

# IMPROVING RURAL HEALTH ACROSS THE SOUTHEAST

How Atrium Health is confronting unmet healthcare needs across small communities in the southeastern U.S.



Atrium Health

Millions of Americans live in small communities that lack access to essential health services.<sup>1</sup> People in rural areas have higher than average rates of chronic diseases and shorter life expectancies. They are more likely to live below the federal poverty level, less likely to have health insurance, and tend to live further away from a doctor or hospital.

At a time when many health systems have centralized their services and research hubs in major urban centers, Atrium Health has taken the opposite approach—bringing world-class care and clinical research to rural patients throughout the Southeast. Our programs reduce the distance between patients and health experts, with the ultimate goal of eliminating geographic disparities in healthcare.

**Five key features** define our efforts to improve rural health:



## 1. A LARGE CARE NETWORK

Our 950+ locations host nearly 20 million patient encounters every year.



## 2. INTEGRATED SERVICES

Our physicians work side-by-side across disciplines.



## 3. TELEMEDICINE

Telemedicine has vastly expanded our reach in rural areas, breaking down travel and cost barriers while expanding access.



## 4. MOBILE CARE

For especially hard-to-reach communities, our care teams bring screening and preventive care to them.



## 5. PARTNERSHIPS

We collaborate with partners who address nutrition, housing, transportation, and other social factors that influence health and access to care.

## Our region



**1 IN 3** residents in our **catchment area** lives in rural communities, compared with

**1 IN 5** nationwide

Rural communities are defined as areas with **<2,500** people, per the U.S. Census



## NORTH CAROLINA

has the second largest rural population of any state



*"It's often said that ZIP codes matter more than genetic codes in shaping Americans' health. We are confronting the social factors that stand between our patients and quality healthcare."*

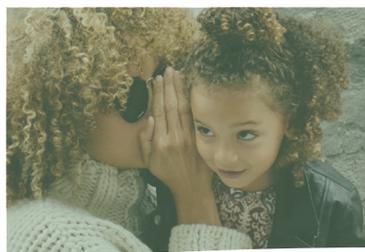
—Alisahah Cole, MD, Chief Community Impact Officer, Atrium Health

1. Health Resources and Services Administration: <https://data.hrsa.gov/topics/health-workforce/shortage-areas>

# Clinical Excellence Across the Care Continuum



PREVENTION



DIAGNOSIS



TREATMENT



WELLNESS



## CANCER CARE

Cancer patients in rural areas often have to travel considerable distances to receive care. They face significantly higher rates of cancer-related deaths—a disparity that has worsened in recent years. Atrium Health's Levine Cancer Institute was founded on the belief that where people live shouldn't determine how they fight cancer. We bring world-class specialists and cutting-edge therapies to 17,000+ new patients every year. Our custom-built software, called **Electronically Accessible Pathways**, ensures that each of our locations delivers the highest standard of care. Our first-of-its-kind **mobile lung unit** brings cancer screenings to underserved patients across the tobacco belt—diagnosing cancer at earlier, more treatable stages. **Virtual genetic counseling** expands precision medicine to patients in small communities.



## EMERGENCY CARE

When an emergency strikes, the time it takes to get to the hospital can be the difference between life and death. Our extensive use of telemedicine has driven outstanding patient outcomes and expedited emergency care throughout our region. We've addressed staffing shortages in small hospitals through **Virtual Critical Care**—24-hour, real-time supervision for critically ill patients in smaller hospitals. Likewise, our **Telestroke** program uses videoconferencing to give every stroke patient immediate access to an expert neurologist—ensuring that rural patients receive timely, expert care when time is of the essence.



