Quarterly Progress Updates

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Director
North Carolina Statewide Telepsychiatry Program (NC-STeP)
• 66 hospitals in network
  – 43 hospitals currently live
  – 8 additional hospitals have equipment in place and are just waiting on EMR training with providers to go live
  – 15 additional hospitals are scheduled to go live within the next several months:
    – 7 waiting just on credentialing
    – 8 waiting on combination of credentialing, contracts, and/or equipment.
NC-STeP Status as of March 2015

• Five Clinical Providers’ Hubs
  • Cape Fear Valley
  • Coastal Carolina Neuropsychiatry
  • Cone Health
  • Mission
  • Novant
<table>
<thead>
<tr>
<th>Timeline</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seven referral sites &quot;Go Live&quot; (total in network= 52).</td>
<td>66 hospitals in network: 43 hospitals currently live and 23 additional in various stages of implementation.</td>
</tr>
<tr>
<td>ECU Center for Telepsychiatry prepares Year-3 budget and submits to DHHS Office of Rural Health and Community Care.</td>
<td>In process.</td>
</tr>
<tr>
<td>Apply for additional Duke Endowment funding, if needed.</td>
<td>We plan to apply for renewal of the current grant.</td>
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</table>
Hoospitals live with NC-STeP

Clinical provider hubs:
1. Coastal Carolina Neuropsychiatric Clinic
2. Mission Behavioral Health
3. Cone Health
4. Novant Health Medical
5. Cape Fear Valley Health System

Hospitals in process of going live

NC-STeP Status - January 2015
Total Number of ED Telepsychiatry Patients by Hospital - for January - March 2015

- Albemarle: 99
- Beaufort: 18
- Bertie: 4
- Carteret: 20
- Carolina East: 40
- Chowan: 96
- Duplin: 33
- Edgecombe: 107
- Lexington: 25
- Martin: 40
- Outer Banks: 92
- Randolph: 100
- Wayne: 32
- Wilson **2 months: 204
- Lenoir: 39
- Nash ** no data: 12
- Bladen: 31
- Washington ** no data: 1
- Wesley Long Cone: 85
- Annie Penn: 96
- Med Center High Point: 6
- Moses Cone: 25
- McDowell: 52
- Novant Kernersville: 8
- Blue Ridge: 29
- Transylvania: 16
- St. Lukes: 14
- Yadkin: 9
- Davie: 60
- Angel: 14
- Hugh Chatham: 9
- Columbus: 150

**Notes:**
- Bladen: **no data**
- Washington: **no data**
- McDowell: **no data**

**NC-STeP Center for Telepsychiatry**
Total Number of ED Telepsychiatry Patients by hospital - for January - December 2014

Number of Telepsychiatry Patients by Hospital
Percent of Use - January to March 2015

- Albemarle 6.7
- Beaufort 1.2
- Carteret 0.3
- Carteret 6.3
- Carolina East 1.3
- Chowan 2.7
- Duplin 6.5
- Edgecombe 2.2
- Fayetteville 1.1
- Hoke 1.1
- Johnston 1.1
- Kane 0.6
- Lee 1.9
- Lenoir 6.7
- Mecklenburg 1.2
- Moore 1.9
- Nash 2.2
- New Hanover 0.6
- New Hanover 1.4
- Orange 0.9
- Person 0.8
- Randolph 13.7
- Scotland 0.7
- Stokes 1.3
- Surry 1.3
- Vance 1.1
- Wake 1.9
- Wake 1.9
- Warren 1.7
- Wayne 6.2
- York 1.4

Notes:
- Albemarle
- Beaufort
- Carteret
- Carolina East
- Chowan
- Duplin
- Edgecombe
- Fayetteville
- Hoke
- Johnston
- Kane
- Lee
- Lenoir
- Mecklenburg
- Moore
- Nash
- New Hanover
- Orange
- Person
- Randolph
- Scotland
- Stokes
- Surry
- Vance
- Wake
- Warren
- Wayne
- York
Percent of Telepsychiatry Patients by Discharge Disposition
Jan - March 2015

- 49% Home
- 41% Against Medical Advice
- 9% Admit
- 0.7% Transfer
- 0.1% Other
Percent of ED Telepsychiatry Patients by Discharge Disposition
January - December 2014

- Home: 39%
- Transfer: 53%
- Admit: 5%
- Against Medical Advice: 3%
- Other: 0%
59% percent of patients had a LOS of 30 hours or less.

