



NoGAPP
NORTH GEORGIA ADVANCED PRACTICE PROGRAM



Building a Workforce for Rural Health

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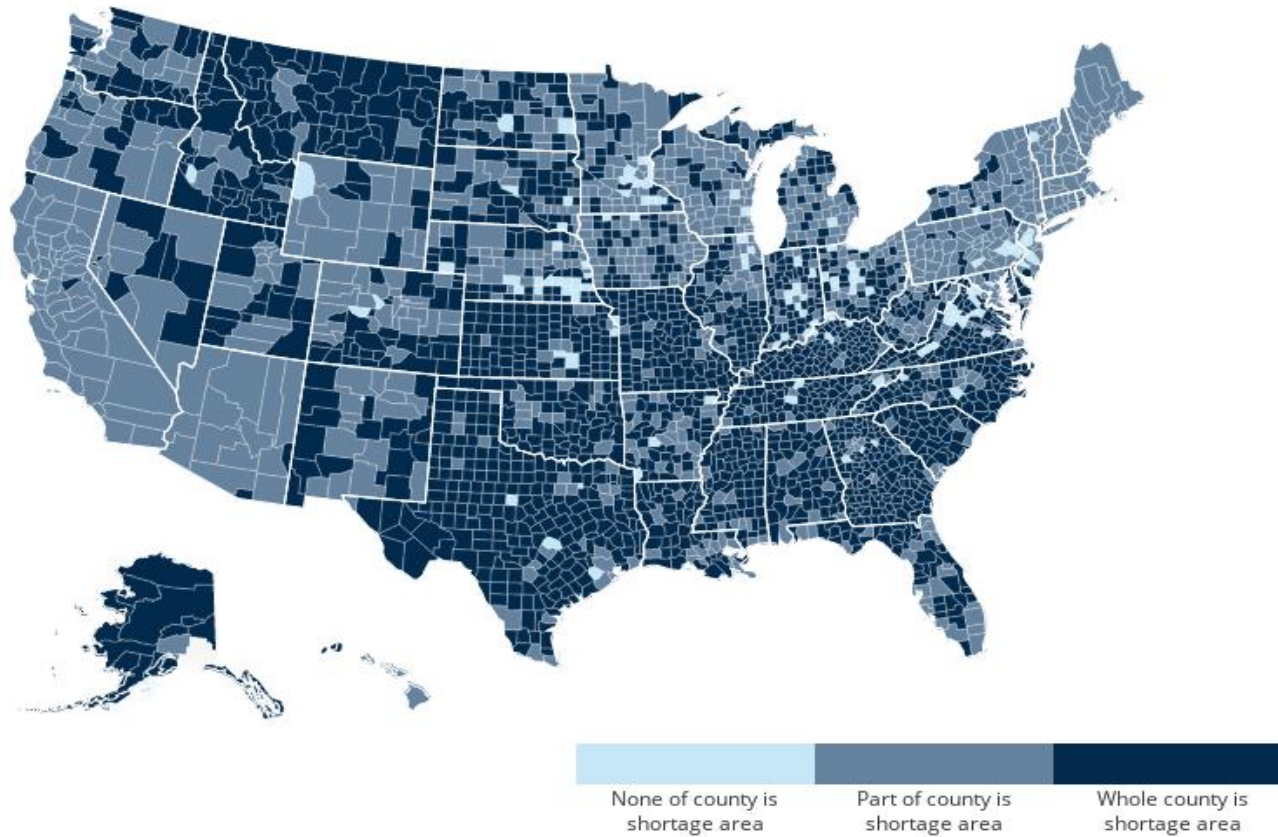
The author(s)/presenter(s) are employees of MedLink Georgia and Emory University, in Winder and Atlanta, Georgia (respectively)

Current state of rural primary care

- ▶ About 20 percent of Americans live in rural areas, but barely one-tenth of physicians practice there
- ▶ The patient-to- primary care physician ratio in rural areas is only 39.8 physicians per 100,000 people, compared to 53.3 physicians per 100,000 in urban areas
- ▶ The federal government projects a shortage of over 20,000 primary care physicians in rural areas by 2025
- ▶ Compared to urban Americans, rural Americans are more likely to have heart disease, stroke, cancer, unintentional injuries, suicide risk, and chronic lung disease, and have higher death rates from COVID-19
- ▶ Recruitment and retention of primary care providers in rural settings has proven to be an ongoing challenge for the healthcare system resulting in diminished access to care for this population

Health professional shortage areas in US

Health Professional Shortage Areas: Primary Care, by County, 2023



Community Health Centers (CHC)

- ▶ First health **Community Health Centers opened in 1965**. A founding center and beacon for FNP training is The Community Health Center & Dr. Margaret Flinter—wrote "the book" on building Residency programs
- ▶ Expansion of the federally supported health center system to over 1,400 organizations; Federally Qualified Health Centers (**FQHC's**) are in **11,000 rural and urban communities**
- ▶ Created an affordable health care option for more than **30 million people**
- ▶ Health centers help **increase access to crucial primary care** by reducing barriers such as cost, lack of insurance, distance, and language for their patients



FQHC Health Centers...

