



STATE OF NORTH CAROLINA  
DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER  
GOVERNOR

MANDY COHEN, MD, MPH  
SECRETARY

October 1, 2019

**SENT VIA ELECTRONIC MAIL**

The Honorable Joyce Krawiec, Chair  
Joint Legislative Oversight Committee on  
Health and Human Services  
North Carolina General Assembly  
Room 308, Legislative Office Building  
Raleigh, NC 27603

The Honorable Josh Dobson, Chair  
Joint Legislative Oversight Committee on  
Health and Human Services  
North Carolina General Assembly  
Room 307B, Legislative Office Building  
Raleigh, NC 27603

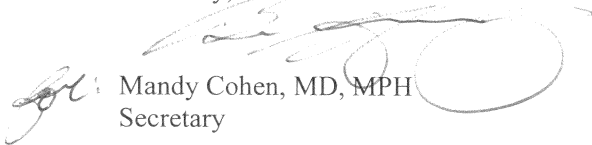
The Honorable Donny Lambeth, Chair  
Joint Legislative Oversight Committee on  
Health and Human Services  
North Carolina General Assembly  
Room 303, Legislative Office Building  
Raleigh, NC 27603

Dear Chairmen:

Session Law 2018-88, Section 3.(b) directs the Office of Rural Health, Department of Health and Human Services, to work with data from the Cecil G. Sheps Center for Health Services Research, and other sources, to identify the need for dentists in rural areas in North Carolina and to develop a recommendation to target loan repayment funds for dentists in rural areas that have been identified as having the greatest need for dentists. A final report is due to the Joint Legislative Oversight Committee on Health and Human Services on the actions required in this section on or before October 1, 2019. Pursuant to the provisions of law, the Department is pleased to submit the attached report.

If you have questions about the content of this report, please contact Maggie Sauer, Director for the Office of Rural Health, at 919-527-6440 or [Maggie.Sauer@dhhs.nc.gov](mailto:Maggie.Sauer@dhhs.nc.gov).

Sincerely,



Mandy Cohen, MD, MPH  
Secretary

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# **Report on Target Loan Repayment Programs**

**Session Law 2018-88, Section 3(b)**



**Report to**

**The Joint Legislative Oversight Committee on  
Health and Human Services**

**By**

**North Carolina  
Department of Health and Human Services**

**October 1, 2019**

## Executive Summary

In Part II of Session Law 2018-88 the North Carolina General Assembly (NCGA) directed the North Carolina Department of Health and Human Services (DHHS), Office of Rural Health (ORH) to provide two reports the North Carolina State Loan Repayment Program (the North Carolina Loan Repayment Program for purposes on this report), with directed attention to access to dentist in rural areas. An interim report was due October 1, 2018 and a final report is due October 1, 2019. These reports are to document how ORH is directing the North Carolina Loan Repayment Program to ensure that it aligns with the following goals: 1) targets increasing the number of health care providers in rural areas of the State; 2) is coordinated with the National Health Service Corps and Federal Loan Repayment programs, and well as any other publicly or privately funded programs, to maximize funding to increase the number of health care providers in rural areas of the State; and 3) ensures both recruitment and retention of health care providers in rural areas of the State. Further, DHHS was directed to work in conjunction with the Cecil G. Sheps Center for Health Services Research (Sheps Center) to identify the need for dentists in rural areas in North Carolina and develop recommendations to target loan repayment funds for dentists in rural areas that have been identified as having the greatest need for dentist.

DHHS and ORH welcomes the opportunity to examine, align and report on the structure and outcomes of the North Carolina Loan Repayment Program as well as examine and respond to the need for dentists in rural communities. The North Carolina Loan Repayment Program has played in integral role in creating and maintaining access to health care providers. In 1973, North Carolina was the first state in the nation to create a State Office of Rural Health. In 1987, the North Carolina General Assembly passed legislation creating and supporting the North Carolina Loan Repayment Program within ORH. Since that time, the North Carolina General Assembly has appropriated funds to the Loan Repayment Program which ORH has administered to increase access to quality health care in rural and underserved communities by recruiting and providing incentives to providers who agree to serve those communities. The ORH recruitment activities include working with sites to post employment opportunities and linking candidates to those opportunities. Based upon eligibility and funding, ORH may offer providers loan repayment or high needs service bonus through ORH or link to loan repayment programs in the federal or public sectors.

The incentives provided include loan repayment and high need service bonuses. Loan repayment awards include up to \$100,000 for physicians/dentists, paid on a graduated scale, over a four-year service commitment and up to \$60,000 for advanced clinical providers following the same process for payment and service commitment. High Need Service Bonuses are used as a recruitment tool for providers without loan repayment needs; however, these awards are provided as lesser amounts (up to \$50,000 for physicians/dentists and up to \$30,000 for advanced clinical providers) and requires a four-year service commitment. ORH also aids with recruitment of providers when the placement does not meet criteria to offer incentives.

Access to high quality health care in rural communities is a critical need; therefore, the state-funded North Carolina Loan Repayment Program is not the only program focused on increasing access to care in these communities. ORH has a strong history of maximizing the North Carolina Loan Repayment funds by leveraging other loan repayment programs such as the federal National Health Service Corps program and private programs such as the North Carolina Medical Society's Community Practitioner Program. Further, ORH

strategically used North Carolina Loan Repayment appropriations as match to draw down additional federal loan repayment funds through a competitive grant from the Health Resources and Services Administration (HRSA) State Loan Repayment Program (SLRP) to recruit behavioral health providers. To ensure that North Carolina Loan Repayment Program leverages other loan repayment programs to increase the number of providers in rural communities, ORH encourages providers and sites to apply to the National Health Service Corps before the state-funded North Carolina State Loan Repayment Funds are accessed.

ORH also meets and communicates regularly with partners administering the federal and privately funded loan repayment programs to ensure the loan repayment programs are complementary. ORH co-chairs the North Carolina Rural Health Leadership Alliance Workforce Recruitment and Retention Workgroup, a group of provider associations, loan repayment programs, educational groups, and interested parties, to ensure regular communication, collaboration and alignment with key stakeholders and programs supporting placement of providers.

Since inception the North Carolina Loan Repayment Program, as directed by legislation, has focused on recruitment of providers to rural communities. In 2018, the passage of HB 998 expanded the program scope to include retention of providers.

Recruitment and retention of quality providers is key to ensuring optimal health in rural communities. ORH tracks contract completion rates and uses this as a method of assessing provider retention. Over 60% of providers complete their four-year commitment. Another data tool to track retention is provider feedback. ORH partners with the Sheps Center, who administers and evaluates questionnaires completed by loan program participants, to assess retention of providers based on survey response. The top positive and negative survey responses that contribute to a provider's likelihood of staying in a community beyond his or her service commitment was "feeling like I am doing important work" and "fully valuing the mission of my practice" being high retention factors and "compensation" and "time away from work" and "involvement in administrative decisions" being low retention factors. Successful recruitment and retention of providers to rural communities is also attributed to provider sense of community acceptance and opportunities for family members' employment or education.

In examining and responding to the identification of the need for dentists in rural areas of the State, data from the Sheps Center reveals that most dentists have practices in and around urban counties. Further, 76 of North Carolina's 100 counties are designated as dental health professional shortage areas (HPSAs). Over the past ten years, ORH has funded \$8,348,637 towards 193 contracts for dentists to provide care in underserved areas of the state. Of the 193 contracts, 149 were involved in placing new dentists in an underserved area of the state, and 99 were placed in rural counties (61%). Ninety-four percent (181) of those contracts supported loan repayment through the North Carolina State Loan Repayment Program and six percent (12) provided High Needs Service Bonus.

Over the past year, ORH has embarked on gathering stakeholder feedback to inform improvements to the three incentive programs administered by ORH (the North Carolina Loan Repayment Program (LRP), the State Loan Repayment Program (SLRP) and the J-1 Visa Waiver Program). Further, as ORH used this feedback to

guide the work of placement services to ensure alignment with other placement programs such as National Health Service Corps and the North Carolina Medical Society's Community Practitioner Program as well as the placement services efforts that do not involve incentives but result in placements.

ORH conducted 10 on-site stakeholder meetings across the state. In addition to feedback provided at on-site stakeholder meetings, ORH solicited and received stakeholder feedback using an open written feedback period that spanned several months. Stakeholder feedback was received by the providers, safety net sites, provider and site associations, medical schools, AHEC, and others. Overwhelmingly, stakeholders supported and found value in the placement services at ORH. By coupling stakeholder feedback with internal quality improvement work, ORH developed and is in the process of implementing the following process and program improvements:

1. Process Updates

- a. Collect feedback at least annually from stakeholders through the creation of a Workforce Development Advisory Committee and/or gathering feedback from stakeholders to provide guidance regarding placement services offered by ORH and incentives with the goal of aligning resources and building innovative programs for access to care in rural and underserved communities. Innovations examples include rural training tracks and strengthening pipeline efforts.
- b. Program guidelines will be updated annually and will be informed by stakeholder feedback and program funding levels
- c. Program application will be updated annually

2. 2019-2020 Program Updates For \$1,500,000 Base Appropriations

- a. Expand eligibility criteria:
  - i. Extend the application window beyond six months from hire date
    1. Providers are eligible to apply up to 24-months from hire date
  - ii. Ensure program guidelines complement other incentive programs and do not preclude providers from applying
  - iii. Expand eligibility for State Mental Hospitals and Alcohol and Drug Abuse Treatment Centers (ADATCs) to include providers other than Psychiatrists such a Primary Care Physicians, Licensed Clinical Social Worker (LCSW), Licensed Professional Counselor (LPC), Licensed Marriage and Family Counselor (LMFT), Psychiatric Nurse Specialist (PNS), Health Service Psychologist (Clinical & Counseling), Licensed Clinical Addiction Specialist (LCAS) and Health Service Psychologist (HSP)-Clinical and Counseling
  - iv. Add incentives for preceptors to precept medical and dental residents, PAs, and NPs in rural communities.
  - v. Increase program incentive amount during the first year for providers at qualifying sites while maintaining graduated payment model
  - vi. Retention: Offer continuation contracts for LRP. Providers could apply for funding one year at a time following completion of their 4-year NC LRP service obligation

