



NC Department of Health and Human Services

The Use of Telehealth to Improve Access to Care in Rural Areas

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July 17, 2018

About the Office of Rural Health (ORH) and our Mission

Overview

- First state office (1973) in the nation created to focus on the needs of rural and underserved communities
- Assists underserved communities by developing and funding innovative strategies for improving:
 - Access to health care
 - Quality of health care
 - Cost-effectiveness of health care

State Fiscal Year 2017 Office Facts

- Administered over 300 contracts
- Spent \$28.8 million from state, federal, and philanthropic sources
- Returns over 86% of its budget directly to NC communities
- Provided 2,000 technical assistance activities

While we do not provide direct care, our programs support numerous health care safety net organizations throughout North Carolina.



Programs at ORH



Placement and HPSA Services

Recruit providers and designates health professional shortage areas



NC Rural Health Centers

Supports state designated rural health centers that serve the entire community



NC Community Health Grants

Supports the primary care safety net system with increasing access to health care for vulnerable populations



NC Farmworker Health Program

Supports medical, dental and educational services for members of the North Carolina agricultural labor force and their families



Rural Health Information Technology Program

Provides technical assistance to improve the use of Electronic Health Record (EHR) Systems and the use of health information exchange



NC Rural Hospital Program



NC Medication Assistance Program

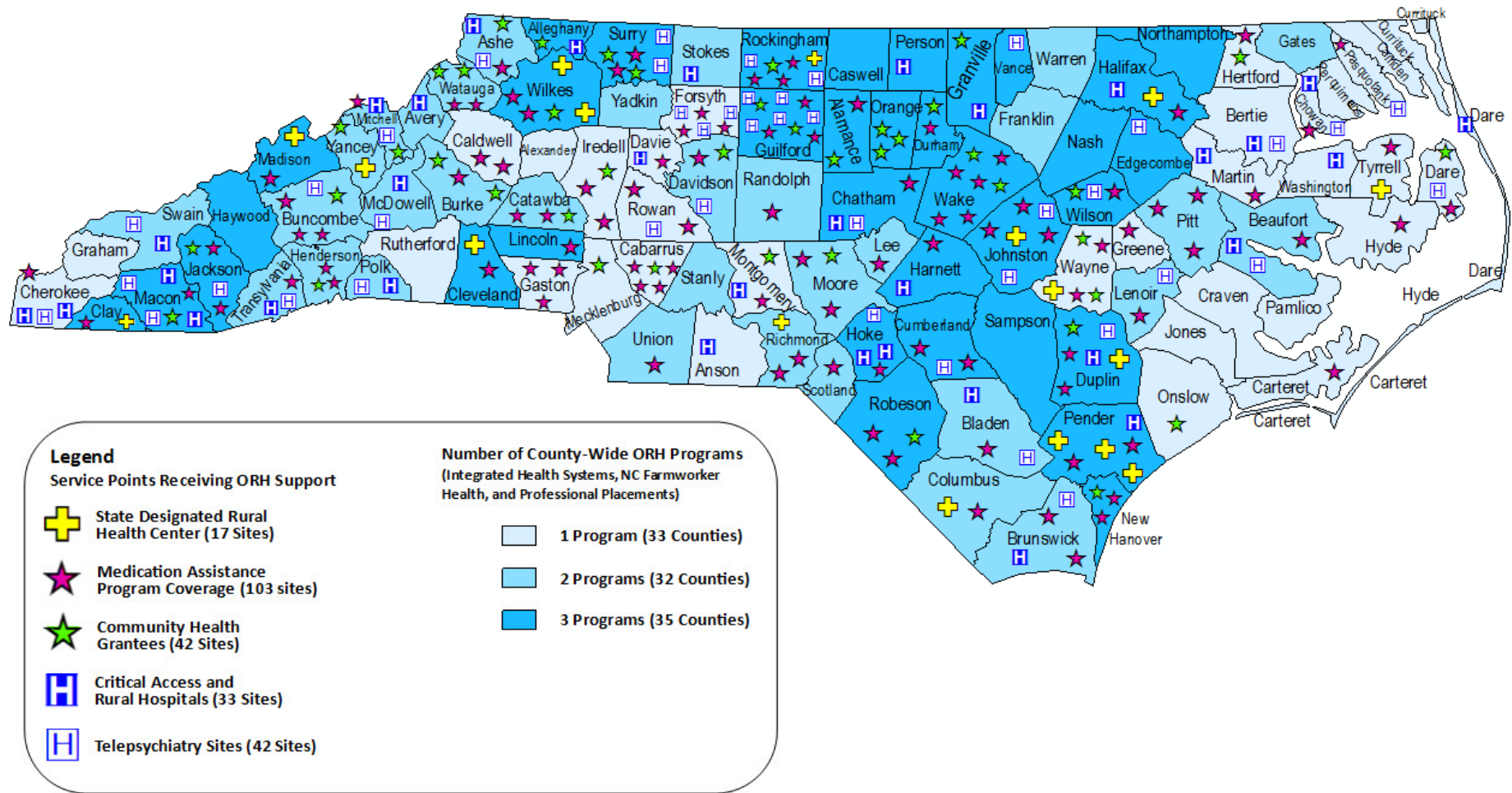


NC Statewide Telepsychiatry Program



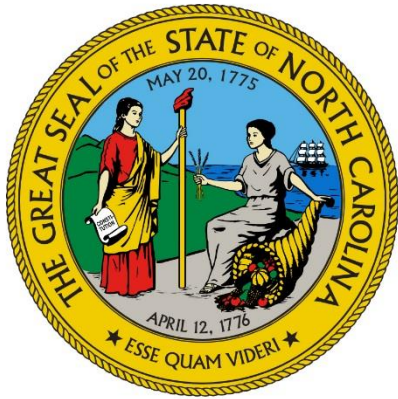
NC Integrated Health Systems

SFY 2017 Map of ORH Coverage



**Office of Rural Health
Critical Access and Rural Hospitals
SFY 2017**

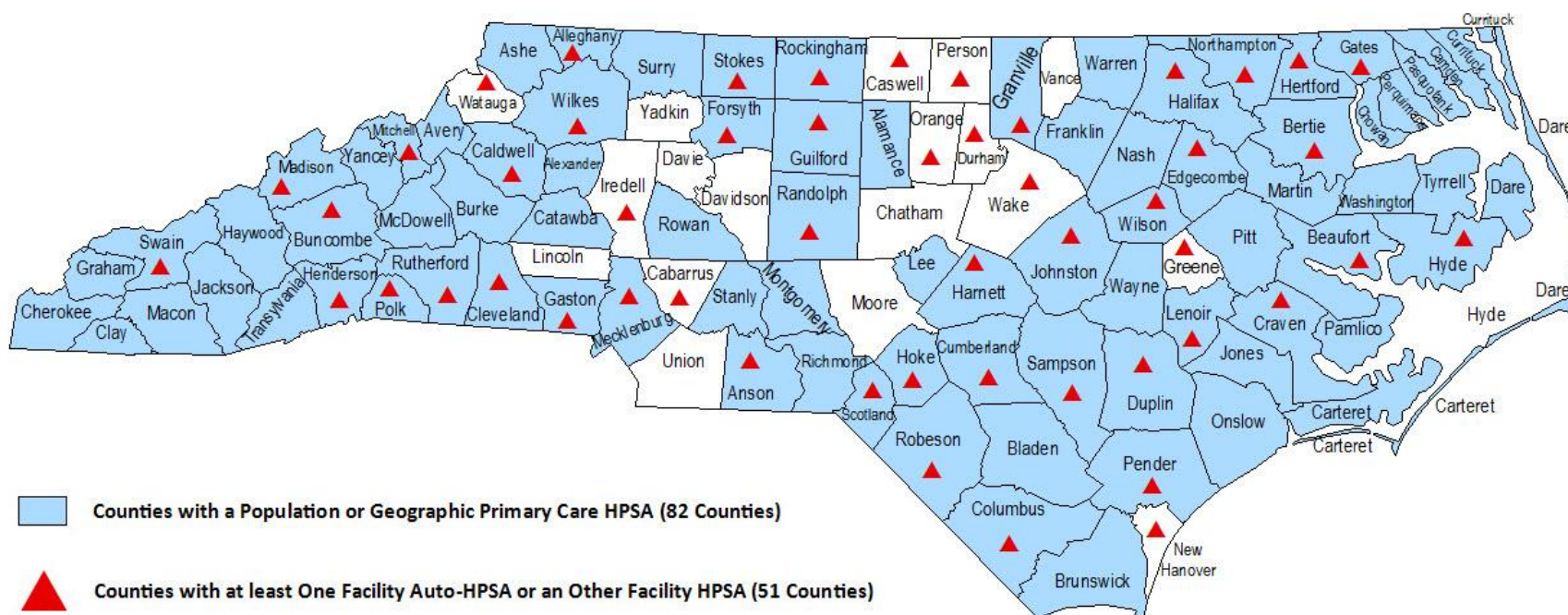




The Mental Health Crisis in North Carolina

Health Professional Shortage Areas (HPSAs) Primary Care

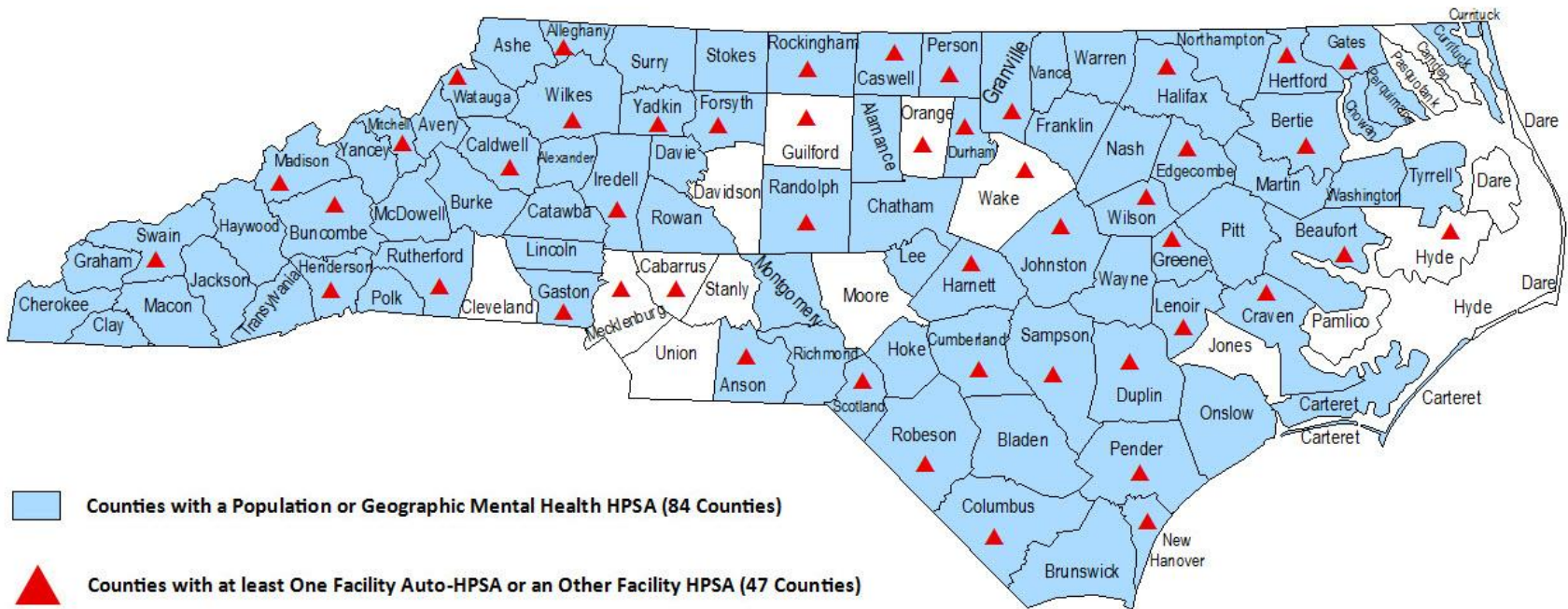
North Carolina Office of Rural Health Primary Care - Health Professional Shortage Areas (HPSA)