- ▶ Receive Health Center Program **federal grant funding** to improve the health of underserved and vulnerable populations.
- ▶ The majority of health centers' operating funds come from **Medicaid, Medicare, private insurance, patient fees, and other resources.**
- ▶ Health centers must comply with all **Health Center Program requirements** and other federal and state requirements.
- ▶ The Bureau of Primary Health Care (BPHC) **funds health centers** in underserved communities, providing access to high quality, family oriented, comprehensive primary and preventive health care for people who are low-income, uninsured or face other obstacles to getting health care.

<https://www.hrsa.gov/about/organization/bureaus/index.html>

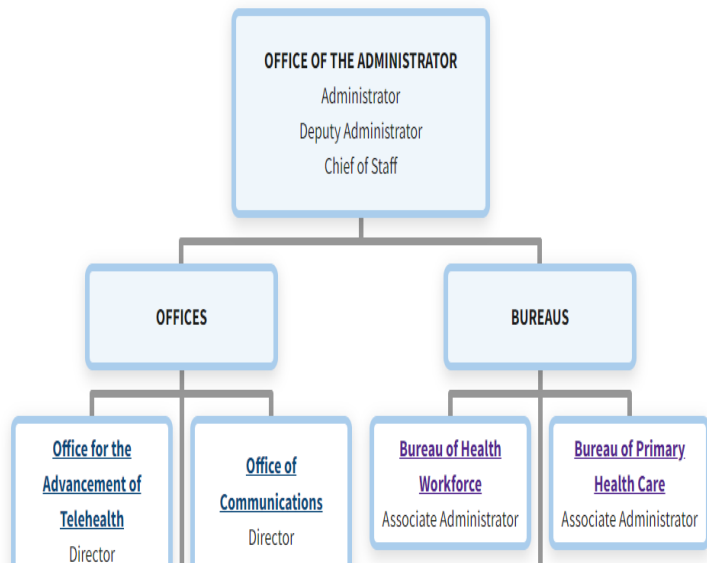
Health Resources and Services Administration (HRSA)

- ▶ Is an agency of the U.S. Department of Health and Human Services, is the *primary federal agency for improving health care to people* who are geographically isolated, economically or medically vulnerable.
 - ▶ **Goal 1: Improve Access to Quality Health Services**
 - ▶ **Goal 2: Foster a Health Care Workforce Able to Address Current and Emerging Needs**
 - ▶ **Goal 3: Achieve Health Equity and Enhance Population Health**
 - ▶ **Goal 4: Optimize HRSA Operations and Strengthen Program Management**

<https://www.hrsa.gov/about/index.html>

Bureau of Health Workforce

Health Resources and Services Administration



- ▶ Administers programs that are designed to strengthen the health workforce and connect skilled professionals to rural, urban, and tribal underserved communities nationwide.
- ▶ **ACCESS:** Make it easier for people to get health care.
- ▶ **SUPPLY:** Add health care workers to the workforce.
- ▶ **DISTRIBUTION:** Help health care providers work where they're needed.
- ▶ **QUALITY:** Train health care providers to use techniques proven to help patients.

Advanced Nursing Education-Nurse Practitioner Residency (ANE-NPR)

- ▶ Sponsored by the Bureau of Health Workforce
- ▶ First federal funding to support APRN residency programs
- ▶ Increase primary care providers in community based settings
- ▶ Support the placement and retention in these settings through clinical and academic focused 12-month nurse practitioner residency programs
 - ▶ 36 programs were funded in 2019; majority were new programs vs expansion grants
 - ▶ Four years to establish a program
 - ▶ Academic practice partnerships

Strategies for optimizing the use of healthcare providers in rural areas

- ▶ Using **interprofessional teams** to provide coordinated and efficient care for patients and to extend the reach of each provider
- ▶ Removing state and federal barriers that constrain professionals from **practicing to the full extent of their training**
- ▶ Removing barriers to the use of **telehealth** to provide access to remote healthcare providers
- ▶ **Nurse practitioners** possess clinical and relational skills which make them particularly suited to practice in this environment.
- ▶ The preparation of nurse practitioner graduates through a **specialized residency** in rural family practice provides a pathway for recruitment and facilitates the transition into complex care setting.



NoGAPP

NORTH GEORGIA ADVANCED PRACTICE PROGRAM

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- ▶ \$2.2 Million over four years
 - ▶ 2019-2020 building infrastructure
 - ▶ 2020-2021 first year
 - ▶ 2021-2022 second year
 - ▶ 2022-2023 third year

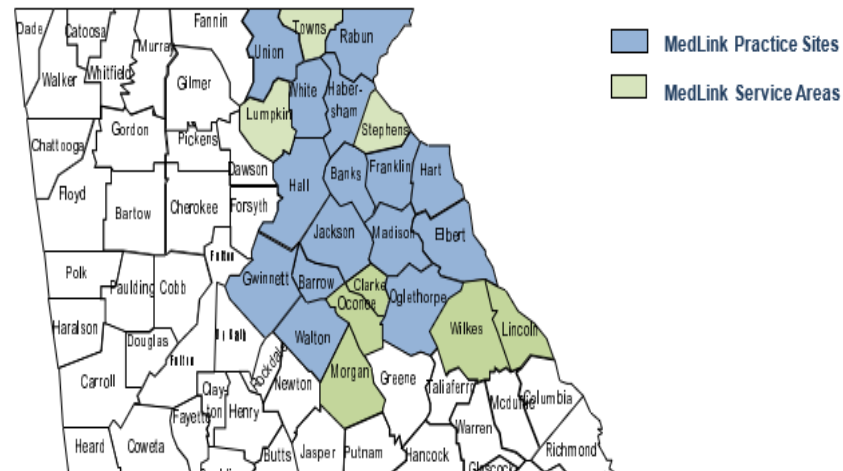


North Georgia Advanced Practice Provider Program (NoGAPP)

