

Rural Pipeline Programs: Their Role in Recruitment and Retention of the Rural Physician

Caroline Roberts, MD
Meredith Bazemore



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL



UNC

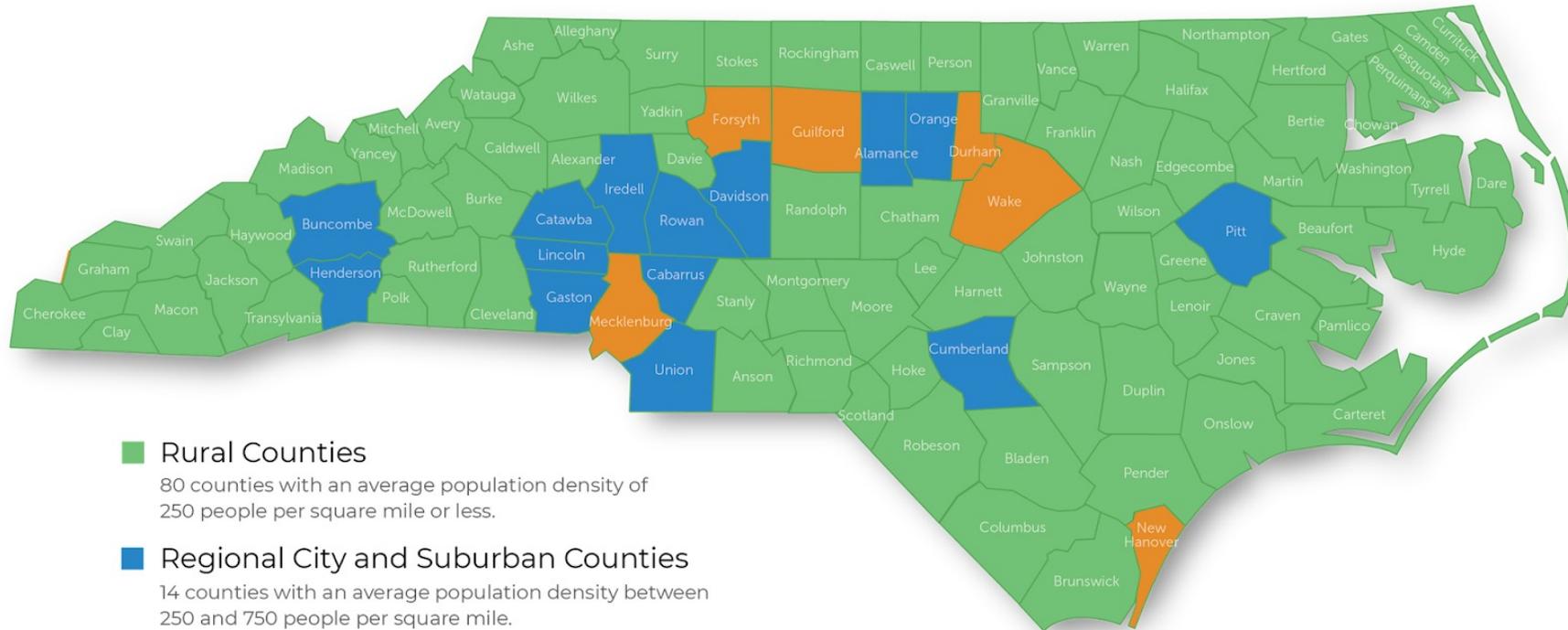
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Disclosures