Data as of January 3, 2018

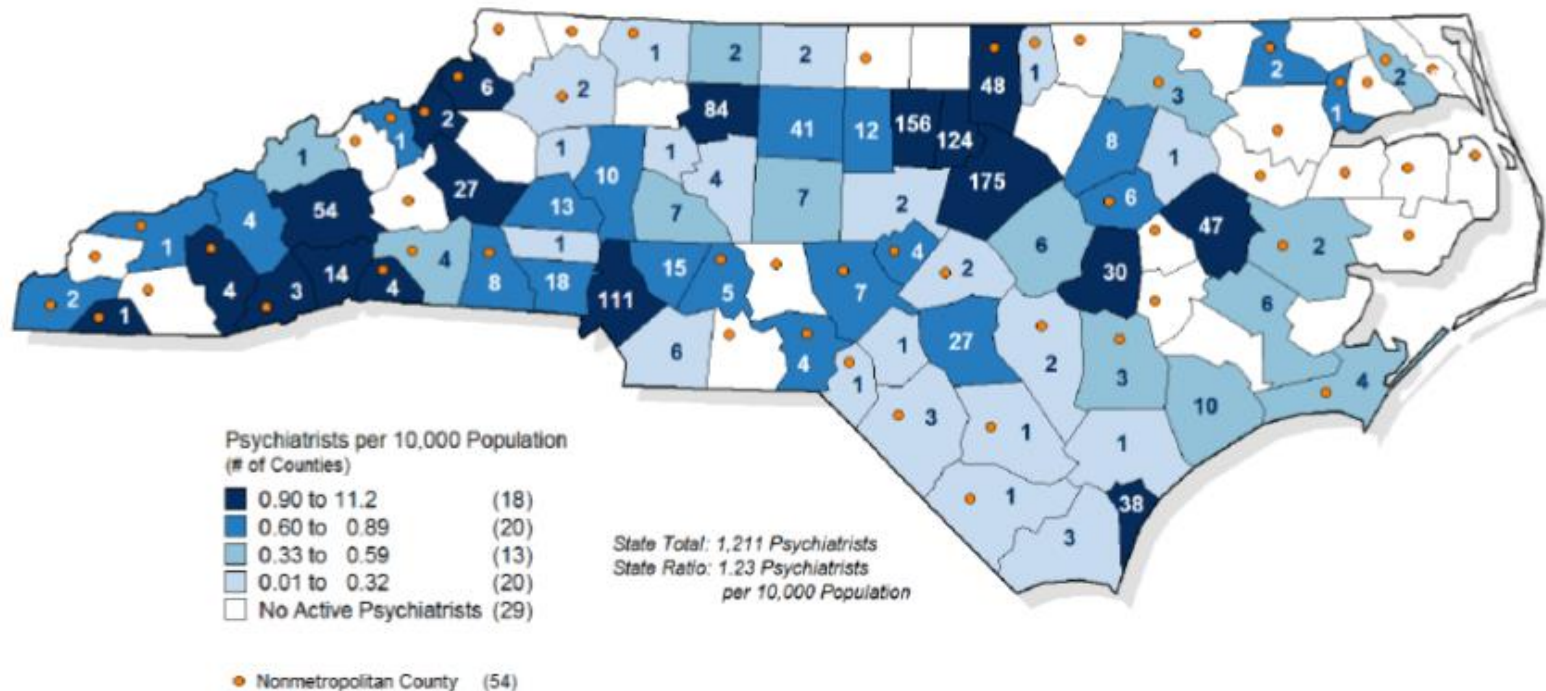
Health Professional Shortage Areas (HPSAs) Mental Health

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



Data as of January 3, 2018

Psychiatrists per 10,000 population North Carolina (2013)



Source: North Carolina Health Professions Data System, with data derived from the North Carolina Medical Board, 2013; US Census Bureau and Office of Management and Budget, March 2013.

Note: Data are based on primary practice location and include active, in-state, nonfederal, non-resident-in-training MDs and DOs licensed in NC as of October 31, 2013 who indicate that their primary area of practice is psychiatry, child psychiatry, psychoanalysis, psychosomatic medicine, addiction/chemical dependency, forensic psychiatry or geriatric psychiatry. "Core Based Statistical Area" (CBSA) is the OMB's collective term for Metropolitan and Micropolitan Statistical areas. Here, nonmetropolitan counties include micropolitan and counties outside of CBSAs.

