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

Calendar Year 2020

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 4, 2020

NH DIVISION OF
Public Health Services
Improving health, preventing disease, reducing costs *for all*
Department of Health and Human Services

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 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. A greater proportion of rural residents traveled more than 30 minutes to primary care appointments compared to non-rural residents. While a longer travel time in non-rural NH may be explained by bypass behavior, which describes traveling father for care as a matter of choice between many systems of care, travel for rural residents often is necessary to access the nearest source of care. There is very little difference in the amount of health care received between rural and non-rural residents. Consistent with the national trend, acute alcohol- and drug use-related emergency department and inpatient admissions are higher for non-rural residents than their rural counterparts. Also in line with national projections is the 17% higher rate of suicide in rural than in non-rural NH. Rural residents were about 1.5x more likely to deliver at 42+ weeks and almost 2x more likely to smoke during pregnancy than their non-rural counterparts. Rural women were more likely to receive prenatal care. Screening rates differed by rurality, with rural residents screening at lower rates than non-rural residents for mammography and colonoscopy. There is a disparity in late-stage breast cancer rates between rural and non-rural residents, with a relatively greater proportion diagnosed at late stage in rural areas. Although rural and non-rural residents accessed primary medical care at similar rates, rural residents were over 25% less likely to have had a dental visit within the past year.

The Health Professions Data Center (HPDC) will have full workforce data for physicians, psychologists, and alcohol and drug counselors in 2021 and full workforce data for APRNs and mental health practitioners in 2022. For the time being, workforce reports will continue to be released two years after the close of the collection periods. The response rate statistics for State Fiscal year 2020 show that at least 95% (up to 99.4%) of the clinicians under each type of license are meeting the survey requirement. The most recent current primary workforce capacity report released is for the 2018 Physician Assistant Data.

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 the Rural Health and Primary Care section 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. 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 State Office of Rural Health (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 2020

Health Status of Rural Residents

New Hampshire (NH) 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 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]

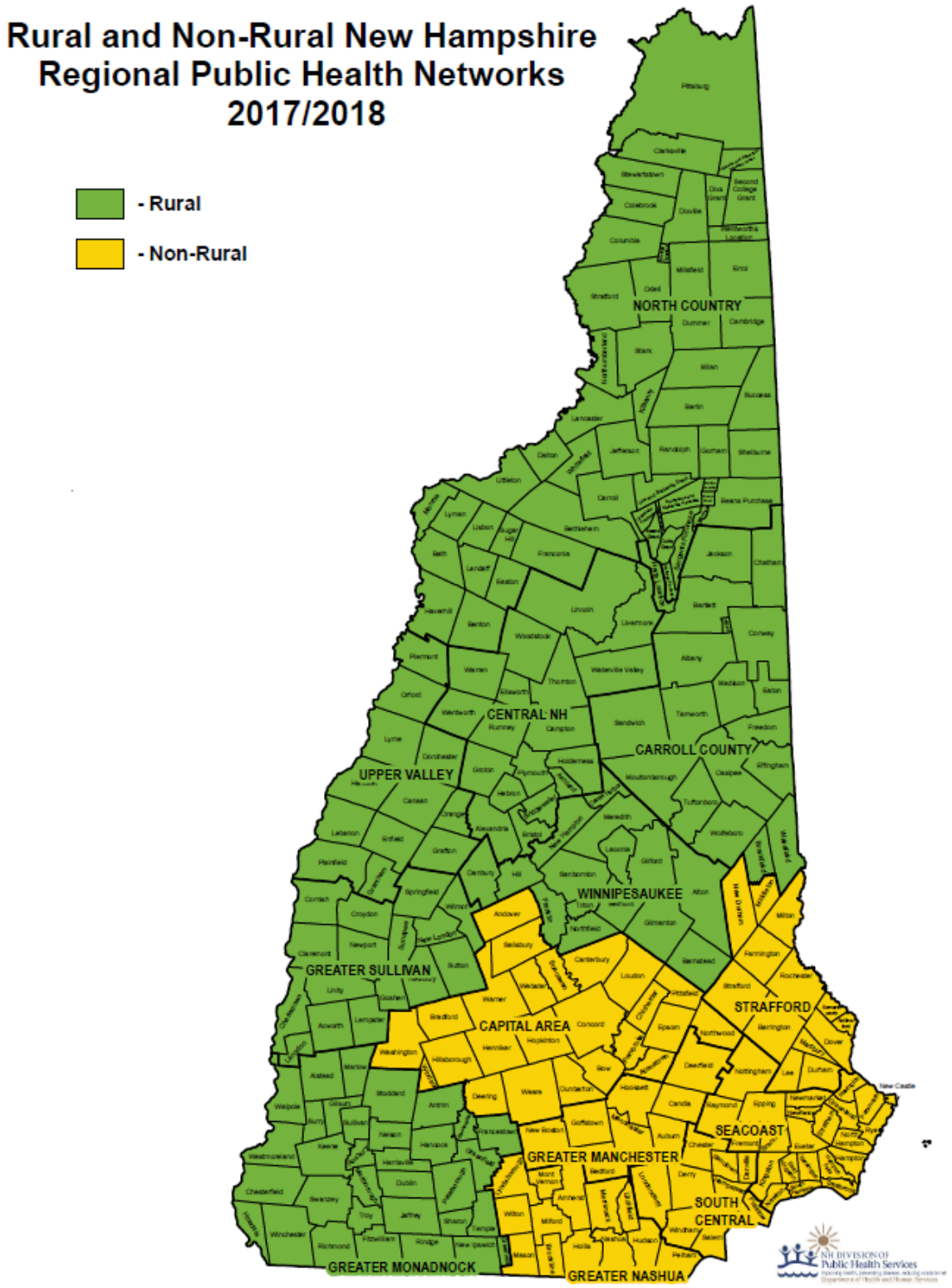
In July 2013, the NH DHHS, through the Bureau of Drug and Alcohol Services (BDAS) and Division of Public Health Services (DPHS) established a strategic partnership to align multiple regional and local public health partnerships into one integrated system. The Regional Public Health Networks (RPHNs), 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 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]

[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.

[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
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 working 2020 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 indicators were classified under the following categories (for a full list of analyzed health indicators, see Appendix A):

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

* Not included in this report; data analysis still underway, refer to the Health Professions Data Center figures on distribution.

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 slightly 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 0.05 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, 2015-2018; Death Certificates, 2010-2019

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 2016-2017 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 2014-2018 data.