None

North Carolina is a Rural State

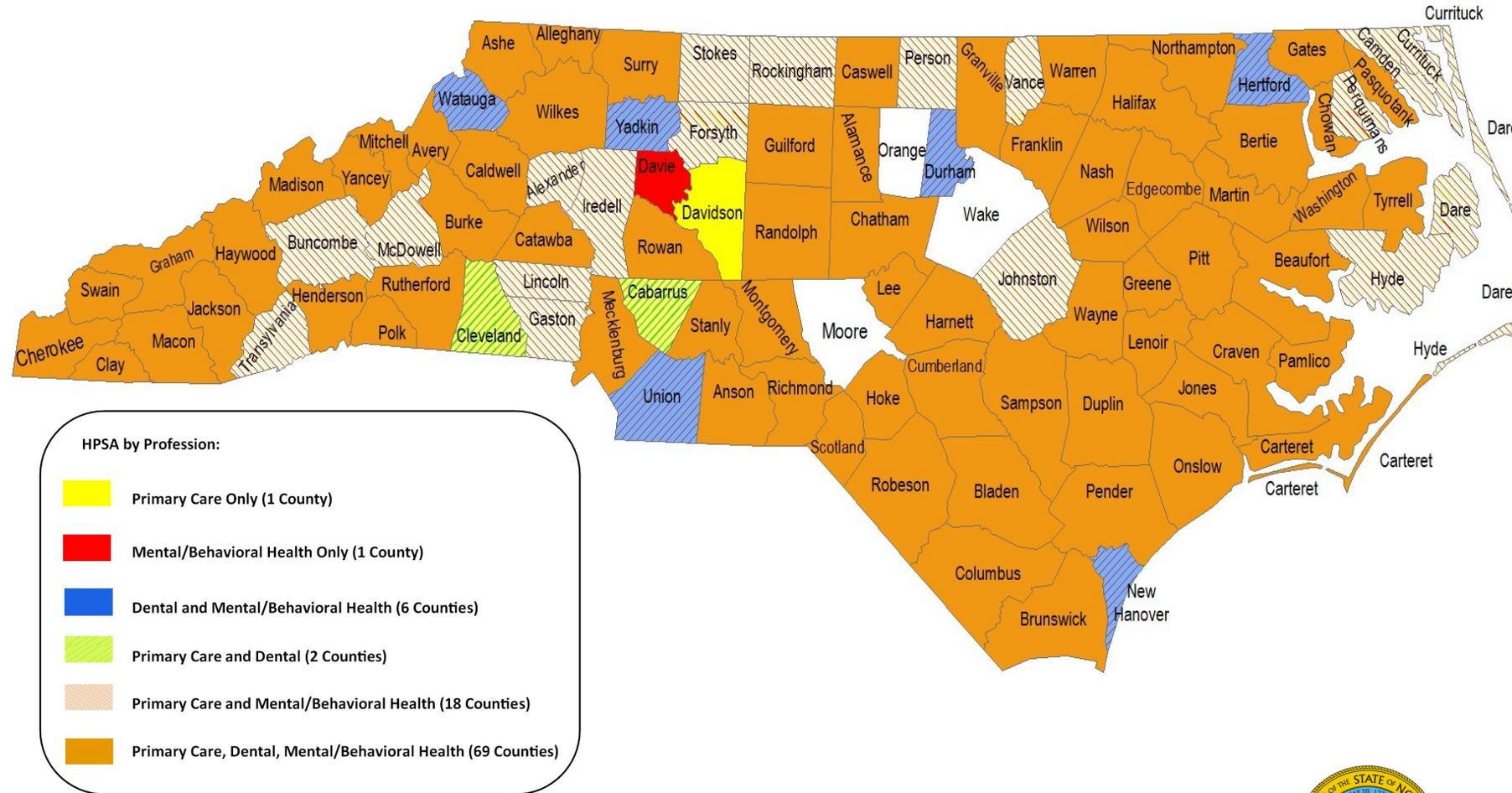
NORTH CAROLINA COUNTIES



- Rural Counties**
80 counties with an average population density of 250 people per square mile or less.
- Regional City and Suburban Counties**
14 counties with an average population density between 250 and 750 people per square mile.
- Urban Counties**
6 counties with an average population density that exceeds 750 people per square mile.

Densities calculated by the Rural Center based on 2014 U.S. Census population estimates.

North Carolina Office of Rural Health Counties Designated Health Professional Shortage Areas SFY 2020



-Shortage area may be a whole county, population or geographic area within a county.
 -Counties in white do not have a geographic or population HPSA designation. Those counties either do not meet the criteria for HPSA designation or have not been reviewed.