Produced by: Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Map labels reflect the number of psychiatrists within the county.

Flex Supported/Engaged Activities to Address Mental Health Needs

Mental Health First Aid

Mental Health Resource Web Portal

Quarterly CAH Meeting and Mental Health Learning Action Network (LAN)

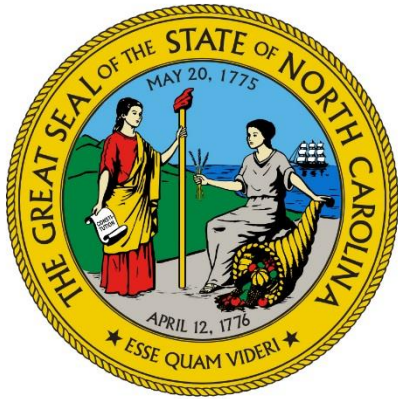
Community Health Worker Initiative

Integrated Care

Regional Support and Engagement

Telepsychiatry

- NC-STeP (North Carolina Statewide Telepsychiatry Program)



Telehealth as a Solution

Timeline: Mental Health Crisis and Telepsychiatry in North Carolina

2000: North Carolina moves from Public Provided Mental Health and Substance Abuse Services to MCO/LME

2013: NC General Assembly creates the statewide Telepsychiatry Initiative (NC-STeP)

- Patients placed under involuntary commitment (IVC) are taken to EDs for an assessment.
- Hospitals reported an average length of stay (LOS) for IVC patients between 48 and 72 hours.

2018: NC General Assembly Expands NC-STeP to community-based settings

2011: Telepsychiatry program by the Albemarle Hospital Foundation shows positive results.

- Closing of psychiatric hospitals
- Ongoing shortage of psychiatrists, especially in rural areas.
- Overcrowding of EDs due to mental health patients.

2017: NC General Assembly requests report from NC DHHS on telehealth (definitions and recommendations)

Background: External Environment in 2013

Nationwide

- Patients present to emergency departments with behavioral health crises and require an assessment from a trained individual.
- However, many ED physicians do not have adequate training to conduct a proper assessment, so patients are boarded in the ED, awaiting transfer to an appropriate level of care (often another facility).
- According to a 2008 nationwide survey of ED physicians, 79% reported that their ED boarded behavioral health patients.¹

North Carolina

- In North Carolina, patients placed under involuntary commitment (IVC) are taken to emergency departments for an assessment.
- Due to lack of behavioral health professionals and inpatient psychiatric beds, hospitals reported an average length of stay (LOS) for IVC patients between 48 and 72 hours.

Solutions

- Among the various possible solutions, telepsychiatry arose after successful programs were initiated by the South Carolina Department of Mental Health (2010) and the Albemarle Hospital Foundation (2011).

Telepsychiatry: Face-to-face Videoconferencing

A live videoconference can take place between patient and provider, or provider to provider. The image below is a promotional image from the Albemarle Hospital Foundation's telepsychiatry program.



Photo Credit:
Albemarle Hospital Foundation

NC-STeP: Addressing mental health needs of ED patients

Partners

NC Office of Rural Health

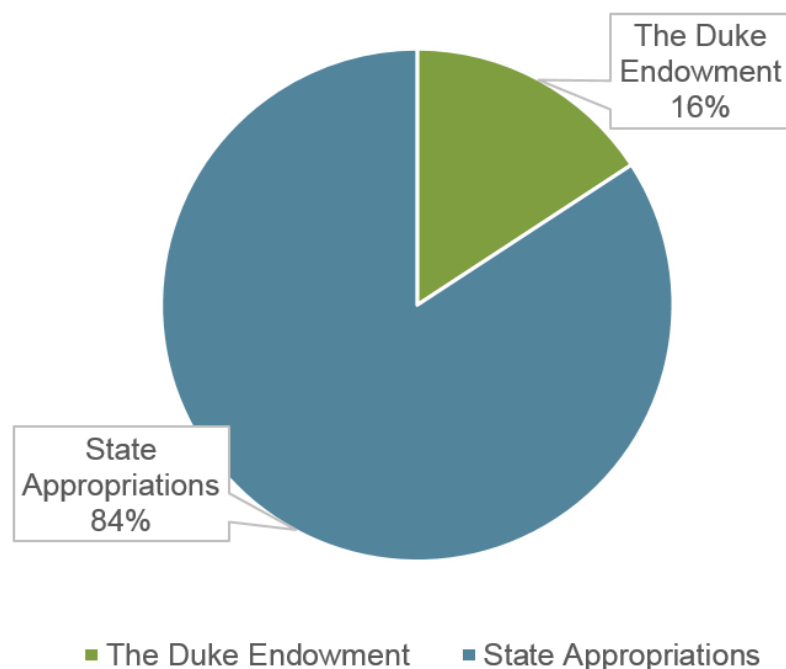
East Carolina University Center for Telepsychiatry and e-Behavioral Health