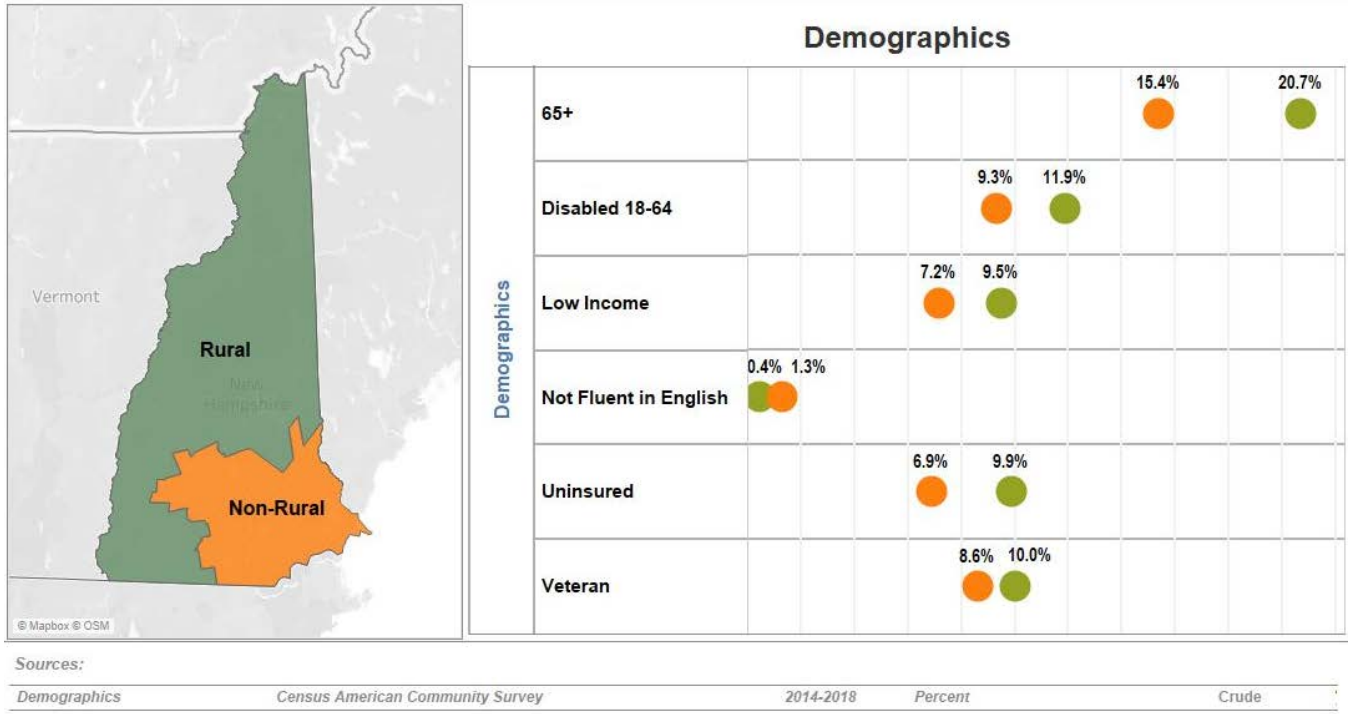
Cancer Registry - The New Hampshire State Cancer Registry (NHSCR) is a statewide, population-based cancer surveillance program that collects incidence data on all cancer cases diagnosed or treated in the State of New Hampshire. This dataset utilizes 2013-2017 data.

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 2018 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.

Figure 2 illustrates the significant demographic differences found between rural and non-rural regions. Rural residents were more likely to be older (34%), disabled (28%), low income (32%), uninsured (43%), and veterans (16%) than non-rural residents. Racial and ethnic diversity is increasing in NH, particularly in non-rural regions,[4] as demonstrated by the finding that non-rural residents are three times less likely to be fluent in English as rural residents.

Figure 2.

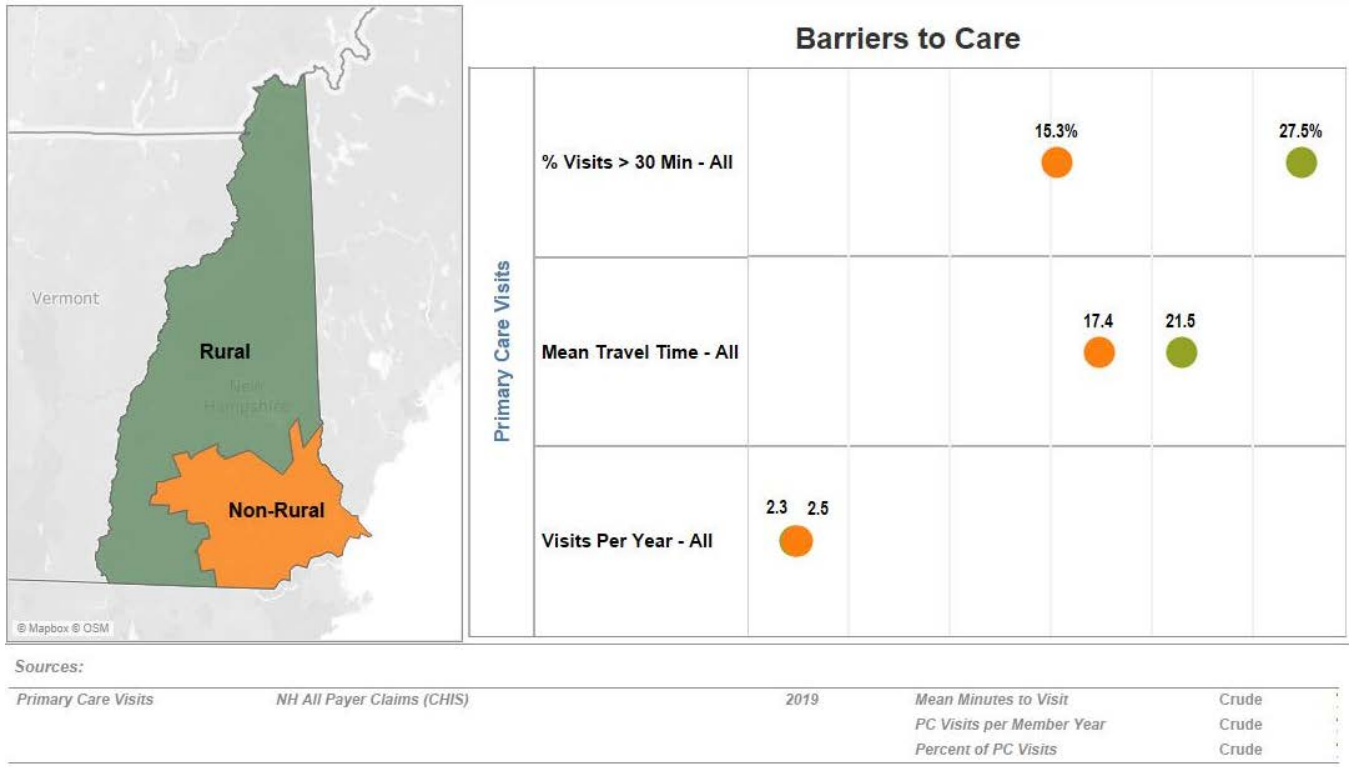


Due to the geographic barriers rural residents face, it should come as no surprise that there are travel time differences between rural and non-rural residents, as visualized in Figure 3. A greater proportion of rural residents traveled more than 30 minutes to primary care appointments compared to non-rural residents (27.5% v. 15.3%). The difference in mean travel time between rural and non-rural