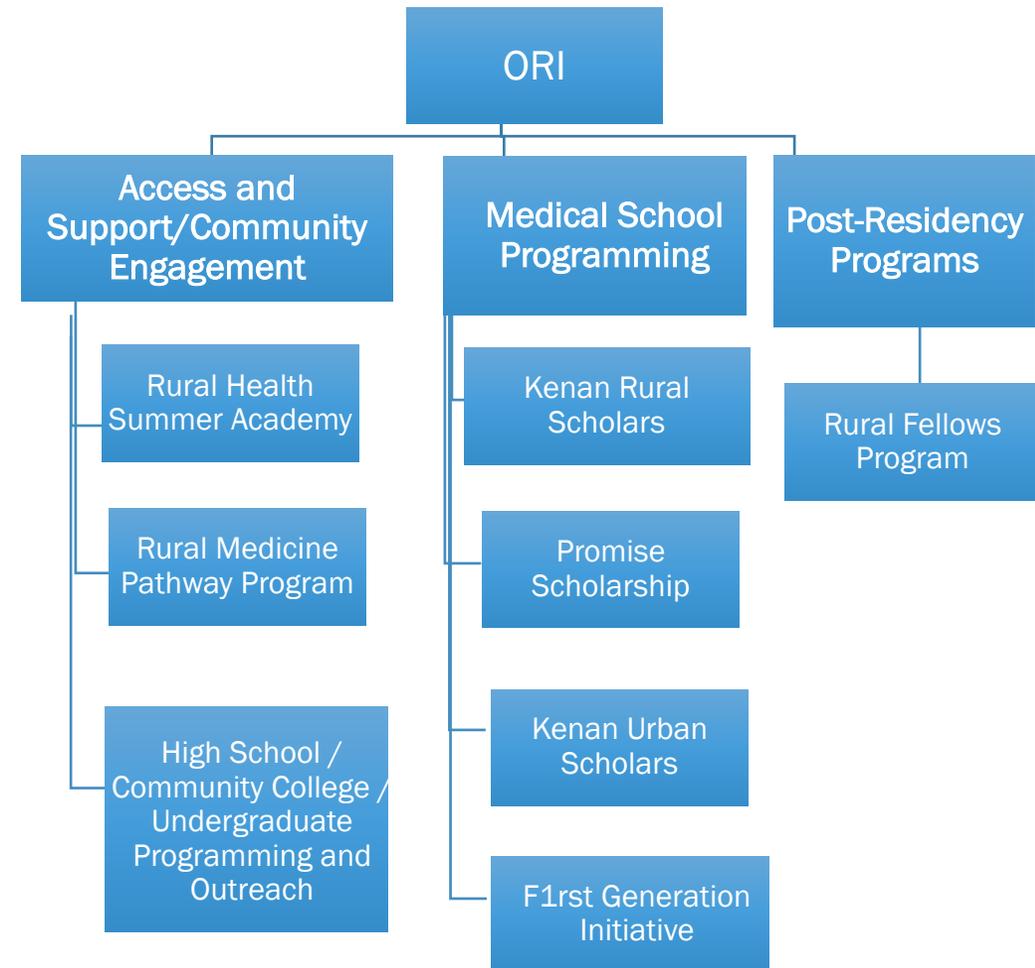
Office of Rural Initiatives



The Office of Rural Initiatives (ORI) exists to address the health care disparities in rural North Carolina through the recruitment and retaining of a diverse primary care provider workforce to meet the unique needs of our rural and underserved communities.

ORI aims to meet this mission through:

- *Educational opportunities in Rural North Carolina*
- *Recruitment of students from rural areas of North Carolina to the UNC School of Medicine*
- *Pipeline Programs in partnership with community and campus partners*
- *Exposure to Rural and Underserved areas of North Carolina*
- *Advocacy for healthcare inclusiveness and equity*
- *Mentorship and Support*



Partnerships: External Funding Sources



- **William Kenan Charitable Trust**

The Kenan Primary Care Scholars Program purpose is to increase the UNC School of Medicine students seeking rural health careers in North Carolina and to provide financial support and enrichment experiences to sustain their decisions. Kenan Scholars receive support during medical school and as alumni in residency. Medical school support includes summer stipends, scholarships during years two, three and four, one-time payments for Rural Residency Match , and a bonus for entering rural Primary Care Practice.