Median Length of Stay for January - March 2015 = 24.7 Hours
62% percent of patients Had a LOS of 30 hours or less

Median Length of Stay for Jan 2014 – Dec 2014 = 23.6 Hours
Median Length of Stay in Hours

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<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length in Hours</td>
<td>10.9</td>
<td>24</td>
<td>25.5</td>
<td>27.9</td>
<td>18.8</td>
<td>24.7</td>
</tr>
</tbody>
</table>

Median Length of Stay in Hours
Median Length of Stay in Hours

<table>
<thead>
<tr>
<th>Period</th>
<th>Median Length of Stay in Hours</th>
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</thead>
<tbody>
<tr>
<td>Nov-Dec 2013</td>
<td>16.5</td>
</tr>
<tr>
<td>Jan-March 2014</td>
<td>23.3</td>
</tr>
<tr>
<td>April-June 2014</td>
<td>24.6</td>
</tr>
<tr>
<td>July-Sept 2014</td>
<td>26.6</td>
</tr>
<tr>
<td>Oct-Dec 2014</td>
<td>18.9</td>
</tr>
<tr>
<td>12 Month Period Jan-Dec 2014</td>
<td>23.6</td>
</tr>
</tbody>
</table>
Average Length of Stay for Hospitals Participating in NC STeP

- Nov-Dec 2013: 20.7 hours
- Jan-March 2014: 35.3 hours
- April-June 2014: 47.9 hours
- July-Sept 2014: 53.1 hours
- Oct-Dec 2014: 30.5 hours
- Jan-March 2015: 41.9 hours

Average Length of Stay in Hours
## Average Length of Stay for ED Telepsych Patients in Hours by Hospital - for January - March 2015

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Length of Stay in Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albermarle</td>
<td>41.9</td>
</tr>
<tr>
<td>Beaufort</td>
<td>45.8</td>
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<tr>
<td>Bertie</td>
<td>35.5</td>
</tr>
<tr>
<td>Carteret</td>
<td>36.3</td>
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<tr>
<td>Carolina East</td>
<td>28</td>
</tr>
<tr>
<td>Chowan</td>
<td>55.4</td>
</tr>
<tr>
<td>Duplin</td>
<td>37.2</td>
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<tr>
<td>Edgecombe</td>
<td>24.5</td>
</tr>
<tr>
<td>Lexington</td>
<td>43.1</td>
</tr>
<tr>
<td>Martin</td>
<td>41.1</td>
</tr>
<tr>
<td>Outer Banks</td>
<td>37.8</td>
</tr>
<tr>
<td>Randolph</td>
<td>51.6</td>
</tr>
<tr>
<td>Wayne</td>
<td>58.2</td>
</tr>
<tr>
<td>Wilson **2 months</td>
<td>39.3</td>
</tr>
<tr>
<td>Lenoir</td>
<td>41</td>
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<tr>
<td>Bladen</td>
<td>Nash ** no data</td>
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<tr>
<td>1.5</td>
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<tr>
<td>Washington ** no data</td>
<td>Wesley Long Cone</td>
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<tr>
<td>35.1</td>
<td>Annie Penn</td>
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<tr>
<td>1.5</td>
<td>Moses Cone</td>
</tr>
<tr>
<td>49.2</td>
<td>McDowell</td>
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<tr>
<td>46.8</td>
<td>Novant Kernersville</td>
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<tr>
<td>36.1</td>
<td>Blue Ridge</td>
</tr>
<tr>
<td>32.7</td>
<td>Transylvania</td>
</tr>
<tr>
<td>31.6</td>
<td>St. Lukes</td>
</tr>
<tr>
<td>58.1</td>
<td>Yadkin</td>
</tr>
<tr>
<td>32.7</td>
<td>Davie</td>
</tr>
<tr>
<td>86.5</td>
<td>Angel</td>
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<tr>
<td>70.7</td>
<td>Hugh Chatham</td>
</tr>
<tr>
<td>Columbus</td>
<td>86.5</td>
</tr>
</tbody>
</table>

**Notes:**
- **Average**: The average length of stay for ED Telepsych patients in hours for January - March 2015.
- **No data**: Hospitals indicated with **no data** do not have recorded data for the specified period.
Average Length of Stay for ED Telepsych Patients in Hours by hospital - for January - December 2014

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Length of Stay in Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>40.8</td>
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<tr>
<td>Albemarle</td>
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<td>Beaufort</td>
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<td>Bertie</td>
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<td>Carteret</td>
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<td>Carolina East</td>
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<tr>
<td>Chowan</td>
<td>28.2</td>
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<td>Duplin</td>
<td>19.6</td>
</tr>
<tr>
<td>Edgecombe</td>
<td>28.2</td>
</tr>
<tr>
<td>Lexington</td>
<td>20.3</td>
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<tr>
<td>Martin</td>
<td>18.6</td>
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<tr>
<td>Our Community</td>
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<tr>
<td>Outer Banks</td>
<td>40.1</td>
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<tr>
<td>Pungo</td>
<td>41.9</td>
</tr>
<tr>
<td>Randolph</td>
<td>56.8</td>
</tr>
<tr>
<td>Wayne</td>
<td>83</td>
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<tr>
<td>Wilson</td>
<td>91.4</td>
</tr>
<tr>
<td>Lenoir</td>
<td>66.3</td>
</tr>
<tr>
<td>Nash</td>
<td>46.8</td>
</tr>
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<td>Bladen</td>
<td>55.7</td>
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<td>31.3</td>
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<td>38.3</td>
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<td>Novant Kernersville</td>
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<td>3.3</td>
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<td>Transylvania</td>
<td>22</td>
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<td>19.9</td>
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<td>Yadkin</td>
<td>38.3</td>
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Length of Stay by Hospital in hours
IVCs - by Release Status
January - March 2015

