Quarterly Progress Update

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Brody School of Medicine - East Carolina University

Director
North Carolina Statewide Telepsychiatry Program (NC-STeP)
Four Clinical Providers’ Hubs as of March 31, 2016:

1. Cape Fear Valley
2. Cone Health
3. Mission
4. Novant

Three new provider hubs (since the last quarter) with a total of 17 new providers being credentialed.

29 hospitals are in process of going live (i.e. waiting on credentialing/restarting under new Provider hub) and

29 Hospitals are currently live under Model 2 hubs.
• 31 hospitals are live as of 6/30/16.
• 13 hospitals reported Telepsychiatry patients in their ED during this period (several additional hospitals are live but did not have telepsychiatry patients).
• 108 patient assessments were billed for Model-1 hospitals during the report period.
• The Median Length of Stay was 38.1 hours.
• 41.2% were discharged to home.
• 51.8% were discharged to another facility.
The Average Length of Stay was 62.9 hours:
- discharged to home = 55.3 hours
- transferred to another facility = 65.6 hours

167 ED patients who received telepsychiatry services had an IVC in place during their ED stay
- 54 (32%) of those patients did not have an IVC in place at discharge
### NC-STeP Status as of June 30, 2016

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2015</th>
<th>TARGET TO BE REACHED BY 06/30/2016</th>
<th>VALUES/MEASURES REACHED AS OF 6/30/2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To maintain the number of full-time equivalent (FTE) positions supported by this contract at 1.65 (DHHS 0.70 FTEs + DE 0.95).</td>
<td>0.70 FTEs</td>
<td>1.65 FTEs</td>
<td>1.90 FTEs</td>
</tr>
<tr>
<td>2. To increase the number of overturned involuntary commitments to address unnecessary hospitalization: o DHHS increase by 106 from 1059 to 1165. o Duke increase by 356, from 0 to 356. o Combined increase = 462 o Combined target = 1,521</td>
<td>1059</td>
<td>1521</td>
<td>54 in this quarter Cumulative total since program inception 2063 Savings from 2063 overturned IVCs = $11,140,200</td>
</tr>
</tbody>
</table>
### NC-STeP Status as of June 30, 2016

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<tbody>
<tr>
<td>3. To increase the number of participating consultant providers by 1, from 32 to 33.</td>
<td>32</td>
<td>33</td>
<td>39*</td>
</tr>
<tr>
<td>4. To increase the number of telepsychiatry assessments conducted by 5,387 (DHHS by 1,067, from 10,665 to 11,732. DE by 4320) to a target of 16,052.</td>
<td>10,665</td>
<td>16,052</td>
<td>108 in this quarter Cumulative total since program inception 20,891 which exceed State and Duke combined target by 4,839</td>
</tr>
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</tbody>
</table>
| 5. To increase the number of state-supported telepsychiatry referring sites by 14, from 59 to 73. | 59 | 73 | 60 in network**  
31 Live  
29 in process |
| 6. To increase the reports of IVCs to an enrolled hospital by 1,861(DHHS increase by 436, from 4,364 to 4,800. Duke increase by 1,425 from 0 to 1,425.) to 6,225. | 4,364 | 6,225 | 167 in this quarter  
Cumulative total since program inception 8,413 |
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<td>7. To reduce the average (mean) Length of Stay for all patients with a primary mental health diagnosis across all dispositions by 19 hrs., from 42 to 23 hrs.</td>
<td>42 hours*</td>
<td>23 hours</td>
<td>62.9 mean this quarter</td>
</tr>
<tr>
<td>12. To increase the ratio of the overall revenues (billing, subscription fees), exclusive of grant funding, to program costs (exclusive of start-up costs).</td>
<td>0.93:1.00</td>
<td>&gt;1.00:1.00</td>
<td>1.04:1.00***</td>
</tr>
</tbody>
</table>
Established 3 new provider hubs with a total of 17 new providers being credentialed to serve NC STeP. 29 hospitals are in process of going live (i.e. waiting on credentialing/restarting under new Provider hub) and 29 are currently live under Model 2 hubs. 10 hospitals have terminated, 2 hospitals have closed, 4 have suspended progress.