## PRIMARY & SCHOOL-BASED CARE

For many rural families, scheduling a routine checkup can be a challenge. We're making it easier to access primary care using mobile services and telemedicine. In partnership with the YMCA of Greater Charlotte, the **Wellness on Wheels** mobile health unit provides health education and health screenings, including blood pressure and diabetes tests, as well as nutrition education and lifestyle management to prevent high blood pressure, Type 2 diabetes and other chronic diseases. Similarly, the **Anson Mobile Health Unit** regularly visits rural shopping centers and community hubs with blood pressure, glucose, weight, and BMI screenings. Our **eVisits** and **Virtual Visits** efficiently treat minor illnesses using online surveys and live video links. We've also expanded primary care and wellness programs in schools. This includes implementation of the **Healthy Together** program to reduce childhood obesity in rural elementary schools and the **Levine Children's School-Based Virtual Clinic** (SBVC) in Cleveland County and Lincoln County schools. The school-based virtual clinic provides students and parents with the opportunity for medical care without the child leaving school or the parents leaving work.



## CARDIAC CARE

Heart disease is a leading cause of death in America, and even more common in rural areas. In 2019, Atrium Health's Sanger Heart and Vascular Institute launched a three-year pilot called **Perfect Care** to bring home-based cardiac care to rural patients. The program arms patients with wearable devices to monitor weight, heart, sleep, and other activities after surgery. Similarly, our **Heart Success** program has reduced readmissions during the high-risk period immediately following an episode of acute heart failure.



## BEHAVIORAL HEALTH

A shortage of behavioral health professionals affects much of the U.S., including the Southeast. Atrium Health's **Behavioral Health Integration** program is closing this gap. We've expanded "whole person care" throughout our region. We proactively screen for social and emotional issues in rural primary care settings and coordinate ongoing follow-up care via telemedicine. Our virtual platform delivers behavioral health services to thousands every year. We also use virtual technology to bring **telepsychiatry** to rural emergency departments, some of which are in counties that do not have a single practicing mental health professional. We conduct 1,000+ telepsychiatry consults every month, which have reduced the length of stay by 50% for patients seeking psychiatric care.



## CLINICAL TRIALS

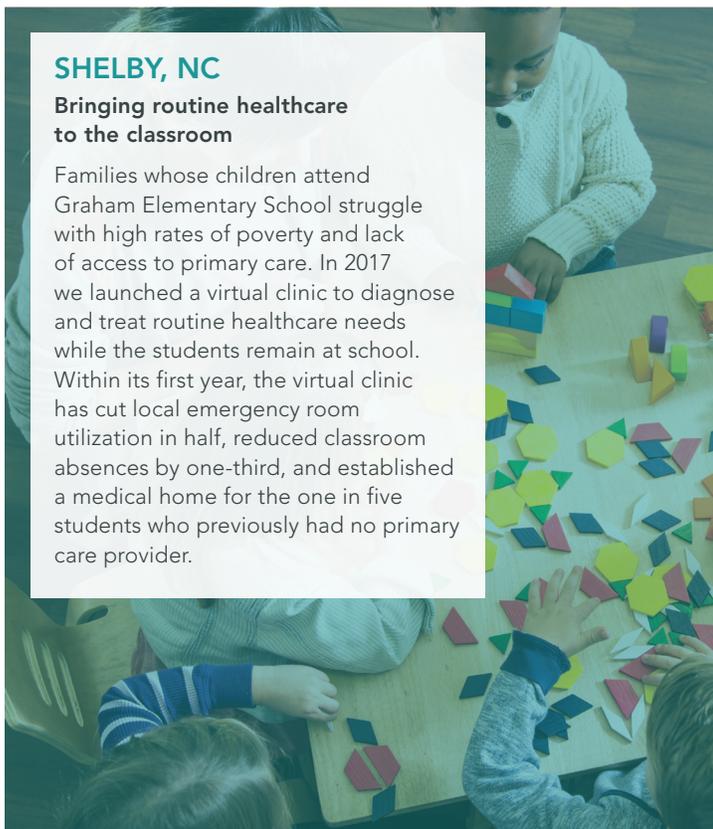
Most **clinical trials** take place within large, metropolitan research centers. We've made clinical trials standard in communities of all sizes—offering patients access to cutting-edge new therapies and improving the quality of our research. Since 2017, more than a third of participants in our cancer studies enrolled at sites outside of our flagship location, and a quarter of patients came from rural counties. In addition to our own enrollment, we've also led a national effort to expand the FDA's clinical trial eligibility criteria, opening the door for more institutions to design more inclusive research.