- 73.3% released
- 26.6% not released
IVCs - By Release Status
January - December 2014

- 79% released
- 21% percent not released
NC STeP: Number of IVCs for Participating Hospitals by Quarter

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Number of IVCs</th>
<th>Number of IVCs Turned Over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov-Dec 2013</td>
<td>381</td>
<td>108</td>
</tr>
<tr>
<td>Jan-March 2014</td>
<td>617</td>
<td>120</td>
</tr>
<tr>
<td>April-June 2014</td>
<td>833</td>
<td>233</td>
</tr>
<tr>
<td>July-Sept 2014</td>
<td>829</td>
<td>206</td>
</tr>
<tr>
<td>Oct-Dec 2014</td>
<td>811</td>
<td>154</td>
</tr>
<tr>
<td>Jan-March 2015</td>
<td>893</td>
<td>238</td>
</tr>
</tbody>
</table>

Legend:
- **Blue**: Number of IVCs
- **Red**: Number of IVCs Turned Over
NC-STEPI CHARGE MIX
PROJECT INCEPTION TO DATE
(based on initial status)

- Self-Pay, 33.3%
- Other, 18.3%
- Medicare, 21.7%
- Medicaid, 11.3%
- Commercial, 10.3%
- Blue Shield, 5.1%
- Self-Pay, 33.3%
Satisfaction Surveys

• Conducted in March 2015
• Three groups:
  ▪ Emergency Department Physicians (17 responded)
  ▪ Hospital Emergency Department Staff (36 responded)
  ▪ Hospital CEOs/COOs (4 responded)
• Invitations to participate were sent via electronic mail
• Surveys were completed online via Qualtrics software
• Each group was given a different survey (with different questions) based on their role in the telepsychiatry program
• For each group, one summary question is selected for an overall “satisfaction” rate
Hospital CEOs/COOs results

- 50% reported that the Length of Stay for psychiatric patients in the ED has reduced. 50% were undecided. None disagreed with this statement.
- 75% felt there had been an improvement in discharge planning for psychiatric patients.
- 75% felt the hospital’s use of telepsychiatry consults has been cost effective.
- 100% said they would recommend this program to other hospitals.
Hospital ED Physicians results:

- 82% report that the telepsych consults are easy to obtain.
- 70% report that the consultants respond quickly to the telepsych requests.
- 82% report that the evaluations are complete and thorough.
- 69% say the consult disposition recommendations are helpful.
- 82% report that the consults have improved the quality of care for mental health/substance abuse patients in the ED.

**ED Doc: Telepsych consults have improved the quality of care for mental health and substance abuse patients in the ED**

*This question used to measure overall satisfaction*
ED Doc: Telepsychiatry consults are easy to obtain

ED DOC: Consultants respond quickly to telepsychiatry requests

ED DOC: Evaluations are complete and thorough

ED Doc: Telepsychiatry documentation is straightforward
Hospital Staff results:
- 67% report the equipment is easy to use.
- 64% reported that they received adequate training and instruction.
- 53% reported that the system works well, without static, delays in transmission, or limits of picture or audio.
- 47% agreed with the statement that it is an efficient use of their time.
  
  28% disagreed with this statement, and 25% were undecided.
- 61% reported that patients appear comfortable, and 64% said patients were cooperative.
- 42% agreed with the statement that the program has improved patient care in our ED.
ED Staff: Equipment is easy to use

ED Staff: I received adequate training and instruction preparing me to use the system

ED Staff: The system works well without static, delays in transmission, or limits of picture or audio
Program Outcomes Summary
Data for the Period January-March 2015

• NC-STeP is either ahead of schedule or on time with all of the legislatively defined timelines.

• 66 hospitals in network:
  – 43 hospitals currently live
  – 8 additional hospitals have equipment in place and are just waiting on EMR training with providers to go live
  – 15 additional hospitals are scheduled to go live within the next several months
• 2,272 total Telepsychiatry Assessments were conducted under the program during this three month period (including both initial and follow-up assessments).

• The Median Length of Stay for all ED patients who received telepsychiatry services was was 24.7 hours.
893 ED patients who received telepsychiatry services had an IVC in place during their ED stay. 238 of those patients (26%) did not have an IVC in place on discharge.

Of the ED patients who received telepsychiatry services, 41% were discharged to home. 48.7% were discharged to another facility.
NC-STeP
STATEWIDE TELEPSYCHIATRY PROGRAM
NORTH CAROLINA