- ▶ **Build a pathway** to help meet rural/underserved community's need for qualified primary care providers
- ▶ **Increase the number** of fully-functioning Primary Care Nurse Practitioners available to provide care in rural and underserved areas in Georgia and beyond
- ▶ Establish a **sustainable model** for a Nurse Practitioner Residency that other academic-practice partnerships could emulate

Emory School of Nursing and MedLink Georgia, Inc.

- ▶ 18 sites across 23 counties
- ▶ 26 MD's, 32 APRN's, 4 PA's and 285 staff
- ▶ Completed 153,445 encounters in 202



- ▶ PCMH (Level 3 Certification)
 - ▶ Primary Care/Family Medicine, Pediatrics, Behavioral Health, Substance Use Disorder Treatment (Medication Assisted Treatment), Rehabilitation and Wellness (PT/OT), Dental, Diabetes Self-Management Education and Support (DSMES) Program (Accredited), Nutrition, Chronic Care Management, 340B Pharmacies (4 In-house pharmacies), HIV Prevention and Treatment (PrEP), and Women's Health

Nell Hodgson Woodruff School of Nursing, Emory University

Total students: 1,215

Diversity: 48%

Total Pre-licensure students: 638

Total MSN students: 351

Total DNP students: 119

Total PhD students: 30

Atlanta, GA



To promote optimal health and wellness for all by creating, changing, and leading through innovative teaching, discovery, nursing practice, and social action in our local and global communities.

NoGAPP Vision and Mission



Vision

To develop a sustainable source of dedicated, highly-qualified nurse practitioners ready to meet the unique challenges of practice in Federally Qualified Health Centers that are motivated by clinical excellence and the desire for continuous improvement in healthcare access and delivery

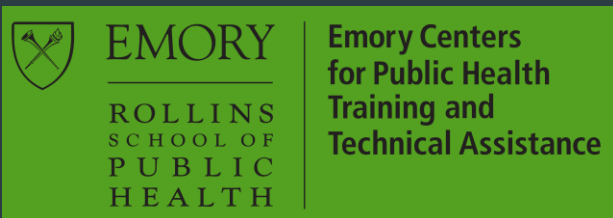


Mission

To create a comprehensive, immersive nurse practitioner residency program in the Federally Qualified Health Center setting that facilitates clinical expertise, compassionate practice, interdisciplinary collaboration, and professional confidence, in partnership with our communities to improve the health outcomes for individuals and families.

Evaluation Framework

► Developed in partnership with the Program Evaluation and Quality Improvement Center at Emory Centers for Public Health Training and Technical Assistance



Goals

Create an infrastructure and strategy for FNP workforce development to serve rural settings supported by FQHCs

Development of an Accredited Family Nurse Practitioner Residency program focused on rural health.

Partner with communities to improve outcomes of individuals and families

| Domain Areas | Objectives | Program Evaluation |
|------------------------------------|---|---|
| | Identify, develop, and monitor the appropriate roles and responsibilities necessary to support the residency program | In end of residency survey, ask residents about the clarity of the roles and responsibilities of residents, staff, peer coaches (before/after residency) |
| Organizational engagement | Achieve NNPRFTC Accreditation for NoGAPP residency Program. Goal: by 2023 (end of grant) | Did the program achieve Accreditation by end of grant? |
| | Continue to recruit and retain local and regional candidates for the program while expanding nationally. Goal: continue to increase the number of qualified applicants year after year. Goal 2: after completion of the residency, 100% retention of residents in FQHCs, and at least 50% remaining at MedLink. | Recruitment survey; tracking the number of applicants each year; tracking the retention rate (at Medlink or other FQHC) post-residency (1-year follow up survey) |
| Resident recruitment and retention | Cultivate a positive and supportive work environment to acculturate residents into the organization. Goal: residents describe experience as positive and supportive | Questions in end of program survey and follow up survey on environment and culture; performance reviews or oral evaluations |
| | | Incorporate overarching questions in exit survey on the influence of the curriculum (continuity clinic, mentor clinic, specialty rotations, didactic sessions, etc) on their confidence and competence as a well-rounded confident family nurse practitioner in a rural environment. Did the curriculum overall meet your needs/perceptions/opinions. |
| Clinical Excellence | A 12-month curriculum designed to support the advancement of competence, confidence, compassionate practice, and interdisciplinary collaboration as a full scope FNP. | |
| | Share and disseminate findings from the NoGAPP residency regionally/nationally through scholarly products | Track number of publications and presentations annually |
| Scholarship | Prepare clinical nurse scholars by cultivating lifelong learning to contribute to evidence-based practice within MedLink | Exit survey self efficacy questions |
| Healthcare Access | Increase access to safe, quality, and timely primary care for underserved and special populations. | End of Program survey (administered to residents and peer coaches) |
| Healthcare Outcomes | Improvement in patient health outcomes through evidence-based practice and/or increased access to community-based resources | End of Program survey (administered to residents and peer coaches) |
| Community Partnership | Engagement with community partners and/or health-related events to enhance the provision of care. | Residents self report community engagement (Bethany and Jess track) |