The Revenues to Cost Ratio is (falsely) high due to the loss of CCNC and the program not paying out Provider Support and Pro Fees. Once we are live on the Portal, the program will resume provider payments which will significantly increase the program expenses and in turn, reduce the Revenues to Cost Ratio.
Number of patients compared this quarter to last quarter

Number of Patients for Jan-Mar 2016
Number of Patients for April-June 2016

Bladen: 9, 9
Wesley Long Cone: 18, 6
Annie Penn: 7, 7
Moses Cone: 9, 9
McDowell: 116, 112
Novant Kernersville: 7, 4
Novant Clemmons: 2, 0
Novant Thomasville: 18, 16
Blue Ridge: 23, 25
Transylvania: 47, 61
Angel: 79, 79
Hugh Chatham: 65, 14
Novant Rowan: 0, 22
UNC Johnston: 2, 2

NC-STeP
East Carolina University
Center for Telepsychiatry
Total Number of ED Telepsychiatry Patients by Hospital for 2015 (January - December)
## Patient Encounters and Assessments

<table>
<thead>
<tr>
<th></th>
<th>Since project inception in November 2013</th>
<th>During Calendar Year 2014</th>
<th>During Calendar Year 2015</th>
<th>During Quarter April - June 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Patient Encounters</strong></td>
<td>13,975</td>
<td>5,144</td>
<td>7,132</td>
<td>369</td>
</tr>
<tr>
<td><strong>Model 1 hospital</strong></td>
<td>11,520</td>
<td>4,578</td>
<td>5,852</td>
<td>56</td>
</tr>
<tr>
<td><strong>Model 2 hospital</strong></td>
<td>2,455</td>
<td>566</td>
<td>1,280</td>
<td>313</td>
</tr>
<tr>
<td><strong>Number of Assessments</strong></td>
<td>20,891</td>
<td>8,438</td>
<td>12,294</td>
<td>108</td>
</tr>
</tbody>
</table>

(assessment #s are only reported for Model 1)
Percent of Use by Hospital April - June 2016 (based on number of patient encounters)

- Bladen 5%
- Annie Penn 2%
- Moses Cone 2%
- McDowell 31%
- Novant Kernersville 1%
- Novant Thomasville 4%
- Blue Ridge 7%
- Transylvania 17%
- Angel 22%
- Hugh Chatham 3%
- Novant Rowan 6%
- Novant Johnston 0.5
51% percent of patients had a LOS of 30 hours or less.

Number of patients with a LOS in this category:

NC STeP April - June 2016 Number of Patients by LOS Category (in hours)

Median Length of Stay for April 2016 – June 2016 = 38.1 Hours
There were 90 patients (1.2%) with a length of stay longer than 300 hours.

Median Length of Stay for January – December 2015 = 26.7 Hours
Median Length of Stay in Hours

<table>
<thead>
<tr>
<th>Period</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>April-June 2014</td>
<td>25.5</td>
</tr>
<tr>
<td>July-Sept 2014</td>
<td>27.9</td>
</tr>
<tr>
<td>Oct-Dec 2014</td>
<td>18.9</td>
</tr>
<tr>
<td>2014 - 12 MONTHS</td>
<td>23.6</td>
</tr>
<tr>
<td>Jan-March 2015</td>
<td>24.9</td>
</tr>
<tr>
<td>April-June 2015</td>
<td>26.3</td>
</tr>
<tr>
<td>July-Sept 2015</td>
<td>29</td>
</tr>
<tr>
<td>Oct-Dec 2015</td>
<td>26.6</td>
</tr>
<tr>
<td>2015 - 12 MONTHS</td>
<td>26.7</td>
</tr>
<tr>
<td>Jan-March 2016</td>
<td>24</td>
</tr>
<tr>
<td>April-June 2016</td>
<td>38.1</td>
</tr>
</tbody>
</table>
Average Length of Stay by Provider
April-June 2016 (in hours)

- Novant (56 patients): 89.2 hours
- Cone Health (16 patients): 47.1 hours
- Cape Fear (18 patients): 47 hours
- Mission (277 patients): 59.8 hours
- All Hospitals: 62.9 hours
Average Length of Stay for Hospitals Participating in NC STeP