[4] Johnson, Kenneth. "New Hampshire Demographic Trends in an Era of Economic Turbulence." *UNH Carsey School of Public Health.* November 19, 2019.

residents is less striking, with data reflecting just a four-minute difference. While a longer travel time in non-rural NH may be explained by bypass behavior, which describes traveling father for care as a matter of choice between many systems of care, travel for rural residents often is necessary to access the nearest source of care. There is very little difference in the amount of health care received between rural and non-rural residents (2.3 v. 2.5 visits per year), which is consistent with national data suggesting rural residents access primary care regardless of the documented barriers to care.[5]

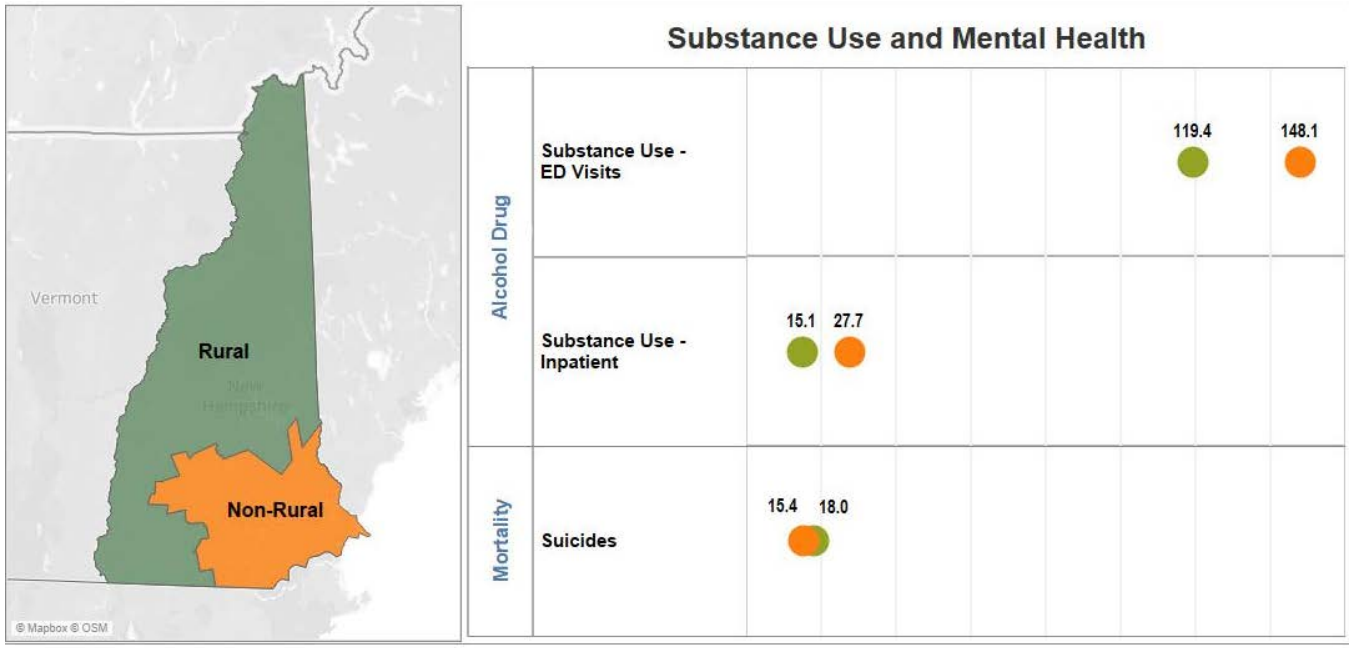
Figure 3.



[5] Jeffrey Stensland, et al. "Rural and Urban Medicare Beneficiaries Use Remarkably Similar Amounts of Health Care Services." *Health Affairs*, vol. 32, no. 11: Redesigning the Health Care Workforce, 2013

Consistent with the national trend, acute alcohol- and drug use-related emergency department and inpatient admissions are higher for non-rural residents than their rural counterparts, by 24% and 83%, respectively (Figure 4).[6] Also in line with national projections is the 17% higher rate of suicide in rural than in non-rural NH.[7] Rural NH may be disproportionately impacted by suicide, due in part to associated rural risk factors such as veteran status and lack of health insurance.

Figure 4.