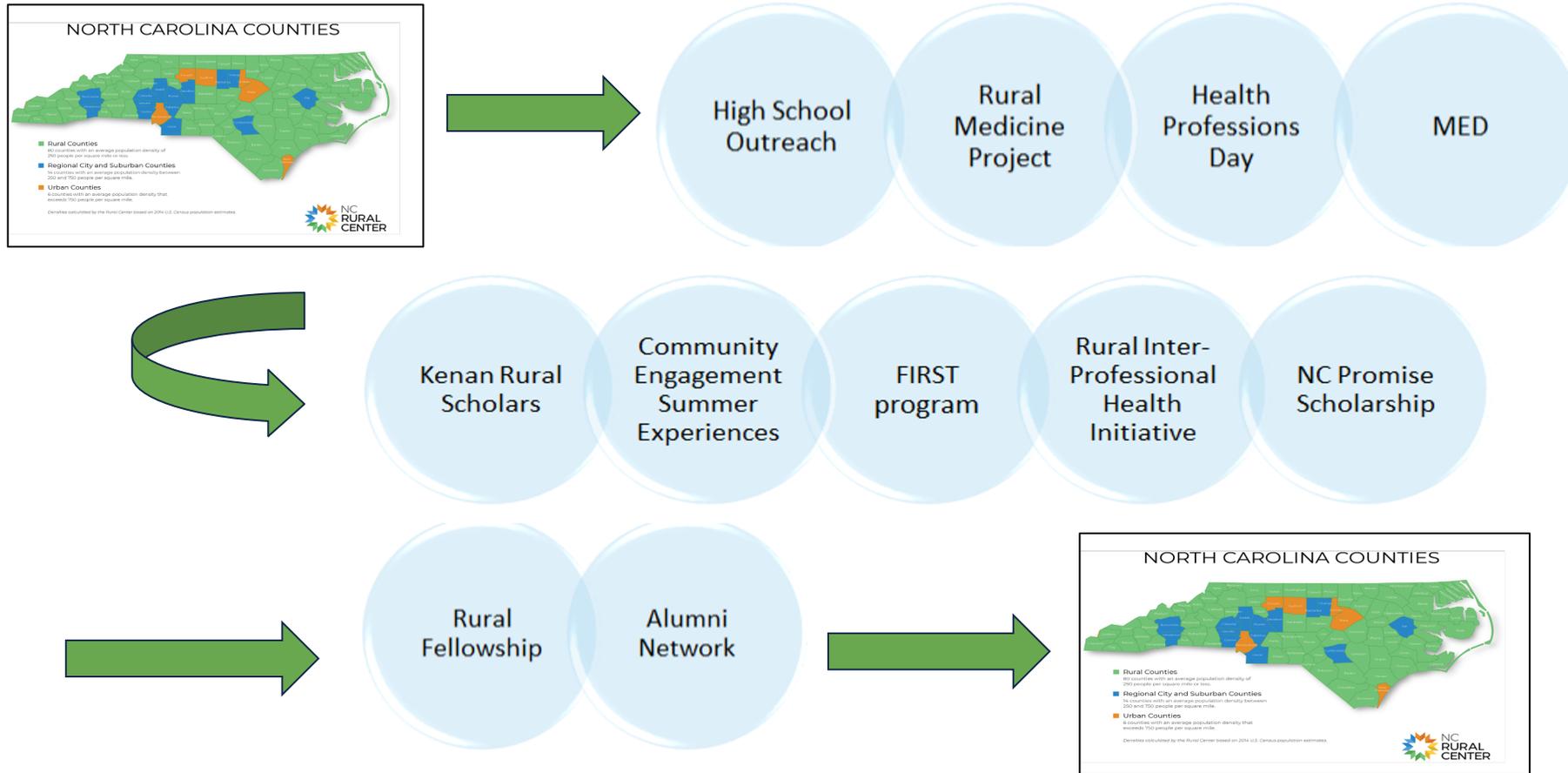
- **State Funding**

Provides funding to expand and extend work of Kenan Primary Care Scholars program. The funding in part support scholarships for students with a specialization interest in primary care, general surgery, and psychiatry who are committed to practicing medicine in a rural area of North Carolina.