3. 2019-2020 Program Planning for proposed \$3,500,000 (SFY 19-20) and \$1,000,000 (SFY 20-21) Non-recurring Appropriations
  - a. Eligibility criteria:
    - i. Extend the application window beyond six months from hire date
      1. Providers are eligible to apply up to 4 years from hire date
    - ii. Offer one-time retention bonus for years 5, 10 or 15 to providers practicing at eligible site in HPSA of 15 or higher
    - iii. Extend eligibility to full-time/part-time providers employed at Free and Charitable Clinics
    - iv. Ensure program guidelines complement other incentive programs and do not preclude providers from applying
    - i. Expand eligibility for State Mental Hospitals and Alcohol and Drug Abuse Treatment Centers (ADATCs) to include providers other than Psychiatrists such a Primary Care Physicians, Licensed Clinical Social Worker (LCSW), Licensed Professional Counselor (LPC), Licensed Marriage and Family Counselor (LMFT), Psychiatric Nurse Specialist (PNS), Health Service Psychologist (Clinical & Counseling), Licensed Clinical Addiction Specialist (LCAS) and Health Service Psychologist (HSP)-Clinical and Counseling
    - v. Add incentives for preceptors to precept medical residents, PAs, and NPs in rural communities.
    - vi. Increase program incentive amount during the first year for providers at qualifying and Safety Net sites while maintaining graduated payment model
    - vii. Retention: Offer continuation contracts for LRP. Providers could apply for funding one year at a time following completion of their 4-year NC LRP service obligation
4. Future Program Updates: Dependent Upon Increased Appropriations/Funding
  - a. Expand eligibility criteria:
    - i. Increase High Need Service Bonus
    - ii. Offer retention bonus for years 5, 10, and 15
    - iii. Add an incentive during residency for future practice in rural communities
    - iv. Consider offering incentives within ECU Dental Community Service Learning Centers (CSLs). CSLs indicate they are not able to implement a Sliding Fee Scale.

Further, ORH is working closely with partners and stakeholders to develop pipeline programs that build interest in healthcare careers and support youth from underserved communities. This work will include collaborating with partners to increase opportunities for engagement in rural training tracks and rural rotations and could lead to development of incentives offered through ORH or partners during residency for commitment to practice in rural areas.

ORH acknowledges and appreciates the creation, engagement and long-term support provided by the North Carolina General Assembly to the North Carolina State Loan Repayment Program and to the Office of Rural Health. The North Carolina Loan Repayment Program, and other placement incentives programs, create access to essential healthcare in rural and underserved communities across the State.

## North Carolina Loan Repayment Program Overview

North Carolina Session Law 2018-88, Part II, Section 3.(a) Target Loan Repayment Programs, directed the Office of Rural Health, Department of Health and Human Services to structure the North Carolina State Loan Repayment Program (the North Carolina Loan Repayment Program for purposes on this report) to align with the following goals: 1) targets increasing the number of health care providers in rural areas of the State; 2) is coordinated with the National Health Service Corps and Federal Loan Repayment programs, and well as any other publicly or privately funded programs, to maximize funding to increase the number of health care providers in rural areas of the State; and 3) ensures both recruitment and retention of health care providers in rural areas of the State.

This report includes an outline of the current North Carolina Loan Repayment Program, its origins, and guidelines and concludes with plans for reviewing and revising the existing program to meet the needs of rural communities.

Founded in 1973 to focus on the needs of rural and underserved communities, the North Carolina Office of Rural Health (ORH) became the first State Office of Rural Health in the nation. To meet its mission of ensuring access to quality care, the ORH Placement Services Team serves both rural communities and urban underserved communities across the state by making compatible matches between job sites and providers, based on their mutual needs. Placement Services recruits primary care physicians, nurse practitioners and certified nurse midwives, physician assistants, dentists, dental hygienists, psychiatrists, and Masters-trained behavioral health professionals.

The North Carolina Loan Repayment Program (LRP) was approved by the North Carolina General Assembly in Session Law 1987-1100, Section 39.3 – Rural Obstetrical Care Incentive Pilot. Over time, the program has expanded its focus, with legislative changes in SFY 2006 and 2015. ORH has been the administrator of the program since inception, offering incentives to primary care providers practicing in rural and underserved areas across North Carolina. The ORH recruitment activities include working with sites to post employment opportunities and linking candidates to those opportunities. Based upon eligibility and funding, ORH may offer providers loan repayment or high needs service bonus through ORH or link to loan repayment programs in the federal or public sectors.

To focus on access to care in rural and underserved communities, a provider must agree to practice in a community and practice site deemed eligible for the program to receive loan repayment. Automatic site eligibility is granted for the following North Carolina facility types:

- National Health Service Corps (NHSC) certified sites
- Alcohol and Drug Abuse Treatment Centers (Julian F. Keith ADATC, Walter B. Jones ADATC, R. J. Blackley ADATC) – *historically psychiatrists only, program improvements will expand eligibility to Primary Care Physicians, Licensed Clinical Social Worker (LCSW), Licensed Professional Counselor (LPC),*

*Licensed Marriage and Family Counselor (LMFT), Psychiatric Nurse Specialist (PNS), Health Service Psychologist (Clinical & Counseling), Licensed Clinical Addiction Specialist (LCAS) and Health Service Psychologist (HSP)-Clinical and Counseling*

- State mental health hospitals (Cherry Hospital, Central Regional Hospital, Broughton Hospital) – *historically psychiatrists only, program improvements will expand eligibility to Primary Care Physicians, Licensed Clinical Social Worker (LCSW), Licensed Professional Counselor (LPC), Licensed Marriage and Family Counselor (LMFT), Psychiatric Nurse Specialist (PNS), Health Service Psychologist (Clinical & Counseling), Licensed Clinical Addiction Specialist (LCAS) and Health Service Psychologist (HSP)-Clinical and Counseling*
- Sites with an associated federally designated Health Professional Shortage Area (HPSA) score and/or that are making substantive strides toward achieving NHSC site certification
- Critical Access Hospitals

North Carolina Loan Repayment (LRP) awards for primary care physicians, general dentists and psychiatrists are provided not to exceed \$100,000 for four years of service. LRP awards for nurse practitioners, certified nurse midwives, physician assistants, dental hygienists and psychiatric nurse practitioners are provided not to exceed \$60,000 for up to four years of service. Amounts paid over the four years are graduated with the highest repayment disbursement in the fourth year to enhance retention. Historically, providers must be in their practice site no more than six months to be eligible for the LRP.

For providers without educational loans, High Needs Service Bonus Awards are available to incentivize practicing in rural and underserved communities in sites with a sliding fee scale and located in a Health Professional Shortage Area (HPSA). High Needs Service Bonus for primary care physicians, general dentists and psychiatrists are provided not to exceed \$50,000 over four years. High Needs Service Bonus Awards for certified nurse midwives, physician assistants, dental hygienists and psychiatric nurse practitioners are provided not to exceed \$30,000 over four years.

Since inception the North Carolina Loan Repayment Program, as directed by legislation, has focused on recruitment of providers to rural communities. In 2018, the passage of HB 998 expanded the program scope to include retention of providers.

North Carolina State Loan Repayment Program funding is exclusively for placement incentives (loan repayment or high need service bonus). Funding is not used to support travel related expenses associated with the recruitment process or moving expenses.

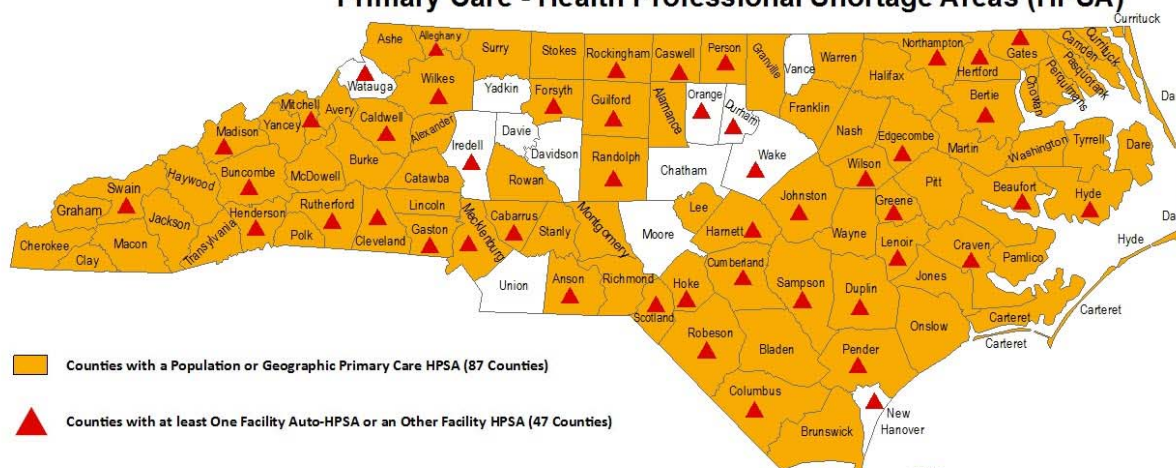
## **Creating Access to Healthcare In Rural Communities**

ORH ensures that the North Carolina Loan Repayment Program is targeted to increase the number of healthcare providers in rural areas of the State. ORH considers 70 of North Carolina's 100 counties as rural. ORH also uses Health Professional Shortage Area Designations to denote areas of healthcare shortage across the State. Currently, 87 of North Carolina's 100 counties are designated as Primary Care Health Professional



Shortage Areas (HPSA); 90 counties are designated as Mental Health HPSAs and 76 counties are designated as Dental HPSAs. HPSA designations reflect a population's access to primary care physicians, psychiatrists, or dentists. HPSA scores reflect the severity of the shortage with higher scores documenting the greatest need for providers. Historically, ORH has performed reviews for new HPSA designations at the request of interested North Carolina communities. Occasionally there have been some exceptions initiated by ORH staff. During 2017, ORH made an exception to this practice. In response to the opioid epidemic that has overwhelmed both North Carolina and the nation, ORH proactively initiated mental health HPSA reviews for 35 undesigned counties. These designations have all been approved. During this same period, ORH submitted five community-initiated mental health HPSA reviews that have also been approved. It is anticipated that these 40 additional HPSAs will result in the recruitment of more mental health providers to serve these counties by using federal and state incentives. The following maps illustrate the current HPSA designations for primary care, mental health and dental.