Comprehensive 12-month competency based curriculum

- ▶ Didactic Sessions
- ▶ Continuity Clinic
- ▶ Specialty Clinic
- ▶ Mentor Clinic
- ▶ Quality Improvement
- ▶ Leadership Development
- ▶ Community Engagement

Sample schedule

Monday

- ▶ Continuity Clinic

Tuesday

- ▶ Didactic Sessions
- ▶ Admin Time

Wednesday

- ▶ Mentor Clinic

Thursday

- ▶ Specialty Rotation

Friday

- ▶ Continuity Clinic

Didactic Content

| Presentation Topic | Date | Presenter |
|---|-------------|-----------------------------------|
| Physical Assessment | 14-Jul-20 | Michelle Cellai |
| Ordering/Interpretation of Labs | 21-Jul-20 | Michelle Cellai |
| Reproductive Health | 28-Jul-20 | Susie Price |
| EKG Interpretation | 04-Aug-2020 | Dr. Mushtaq Ahmed |
| Cardiac Disorders/Workup of Chest Pain | 11-Aug-20 | Zac Clevenger |
| Diabetes/Patient Self Management | 18-Aug-20 | Margaret Kapasi/Kathy Marshall NP |
| Creating Athena Order Sets | 25-Aug-20 | Susie Price, Trina Simmons |
| No Meeting - IHI Modules | 1-Sep-20 | N/A |
| Diagnosing Autism | 8-Sep-20 | Susan Brasher |
| Hypertension | 15-Sep-20 | Dr. Kimberly Martin |
| The Role of Diet and Nutrition in Chronic Disorders | 22-Sep-20 | Jennifer Madore RD |
| Health Information Technology | 29-Sep-20 | Jason Atkins |
| Adult Screenings and Immunizations | 6-Oct-20 | Michelle Cellai |
| Quality Improvement | 13-Oct-20 | Corinne Abraham |
| Nexplanon Insertion | 20-Oct-20 | Tami Barbeau |
| Pediatric Well Child Visits | 27-Oct-20 | Bonnie Proulx |
| COPD | 3-Nov-20 | Dr. Daniel Gordon |
| Asthma | 10-Nov-20 | Clint Shedd |
| Shared Decision Making Primary Care | 17-Nov-20 | Wendy Madigosky |
| Congestive Heart Failure | 24-Nov-20 | Zac Clevenger |
| The Neuro Chemistry of Addiction | 1-Dec-20 | Dr. Lonnie Sipsy |
| Lean | 8-Dec-20 | JoAnna Hillman |
| Workup of Headache | 15-Dec-20 | Calli Cook, NP |
| Communication/Motivational Interviewing | 22-Dec-20 | Jordan Hoffman |
| Diagnosis and Treatment of Eating Disorders | 29-Dec-20 | Jennifer Price RD,MSN |

Continuity clinic: Ramp up schedule

| | July | Aug | Sep | Oct | Nov/ Dec | Jan/ Feb | Mar/ Apr | May | June |
|--|------|-----|-----|-----|----------|-------------|-------------|-----|------|
| # of live patients per day | 0 | 8 | 10 | 12 | 14 | 16 | 18 | 18 | 18 |
| # of patients scheduled | 0 | 12 | 14 | 16 | 18 | 20 | 22 | 22 | 22 |
| # days seeing patients/month) | 0 | 13 | 12 | 13 | 12 | 14 | 14/15 | 19 | 19 |
| slots frozen | 22 | 10 | 8 | 6 | 4 | 4 | 2 | 2 | 2 |
| actual average # of patients seen per week | | 24 | 30 | 36 | 42 | 48 | 54 | 72 | 72 |

Specialty Rotations

Pediatrics

Podiatry

Women's Health

Ear, Nose, and Throat

MAT/Vivitrol

Dermatology

Urology

Cardiology

Diabetes

Behavioral Health

Orthopedics

Geriatrics

Versant Voyager

- ▶ A decade of experience with Competency based residency programs; 6 APRN tracks
- ▶ NoGAPP Curriculum: 93 competencies/12 procedures
- ▶ QSEN Framework for Competency Safety
 - ▶ Procedural
 - ▶ Teamwork and Collaboration
 - ▶ Evidence-Based Practice
 - ▶ Leadership
 - ▶ QI
- ▶ Performance Gap Assessment
- ▶ Individual Learning Plans
- ▶ Monthly Journaling

Creating an Infrastructure & Cultural Transformation

- ▶ Organizational Activities
 - ▶ Mission/Vision
 - ▶ Visible Leadership Support
 - ▶ Quarterly Practice Manager meeting
 - ▶ Medical Staff Monthly meetings
 - ▶ Quarterly Board Meetings
- ▶ Program Activities
 - ▶ Peer Coach Orientation & Quarterly Development
 - ▶ Peer Coach Handbook
 - ▶ Role & Responsibility Document
 - ▶ NoGapp Advisory Board Quarterly Meeting
 - ▶ Operations/Curriculum meeting weekly
 - ▶ Resident Evaluations quarterly
 - ▶ Site visits every other month by Program Director