- **The Hazel P. and George R. Perkins, Jr. Rural Medical Education Excellence Fund**

The Perkins Medical Education Excellence Fund supports student and faculty education, research, training and clinical efforts to serve rural populations through scholarships, fellowships and awards.

Office of Rural Initiatives





Pre-Medical Pipelining

High School and Undergrad Pipelining



RURAL MEDICINE PATHWAY PROGRAM

- Partnership with the Carolina Covenant Scholars office in the Office of Scholarships and Student Aid. Program for debt-free education for students meeting financial requirements. Providing access to any admissible student regardless of ability to pay
- Students apply first semester of sophomore year; preference for students from rural areas of NC with interest in medicine
- Program components:
 - Cohort-based student program (8-10 students per year)
 - Faculty mentorship and advising for pre-health
 - Summer stipend to support community-based research project
 - Scholarships in junior and senior year based on academic performance
 - Monthly meetings and seminars
 - Community service projects as a cohort

HIGH SCHOOL COMMUNITY EVENTS

- Partnership programs with high schools, local AHECS, community colleges
- Brings together multiple county high schools for health careers day hosted by UNC and community partners
- Hosted at local community college campuses to highlight the various pathways to health careers; utilizing strength of community college system as pathway to 4-year programs
- Local providers and current students serve on panels to share story of journey
- Hands-on stations (pre-COVID)
- Also host one on one high school presentations for health science classes, and other interested classes. Developing relationships with students as they complete high school career



Medical School Pipelining

Kenan Rural Primary Care Scholars



- **Founded in 2013**
- **Began in partnership with MAHEC (Mountain Area Health Education Center)**
- **Expanded (2017) to Central NC and SEAHEC (Southeastern Area Health Education Center)**
- **Longitudinal experience throughout Med School**
- **Cohort-based experience**



To increase the number of UNC SOM students seeking rural health careers in North Carolina and to provide financial support and enrichment experiences to sustain their decision

Kenan Rural Primary Care Scholars



- **Summer Externship**
 - 6-week externship between first and second year
 - Rural Clinic Placement
 - Weekly Didactics with Rural Focus
 - Summer Scholarly Projects
- **Cohort Experiences / Mentorship Opportunities**
 - Full cohort / Campus cohort
 - Pairing with Campus Mentor and Clinical Mentor → Opportunities for longitudinal relationships during 3rd year
- **Monthly Didactics & Curriculum Enrichment**
 - Topics to further broaden rural health knowledge base
 - Foster a professional, and supportive, cohort.
 - POCUS Curriculum
 - Spanish Course- optional
- **Scholarship Support**