### North Carolina Office of Rural Health Primary Care - Health Professional Shortage Areas (HPSA)



#### Disclaimers:

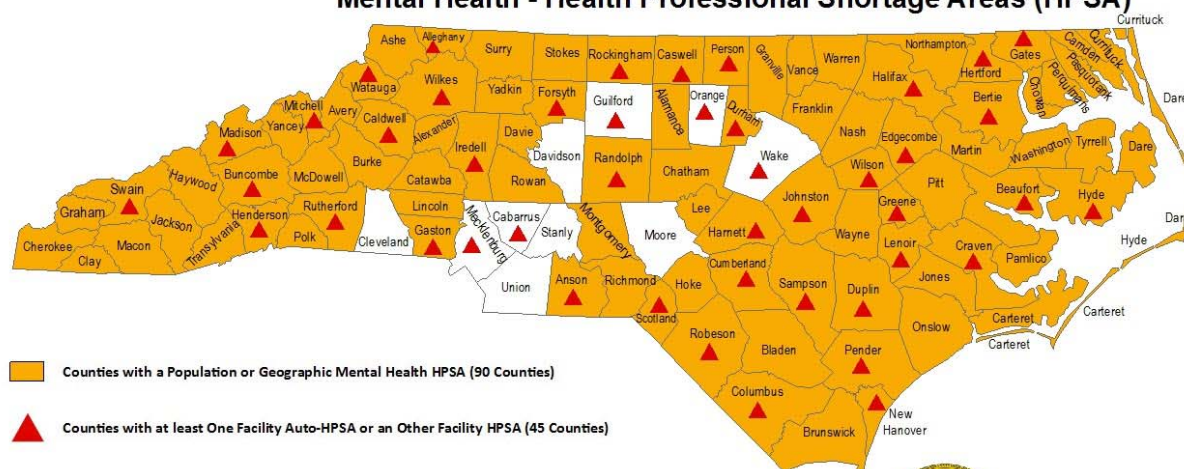
- Primary site only, does not include Correctional Facilities or Federally Qualified Health Center (FQHC) satellite sites
- Shortage area may be whole county, or population group or geographical area within county
- Counties that are in white represent urban or rural counties without an official HPSA designation
- The map is not reflective of counties that, if reviewed, would qualify for a primary care HPSA



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**  
Office of Rural Health

Data as of January 3, 2019

## North Carolina Office of Rural Health Mental Health - Health Professional Shortage Areas (HPSA)



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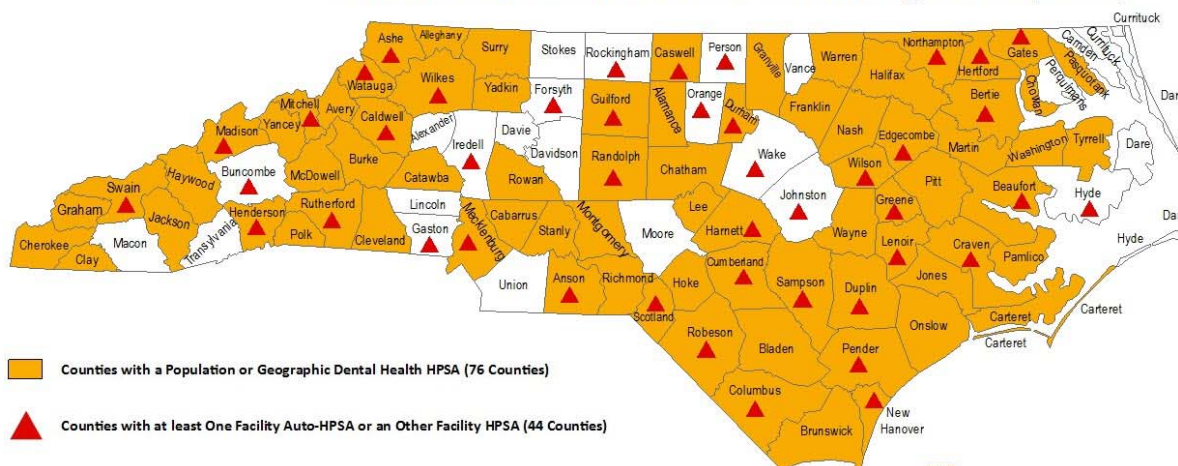
- Primary site only, does not include Correctional Facilities or Federally Qualified Health Center (FQHC) satellite sites
- Shortage area may be whole county, or population group or geographical area within county
- Counties that are in white represent urban or rural counties without an official HPSA designation
- The map is not reflective of counties that, if reviewed, would qualify for a mental HPSA



NC DEPARTMENT OF  
**HEALTH AND HUMAN SERVICES**  
Office of Rural Health

Data as of January 3, 2019

## North Carolina Office of Rural Health Dental Health - Health Professional Shortage Areas (HPSA)



### Disclaimers:

- Primary site only, does not include Correctional Facilities or Federally Qualified Health Center (FQHC) satellite sites
- Shortage area may be whole county, or population group or geographical area within county
- Counties that are in white represent urban or rural counties without an official HPSA designation
- The map is not reflective of counties that, if reviewed, would qualify for a dental HPSA

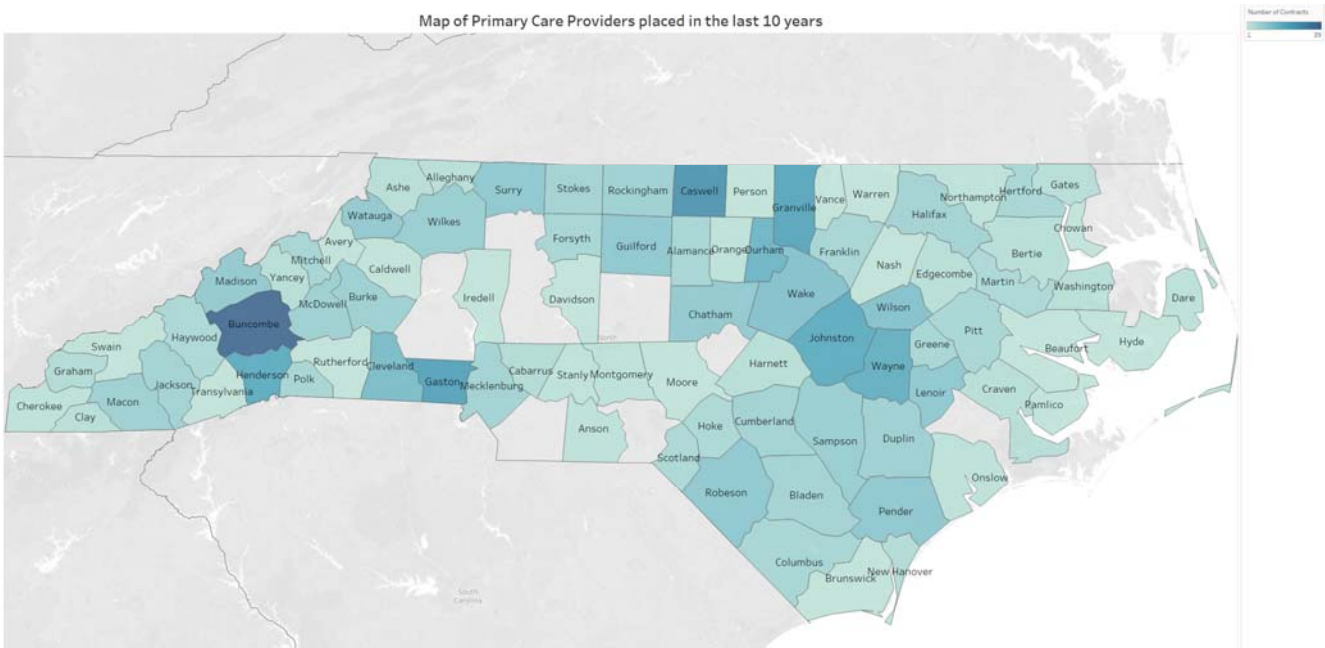


NC DEPARTMENT OF  
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Office of Rural Health

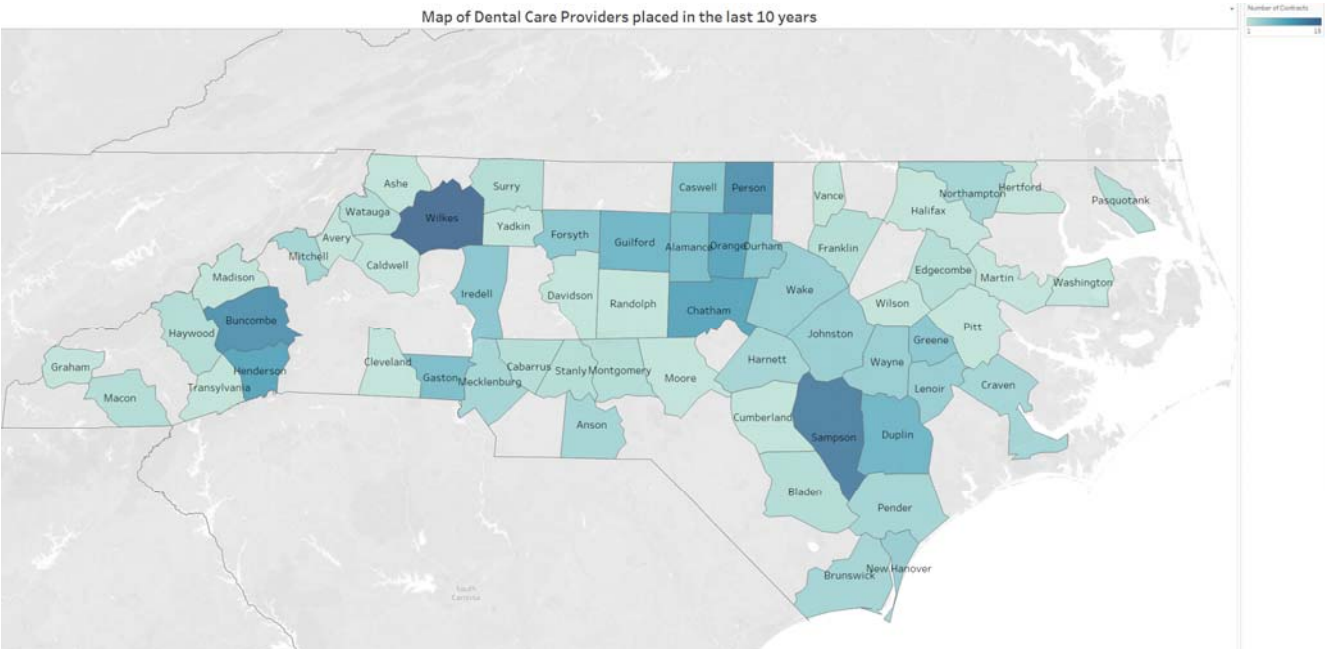
Data as of January 3, 2019

ORH uses rural status and HPSA scores to determine program eligibility, leverage and coordinate across incentive programs and maximize limited dollars to incentive practicing in rural communities. Over the past ten years, ORH has incentivized 467 providers to practice in rural or underserved communities. A breakdown of provider types and location of practice is illustrated in the following maps:

**Ten- Year Review of Primary Care provider Placements-** The map below includes Medical Doctors and Advanced Practice Providers across the state by density, counties with darker shading indicate a higher number of placements.