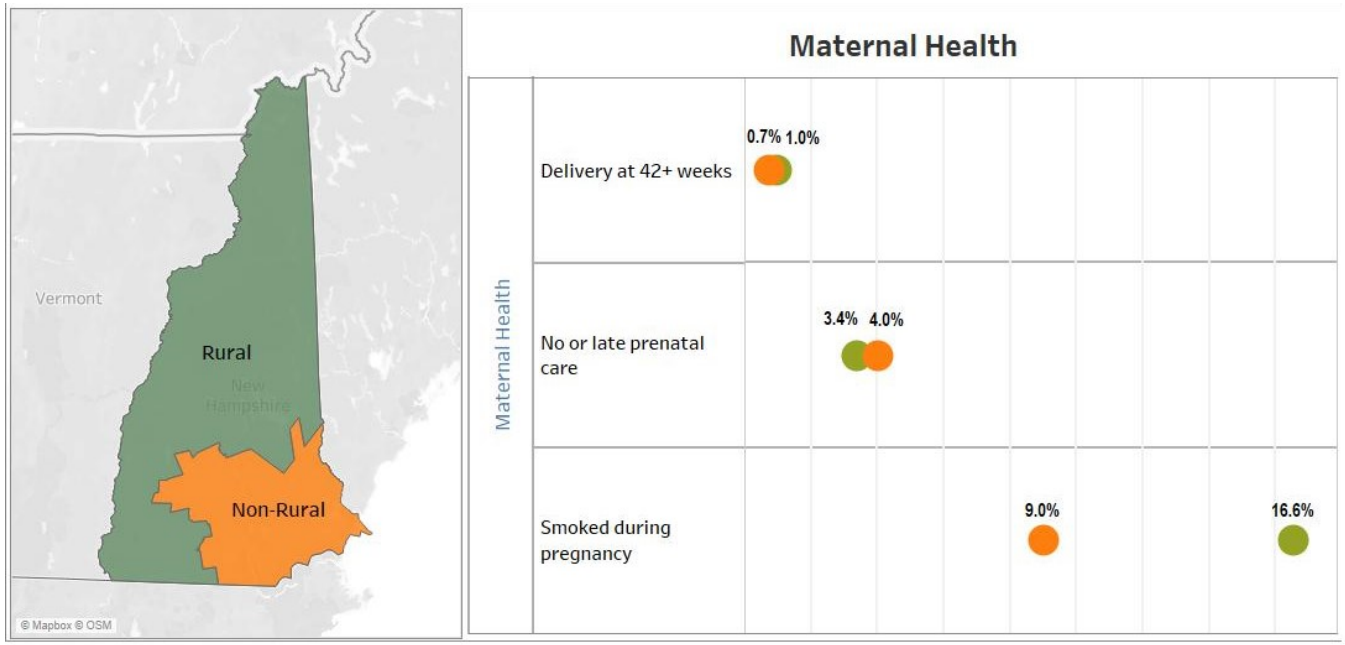


[6] Schroeder, Shawnda, et al. "Rural and Urban Utilization of the Emergency Department for Mental Health and Substance Abuse." *Rural Health Reform Policy Research Center.* Policy Brief, June 2017.

[7] "Suicide in Rural America." *Centers for Disease Control and Prevention.* Accessed on 12/3/20 at https://www.cdc.gov/ruralhealth/Suicide.html.

Figure 5 visualizes the maternal health disparities between rural and non-rural NH when considering post-term delivery (42+ weeks), prenatal care, and smoking during pregnancy. Rural residents were about 1.5x more likely to deliver at 42+ weeks and almost 2x more likely to smoke during pregnancy than their non-rural counterparts. Rural women were more likely to receive prenatal care which could be explained, in part, by greater availability of midwifery services in rural compared to non-rural areas.[8]

Figure 5.

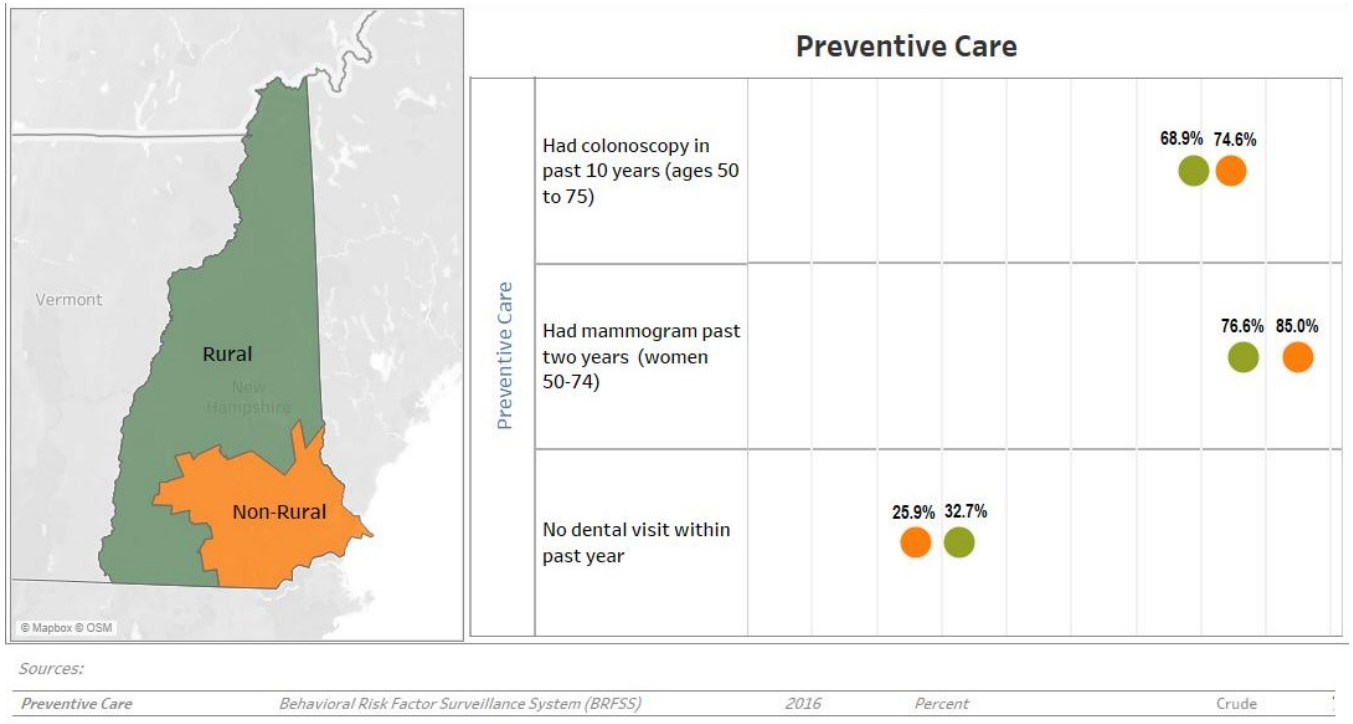


As illustrated in Figure 6 below, screening rates differed by rurality, with rural residents screening at lower rates than non-rural residents for mammography and colonoscopy. Because colonoscopy rate confidence intervals overlapped by the slightest margin (< 0.01) – statistical analysis to compute a p-value will better assess whether differences exist by rurality. Pap test (cervical screening)

[8] "Improving Access to Maternal Health Care in Rural Communities-Issue Brief." *Centers for Medicare and Medicaid Services.* Accessed on December 29, 2020 at https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/rural-health/09032019-Maternal-Health-Care-in-Rural-Communities.pdf

screening was not found to be different by rurality. It is possible that age is a fundamental consideration in screening disparities. Crude BRFSS estimates are somewhat age adjusted with restricted age ranges in the measures and we see a rural disparity for screening indicated for an older population (50-75) but not for screening indicated for a broader age range, as is with the cervical cancer screening measure (21-65). Although rural and non-rural residents accessed primary medical care at similar rates, rural residents were over 25% less likely to have had a dental visit within the past year. A possible contributing factor is the greater workforce shortage of dentists in rural NH.[9]