Kenan Rural Primary Care Scholars



Commitment & Passion for rural and underserved communities

Background

Rural Community
NC Preference

Intent

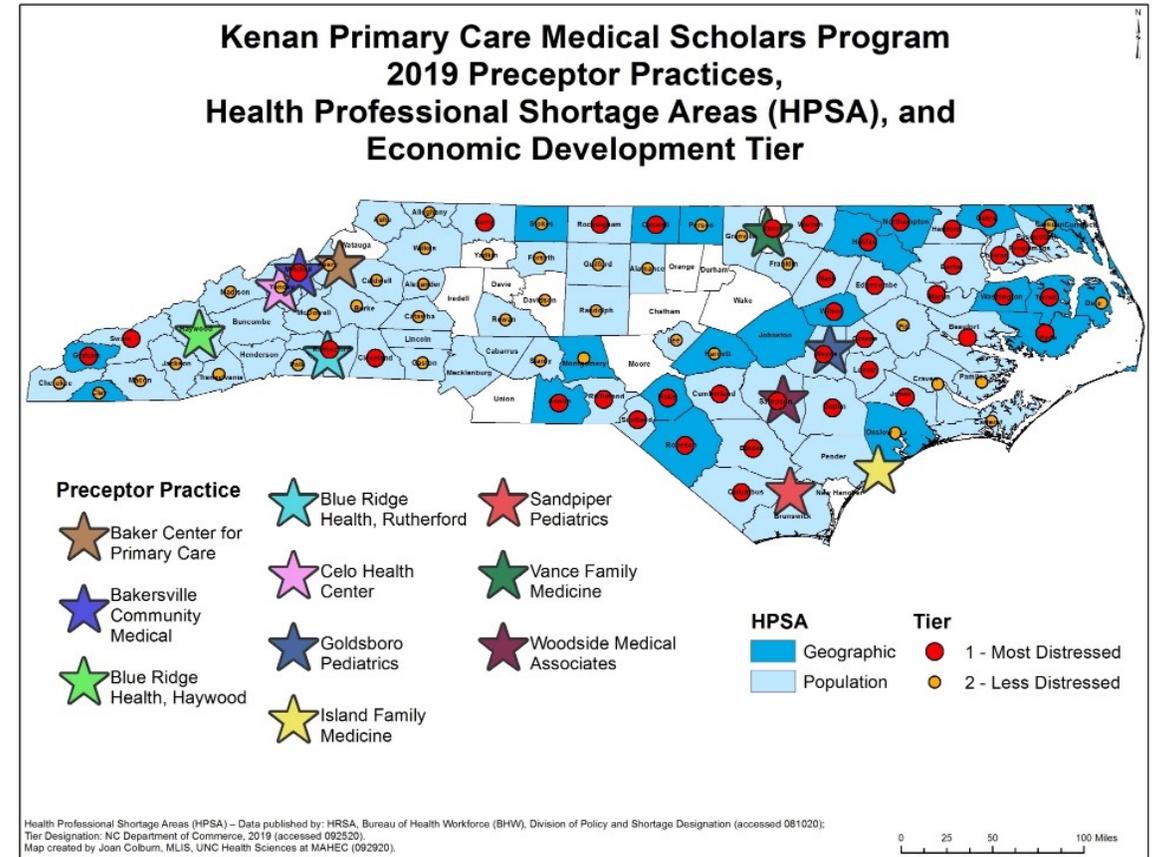
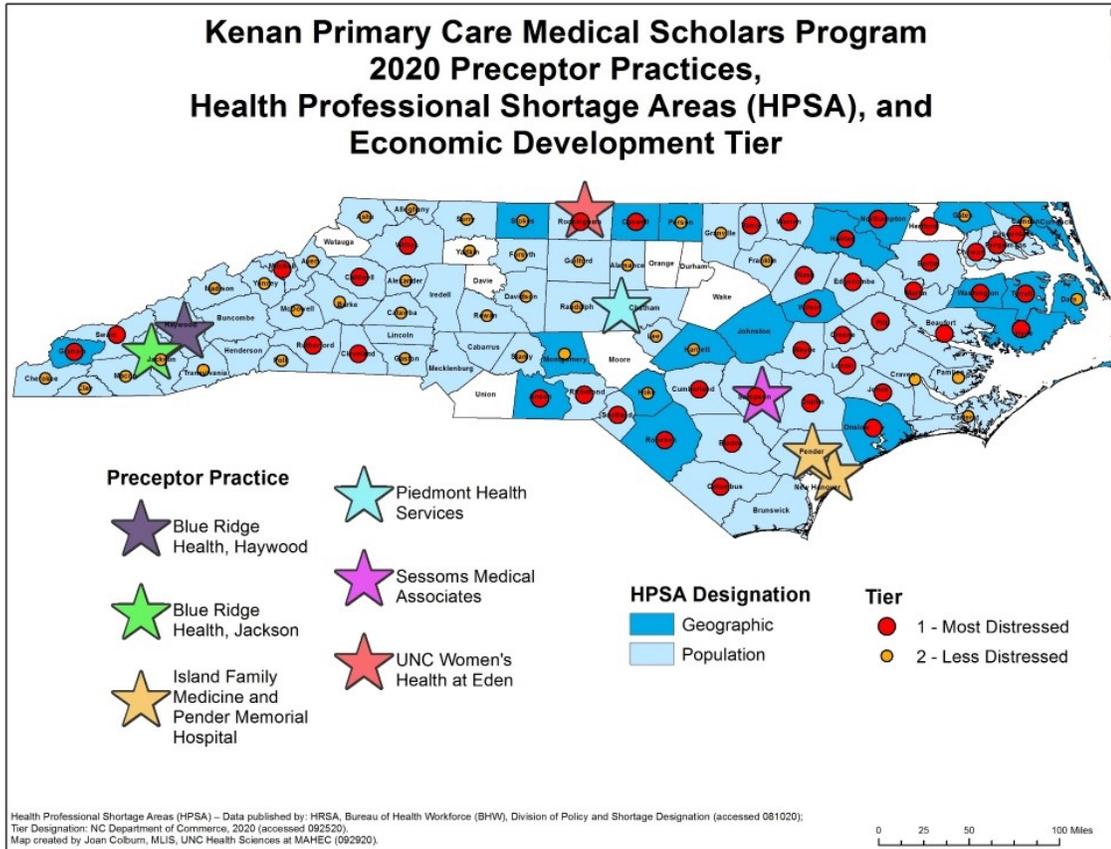
Practice Rural Primary Care in NC
*Family Medicine, Internal Medicine,
OB/GYN, Psychiatry, General Surgery, Pediatrics*