# Community Case Studies

## SHELBY, NC

### Bringing routine healthcare to the classroom

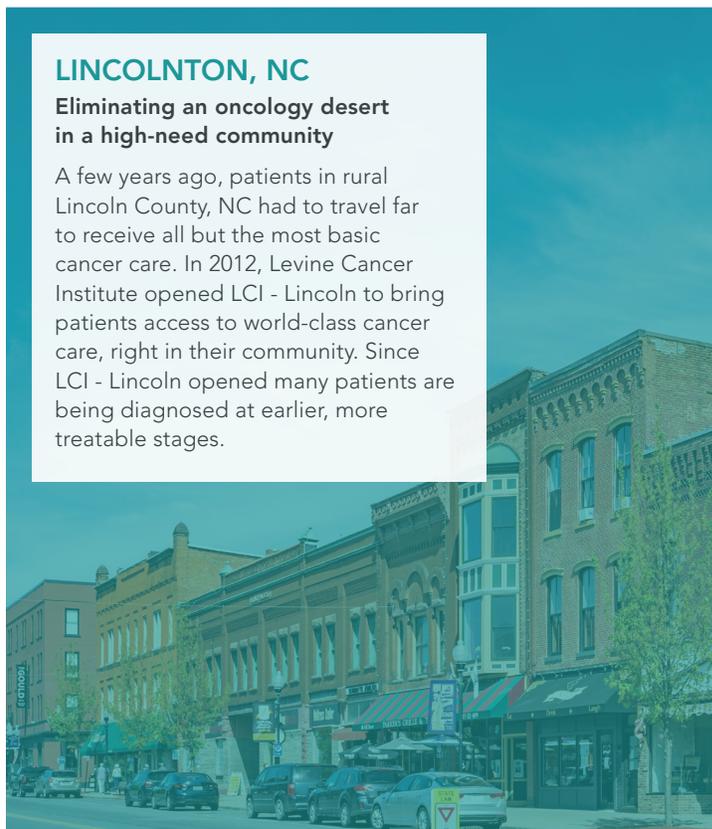
Families whose children attend Graham Elementary School struggle with high rates of poverty and lack of access to primary care. In 2017 we launched a virtual clinic to diagnose and treat routine healthcare needs while the students remain at school. Within its first year, the virtual clinic has cut local emergency room utilization in half, reduced classroom absences by one-third, and established a medical home for the one in five students who previously had no primary care provider.



## LINCOLNTON, NC

### Eliminating an oncology desert in a high-need community

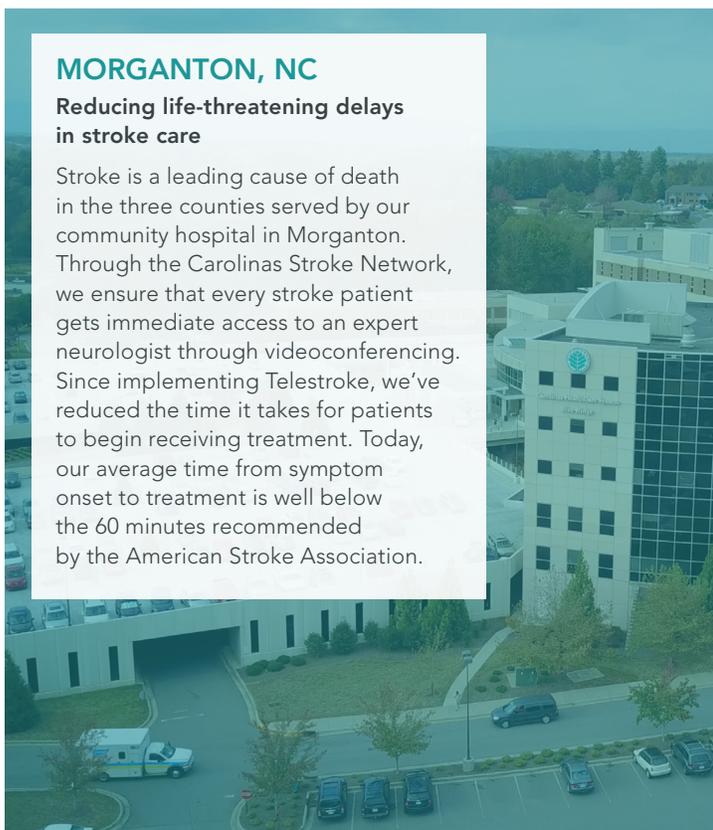
A few years ago, patients in rural Lincoln County, NC had to travel far to receive all but the most basic cancer care. In 2012, Levine Cancer Institute opened LCI - Lincoln to bring patients access to world-class cancer care, right in their community. Since LCI - Lincoln opened many patients are being diagnosed at earlier, more treatable stages.