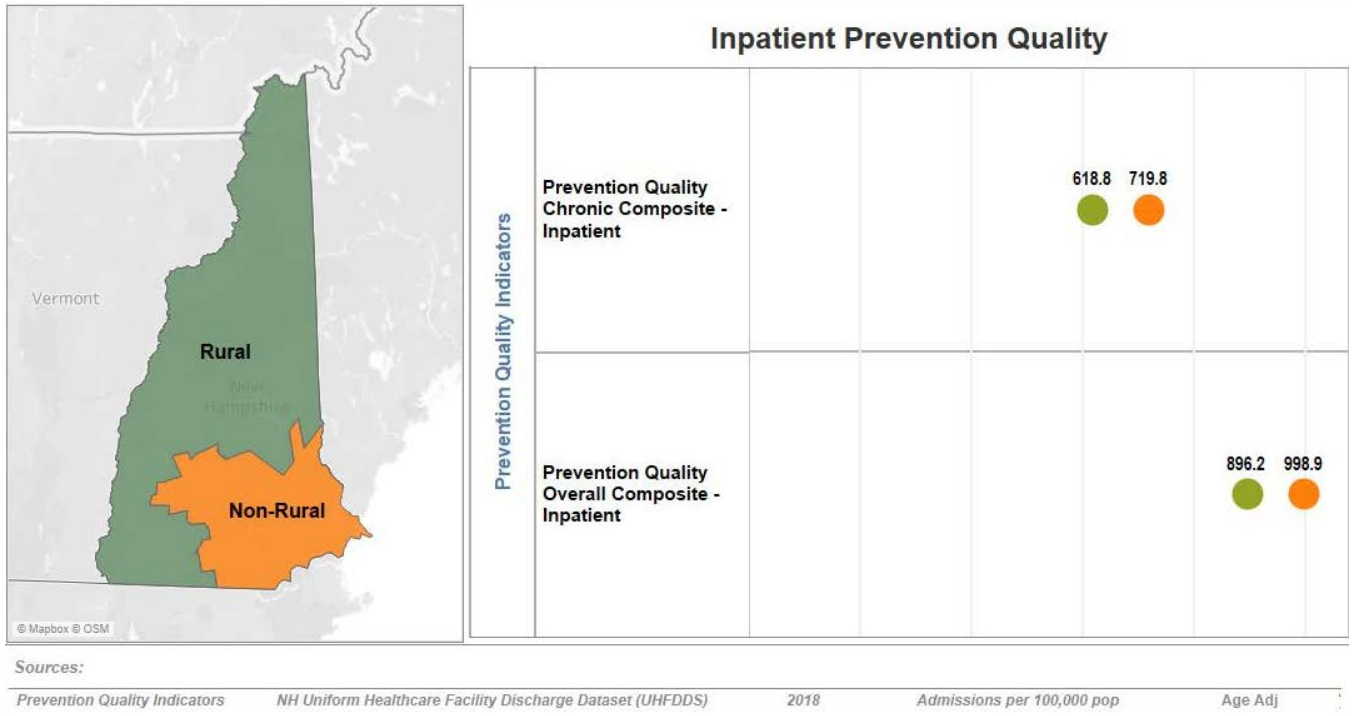
Figure 6.



[9] "NH Statewide Primary Care Needs Assessment to Analyze Unmet Need, Disparities, and Health Workforce Issues." *NH Rural Health and Primary Care*. May 2016.

Prevention Quality Indicators (PQIs) replaced Ambulatory Care Sensitive Conditions (ACSC) as a measure of inpatient admissions that could have been avoided with proper access to primary care. According to the 2018 data (Figure 7), rural NH had lower rates of PQIs for the chronic composite and overall composite measures than non-rural NH (see Figure 1 for definitions). In other words, non-rural residents were more likely to be admitted to the hospital for preventable medical complications than their rural counterparts. Because PQI risk is influenced by racial and ethnic factors, with language barriers and race increasing risk, this could partially explain why PQI rates are higher for non-rural populations in NH.[10]

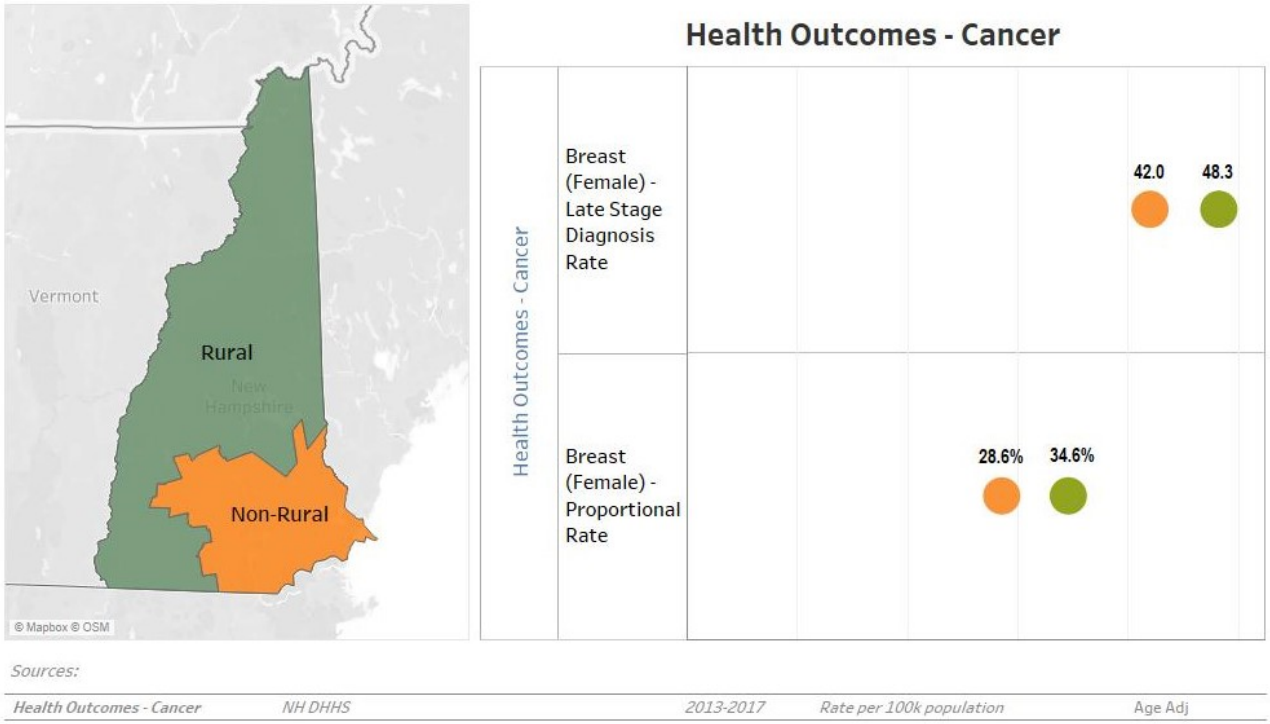
Figure 7.