Time Commitment

Monthly Didactic Attendance
6-week summer externship
Outreach programs



Kenan Rural Primary Care Scholars



Kenan Rural Primary Care Scholars



Kenan Scholar Demographics –

73 Total Scholars (2013-2021)

- 57 NC Residents (75%)
- 16 OOS Residents (25%)

Residency - 43 Graduates as of 2021

35 of 43 matched into Primary Care (81%)

- 5 to EM, 1 to Anesthesiology, 1 to Peds Neurology, 1 to Ophtho
- Primary Care: 22 of 35 matched into NC residencies (63%)
 - 20 Family Medicine (57%)
 - 5 OB/GYN (14%)
 - 4 Psychiatry (11%)
 - 2 General Surgery (6%)
 - 1 Pediatrics (3%)
 - 2 Internal Medicine (6%)
 - 1 med- peds (3%)



Current Practice Locations

NC (all rural)

- 1 psych, 3 FamMed, 1 Ob/Gyn

Fellowships

- 1 surgical OB (Illinois)
- 1 International Medicine (Kansas)

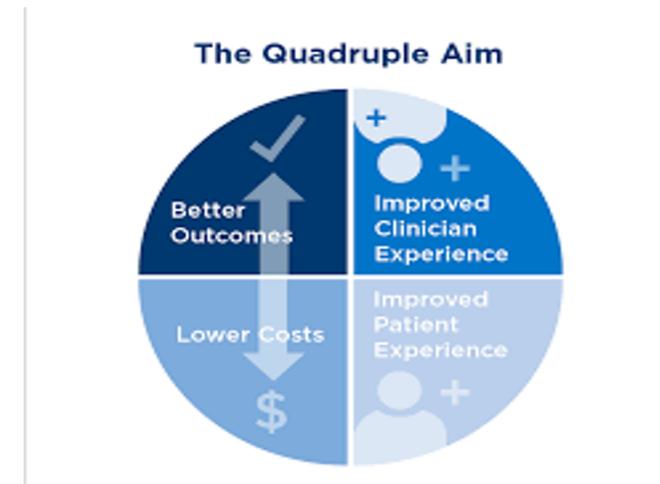


Post Residency Pipelining

Rural Fellows Program



- Increased Responsibility of Rural Providers to Stay Up To Date
- Variance of needs in rural communities
- Required to perform a greater number of procedures in a wider variety of settings, including hospitalist work, emergency services, obstetric deliveries, anesthesia, and general office procedures
- When providers are able to perform specialized care in their office:
 - 1) Patients are more satisfied
 - 2) Continuity of care is improved
 - 3) Cost and wait times are less
 - 4) Physician satisfaction is improved.