## MORGANTON, NC

### Reducing life-threatening delays in stroke care

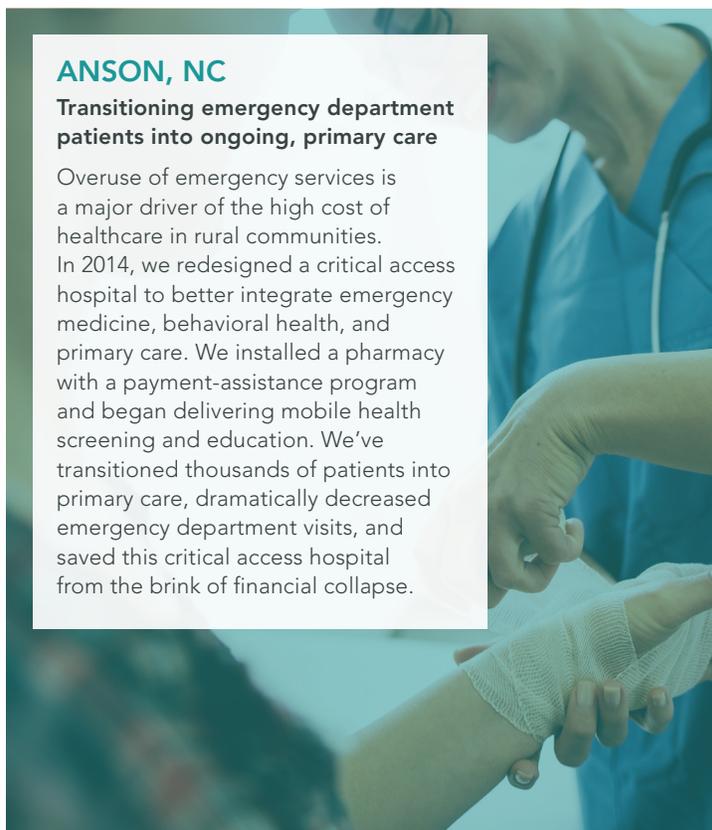
Stroke is a leading cause of death in the three counties served by our community hospital in Morganton. Through the Carolinas Stroke Network, we ensure that every stroke patient gets immediate access to an expert neurologist through videoconferencing. Since implementing Telestroke, we've reduced the time it takes for patients to begin receiving treatment. Today, our average time from symptom onset to treatment is well below the 60 minutes recommended by the American Stroke Association.



## ANSON, NC

### Transitioning emergency department patients into ongoing, primary care

Overuse of emergency services is a major driver of the high cost of healthcare in rural communities. In 2014, we redesigned a critical access hospital to better integrate emergency medicine, behavioral health, and primary care. We installed a pharmacy with a payment-assistance program and began delivering mobile health screening and education. We've transitioned thousands of patients into primary care, dramatically decreased emergency department visits, and saved this critical access hospital from the brink of financial collapse.