First Cohort

- ▶ FY2 cohort of 4
 - ▶ 4 female/ 2 AA, 2 Caucasian
 - ▶ Recruitment= 11 candidates; accepted 4 with 2 waitlist
 - ▶ 100% in state
 - ▶ 75% retention rate
 - ▶ Second resident left after 6 mos. For a 50% retention rate for 1 year

First Cohort



Acting as peer mentors, leading didactic sessions, serving on Advisory Board, editing manuscript for publication submission

Second Cohort*

- ▶ FY3 cohort of 5
 - ▶ 4 female, 1 male: 1 AA, 4 Caucasian
 - ▶ Recruitment = 55 applicants accepted 6; 3 on waitlist
 - ▶ 22% out of state ; One withdrew 3 months into the program due to financial issues
 - ▶ 100% retention rate

*Became accredited by The Consortium for Advanced Practice Providers in June 2023



Third Cohort

- ▶ FY4 cohort of 9
 - ▶ 9 female: 4 AA, 2 Latina, 3 Caucasian
 - ▶ Recruitment 32 applicants for 9 positions
 - ▶ 18% out of state
 - ▶ 55% retention rate overall
 - ▶ 80% retention MedLink, 50% East Georgia, and 0% Community Healthcare

Residents 2022-2023

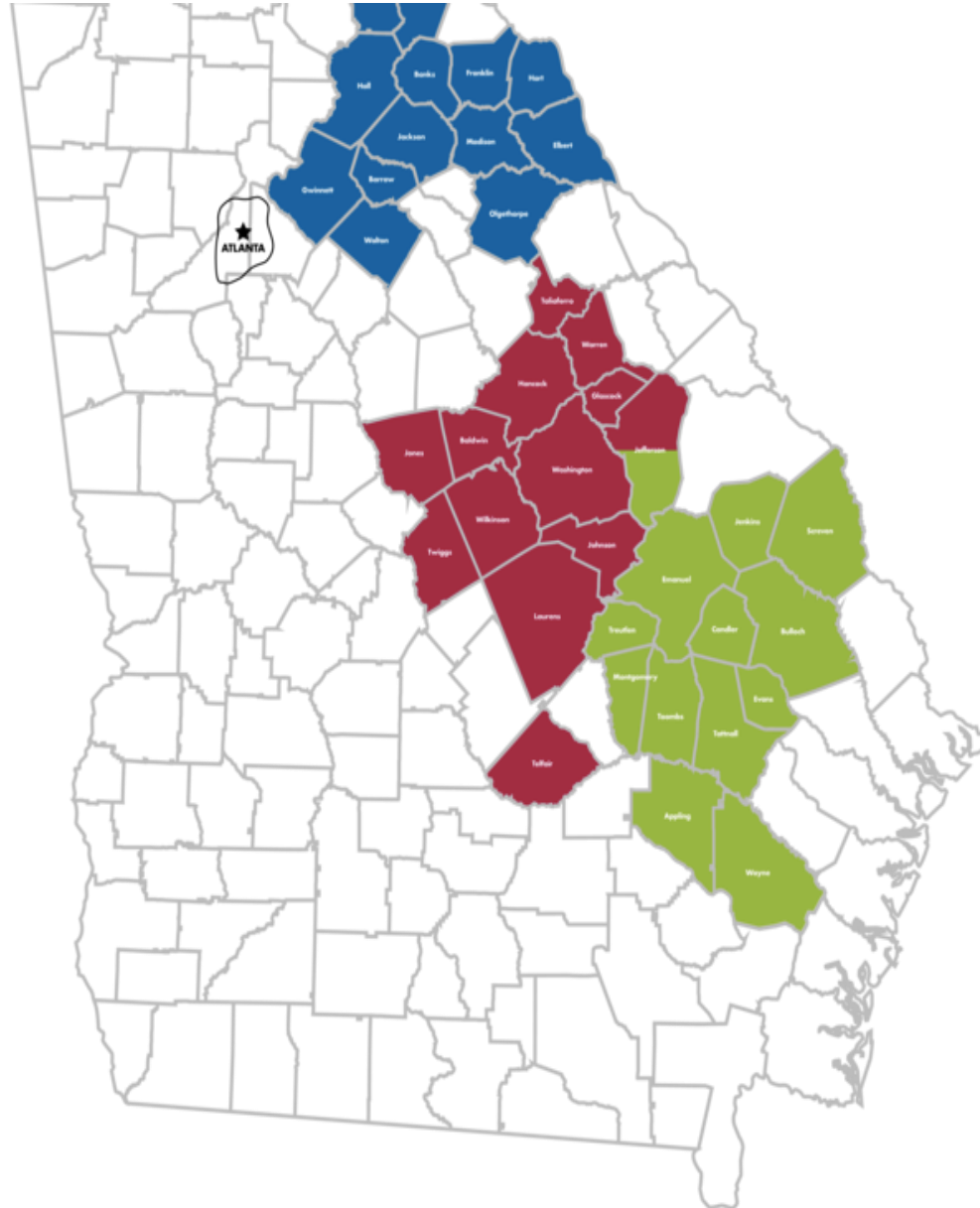


Third Cohort: FQHCS Partner Expansion



Total coverage area of NoGAPP

as of July 1, 2022



White
Habersham
Hall
Banks
Franklin
Hart
Jackson
Madison
Elbert
Barrow
Gwinnett
Oglethorpe
Walton