Funding

\$2 million in recurring state appropriations

Additional one-time \$1.5 million awarded by The Duke Endowment*

Program Funding as of June 30, 2017

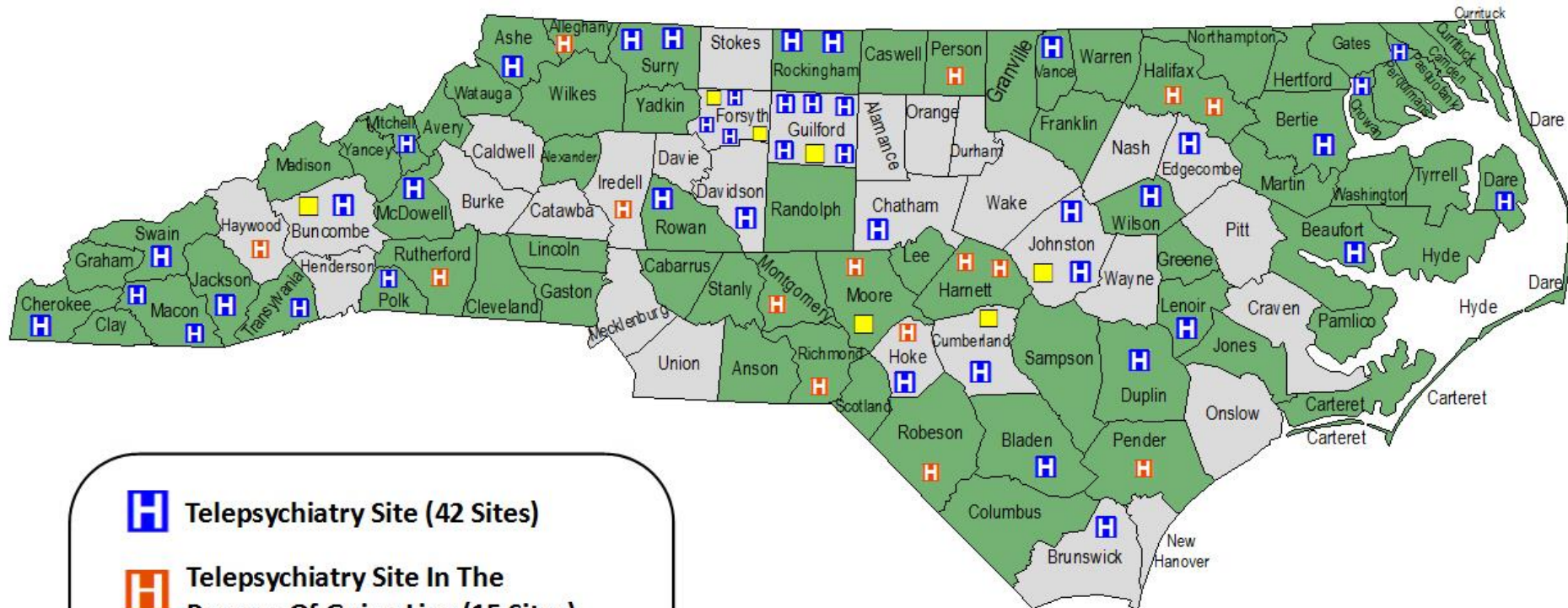


*Funding reflects amounts budgeted, not amounts expended. The NC General Assembly has allocated a total of \$8 million since the program began.

