implementation of primary care-associated licensing boards, in 2024.

This year, administrative rules were amended for physician assistant (PA) biennial license renewal. Previous to this amendment, PAs were the only license type under the Division of Health Professions subject to annual license renewal.

PROGRAM UPDATES

Health Status of Rural Residents

The NH Health and Human Services Data Portal went through a major technical transition to Tableau, a modern interactive data visualization tool. The data portal is an interactive website aggregating health and social services data and producing customized reports, maps and time trend analysis on hundreds of health related indicators at the town, county and state level. Data may be used to identify trends, develop program initiatives, strengthen research, aid grant writing and support policy changes. Some of the data dashboards are complete and made available starting in June 2021. The capability to choose rurality as a geography type was included in the release and provides rural and non-rural data filtering. This feature allows users to see if there is a statistical significance by rurality for certain indicators. Beyond the mapping feature, users can also choose to see a chart which allows more detail on rurality by Public Health Region. Some of the visualizations in this report were taken directly from the data portal and others were created for the report as they were not available on the dashboard yet.

Health Professions Data Center

Compliance

Rural Health and Primary Care (RHPC) continues to work closely with the Office of Professional Licensure and Certification (OPLC) to implement surveying as a condition of license renewal, as the legislature intended. However, due to understaffing, which limits the capacity of licensing boards to review renewal requirements for each licensee, renewals are currently being issued prior to certifying survey requirement compliance. In lieu of survey compliance confirmation by licensing board staff, providers attest to survey compliance on the online license renewal form.

This year, the OPLC Enforcement Office was created to better manage noncompliance of regulatory requirements, which includes the Health Professions Survey. Together, the HPDC manager and Enforcement Office administrator will coordinate noncompliance follow up to increase survey compliance and, ultimately, response rates. The first wave of noncompliance follow up is coordinated by the HPDC via email. Two weeks after reminder emails are sent to providers, the Enforcement Office receives the final noncompliance list from the HPDC and will use these lists to mail out noncompliance letters, outlining the violation and impending enforcement action - a filed complaint and board hearing - in the event that the requirement is left unmet. Thirty days after the letters are mailed, the HPDC will generate and send the final noncompliance list to the Enforcement Office for board investigation and possible disciplinary action.

Administration

The HPDC continues to target efforts to streamline the survey process by reducing administrative inefficiencies. Direct access to provider data via the State File Transfer Protocol (SFTP) site was granted in 2020 to remove the need for OPLC staff participation in the data retrieval process. At the beginning of 2021, the OPLC created additional information technology (IT) positions within the Health Professions Division to successfully migrate all professions to online licensing on the My Licensing Office (MLO) platform; and to standardize data definitions and data entry for consistent use. The HPDC was assigned a Business Systems Analyst (BSA) to act as an intermediary between HPDC and OPLC MLO staff. All data requests and survey implementation considerations are managed by the BSA, effectively improving workflow and reducing administrative inefficiencies. Since working directly with the BSA, survey efforts have been more fluid and any kinks in the process have been quickly addressed and resolved.

Data Use

With consistent and reliable data on the supply and capacity of the NH health care workforces, data requests have been on the rise. Over the past year, the HPDC has supplied workforce figures to be included in grants for University of New Hampshire and Geisel School of Medicine at Dartmouth College, as well as informing reporting requirements for our stakeholders within

DHHS. Of considerable impact, the HPDC provided health care workforce supply and distribution figures for New Hampshire's COVID-19 vaccination distribution planning effort. The HPDC is the only entity in the state that could provide this level of granularity on the provider workforces. This collaborative effort informed the development of the COVID-19 vaccination allocation plan and the minimal vaccine supply necessary to cover health workers in phase I of the vaccination schedule.

The HPDC was primarily created to collect current and accurate provider data critical for federal shortage designation work. Shortage designations bring providers and funding to underserved areas of the state. A variety of grants and other federal and state programs with funding opportunities, including the State Loan Repayment Program, use these designations to target resources to areas of need. Collected health workforce data allows our office to validate providers within the Health Resources and Services Administration's (HRSA) Shortage Designation Management System (SDMS) so we can effectively identify physician supply and practice in existing or potential designated areas within New Hampshire. Because HRSA utilizes the National Provider Identifier (NPI) database to indicate provider practice within SDMS, and this database is notoriously inaccurate for current provider supply and capacity, our office relies heavily on the HPDC's provider data to reliably perform shortage designation work. RHPC is currently utilizing the most recently collected provider data for the 2021 National Shortage Designation Update. Provider validation is essentially the most important component of this work, as Health Professional Shortage Area (HPSA) scores, designed to identify areas of greater need, depend heavily on population-to-provider ratios. These scores affect whether facilities will be eligible locations for National Health Service Corps and Nurse Corps providers; Centers for Medicaid and Medicare Services (CMS) HPSA Bonus Payments for delivering Medicare-covered services to patients; and status as a designated Rural Health Clinic, which have enhanced reimbursement and other financial incentives. With the HPDC's provider data, our office will successfully conduct this work to ensure the most vulnerable areas in New Hampshire are reinforced.