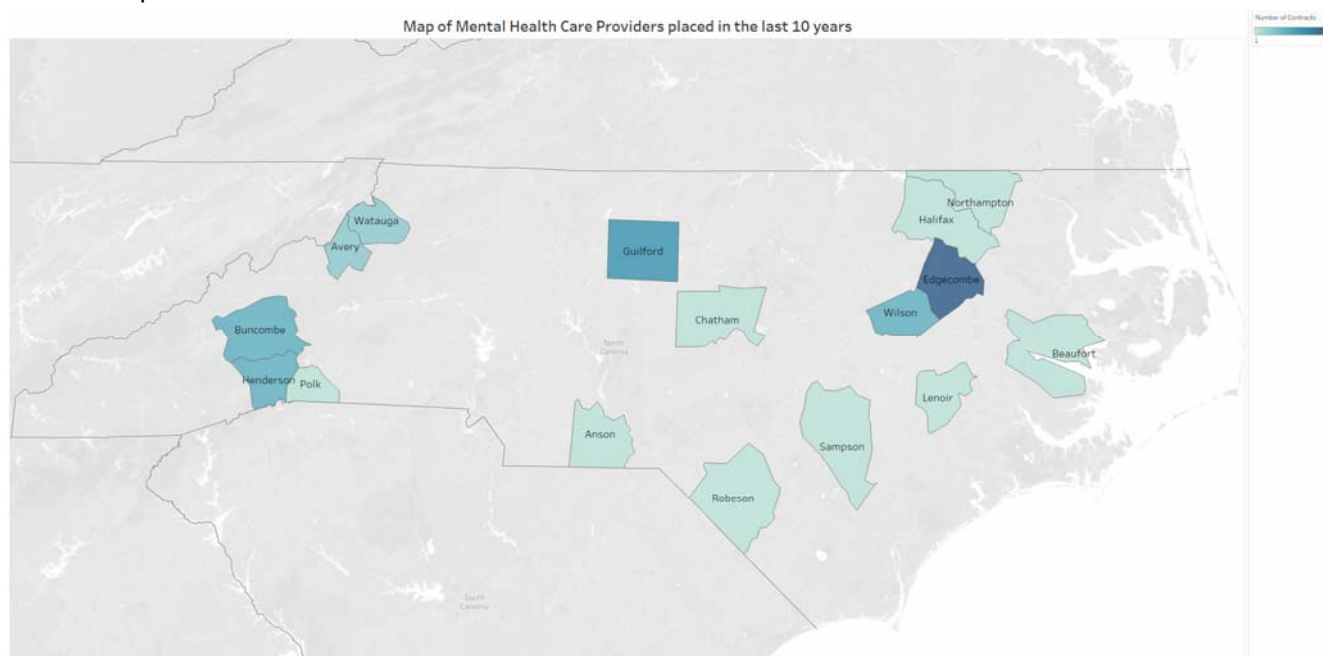


**Ten-Year Review of Dental Care providers Placements.** The map below includes Dentists and Hygienists across the state by density. Counties with darker shading indicate a higher number of placements.





**Ten-Year Review of Behavioral Health provider Placements.** The map below includes Medical Doctors and Advanced Practice Providers across the state by density. Counties with darker shading indicate a higher number of placements.



## Leveraging Other Placement Incentive Programs to Increase Access to Healthcare

The Office of Rural Health has a strong history leveraging resources to maximize the North Carolina Loan Repayment Program reach. This work involves leveraging both internal and external resources and programs. Internal to state government, ORH partnered with the North Carolina Medicaid Program to match state appropriations with Medicaid resources to expand program funding and reach. Through a Memorandum of Agreement, ORH assists with creating access to quality healthcare for the Medicaid population and in turn, the Medicaid program provides approximately 30% match for the Loan Repayment Program appropriations. This stretches vital state resources and ensures that the loan repayment program is creating access to healthcare for those most in need. The strength in this partnership is evidenced in increased funding, and therefore an increase in the number of providers placed in rural serving the population that qualifies for Medicaid. This partnership requires providers to provide services to patients with Medicaid to be eligible for the North Carolina Loan Repayment Program. While most healthcare safety net providers accept Medicaid, not all do. This makes providers employed by organizations that do not accept Medicaid ineligible for the LPR (i.e. free and charitable clinics).

ORH also works internally to leverage other placement incentive programs, such as the J-1 Visa Waiver Program and the HRSA-funded State Loan Repayment Program (SLRP) to ensure that providers are matched with the most appropriate incentive program to maximize reach of each program. The J-1 Visa Waiver Program provides a waiver provision for foreign medical graduates provided by Section 220 of Public Law 103-416. Annually, on October 1, the State of North Carolina receives 30 J-1 Visa Waiver slots. ORH also administers the

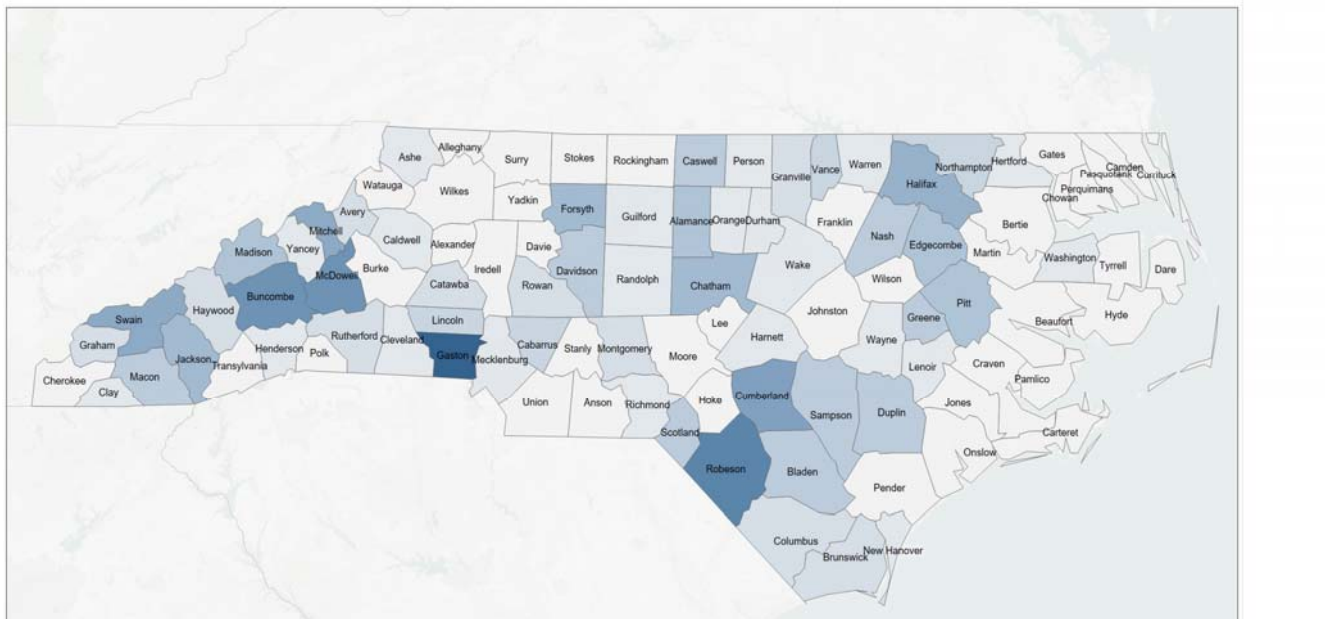
federally supported HRSA State Loan Repayment Program to provide loan repayment to providers working in integrated behavioral health settings. While much smaller totaling \$200,000 annually, this program is also leveraged to increase access to care in rural communities. ORH also leverages complementary state-funded ORH administered programs, such as the Community Health Grant Program, to fund provider salaries or operating needs, the Medication Assistance Program to fund essential medication resources for providers to assist patients achieve healthier lives, the Rural Health Information Technology Program to assist practices with connecting to the health information exchange and improving use of electronic health records, and the Analytics and Innovations Program to provide data that can be used for practice improvements and provide technical assistance on innovations such as Mental Health First Aid, Community Health Workers and Telehealth.

ORH works closely with external programs to maximize the North Carolina Loan Repayment Program. ORH is the sole organization recognized by HRSA as being responsible for providing technical assistance for the National Health Service Corp (NHSC) program and for gathering, analyzing and submitting data to HRSA for Health Professional Shortage Area Designation.

The National Health Service Corp program offers up to \$50,000 for two years of service in a NHSC designated site. Providers can reapply for the program upon satisfactory completion of each commitment ([NHSC Loan Eligibility](#)). The ORH Placement Team coordinates with the NHSC and interested practice sites to provide technical assistance on NHSC site certification process and applications. Sites are eligible to apply once a year for NHSC site designation ([NHSC Site Designation](#)).