[10] "Expanding Use of the AHRQ Prevention Quality Indicators: Report on the Clinical Expert Review Panel." *Agency for Healthcare Research and Quality*. November 7, 2009.

Because this report aims to capture disparities in access and utilization of primary care services between rural and non-rural areas, we use two cancer measures for the late-stage cancer diagnosis indicator for rural and non-rural areas: the age-adjusted incidence rate per year (over a 5-year span); and the proportion of all breast cancer incidence diagnosed at a late stage. Figure 8 illustrates the disparity in late-stage breast cancer rates between rural and non-rural residents, with a relatively greater proportion diagnosed at late stage in rural areas. While non-rural NH is meeting the Health People 2020 target for late-stage diagnosis (42.4), rural NH is far behind, even exceeding the 2007 baseline for late-stage cases (44.7).[11] There was no statistically significant difference in colon cancer rates by rurality, and because cervical cancer is so rare, a statistical analysis was not considered useful.

Figure 8.



[11] Healthy People 2020. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. December 18, 2020. Available from: https://www.healthypeople.gov/2020/topics-objectives/topic/cancer/objectives.

Health Professions Data Center

Due to the license renewal schedule, the Data Center has collected full workforce data for one provider type – physician assistants - since the amendment to RSA 126-A:5, XVIII passed in July 2019. All licensed provider types - apart from physician assistants - renew biennially, every two years after receiving their initial license. As a result, full data collection for all other participating provider types is achieved every two years. Administrative rules reflecting the amended legislation and associated requirements for license renewal were established for physicians, psychologists, alcohol and drug counselors, advanced practice registered nurses (APRNs), and mental health practitioners (independent clinical social workers, marriage and family therapists, clinical mental health counselors, pastoral psychotherapists) under the Office of Professional Licensure and Certification (OPLC). Administrative rules for the survey requirement will be established for dental providers (registered dental hygienists and dentists) prior to the 2021 renewal cycle for registered dental hygienists. Since renewals for APRNs and mental health practitioners are rolling (take place throughout the year) and the survey collection period for these provider types coincides with the state fiscal year (7/1-6/30), data collection for both provider types is still underway and will not conclude until June 30, 2021.

Initial legislation established in June 2017 (HB322) required the SORH to collect workforce data by surveying participating licensed providers during the license renewal cycles. Administrative rules and surveys were implemented and data was collected in 2018 for participating provider types. However, because the legislation did not require participation as a condition of license renewal, responses and the corresponding data collected before the July 2019 amendment (HB127) passed is limited. Reports for the 2018 physician workforce (partial) and the 2018 physician assistant (PA) workforce (full) have been released.

The HPDC will have full workforce data for physicians, psychologists, and alcohol and drug counselors in 2021 and full workforce data for APRNs and mental health practitioners in 2022. Until the new data analyst position is hired, workforce reports will continue to be released two years after the close of the collection periods (see Future Plans below). Refer to Table 1 below for expected data collection completion and report release dates.

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 workforce sections:

- Response rate
- Practice status
- Demographics
- Capacity - sites and hours, and specialty
- Distribution
- Access – payment and wait time
- Recruitment - education/training

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

Table 1. Data Collection and Workforce Report Dates

Provider Type	**Data Collected - **Partial**	**Data Collected - Full**	**Workforce Report**
Physician Assistant (PA)	N/A	*2018, annually thereafter	2020
Physician	*2018	*2019	2021
Psychologist	*2019	2020	2022
Alcohol & Drug Counselor (MLADC/LADC)	*2019	2020	2022
Advanced Practice Registered Nurse (APRN)	*2019	2020	2022
Mental Health Practitioner *- Independent Clinical Social Worker (LICSW)* *- Clinical Mental Health Counselor (LCMHC)* *- Marriage and Family Therapist (MFT)* *- Pastoral Psychotherapist (PP)*	*2019	2020	2022

Note: Timeline expected without data analyst position filled
* Data collection occurred prior to implementation of the 2019 legislative amendment, which requires survey/opt out as a condition of license renewal; as a result, survey/opt out responses are limited.
** Providers due to renew (about half of all licensees)

Provider Response Rate Data

Table 2 contains the response rate statistics for State Fiscal year 2020. 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, total renewals from those due to renew, and the percent of providers who did not renew. The proportion of providers who did not renew is not an indication of attrition or a gross loss of providers from the workforce, rather a measure of providers that were not retained as a result of events such as retirement, relocation out of state, extended leave, etc. Licensing list figures suggest the supply of licensed providers continues to grow, as the number of initial licenses outweighs the number of licensed providers lost. Of note is the near-complete response rate for psychologists and alcohol and drug counselors; a result of licensing board follow up of noncompliant licensees.

Table 2. Provider Response Rate Data for SFY2020

Provider Type	**Data Collection Period**	**Met Survey Requirement**	***Opt Outs**	****Total Renewals**	**Nonrenewals (%)**
Physician Assistant (PA)	Oct-Dec 31, 2019	800 (**95.1%**)	12 (1.4%)	841 of 903	6.9%
Physician	Mar-Jun 30, 2020	2,989 (**95.1%**)	51 (1.7%)	3,144 of 3,678	14.5%
Psychologist	Apr-Jun 30, 2020	173 (**99.4%**)	3 (1.7%)	174 of 233	25.3%
Alcohol & Drug Counselor (MLADC/LADC)	Apr-Jun 30, 2020	242 (**99.2%**)	2 (0.8%)	244 of 279	12.5%

* Of licensees who met the survey requirement

** Of those due to renew

2018 PA Workforce Data Summary

Notable characteristics of the PA workforce actively practicing in NH

Demographics

Female	**70%**
Non-Hispanic White	**92%**
*Under 40 years old	**48%**
Other Languages	**<4%**

Sites and Hours

2+ Locations	**20%**
<40 Hours/Week	**50%**
<30 Hours/Week (Part Time), Primary Care	***25%**

**Twice the number of primary care specialists reported working less than 30 hours/week compared to other specialists (12.5%)*