FUTURE PLANS

Health Status of Rural Residents

Rural Health and Primary Care (RHPC) still plans to create a Rural Health dashboard in Tableau that will be hosted on the NH Health and Human Services Data Portal and will contain rural relevant indicators for core public health indicators such as basic demographics, health status, morbidity rates, mortality rates, health care access, social determinants, and environmental determinants. The link for the rural dashboard will be on our section website and also used for future annual reports. This data will be updated annually at a minimum but as often as the datasets change.

Health Professions Data Center

Workforce Reports

As previously mentioned, workforce reports with aggregated provider data will be released two years after the close of the data collection/renewal cycle for each participating provider type. Because renewals are determined by initial license year (save for dental professionals), data collection on the full license list is achieved every two years to account for those who renew on even and odd years. Since workforce reports are released for one year of data collection, or half of all licensed providers, reports are released annually. Dental professionals are the exception, as dentist renewals occur on even and registered dental hygienist (RDH) renewals on odd years, with all providers under the respective license type (i.e. dentist/RDH) renewing all together in one year. 2020 legislation and the subsequent administrative rules change moved physician assistant (PA) renewals from an annual to biennial basis to be consistent with all other licensed health professions under the Office of Professional Licensure and Certification (OPLC). Prior to this change, PAs were the only provider type to renew annually and, as such, workforce reports on data collected prior to this legislative amendment (i.e. 2018-2020) will represent the full PA license list, excluding initial licenses. Similar to PA data collection between 2018 and 2020, dental provider workforce reports will represent all licensed dentists and RDHs in the state, save for initial licenses not yet subject to renewal. However, due to the renewal schedule for these provider types, the reports will be released biennially, not annually.

See Appendix B for renewal cycle details of each participating provider type. Since the implementation of the survey requirement, the HPDC collected data on the full NH workforce of physicians, psychologists, RDHs, and alcohol and drug counselors (LADCs/MLADCs) in 2020 and 2021. Full data on the mental health practitioner, dentist, and APRN workforces will be achieved on June 30, 2022.

Compliance

The Health Professions Data Center's (HPDC) ability to collect responses from all renewing providers has been impeded by OPLC's understaffing because it prevents confirmation of compliance prior to issuing renewals and an inability to enforce compliance after renewals are issued. With the formation of the Enforcement Office in OPLC this year and commitment to pursue disciplinary action for licensees who fail to meet the regulatory requirement, the HPDC is confident that as soon as the enforcement plan (in compliance section above) is implemented the response rate will increase each year and near-complete data will be achieved during the data collection periods.

Data Use

Together with state and national stakeholders, the HPDC designed the Health Professions Surveys to collect rich, comprehensive workforce data that would lend itself to improved healthcare access planning and workforce assessment, including

- Federal shortage designations, which brings providers and grant funding to underserved areas of the state;
- Strengthened recruitment/retention initiatives including scholarships, loan repayment, and waiver programs;
- The expansion of existing educational programs and employment training programs; and
- Stronger emergency preparedness.

With the 2019 legislative amendment requiring completion, the HPDC aims to house complete data on all participating licensed providers. RHPC will rely on this data as the most current and accurate source of provider data for shortage designation work. Provider to population ratio figures and workforce supply and distribution statistics needed for emergency preparedness on a granular level will be reliable and accessible.

In addition, analysis considerations include rural disparity data, which will help RHPC to further delineate statistically significant regional differences for indicators suggesting a disparity in health care access; such as hours worked, accepted payers, wait time, and retention of providers.

Equipped with the most accurate and current provider workforce data in the state, RHPC will continue to educate stakeholders and inform workforce policy. Working alongside health care workforce entities in NH and nationally will strengthen best practices and ensure a complete collaborative approach to identifying and addressing health professions workforce challenges.

Staffing

The HPDC's work will be supported by a data analyst; a new position funded by legislation (HB 4, Laws of 2019). The position was first expected to be filled in summer 2020, but because of the hiring freeze brought on by COVID-19, the position remained unfilled. Once the waiver received gubernatorial approval, RHPC began to actively recruit and interview for the position at the beginning of this year. The position remains unfilled but is posted externally for applications. The new employee will work closely with the Health Professions Data Center Manager, who will guide their work to ensure reporting requirements outlined in the statute are met. With the program expansion resulting from the legislative amendment, a data analyst is critical to the success of the HPDC as the primary resource for health workforce data in the state. Currently, the HPDC is managed by one employee, who executes all aspects of the program, including provider tracking and follow up; survey development and building; implementation coordination with OPLC and DoIT; HPDC website management; and data cleaning, analysis, and reporting. An additional employee will allow the HPDC to release reports more expediently in order to meet the intended purposes for the data (i.e. healthcare access planning, workforce assessment) while it is still relevant.