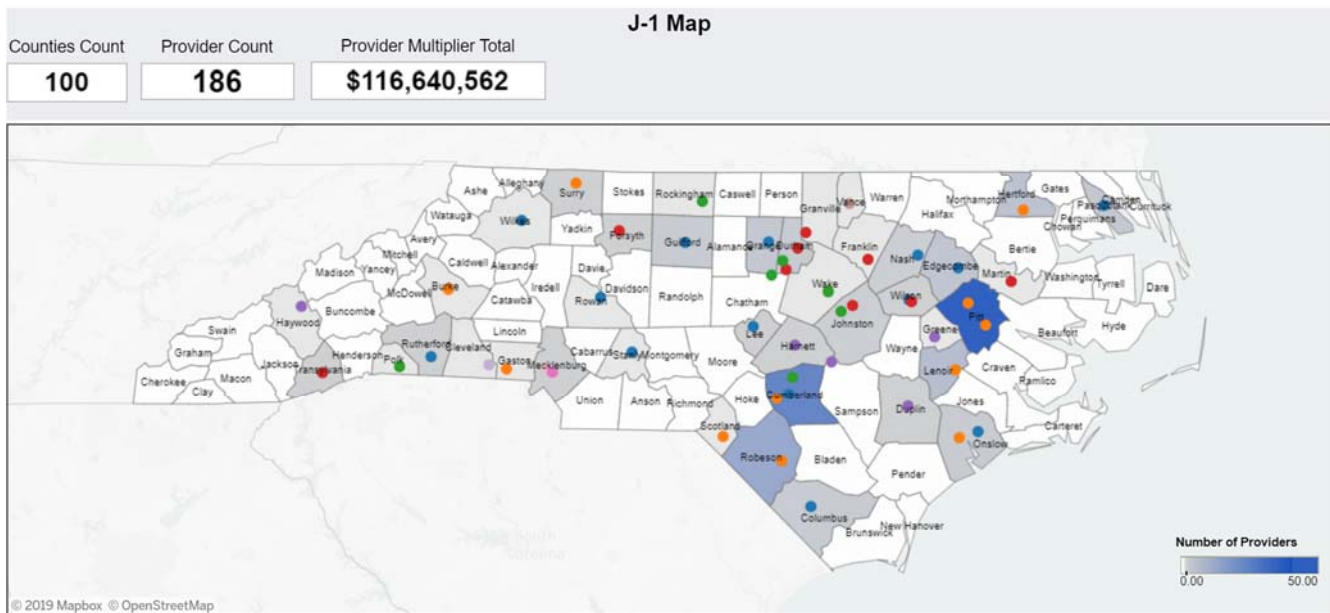
ORH leverages the NHSC program by requiring providers to apply and access this program before accessing the North Carolina Loan Repayment Program. Determining NHSC site eligibility and loan repayment is the first step in ORH loan repayment technical assistance. In fact, if it appears that a site and provider may be eligible for NHSC, ORH will engage in a short-term LRP contract with a provider and require them to submit a good faith application to NHSC and document denial before ORH will consider a full-term LRP contract. ORH has also generated short-term LRP contracts for providers that will qualify for NHSC but are waiting on the next NHSC application cycle to open. In this way, ORH ensures that all sites and providers that are eligible for the NHSC program access this resource before LRP funds are issued. By engaging in short-term LRP contracts, ORH ensures that rural communities can recruit candidates during periods of the year when the NHSC is not accepting applications. By leveraging this NHSC program, 212 providers were incentivized to practice in rural North Carolina communities in SFY 2019. The following map illustrates the county of placement for the SFY 2019 National Health Service Corps 212 Active Provider Placements (data from 2019 North Carolina Field Strength Report):

### SFY 2019 National Health Service Corps Current Active Placements



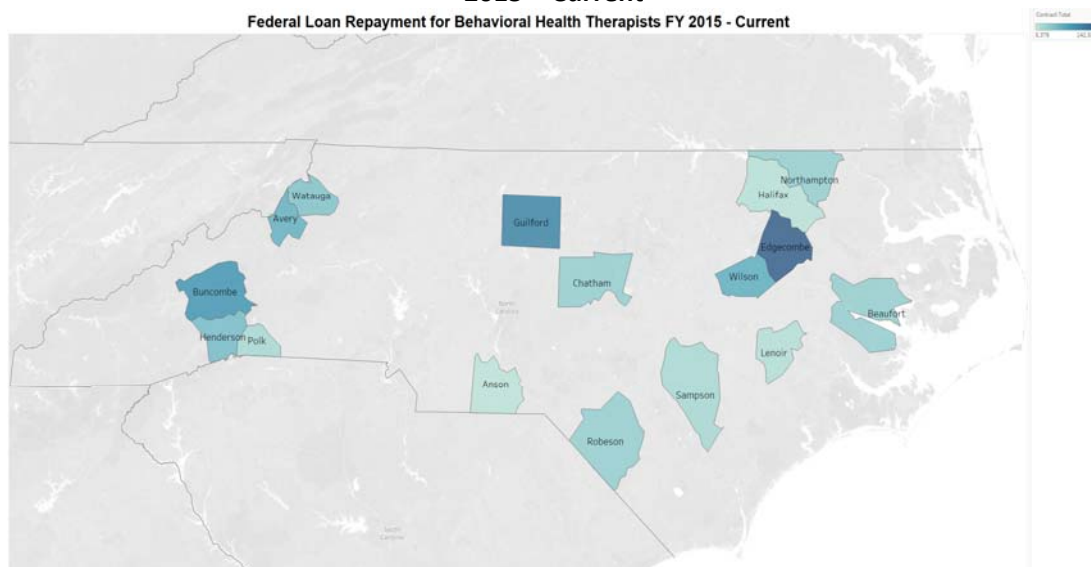
In addition to North Carolina Loan Repayment Program, ORH has two other incentive program options. First, the J-1 Visa Waiver Program provides a waiver provision for foreign medical graduates provided by Section 220 of Public Law 103-416. Annually, on October 1, the State of North Carolina receives 30 J-1 Visa Waiver slots. To ensure North Carolina's primary care needs are met, twenty (20) of the thirty (30) slots are reserved for Family Practice, General Internal Medicine, General Pediatrics, Obstetrics/Gynecology, or Psychiatry physicians practicing in a Health Professional Shortage Area (HPSA). Physicians practicing as hospitalists in Family Practice, General Internal Medicine, General Pediatrics, Obstetrics/Gynecology, or Psychiatry will also be considered. The remaining ten (10) slots may be used for flex or specialist positions. Flex slots do not require the physician to be working in a HPSA and are not limited to Family Practice, General Internal Medicine, General Pediatrics, Obstetrics/Gynecology, or Psychiatry. If specialist applications exceed the number of available flex/specialty slots, specialist applicants practicing in a HPSA will be placed on a waiting list. Currently, ORH utilizes unallocated primary care slots to specialists on April 1. The following map illustrates J-1 Visa Waiver Placements over the previous five-year period.

## Office of Rural Health J-1 Placements Dashboard for SFY 2014 - 2019



In addition to the North Carolina Loan Repayment Program and the J-1 Visa Waiver Program, ORH administers the HRSA-supported State Loan Repayment Program (SLRP). While smaller in scope with a program budget of \$200,000 annually, SLRP provides loan repayment for behavioral health providers practicing in integrated care settings. ORH secured this funding to coordinate and augment the North Carolina Loan Repayment Program. The SLRP program began in 2016 and ORH continues to receive funding from HRSA in this competitive grant program. The current grant period of the SLRP program is 2018-2022.

### Federally-funded HRSA State Loan Repayment Program (SLRP) for Behavioral Health Therapists 2015 – Current



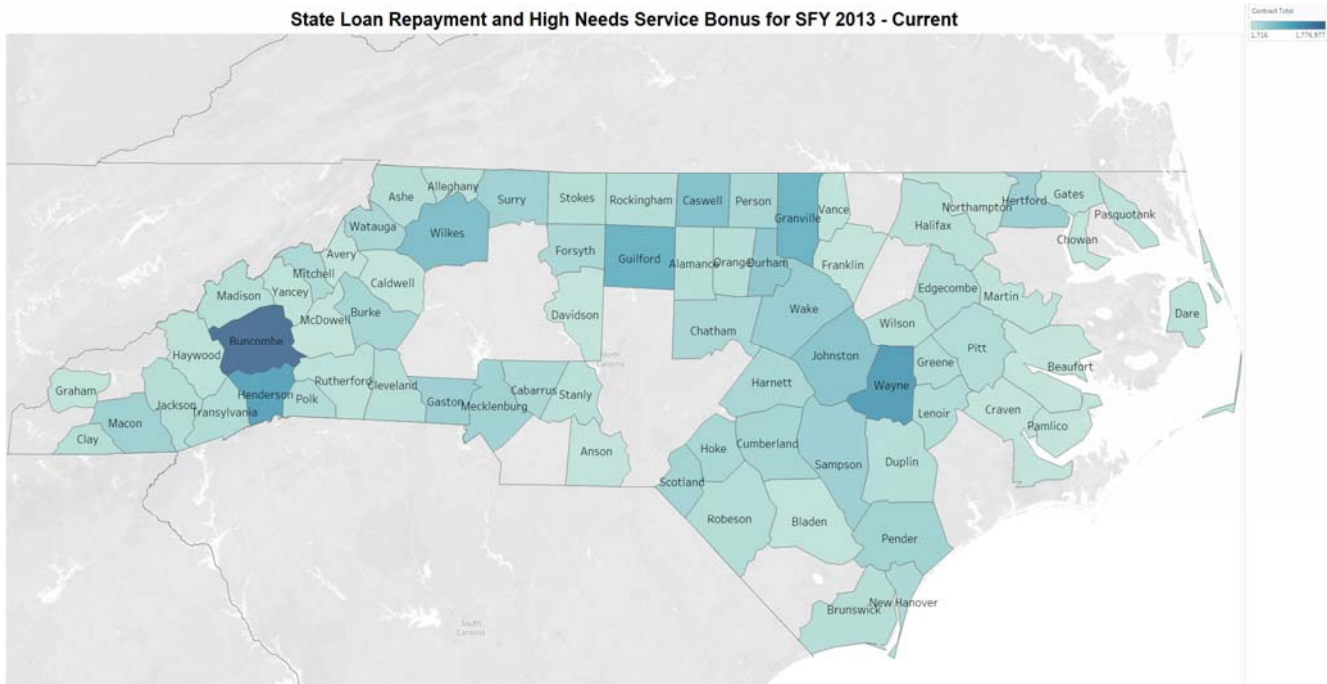
The tables below reflect provider placements through state and federal loan repayment programs:

Incentive Year	Incentive Type			Year Total
	NC Loan Repayment Program (State Appropriations)	High Need Service Bonus (State Appropriations)	SLRP (Federal Funds)	
2013	\$2,271,795	\$218,000	--	\$2,489,795
2014	\$2,860,740	\$190,000	--	\$3,050,740
2015	\$2,834,535	\$353,642	--	\$3,188,177
2016	\$2,312,574	\$199,290	\$101,728	\$2,613,592
2017	\$2,723,056	\$110,000	\$300,000	\$3,133,056
2018	\$2,716,449	\$401,900	\$161,250	\$3,279,599
2019	\$1,965,333	\$520,000	\$196,867	\$2,682,200
<b>Grand Total</b>				
<b>Total</b>	<b>\$17,684,482</b>	<b>\$1,992,832</b>	<b>\$759,845</b>	<b>\$20,437,159</b>

The map below reflects provider placements through federal and state loan repayment programs.