Office of Rural Health

North Carolina Statewide Telepsychiatry Program


SFY 2017



 **Telepsychiatry Site (42 Sites)**

 **Telepsychiatry Site In The Process Of Going Live (15 Sites)**

 **Provider Hub (7 Hubs)**

 **Rural County (70 Counties)**

 **Urban County (30 Counties)**

CDLc

SFY 2018

 Rural County (70 Counties)

☐ Urban County (30 Counties)



Program Outcomes: Measuring the Impact

| Performance Measure | Baseline (2013) | Target for 2017 | Actual Value |
|---|-------------------------|------------------|----------------------------|
| Reports of Involuntary Commitments (IVCs) admitted to hospitals | 147 per month | 12,264 | 9,412 |
| Number of IVCs Overturned | 42 per month (28.6%) | 3,160 (25.8%) | 2,459 (26.1%) |
| Number of telepsychiatry assessments conducted | 450 per month | 33,950 | 25,372 |
| Average LOS (in hours) for behavioral health patients | Between 48 and 72 | Mean: 43 | Mean: 53.2 Median: 29.8 |

- **2013 baseline values were reported by the Albemarle Hospital Program.**
- **The difference between the mean LOS (53.2 hours) and the median LOS (29.8 hours) is due to extreme outliers.**
- **Due to 2,459 overturned IVCs, NC-STeP estimates a cumulative cost savings of \$13,278,600 to state psychiatric facilities**

Program Challenges



NC-STeP in the Media

Psychiatr Q (2018) 89:489–495
<https://doi.org/10.1007/s11126-017-9551-6>



ORIGINAL PAPER

Tower of Babel Problem in Telehealth: Addressing the Health Information Exchange Needs of the North Carolina Statewide Telepsychiatry Program (NC-STeP)

Sy Atezaz Saeed¹

Published online: 14 December 2017
© Springer Science+Business Media, LLC, part of Springer Nature 2017

Abstract Telepsychiatry is a viable option for providing psychiatric care to those who are currently underserved or who lack access to services. While the current technology is adequate for most uses, and continues to advance, there remain barriers to its widespread utilization. One such barrier when working with different healthcare systems is that they utilize different electronic medical record systems (EMRs). This paper describes the experience of the North Carolina Statewide Telepsychiatry Program (NC-STeP) with this problem and how the program successfully resolved it by establishing a web portal that connects participating hospital emergency departments and remote psychiatric providers to share secure electronic health information regarding patient encounters across different EMRs. The Portal also facilitates scheduling, status tracking, and reporting on each patient encounter, as well as delivers the necessary data for the billing to process charges for each consult and to administrators for the operation of the program. The portal effectively bridges the needs of the multiple actors in the telepsychiatry virtual encounter. It provides an efficient experience for the patient and the point-of-care provider, a reliable document exchange for the psychiatric provider, and effective record keeping for the billing and government entities.

STePs Toward Shortening ED Wait Times for Mental Health Patients



Photo credit: Richard Muldez, NC STeP

July 20, 2017

by [Taylor Knopf](#)

Related Articles

- [Commentary: Telepsychiatry Works As Mental Health Services Come to You](#)
- [Telepsychiatry Project Rolled Out Statewide](#)

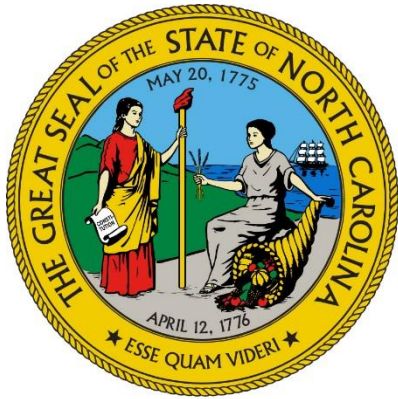
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Tweet

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North Carolina's telepsychiatry program is starting to make a dent on how long people in mental health crisis spend in the emergency room.

SOURCE: North Carolina Health News
<https://www.northcarolinahealthnews.org/2017/07/20/telepsychiatry-shortening-wait-times-mental-health-patients/>



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