# What's Next: Addressing Physician Shortages

## PHYSICIAN SHORTAGES

Physician shortages have been declared a “public health crisis” in the U.S.—a problem that is only expected to worsen in the coming decades.<sup>2</sup> High ratios of physicians to patients are associated with better health outcomes and longer lifespans. Currently, shortfalls are greatest in rural communities in the South, and affect both primary and specialty care.<sup>3</sup>

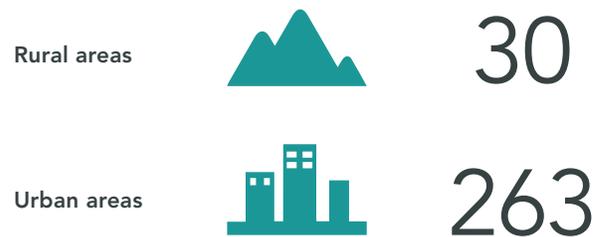


## ACCORDING TO THE NATIONAL RURAL HEALTH ASSOCIATION,<sup>4</sup> THERE ARE:

### Primary care physicians per 10,000 people



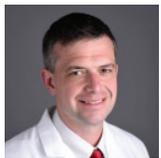
### Specialists per 100,000 people



## MEDICAL EDUCATION

We're investing in the next generation of medical experts. We currently offer a Psychiatry Residency Program that focuses on innovation in the delivery of psychiatric care. Our residents are extensively trained in telepsychiatry and the collaborative care models—so they can increase access to psychiatric care in primary care settings and reach patients in rural locations.

“The best way to bring psychiatrists to the area is to grow your own. Our psychiatry residents are poised to lead the field—utilizing Behavioral Health Integration and telepsychiatry and serving diverse patients in rural communities.”



—James Rachal, MD,  
Chairman of  
Department of  
Psychiatry

## RECRUITMENT

Through intensive recruitment, we've assembled one of the nation's best and fastest growing networks of specialists. Our team of experts treats the full spectrum of medical conditions, including the rarest and most challenging cases. They publish in leading medical journals, present at scientific conferences, and are routinely included in rankings of top medical professionals.

“I wanted to raise my kids in a small town, but I was afraid that my career would take a hit if I moved outside a major city. At Levine Cancer Institute - Lincoln, I didn't have to choose between the two: I'm able to pursue cutting-edge research while enjoying the pace of life in a rural community.”



—Kwabena Osei-Boateng,  
MD, Hematology/  
Oncology Specialist,  
Levine Cancer  
Institute - Lincoln

## EXPANDING OUR CARE NETWORK

In 2018, Atrium Health and Navicent Health announced a strategic partnership to enhance care access, affordability and equity across the Southeast. With a care network that extends from the Carolinas to Georgia, we have joined forces to address core issues—such as physician shortages and broadband access—that compromise healthcare in rural communities.

“Our partnership with Atrium Health highlights our shared goal of eliminating disparities in healthcare. For rural communities, this means scaling up programs like Behavioral Health Integration and Electronically Accessible Pathways. It also means tackling social issues that influence healthcare delivery, like food deserts and rural broadband.”



—Ninfa Saunders, FACHE,  
DHA, President and  
CEO of Navicent Health,  
Georgia-based partner  
of Atrium Health

2. Harvard, the Massachusetts Medical Society, and the Massachusetts Health and Hospital Association: <https://cdn1.sph.harvard.edu/wp-content/uploads/sites/21/2019/01/PhysicianBurnoutReport2018FINAL.pdf>

3. The Association of American Medical Colleges: [https://aamc-black.global.ssl.fastly.net/production/media/filer\\_public/85/d7/85d7b689-f417-4ef0-97fb-ec129836829/aamc\\_2018\\_workforce\\_projections\\_update\\_april\\_11\\_2018.pdf](https://aamc-black.global.ssl.fastly.net/production/media/filer_public/85/d7/85d7b689-f417-4ef0-97fb-ec129836829/aamc_2018_workforce_projections_update_april_11_2018.pdf)

4. The National Rural Health Association: <https://www.ruralhealthweb.org/about-nrha/about-rural-health-care>