### North Carolina Loan Repayment and High Needs Service Bonus Program (State Funded) 2013 - Current

State Loan Repayment and High Needs Service Bonus for SFY 2013 - Current



If NHSC and the three placement incentive programs administered by ORH are not options, the ORH Placement Services Team refers sites/providers to the North Carolina Medical Society Foundation's [Community Practitioner Program](#), which maintains its own set of eligibility standards. In this way, ORH ensures that the program with the most resources (NHSC) is used first, followed by accessing the North Carolina Loan Repayment Program (and if eligible the HRSA-supported State Loan Repayment Program and the J-1 Visa Waiver Program) and finally if none of these programs align with the site/provider eligibility, ORH collaborates



with the North Carolina Medical Society Foundation's [Community Practitioner Program](#) to link providers to the Foundation's incentive funding.

## North Carolina Loan Repayment Program Recruitment and Retention Activity and Data

ORH collects recruitment and retention data to optimize, target and modify program technical assistance and outreach. Data documenting the recruitment process matches the provider with a requesting and eligible practice site to begin the process. The ORH Placement Team works with the requesting provider and selected site to make the match, continuing the relationship with the provider at least through the loan repayment contract process (up to four years).

One method of examining the retention of providers is contract completion and default rates. The following tables document the completion rates and reflect that over 60% of providers complete their four-year commitment.

### ORH Contract Completion and Default Rates

State Loan Repayment and High Needs Service Bonus

Year	Retention %
2018	55/58 = <b>95%</b>
2017	46/55 = <b>84%</b>
2016	35/57 = <b>61%</b>
2015	58/78 = <b>74%</b>
2014	74/94 = <b>79%</b>
2013	54/72 = <b>75%</b>

Federal Loan Repayment for Behavioral Health Therapists

Year	Retention %
2018	5/5 = <b>100%</b>
2017	9/10 = <b>90%</b>
2016	4/4 = <b>100%</b>

Retention % is number of contracts retained during loan period/total contracts during loan period.

### ORH Contract Completion and Default Rates for Long Term Contracts (3-4 Year Commitments)

State Loan Repayment and High Needs Service Bonus

Year	Retention %
2018	37/40 = <b>93%</b>
2017	28/36 = <b>78%</b>
2016	18/26 = <b>69%</b>
2015	27/43 = <b>63%</b>
2014	20/32 = <b>63%</b>
2013	18/30 = <b>60%</b>

Best indicator  
of completed  
4 year  
contracts

Retention % is number of contracts retained during loan period/total contracts during loan period.

Beyond looking at contractual completion as a metric of retention, ORH participates in the Practice Sights Retention Collaborative and Data Management System ([Practice Sights](#)) with 22 other states comparing recruitment and retention rates. Practice Sights is a recruiting information database comprised of survey data which is completed by providers in loan repayment programs. Providers complete surveys at the end of each year (End-Of-Year Survey), end of each contract (End-Of-Contract Survey), and annually thereafter completing the contract (Alumni Survey). The retention data has been available since 2010. The Retention Collaborative with the Cecil G. Sheps Center at UNC-Chapel Hill (Sheps Center) administers and evaluates questionnaires completed by loan program participants. As part of the North Carolina Loan Repayment Program, recipients are required to participate in the questionnaire process throughout their contract obligation for loan repayment funds. The questionnaires ask about the provider's satisfaction with the practice site, the community and their family's satisfaction in the community. ORH has recently improved its ability to share data with the Retention Collaborative and will make further modifications to the North Carolina State Loan Repayment Program.

The following tables outline the top positive and negative survey responses that contribute to a provider's likelihood of staying in a community beyond his or her service commitment was "feeling like I am doing important work" and "fully valuing the mission of my practice" being high retention factors and "compensation" and "time away from work and involvement in administrative decisions" being low retention factors. Successful recruitment and retention of providers to rural communities is also attributed to provider sense of community acceptance, and opportunities for family members' employment or education.

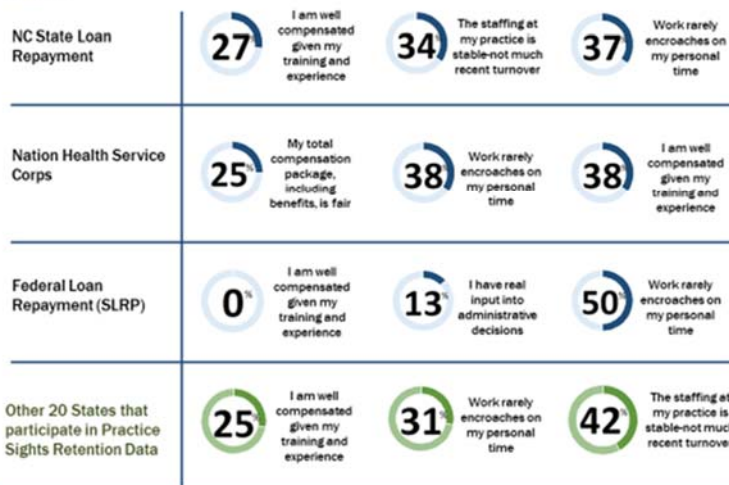
### SFY 2017 - Top Three Retention Factors

Practice Sights Retention Data - Based on % of respondents who agreed to the statement - Includes all respondents from every program

NC State Loan Repayment	94 I feel like I am doing important work	83 I fully value the mission of my practice	83 Staff in my practice support my professional judgment
Nation Health Service Corps	88 I feel like I am doing important work	88 I fully value the mission of my practice	88 Staff in my practice support my professional judgment
Federal Loan Repayment (SLRP)	100 I feel like I am doing important work	100 I fully value the mission of my practice	100 I feel a strong personal connection with my patients
Other 20 States that participate in Practice Sights Retention Data	97 I feel like I am doing important work	94 I fully value the mission of my practice	93 Staff in my practice support my professional judgment

## SFY 2017 - Lowest Three Retention Factors

Practice Sights Retention Data - Based on % of respondents who agreed to the statement - Includes all respondents from every program



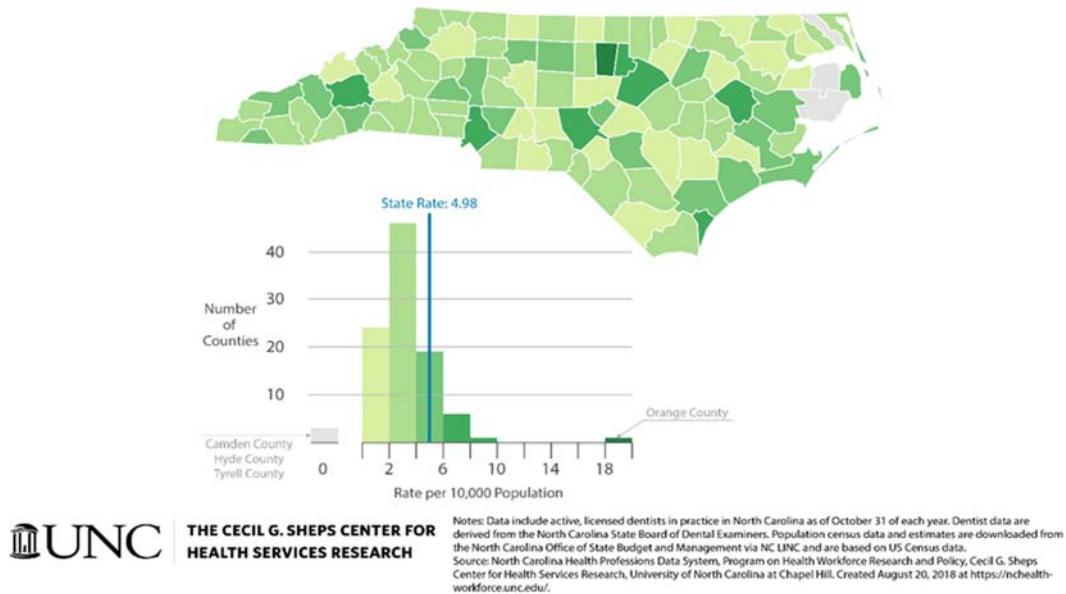
Loan repayment, recruitment and retention represent a few of the critical supports that impact the health of rural communities. Provider impact does not stop at health, access to healthcare enhances the economic vitality of communities. ORH recognizes the importance of the overall health of the community (economic vitality, housing, food, transportation etc.) and expects to fully utilize resources and expertise at DHHS/ORH to explore strategies that will provide maximum benefit to those in North Carolina's rural communities. ORH will also continue to work with communities to build strong, supportive relationship with healthcare providers to increase recruitment and longevity of service.

