



*Improving Behavioral Health Care in the ED:  
North Carolina Statewide Telepsychiatry  
Program (NC-STeP)*

Brian P. Cooper, Jr., MHA  
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# Acknowledgements

First, I would like to acknowledge the funders of this program:

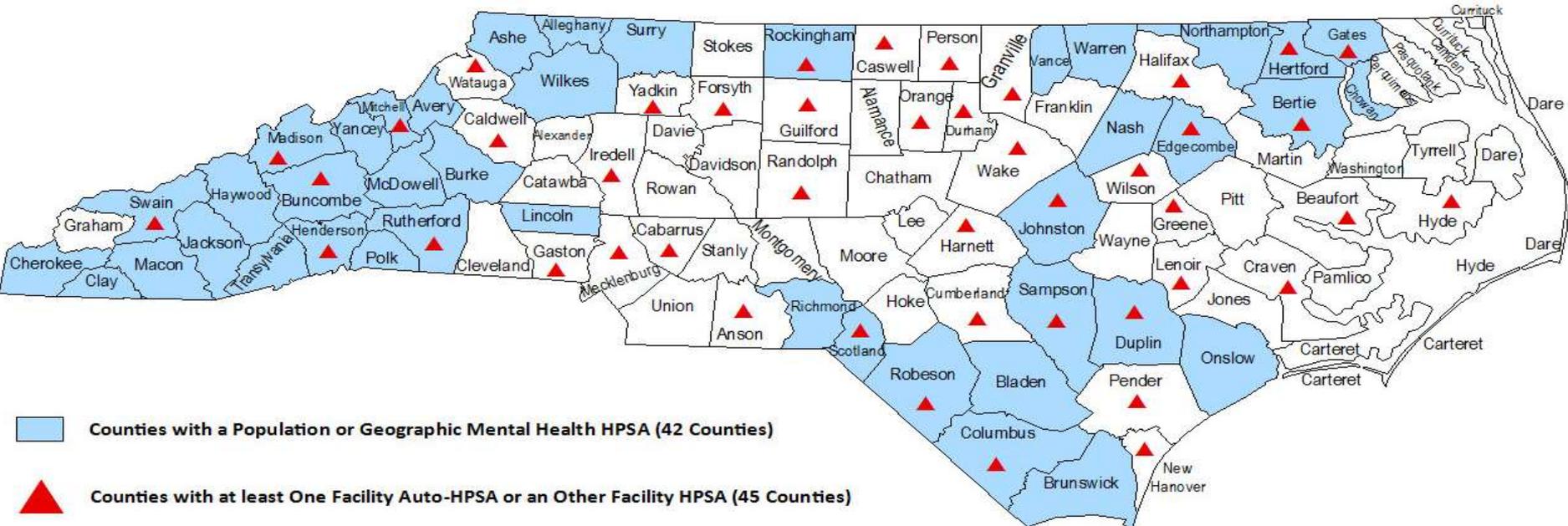


*James B. Duke*

THE DUKE ENDOWMENT



# Most counties in North Carolina do not have a sufficient number of mental health professionals



-  Counties with a Population or Geographic Mental Health HPSA (42 Counties)
-  Counties with at least One Facility Auto-HPSA or another Facility HPSA (45 Counties)

Disclaimer: Primary Site only, does not include Correctional Facilities or Federally Qualified Health Center (FQHC) satellite sites



# 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.<sup>1</sup>
- 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).

1. ACEP PSYCHIATRIC AND SUBSTANCE ABUSE SURVEY 2008. (2008). Retrieved from [https://www.acep.org/uploadedFiles/ACEP/Advocacy/federal\\_issues/PsychiatricBoardingSummary.pdf](https://www.acep.org/uploadedFiles/ACEP/Advocacy/federal_issues/PsychiatricBoardingSummary.pdf) on 07/05/16.



# Background

## Telepsychiatry as a Solution

- The Albemarle Hospital Foundation's telepsychiatry program, initiated in 2011, was successful in reducing the average LOS for IVC patients.
- The program used a hub-and-spoke model, connecting nine hospitals with one provider hub. This model was adopted for the statewide program.



Promotional image from the Albemarle Hospital Foundation's Telepsychiatry Program

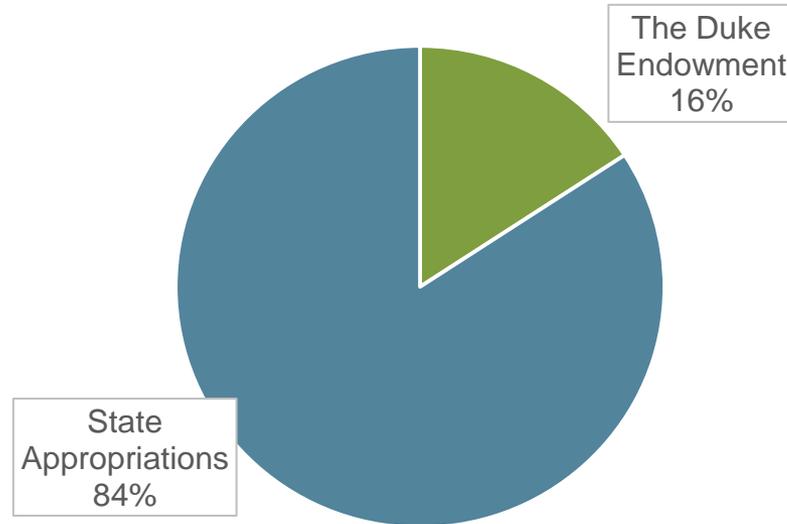


# Background

## Program Inception

- July 2013 – NC General Assembly created the statewide initiative
- 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