COUNTIES

Taliaferro
Hancock
Warren
Glascock
Baldwin
Jones
Washington
Jefferson
Twigg
Wilkinson
Laurens
Johnson
Telfair



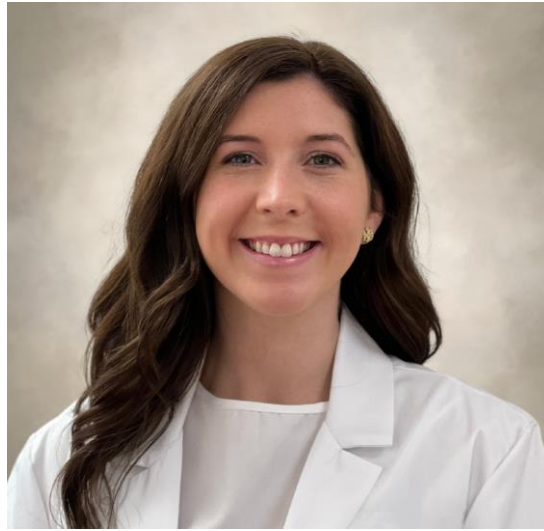
COUNTIES

Screven
Jenkins
Emanuel
Jefferson
Treutlen
Candler
Bulloch
Evans
Montgomery
Toombs
Tattnall
Appling
Wayne

Fourth Cohort

(first outside of the initial Grant)

- ▶ FY4 cohort of 6 (first year Expansion Grant)
 - ▶ 5 female/1 male: 2 AA, 4 Caucasian
 - ▶ Recruitment 31 applicants for 6 positions
 - ▶ 19% out of state
 - ▶ 3 residents at MedLink Georgia, 2 residents at Community Healthcare Systems, 1 resident at East Georgia Health Systems



Evaluation Plan

| Resident Assessment Component | Holistic Program Evaluation Component |
|---|--|
| 1. Versant continuity clinic competency tracking | 1. Resident onboarding evaluation survey |
| 2. Versant reflective journal entries | 2. Peer coach onboarding evaluation survey |
| 3. Quarterly performance review with program director | 3. Weekly didactic session evaluation survey on feedback and recommendations for improvement |
| 4. Quarterly check in with program staff | 4. Resident midpoint check-in survey |
| 5. Scheduled site visits by program director | 5. Faculty and peer coach midpoint check-in survey |
| 6. Mentor assessment of resident performance in specialty rotations | 6. Resident exit survey |

Developed in partnership with the Program Evaluation and Quality Improvement Center at Emory Centers for Public Health Training and Technical Assistance

Outcomes of NP residency programs

- ▶ Qualitative Data
- ▶ Quantitative data
- ▶ Organizational Impact
- ▶ Accomplishments

Qualitative Data—Survey Data

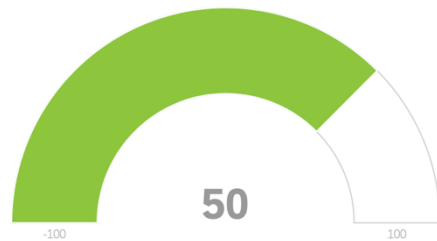
- ▶ “The residency has **prepared me to care for a diverse population with many chronic health problems**. It allowed parallel learning while treating patients, which greatly enhances the absorption of information. The pace of the program provided more time for **getting acclimated in this new role**, which is so important as a new nurse practitioner.” - *Cohort 2 Graduate*
- ▶ “The [NoGAPP residency]... has helped shape my practice, **improved my confidence, and prepared me to serve the population of which I have been placed in charge**. I would 100% recommend this to any new practitioner coming into a rural setting.” - *Cohort 2 Graduate*
- ▶ “This residency was the perfect opportunity to **bridge the gap from new graduate to competent NP**. I am very grateful for the process and believe I have grown significantly as a nurse practitioner and professional. I would highly recommend new graduate NPs start their career in a residency program.” - *Cohort 1 Graduate*

Qualitative Themes—Program Director Site Visits

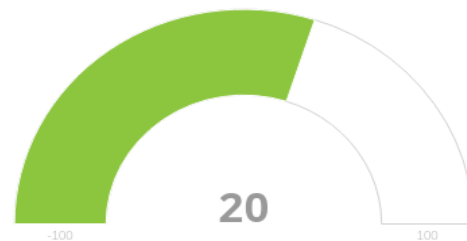
- ▶ **Professional Identity Formation:** Residents experienced not only the transition from novice to expert but also the phenomenon of relinquishing the role of expert registered nurse to that of novice practitioner. This invoked a type of grief response in some residents
- ▶ **Applied Learning:** Didactic presentations provided translational application of their academic work. The best received didactic presenters were employees of an FQHC who could truly guide the resident decision making process in the rural, low resource setting
- ▶ **Peer Support:** Significant reporting of imposter syndrome particularly in the early phases of the program. Empowerment by supportive peer coach/mentor aided in mitigation of those feelings
- ▶ **Practice restrictions:** In Georgia for advanced practice nurses (especially those in rural areas) state policies severely limit access to care for many underserved patients