## Targeting Loan Repayment Funds for Dentists in Rural Areas

North Carolina Session Law 2018-88, Part II, Section 3.(b) directed DHHS to work in conjunction with the Sheps Center to identify the need for dentists in rural areas in North Carolina and develop recommendations to target North Carolina Loan Repayment funds for dentists in rural areas that have been identified as having the greatest need for dentists.

In examining the distribution of dentists across the state, data from the Sheps Center reveals that most dentists have practices in and around urban counties. This is illustrated in the map and graph below.

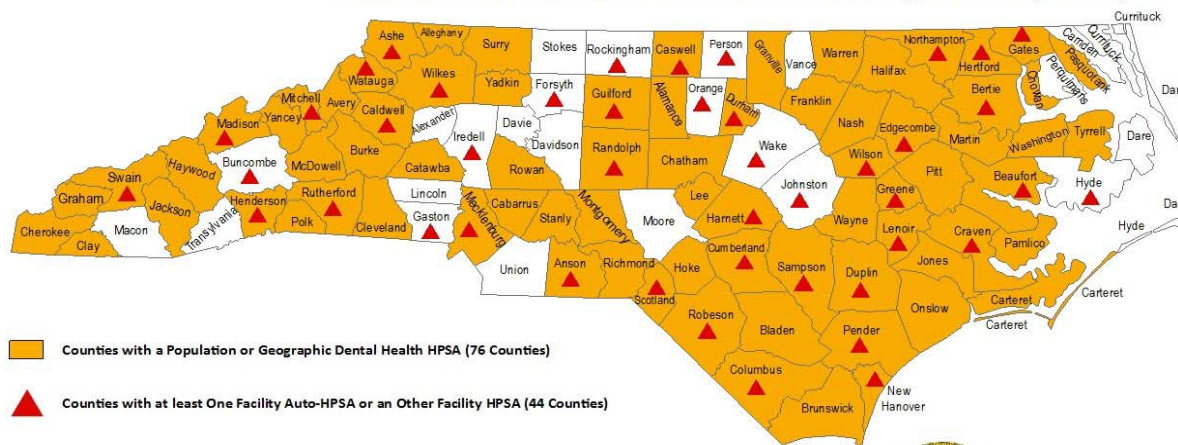
Dentists per 10,000 Population by County, North Carolina, 2017



While counties like Wake, Orange and Buncombe enjoy a healthy provider to population ratio for dentists, there are counties in the State that lack dental providers. There are many counties across the state that have unhealthy provider to population ratios for dental providers, and ORH has placed providers in those counties to improve this ratio. Over the past ten years, ORH has funded \$8,348,637 towards 193 contracts for dentists to provide care in underserved areas of the state.

An additional data source used by ORH to determine need is the designation of Health Professional Shortage Areas (HPSAs). ORH uses the HPSA data along with data from the Sheps Center to focus recruitment efforts to place dentists in the areas of greatest need. Dental HPSAs have been designated in the following counties:

### North Carolina Office of Rural Health Dental Health - Health Professional Shortage Areas (HPSA)



#### Disclaimers:

- Primary site only, does not include Correctional Facilities or Federally Qualified Health Center (FQHC) satellite sites
- Shortage area may be whole county, or population group or geographical area within county
- Counties that are in white represent urban or rural counties without an official HPSA designation
- The map is not reflective of counties that, if reviewed, would qualify for a dental HPSA



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**  
Office of Rural Health

Data as of January 3, 2019

North Carolina Loan Repayment Program offers loan repayment to dentists and dental hygienists serving in HPSAs and other underserved communities across the state. The current ORH policy awards dentists up to \$100,000 for four years of service. Awards for dental hygienists are provided up to \$60,000 for four years of service. For providers who do not have educational loans, a High Needs Service Bonus is available for providers who agree to practice in rural/underserved areas in clinics that have a sliding fee scale and are in a Health Professional Shortage Area (HPSA). High Needs Service Awards for general dentists are provided up to \$50,000 over four years. High Needs Service Awards to dental hygienists are provided up to \$30,000 over four years.

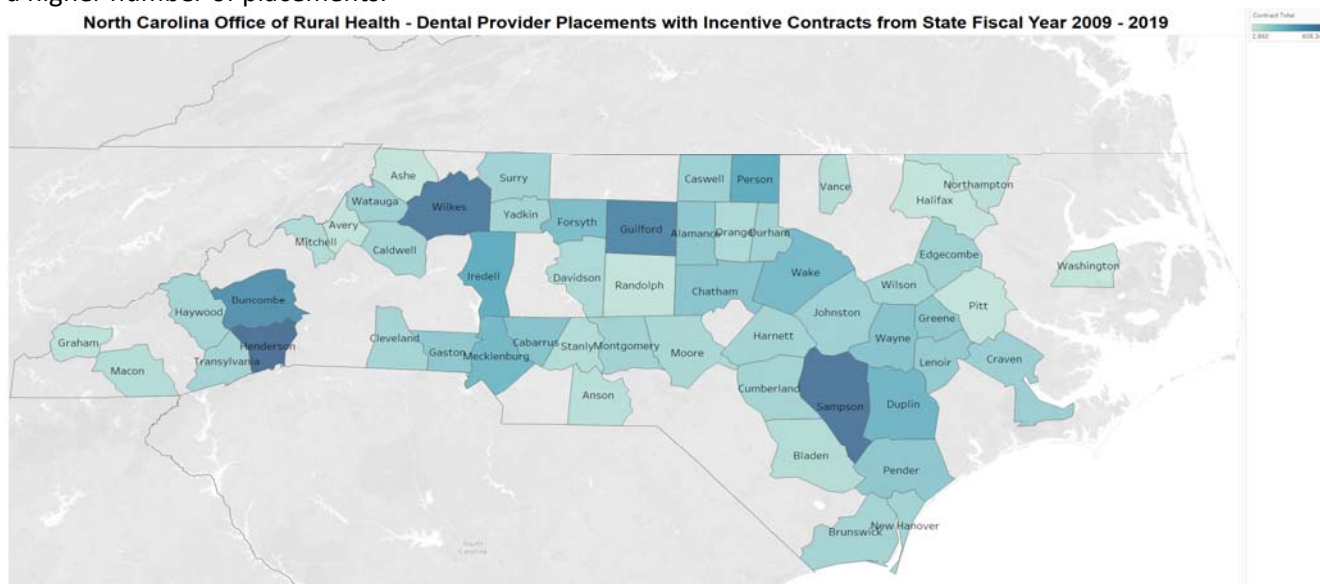
Over the past ten years, ORH has funded \$8,348,637 towards 193 contracts for dentists to provide care in underserved areas of the state. Of the 193 contracts, 149 were involved in placing new dentists in an underserved area of the state, and 99 were placed in rural counties (61%). Ninety-four percent (181) of those contracts supported loan repayment through the North Carolina Loan Repayment Program and six percent (12) provided High Needs Service Bonus. An illustration of contract funding by year can be found below:

#### North Carolina Office of Rural Health – Contract Funding for Dentists (2009-2019)

Incentive Year	Loan Repayment	Service Bonus
2009	976,889	40,000
2010	941,028	35,000
2011	445,521	100,000
2012	290,240	15,000
2013	824,608	50,000
2014	915,587	
2015	543,106	100,000
2016	977,769	
2017	709,848	50,000
2018	872,601	50,000
2019	361,440	50,000

The map below includes Dental placements across the state by density. Counties with darker shading indicate a higher number of placements.

North Carolina Office of Rural Health - Dental Provider Placements with Incentive Contracts from State Fiscal Year 2009 - 2019



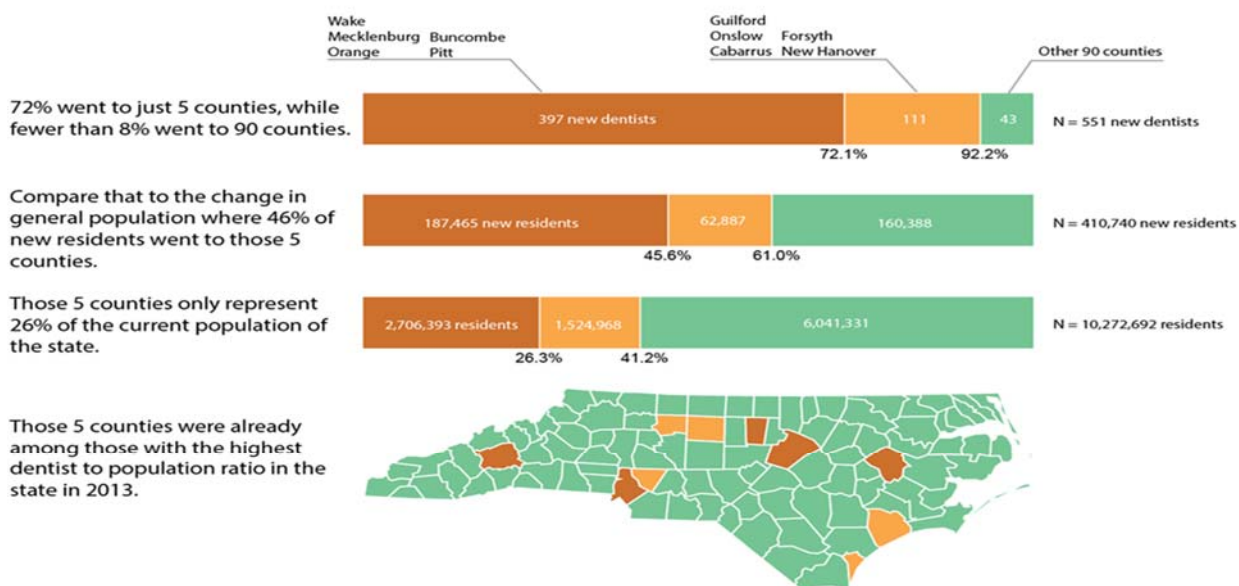


In collaboration with the Sheps Center, ORH is currently working on a longitudinal study to track the impact of North Carolina Loan Repayment on retention for all providers, including dental, at the county and clinic level. This data will inform how often dental providers remain at the original placement site and in the county.