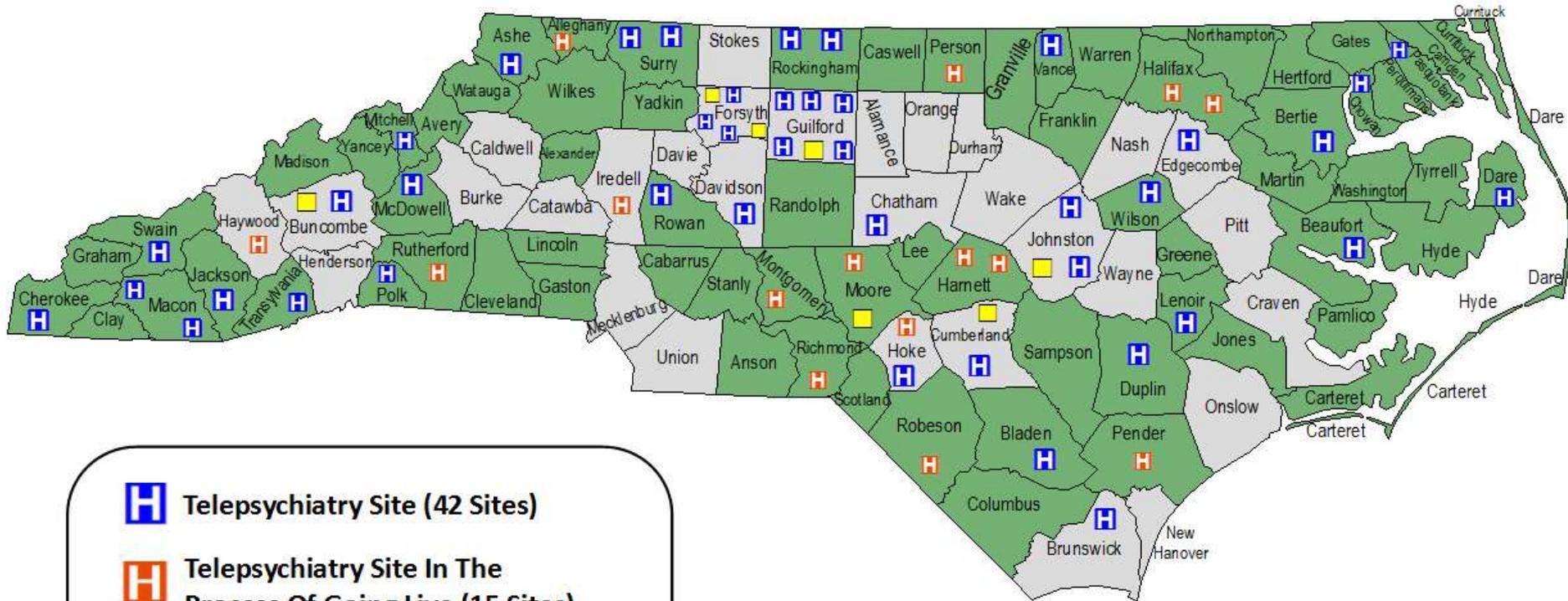


\*Funding reflects amounts budgeted, not amounts expended. The NC General Assembly has allocated a total of \$8 million since the program began.

■ The Duke Endowment   ■ State Appropriations



# 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)**



# 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



# *Lessons Learned/Discussion*

## If You Were to Duplicate This Program...

If you were to replicate this program in your state...

- Don't depend too strongly on a single provider/person/champion
- Navigate the intricacies of public funding
  - Large capital expenses (IT system, equipment) often have delays in billing
  - State legislatures and private grantors like to avoid carryover
  - You'll have to demonstrate your (a) self-sustainability or (b) cost savings
- Develop and fund the number of psychiatric beds your state actually needs
  - If possible, distribute beds across the state
  - New bed conversion program for rural hospitals in NC
- Work clinicians to the top of their licenses first before referring patients to a more expensive level of care (utilize LCSWs, LPCs, etc.)
  - Keep in mind workforce shortages. Look for programs to foster growth.
  - NC has expanded loan repayment to benefits to include telehealth
- Keep in mind the barriers that affect all forms of telehealth/telemedicine
  - Broadband infrastructure, provider credentialing, Medicaid reimbursement, payment parity across payers



*It's been a pleasure!*



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*For additional information...*

East Carolina University Center for Telepsychiatry and e-Behavioral Health:

<http://www.ecu.edu/cs-dhs/telepsychiatry/>



North Carolina Office of Rural Health:

<http://www.ncdhhs.gov/divisions/orh>