Quantitative Data

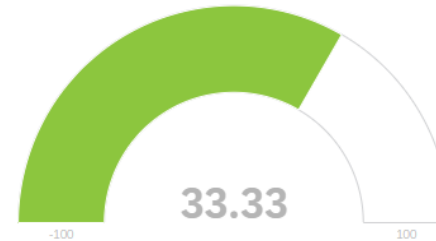
- ▶ 13 out of 18 graduates (72%) will remain at their residency organization
- ▶ Residents were satisfied with the residency, as per the Net Promoter Scores:



Cohort 1



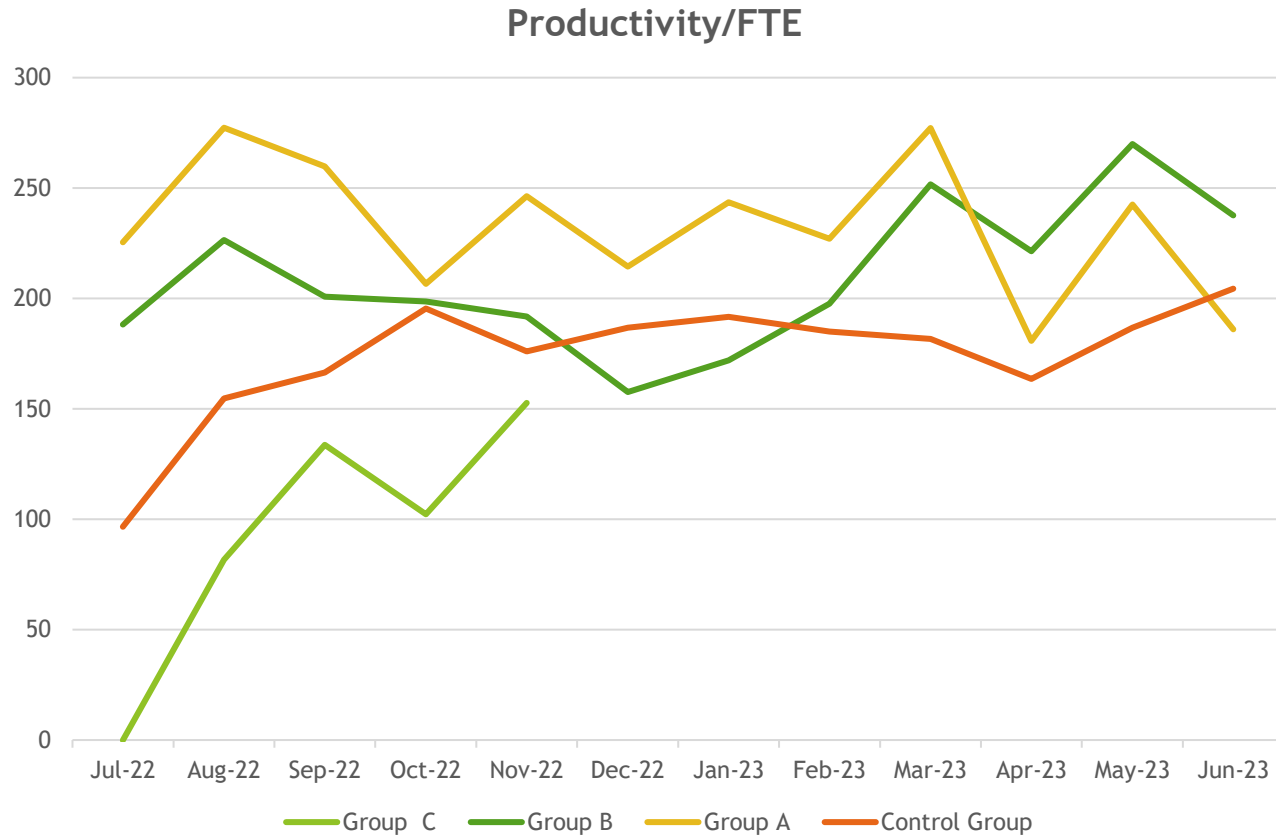
Cohort 2



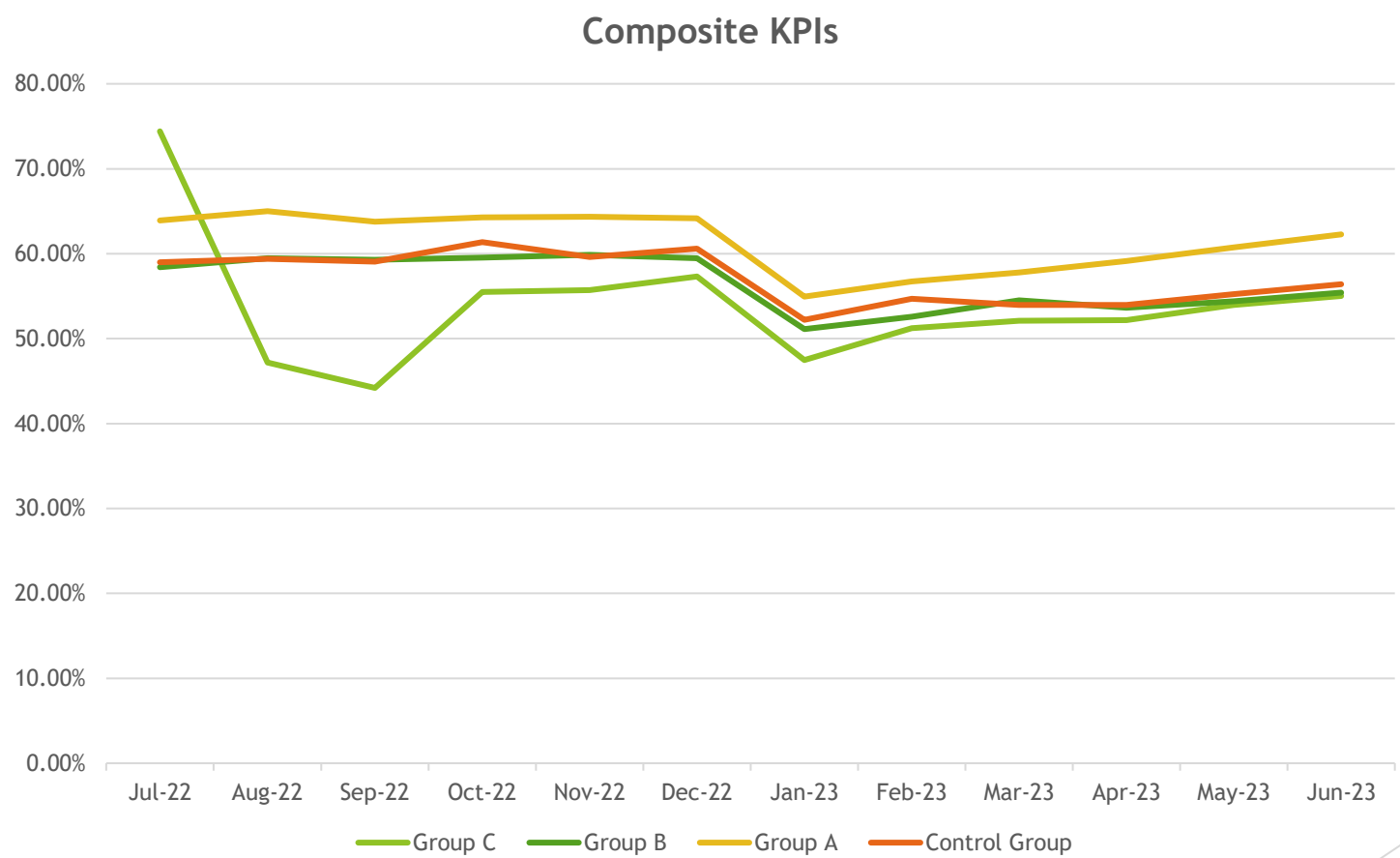
Cohort 3

- ▶ 100% of residents (n=15) agreed the residency had prepared them to increase access to timely and quality healthcare for underserved populations and to improve communities' health outcomes
- ▶ 93% of residents (n=14) agreed the residency increased community members' access to timely and quality healthcare
- ▶ 78% (n=7) of 9 employers of NoGAPP graduates are extremely likely to recommend hiring another NoGAPP graduate in the future

Productivity: Control Group vs. Residency Groups



Key Performance Indicators: Control Group vs. Residency Groups



Organizational Impact

- ▶ Built an Infrastructure for:
 - ▶ A high quality nurse residency program that provides a pathway for recruitment/retention
 - ▶ Expanded organizational identity related to being a teaching center
 - ▶ Peer Coach and Peer Mentor Model
- ▶ Enhanced Quality
 - ▶ Building a culture of provider lead QI
 - ▶ Built 14 standardized order sets based on evidence
 - ▶ Established and revised treatment protocols
 - ▶ Enhanced policy and procedures for new NP hires related to select advanced procedures/skills
- ▶ Enhanced existing provider satisfaction and competence
 - ▶ Training their "own"
 - ▶ Joy in teaching and mentoring
 - ▶ Evidenced based Practice: Internal providers leading didactic sessions

Accomplishments

- ▶ Cultural transformation towards training center
- ▶ Established and sustained an accredited FNP residency program across three FQHC's
- ▶ Developed a robust and comprehensive program evaluation framework for the residency program
- ▶ Developed a sustained process for continued program improvement
- ▶ Strong partnership between Academia and Practice
- ▶ Strong recruitment and retention rates
- ▶ Building relationships with local specialists for resident rotations and referrals
- ▶ Publications and Presentations
- ▶ Secured subsequent funding from HRSA (2023-2027) to expand with a focus on behavioral and maternal health

Did we do what we said we would do?

- ▶ Build a pipeline to help meet rural/underserved community's need for qualified primary care providers.
- ▶ Increase the number of fully-functioning Primary Care Nurse Practitioners available to provide care in rural and underserved areas in Georgia and beyond.
- ▶ Establish a sustainable model for a Nurse Practitioner Residency that other academic-practice partnerships could emulate.

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Thank You