Rural Fellows Program

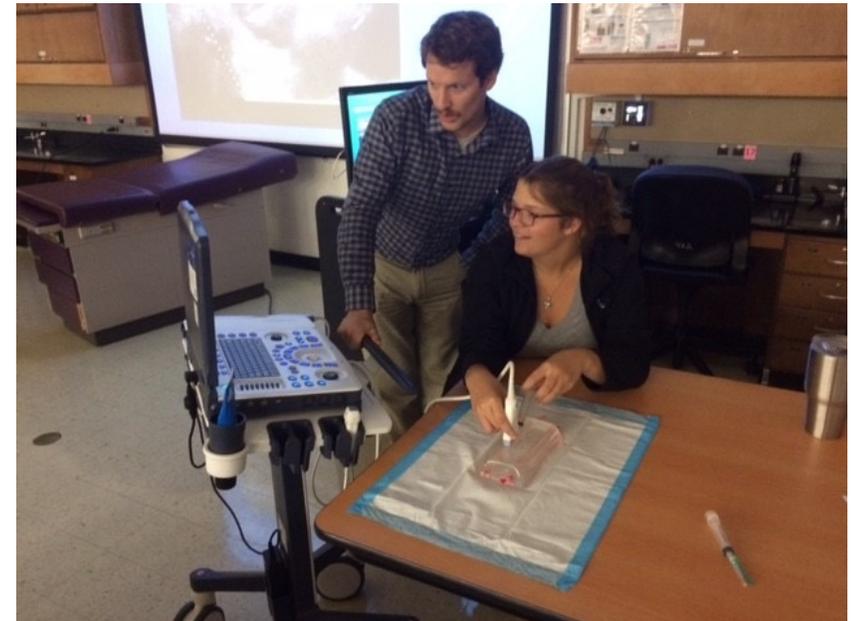


Designed to:

1. Extend training and academic study time during post-residency year
2. Develop skills
3. Provide faculty support and resources to help with particular interests or questions

Components:

1. Leadership Development
2. Preceptor Development
3. Community Engagement



Rural Fellows Program



Rural Fellows in North Carolina



Cohort Year:  2017-2018  2018-2019  2019-2020  2020-21

County Rurality:  Rural  Urban



Accomplishments

ORI Unique Opportunities: POCUS Curriculum



Rural POCUS Curriculum

- Provided butterfly ultrasound during summer experience and then during 3rd and 4th clinical years
- Didactic during summer experience orientation on knobology, common US pathology (skin, shoulder, and knee exam)
- Ongoing didactics during clinical years with opportunity for weekend long immersive course (with preceptor invited)

Goal and Objectives

- Ensure all students, independent of campus, continue to learn and practice Ultrasound skills
- Teach outpatient Ultrasound skills, appropriate of student's level of knowledge, in manners which can be practical to use in outpatient settings
- Continue cohort experience and relationships through large group online teaching sessions which are case-based
- Expand and provide small teaching points throughout the summer to further learning on outpatient Ultrasound skills
- Give feedback on Ultrasound skills to enhance learning and improve technologic skills
- Reflect on utility of POCUS in rural settings
- Utilize Google Classroom as a longitudinal learning tool students can access throughout their 4 years of medical school

Accomplishments



Scholarship and Curriculum

- Collaborative work to build out a new, shared, rural curriculum that will connect students statewide in the future around shared rural curriculum
- Successful COVID elective - COVID + Community Health Center (PHS)
- Transition of Family Medicine Summer Academy to virtual experience to support students enrolled in the program
- Spanish Enrichment program offered to Kenan Primary Care Medical Scholars

Community Partnership

- Expanded clinical opportunities and service opportunities
 - During COVID, worked with Kenan Rural Scholar students who were not able to be in clinic for community service to coordinate volunteer services with Council on Aging in Chatham County

Accomplishments



- **Community / Faculty Engagement**

- ***Rural Fellows Program***

- Partnered with Piedmont Health Services, UNC Family Medicine, and Chatham Hospital to recruit three new rural fellows involved in new Chatham Maternity Care Center to help new graduates maintain surgical skills through fellowship time
- Supporting expansion of Women's Health Opportunities through support of Fellow who was recently named Medical Director of Chatham Health Department

- ***Post-Residency Kenan and Promise Scholars***

- Successfully placed 5 of 6 Kenan Scholars who have graduated from residency in rural practices in NC
- Hosted recruitment Event with representation from several rural practices and Office of Rural Health (NC DHHS) for graduating Kenan Scholars and Promise Scholars

Questions for Consideration



- Best practices for maintaining student databases as students/alumni move across years and roles?
- How to provide support for students throughout the continuum?
 - Clinical Years
 - Residency
 - Fellowship
 - Post-Residency



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