Distribution

Total FTE in Rural Regions		**25%**
Public Health Region by % of total FTE	*Greater Manchester*	**21%**
	Greater Nashua	**14%**
	Seacoast	**13%**
	Capital Area	**13%**
	**Upper Valley*	**9%**
	Strafford	**9%**
	South Central	**7%**
	North Country	**4%**
	Greater Monadnock	**4%**
	Carroll	**3%**
	Greater Sullivan	**2%**
	Winnipesaukee	**2%**
	Central NH	**1%**
Practice in Outpatient Setting		**>60%**

**DHMC in Lebanon sits within Upper Valley*

Specialties

Top 5 most practiced specialties by FTE (%)	**Family Medicine* **Orthopedic Surgery* **Emergency Medicine* *Internal Medicine* *General Surgery*	**19%** **14%** **12%** **5%** **4%**
Several geriatric care specialties ranked at the bottom of reported specialties by FTE (%)	*Neurology* *Hematology/Oncology* *Geriatric Medicine* *Pulmonology* *Rheumatology*	**0.8%** **0.5%** **0.5%** **0.3%** **0.1%**
Primary Care Practice by % of total FTE		**25%**

***** *The top 3 practiced specialties (of 31 reported) represent over 45% of the total FTE in the state*

Payment/Patient Acceptance and Wait – Outpatient Practices

Medicaid Accepted	**~90%**
Sliding Fee Schedule Offered	**40%**
Wait of 1 Week or Less, Established Patients (overall, primary care)	**80%, 87%**
New Patients Accepted, Primary Care	**~75%**

Retention

NH Ties	**3 out of 5**
Less than 5 years Practicing in NH	**40%**
Anticipated reduction in PA capacity (by FTE) in 5 years	**~20%**
New Patients Accepted, Primary Care	**~75%**

Rural Practicing PAs were *more likely to…

Graduate from PA school in the last 5 years	**1.4x**
Have been practicing in NH for less than 5 years	**1.3x**
Anticipate a reduction in PA capacity in 5 years	**1.5x**
Practice primary care	**1.6x**

**At the 95% confidence level*

Rural Practicing PAs were *less likely to…

Have NH ties prior to receiving their initial license	**1.4x**

**At the 95% confidence level*

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 new DHHS administrative rule, each participating licensing board is required to promulgate 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.

Five of the eight participating health professions licensing boards formally adopted survey rules in 2019. The administrative rules process has commenced for the Board of Dental Examiners and will conclude prior to the 2021 renewal cycle for registered dental hygienists. The remaining two boards, 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.

PROGRAM UPDATES

Health Status of Rural Residents

NH Health WISDOM, the data portal for the Division of Public Health Services, is undergoing a major technical transition. The application used for the last seven years to calculate and produce data charts and maps in the portal, IBM Cognos, has numerous limitations and fails to meet WISDOM's growing needs. Four years ago, the Bureau of Public Health Statistics and Informatics initiated an RFP to analyze and determine the best application for the portal requirements. The findings from the RFP narrowed the choices down to two tools with the final selection of Exaptive.

The WISDOM team started the transition over to Exaptive and completed 50-75% of the project, when NH DHHS started exploring an enterprise business intelligence (EBI) application solution. Senior management reviewed the direction of WISDOM and determined the best long-term plan was to cease Exaptive development and to start using the newly selected EBI visualization tool, Tableau.

Due to limited resources, the strategy during the transition to Exaptive, and subsequently Tableau, was to limit creating new Cognos charts in WISDOM and updating only select datasets to allow the team to focus on the transition to the new EBI application. Although efforts have been slowed down during the COVID-19 pandemic DHHS is still focused on transitioning over to Tableau by April 2021.

Once live, the new WISDOM application will provide modern interactive visualizations. The data will have the latest up-to-date data, and include new features such as providing rural and non-rural data filtering.

Health Professions Data Center

Compliance

Rural Health and Primary Care (RHPC) has been working 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 determining survey requirement compliance. In lieu of renewal requirement confirmation by licensing board staff, attestations to certify compliance are used for all but one board, the Board of Mental Health Practice. After conducting multiple rounds of noncompliance follow up, the Health Professions Data Center provides a final noncompliance list to each participating board following the close of the renewal cycle.

Board-specific, follow-up processes for survey requirement noncompliance is as follows:

- Board of Alcohol and Other Drug Use Professionals and Board of Psychologists
  Licensing staff issue noncompliance/false attestation letters and conduct additional follow up, if necessary, in an effort to increase responses.
- Board of Medicine
  No action is taken for noncompliant physicians or physician assistants; renewal licenses are maintained regardless of survey completion. The Board determined there is insufficient capacity for noncompliance follow up due to the number of physicians falsely attesting to meeting the survey requirement.
- Board of Mental Health Practice and Board of Nursing
  Process is currently in development. At the end of November, OPLC issued guidance to have the HPDC send a noncompliance list every two weeks, as renewals are rolling instead of designated to a cycle period. However, protocols for follow up have not yet been determined.

Table 3. Noncompliance Rate Pre/Post Board Intervention

Provider	**Noncompliance Rate Pre-Board Intervention (#)**	**Noncompliance Rate Post-Board Intervention (#)**	**% Change**

Psychologists	11% (19)	~0% (1)	11%
LADCs/MLADCs	9% (22)	1% (3)	8%
**Physicians*	5% (151)	5% (151)	0%

* The Board of Medicine did not conduct follow up on noncompliant providers

Administration
In 2019, RHPC targeted efforts to better streamline the survey process by reducing inefficiencies. A data use agreement between OPLC and RHPC was filed at the beginning of 2020 to establish File Transfer Protocol (FTP) site access to the Health Professions Division provider records. OPLC provider data fields are used to create respondent panels, pre-populate survey authentication fields, and for noncompliance follow up. Direct access to provider data removed the need for OPLC staff participation in the data retrieval process, which has increased process efficiency. RHPC continues to work with the eGov Web Services Division of the Department of Information Technology (DoIT) as part of the implementation process to ensure current links and guidelines are reflected on renewal website's survey requirement page. The HPDC established consistent survey notification language for each participating provider, effectively reducing survey setup time. Implementation coordination now only requires communicating updated survey links for the renewal page of each participating provider type.