Appendix A

Category	Measure	Source
Demographics	65+	ACS
Demographics	Percent Not Fluent in English	ACS
Demographics	Disabled	ACS
Demographics	Veteran	ACS
Demographics	Low Income (below 200% of FPL)	ACS
Demographics	Poverty (below 100% of FPL)	ACS
Demographics	Uninsured	ACS
Barriers to Care	Have health care coverage	BRFSS
Barriers to Care	Delayed/Avoided care due to cost	BRFSS
Barriers to Care	No personal doctor or health care provider	BRFSS
Barriers to Care	Primary care visits > 30 minutes away	APCD
Barriers to Care	Mean travel time	APCD
Barriers to Care	Primary care visits per year	APCD
Workforce Supply	Practice status	Health Professions Data Center
Workforce Supply	Demographics	Health Professions Data Center
Workforce Supply	Distribution	Health Professions Data Center
Workforce Supply	Specialties	Health Professions Data Center
Workforce Supply	Retention	Health Professions Data Center
Workforce Supply	Access	Health Professions Data Center
Workforce Supply	Significant associations by rurality	Health Professions Data Center
Substance Use and Mental Health	Alcohol- and/or drug-related ED visits	UHFDDS
Substance Use and Mental Health	Alcohol- and/or drug-related inpatient admissions	UHFDDS
Substance Use and Mental Health	Self-inflicted harm ED visits	UHFDDS
Substance Use and Mental Health	Self-inflicted harm inpatient admissions	UHFDDS
Substance Use and Mental Health	Current smoker	BRFSS
Substance Use and Mental Health	Suicide	Vital Records
Maternal Health	No/Late prenatal care	Vital Records
Maternal Health	Smoked during pregnancy	Vital Records
Maternal Health	Delivery at 42+ weeks	Vital Records
Preventive Care	Check-up in past year	BRFSS
Preventive Care	No dental visit within past year	BRFSS
Preventive Care	Pneumonia vaccine	BRFSS
Preventive Care	Cholesterol checked	BRFSS
Preventive Care	Flu shot	BRFSS
Preventive Care	Colonoscopy	BRFSS
Preventive Care	Mammogram	BRFSS
Preventive Care	Sigmoidoscopy	BRFSS
Preventive Care	Never tested for HIV	BRFSS
Preventive Care	Pap test	BRFSS
Outcomes	Acute composite	UHFDDS
Outcomes	Chronic composite	UHFDDS
Outcomes	Overall composite	UHFDDS
Outcomes	Late-stage breast cancer incidence	Cancer Registry
Outcomes	Late-stage cervical cancer incidence	Cancer Registry
Outcomes	Late-stage colon & rectal cancer incidence	Cancer Registry
Outcomes	Death-all causes	Vital Records

Appendix B

List of Provider Surveys as of December 2021	License Renewal Cycles
Alcohol and Drug Counselor Licensure Survey ▪ Licensed Alcohol and Drug Counselors (LADCs) ▪ Master Licensed Alcohol and Drug Counselors (MLADCs)	Biennially, 4/1-6/30, by initial license year
Advanced Practice Registered Nurse (APRN) Licensure Survey	Biennially, rolling, by birthday
Dentist Licensure Survey	Biennially on even years, 2/1-4/30
Dental Hygienist Licensure Survey	Biennially on odd years, 2/1-4/30
Mental Health Practitioner Licensure Survey ▪ Licensed Independent Clinical Social Workers (LICSWs) ▪ Licensed Clinical Mental Health Counselors (LCMHCs) ▪ Marriage and Family Therapists (MFTs) ▪ Pastoral Psychotherapists (PPs)	Biennially, rolling, by initial license date
Physician Licensure Survey	Biennially, mid-Mar-6/30, by initial license year
Physician Assistant Licensure Survey	Biennially, mid-Oct-12/31, by initial license year
Psychologist Licensure Survey	Biennially, 4/1-6/30, by initial license year

Appendix C

Provider Type	Data Collection	Workforce Report
Physician Assistant (PA)	Oct-Dec, 2020	2022
Physician	Mar-Jun, 2021	2023
Psychologist	Apr-Jun, 2021	2023
Alcohol & Drug Counselor (MLADC/LADC)	Apr-Jun, 2021	2023
Advanced Practice Registered Nurse (APRN)	Jul 2020 – Jun 2021	2023
Mental Health Practitioner - Independent Clinical Social Worker (LICSW) - Clinical Mental Health Counselor (LCMHC) - Marriage and Family Therapist (MFT) - Pastoral Psychotherapist (PP)	Jul 2020 – Jun 2021	2023
Registered Dental Hygienist (RDH)	Feb-Apr, 2021	2023