Beyond looking at contractual completion as a metric of retention, Practice Sights is a recruiting information database comprised of survey data which is completed by providers in loan repayment programs. Providers complete surveys at the end of each year (End-Of-Year Survey), end of each contract (End-Of-Contract Survey), and years after completing the contract (Alumni Survey). The retention data goes back to 2010. There were 56 dentists who completed their End-of-Year and End-of-Contract Questionnaire during this time. Anticipated retention has shown to be the strongest indicator of retention. Dentists indicating plans to remain in their community correlated with providers who remained in their community. The follows results reflect average years a dental provider would remain as outlined in the following data. On average, dentists completing this survey stated their intent to stay at their current practice for 6.7 years after their contract was completed. These dentists anticipated staying in their current community for 15.2 years, staying in a rural practice for 13.2 years, staying in a medically underserved area for 15.5 years, and staying in their current state of North Carolina for 22.1 years.

The graphic below speaks to the misaligned growth of dentists in our state. The same counties, with a pre-existing high dental professional population, are acquiring new dentists at a higher rate than the areas of need. The distribution of new dentists relative to areas of need are discrepant, and the reach of newly hired dentists is limited under the current landscape.

### North Carolina added 551 new dentists between 2013 and 2017. Where did they go?



THE CECIL G. SHEPS CENTER FOR  
HEALTH SERVICES RESEARCH

Placement incentive programs are aligned to creating access to care for those in most need, uninsured, underinsured and Medicaid beneficiaries. Incentive programs requirement include acceptance of Medicaid beneficiaries and posting an approved sliding fee scale as demonstration of providing care for these populations. In North Carolina, Federally Qualified Health Centers and Local Health Departments comprise most sites that meet these requirements. Most other dental sites do not meet these requirements.

## **North Carolina Loan Repayment Program Stakeholder Engagement and Restructure**

Historically, the North Carolina Loan Repayment Program's legislative mandate was to recruit healthcare providers. In Part II of Session Law 2018-88, legislation expanded the scope of the North Carolina Loan Repayment Program to include provider retention. This expansion, coupled with ORH initiated process improvements, lead ORH to seek feedback and input from partners and stakeholders to guide program improvements.

Over the past year, ORH engaged partners and stakeholders from across the state to gather feedback about the current NC Loan Repayment Program and the other incentive programs administered by ORH (the State Loan Repayment Program (SLRP) and the J-1 Visa Waiver Program) along with ideas to serve the most rural and underserved communities more effectively. ORH conducted ten on-site stakeholder meetings across the state. The stakeholder engagement sessions included an overview of ORH, an overview of the Placement Services Program and detailed each incentive program (NC Loan Repayment Program, State Loan Repayment Program (SLRP) and the J-1 Visa Waiver Program) as well as overviews of the North Carolina Medical Society's Community Practitioner Program and the National Health Service Corp Programs. ORH also provided an overview of Health Professional Shortage Areas (HPSAs) and how this designation influences eligibility for the various placement programs. In addition to feedback provided at on-site stakeholder meetings, ORH solicited and received stakeholder feedback using an open written feedback period that spanned several months.

Stakeholder meetings were held in 10 locations:

- NC Medical Society, Raleigh, Wake County
- Pender Memorial Hospital, Burgaw, Pender County
- Northwest AHEC, Winston-Salem, Forsyth County
- College of the Albemarle, Elizabeth City, Pasquotank County
- Anson Community Hospital, Wadesboro, Anson County
- Madison County NC Cooperative Extension, Marshall, Madison County
- Jackson County Department on Aging, Sylva, Jackson County
- NC Association of Family Physicians, Charlotte, Mecklenburg County
- ECU School of Dental Medicine, Greenville, Pitt County
- Cape Fear Valley Medical Center/Campbell School of Osteopathic Medicine, Fayetteville, Cumberland County

In-person and written feedback was received from interested associations/societies, education and residency training programs, and others to include:

- NC Rural Health Leadership Alliance
- NC Academy of Family Physicians, NC Pediatric Society, NC Medical Society, NC Child, NC Dental Society
- Primary Care Advisory Committee (Membership: NC Community Health Centers Association, NC Association of Free & Charitable Clinics, NC Association of Local Health Directors, NC School-Based Health Alliance and the NC Healthcare Association)
- Education and Residency Training Programs: ECU Brody School of Medicine/Vidant Medical Center GME, ECU Department of Family Medicine, UNC Chapel Hill School of Medicine, ECU School of Dental Medicine, Campbell School of Osteopathic Medicine
- NC AHEC System: EAHEC, MAHEC, SEAHEC, NWAHEC
- Critical Access Hospitals and Small Rural Hospitals
- Hospital systems: Cone, Sentara, Atrium, Vidant, Mission, Southeastern Health, Scotland Health
- Private practice providers
- Various Safety Net sites
- Dogwood Trust Foundation and Nantahala Health Foundation

Overwhelmingly, stakeholders appreciate and found value in the placement services offered by ORH. Stakeholder feedback was used to guide the work and revision of placement services. Care was taken to ensure that suggested program improvements continue to align with other placement programs such as National Health Service Corps and the North Carolina Medical Society's Community Practitioner Programs as well as the ORH placement services efforts that do not involve incentives but result in placements.

By coupling stakeholder feedback with internal quality improvement work, ORH developed and is in the process of implementing the following process and program improvements:

1. Process Updates
  - a. Collect feedback at least annually from stakeholders through the creation of a Workforce Development Advisory Committee or through gathering feedback from stakeholders to provide guidance to ORH on placement services and incentives with the goal of aligning resources and building innovative programs for access to care in rural and underserved communities. Innovations examples include rural training tracks and strengthening pipeline efforts.
  - b. Program guidelines will be updated annually and will be informed by stakeholder feedback and program funding levels
  - c. Program application will be updated annually
  - d. Work collaboratively with Sheps Center to track retention rates
2. 2019-2020 Program Updates For \$1,500,000 Base Appropriations
  - a. Expand eligibility criteria:
    - i. Extend the application window beyond six months from hire date
    - ii. Providers are eligible to apply up to 24-months from hire date



- iii. Ensure program guidelines complement other incentive programs and do not preclude providers from applying
  - iv. Expand eligibility for State Mental Hospitals and Alcohol and Drug Abuse Treatment Centers (ADATCs) to include providers other than Psychiatrists such a Primary Care Physicians, Licensed Clinical Social Worker (LCSW), Licensed Professional Counselor (LPC), Licensed Marriage and Family Counselor (LMFT), Psychiatric Nurse Specialist (PNS), Health Service Psychologist (Clinical & Counseling), Licensed Clinical Addiction Specialist (LCAS) and Health Service Psychologist (HSP)-Clinical and Counseling
  - v. Add incentives for preceptors to precept medical residents, PAs, and NPs in rural communities.
  - vi. Increase program incentive amount during the first year for providers at qualified and Safety Net sites while maintaining graduated payment model
  - vii. Retention: Offer continuation contracts for LRP. Providers could apply for funding one year at a time following completion of their 4-year NC LRP service obligation
- 3. 2019-2020 Program Planning for \$3,500,000 (SFY 19-20) and \$1,000,000 (SFY 20-21) Non-recurring Appropriations
  - b. Eligibility criteria:
    - i. Extend the application window beyond six months from hire date
    - ii. Providers are eligible to apply up to four-years from hire date Offer one-time retention bonus for years 5, 10 or 15 to providers practicing at eligible site in HPSA of 15 or higher
    - iii. Extend eligibility to full-time/part-time providers employed at Free and Charitable Clinics
    - iv. Ensure program guidelines complement other incentive programs and do not preclude providers from applying
      - i. Expand eligibility for State Mental Hospitals and Alcohol and Drug Abuse Treatment Centers (ADATCs) to include providers other than Psychiatrists such a Primary Care Physicians, Licensed Clinical Social Worker (LCSW), Licensed Professional Counselor (LPC), Licensed Marriage and Family Counselor (LMFT), Psychiatric Nurse Specialist (PNS), Health Service Psychologist (Clinical & Counseling), Licensed Clinical Addiction Specialist (LCAS) and Health Service Psychologist (HSP)-Clinical and Counseling
      - v. Add incentives for preceptors to precept medical residents, PAs, and NPs in rural communities.
      - vi. Increase program incentive amount during the first year for providers at qualified and Safety Net sites while maintaining graduated payment model
      - vii. Retention: Offer continuation contracts for LRP. Providers could apply for funding one year at a time following completion of their 4-year NC LRP service obligation
- 4. Future Program Updates: Dependent Upon Increased Appropriations/Funding
  - a. Expand eligibility criteria:
    - i. Increase High Need Service Bonus
    - ii. Offer retention bonus for years 5, then 10, 15

- iii. Add an incentive during residency for future practice in rural communities
- iv. Consider offering incentives within ECU Dental Community Service Learning Centers (CSLs). CSLs indicate they are not able to implement a Sliding Fee Scale.

Further, ORH is working closely with partners and stakeholders to develop pipeline programs that build interest in healthcare careers and support youth from underserved communities. This work will include collaborating with partners to increase opportunities for engagement in rural training tracks and rural rotations and could lead to development of incentives offered through ORH or partners during residency for commitment to practice in rural areas.

## **Conclusion**

In summary, ORH has engaged stakeholders and partners to assist in the development of program and process improvement for the placement incentive programs administered by ORH. While these improvements will increase access to the program, provide transparency and reduce administrative burden, the ability to increase providers in rural communities will be dependent upon program funding. ORH will continue to maximize appropriations provided by the North Carolina General Assembly by leveraging National Health Service Corps funds (Federal funding) and other loan repayment programs. Further, ORH is working closely with partners and stakeholders to develop pipeline programs that build interest in healthcare careers and support youth from underserved communities.

ORH will engage in continuous program improvement process that will involve stakeholder informed annual updates to program guidelines and applications. ORH will expand North Carolina Loan Repayment Program scope to support retention of providers and preceptors in rural communities, as supported by budget. ORH will ensure that incentive programs align with and complements other incentive programs. ORH will continue to engage with Sheps Center in provider retention analysis and will strengthen partnerships with organizations that can support recruitment and retention efforts.

ORH acknowledges and appreciates the creation, engagement and long-term support provided by the North Carolina General Assembly to the North Carolina State Loan Repayment Program and to the Office of Rural Health.