FUTURE PLANS

Health Status of Rural Residents

Under the RHPC, the Primary Care Office (PCO) coordinates with the Bi-State Primary Care Association (BSPCA) and Sections in the Division of Public Health Services (DPHS), including Maternal and Child Health, Chronic Disease, and Public Health Statistics and Informatics, to collect primary care data for the statewide Needs Assessment. New to this collaboration will be the NH Integrated Delivery Networks (IDNs), developed in accordance with NH's Delivery System Reform Incentive Payment Demonstration Waiver (DSRIP); and the Division for Behavioral Health (DBH). The NH PCO and aforementioned partners will convene to discuss the Primary Care Needs Assessment Report due March 2021. As part of the Needs Assessment, our shortage designation contractors at Community Health Institute/John Snow, Inc. (CHI/JSI) are collecting and analyzing data from targeted-area surveys and the following state and national databases:

- Uniform Data System (UDS)
- All Payer Claims Database (APCD)
- Behavioral Risk Factor Surveillance System (BRFSS)
- Hospital Discharge data
- NH TEMSIS (Trauma Emergency Medical Services Information System)
- WISDOM
- American Community Survey (ACS)

- Social Vulnerability Index (SVI)
- Vital records
- Health Professions Data Center

The PCO submitted the last Needs Assessment Report in May 2016, which highlighted population disparities in access to care and gaps in the data sources. Access to healthcare services underlies many of the observed rural/non-rural disparities underscored in the Needs Assessment.

Once the new WISDOM data system is available, where possible, all data will be able to be viewed as rural versus non-rural according to the definition by Public Health Region. The RHPC will then create a Rural Health dashboard in Tableau that will link to the WISDOM system but contain rural relevant indicators for: 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 bi-annually for each participating provider type that completes renewals on a biennial basis, as data collection runs in two-year intervals. As the only provider type that renews annually, physician assistant reports will be released every year beginning with the 2018 Physician Assistant Workforce Report, released in December 2020. See Appendix B for renewal cycle details of each participating provider type. The HPDC will have data on the full NH workforce of physicians, psychologists, and alcohol and drug counselors (LADCs/MLADCs) in 2021, and the respective reports will be released in 2023, then every two years thereafter. The mental health practitioner and APRN data collection cycles run from July 1 to June 30; and the first full dataset will be completed in July 2022. The mental health practitioner and APRN workforce reports will be released every two years beginning in 2024. The OPLC aims to transition all license renewal cycles to a year-round, rolling basis in the near future.

Compliance

Due to the Board of Medicine's decision that understaffing prevents confirmation of compliance prior to issuing renewals or follow up with noncompliant licensees, data on the full physician and physician assistant workforce will not be achieved until the survey/opt out can be enforced. The NH Medical Society (NHMS) offered a possible solution for physicians: to include survey compliance verification in addition to Continuing Medical Education (CME) reporting verification through the NHMS. Confirmation of compliance for both requirements would occur before physicians enter

the license renewal application through the OPLC website. Since CME reporting for 2021 is currently underway, this solution could not be implemented until 2022.

The Office of Professional Licensure and Certification (OPLC) intends to moderate the agency's limited ability to confirm compliance during the renewal process with the creation of a compliance enforcement office. The office will perform audits to monitor compliance, perform follow up, and issue penalties. The HPDC will coordinate noncompliance management with the enforcement office. RHPC anticipates that the addition of a compliance enforcement office will mitigate noncompliance in the absence of survey requirement implementation as a condition of license renewal.

OPLC's goal to transition license renewals to a rolling basis throughout the year would alleviate the extensive workload that currently prevents staff from verifying survey completion. The current system requires staff – often one person - to certify hundreds or thousands of renewals within a three-month window. A rolling renewal cycle would eliminate the expectation to manage a significant number of renewals at one time and spread the cumulative workload over a longer duration of time.

Data Use

Prior to the legislative amendment requiring data collection of all participating licensed providers, RHPC anticipated 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.

Now, with the legislative amendment requiring completion, the HPDC will house complete data on all participating licensed providers and meaningful use will be enhanced. 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 associations, 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 educate stakeholders and inform workforce policy. RHPC will continue to work alongside health care workforce entities in NH and nationally, to ensure best practices

and a complete collaborative approach to identifying and addressing health professions workforce challenges.

Staffing

HPDC work will be supported by a data analyst; a new position funded by legislation (HB 4, Laws of 2019). The position was expected to be filled in summer 2020, but because of the hiring freeze brought on by COVID-19, the position remains unfilled and a waiver has recently received gubernatorial approval. 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

Subgroups	Indicator	Source
Demographics	65+	ACS
Demographics	Percent Not Fluent in English	ACS
Demographics	Disabled	ACS
Demographics	Veteran	ACS
Demographics	Low Income	ACS
Demographics	Uninsured	ACS
Demographics	Medicare	APCD
Demographics	Receive care @ FQHC	APCD
Barriers to Care	Have health care coverage	BRFSS
Barriers to Care	Delayed/Avoided care due to cost	BRFSS
Barriers to Care	No PCP	BRFSS
Barriers to Care	Travel time to PC	APCD
Barriers to Care	10+ mi from hospital	APCD
Barriers to Care	Travel time to MH	APCD
Workforce Supply	PCPs:Population	Licensing data
Workforce Supply	PCPs 50+	Licensing data
Workforce Supply	PCPs-international med grads	Licensing data
Workforce Supply	Dentists:Population	Licensing data
Workforce Supply	Pediatric Dentists:Population	Licensing data
Workforce Supply	General dentists	Licensing data
Substance Use	Needing but not receiving rx for drug use	NSDUH
Substance Use	Needing but not receiving rx for alcohol use	NSDUH
Substance Use	Drug related ED visits	UHFDDS
Substance Use	Alcohol related ED visits	UHFDDS
Substance Use	Drug related inpatient stays	UHFDDS
Substance Use	Alcohol related inpatient stays	UHFDDS
Substance Use	Current smoker	BRFSS
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

Prevention Quality Indicators (PQIs)		
PQIs	*Acute composite	UHFDDS
PQIs	**Chronic composite	UHFDDS
PQIs	Overall composite	UHFDDS
Health Outcomes - Cancer	Breast	Cancer Registry
Health Outcomes - Cancer	Cervical	Cancer Registry
Health Outcomes - Cancer	Colon + Rectal	Cancer Registry
Health Outcomes - Cardiovascular	High blood pressure	BRFSS
Health Outcomes - Cardiovascular	High cholesterol	BRFSS
Health Outcomes - Mortality	All deaths	Vital Records
Health Outcomes - Mortality	Suicide	Vital Records

* Bacterial pneumonia, urinary tract infection

** Diabetes, COPD, asthma, hypertension, heart failure

Appendix B

List of Provider Surveys as of December 2019	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	Annually, mid-Oct-12/31
Psychologist Licensure Survey	Biennially, 4/1-6/30, by initial license year