<table>
<thead>
<tr>
<th>Period</th>
<th>Average Length of Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>April-June 2014</td>
<td>37.8</td>
</tr>
<tr>
<td>July-Sept 2014</td>
<td>45.03</td>
</tr>
<tr>
<td>Oct-Dec 2014</td>
<td>30.3</td>
</tr>
<tr>
<td>2014-12 MONTHS</td>
<td>40.8</td>
</tr>
<tr>
<td>Jan-March 2015</td>
<td>42.8</td>
</tr>
<tr>
<td>April-June 2015</td>
<td>45.1</td>
</tr>
<tr>
<td>July-Sept 2015</td>
<td>60.6</td>
</tr>
<tr>
<td>Oct-Dec 2015</td>
<td>45.8</td>
</tr>
<tr>
<td>2015-12 MONTHS</td>
<td>49.2</td>
</tr>
<tr>
<td>Jan-March 2016</td>
<td>45.5</td>
</tr>
<tr>
<td>April-June 2016</td>
<td>62.9</td>
</tr>
</tbody>
</table>
Average Length of Stay compared this quarter to last quarter

- Average Length of Stay for Jan-Mar 2016
- Average Length of Stay for April-June 2016
Average Length of Stay by Hospital (in Hours)
April - June 2016

- Bladen: 47
- Annie Penn: 13.8
- Moses Cone: 73
- McDowell: 70.3
- Novant Kernersville: 63.1
- Novant Thomasville: 126.2
- Blue Ridge: 39.7
- Transylvania: 50.9
- Angel: 58.3
- Hugh Chatham: 56
- Novant Rowan: 88.2
- UNC Johnston: 24.1
- Average across all hospitals: 62.97

Average Length of Stay by Hospital (in Hours)
Average LOS by Disposition (in hours)
April - June 2016

- AVG - ALL DISPOSITIONS: 62.9 hours
- Other: 63.9 hours
- Admit: 113.3 hours
- Transfer: 65.6 hours
- Home: 55.3 hours
Average LOS by Disposition (in Hours)
Jan-March compared to April-June 2016

- **AVG - ALL DISPOSITIONS**
  - Average LOS April-June 2016: 62.9 hours
  - Average LOS Jan-Mar 2016: 45.5 hours

- **Other**
  - Average LOS April-June 2016: 63.9 hours
  - Average LOS Jan-Mar 2016: 38.8 hours

- **Admit**
  - Average LOS April-June 2016: 113.3 hours
  - Average LOS Jan-Mar 2016: 30.46 hours

- **Transfer**
  - Average LOS April-June 2016: 65.6 hours
  - Average LOS Jan-Mar 2016: 47.6 hours

- **Home**
  - Average LOS April-June 2016: 55.3 hours
  - Average LOS Jan-Mar 2016: 44.2 hours
Patients by Discharge Disposition
April - June 2016

- Home: 41%
- Transfer: 52%
- Admit: 3%
- Other: 3.5%
IVCs - By Release Status
April - June 2016

- 68% percent released
- 32% percent not released
NC STeP: Number of IVCs for Participating Hospitals by Quarter

- April-June 2014: 333, 233, 28% Turnover
- July-Sept 2014: 3090, 206, 25% Turnover
- Oct-Dec 2014: 313, 154, 19% Turnover
- 12 MONTH PERIOD Jan-Dec 2014: 3713, 241, 26% Turnover
- Jan-March 2015: 925, 275, 22.9% Turnover
- April-June 2015: 1199, 329, 23.6% Turnover
- July-Sept 2015: 1392, 281, 26% Turnover
- Oct-December 2015: 1089, 1126, 23.6% Turnover
- 12 MONTH PERIOD Jan-Dec 2015: 4605, 170, 36.4% Turnover
- Jan - March 2016: 62, 32% Turnover
- April - June 2016: 167, 54% Turnover

Legend:
- Blue: Number of IVCs
- Red: Number of IVCs Turned Over
NC-STeP Charge Mix – Project to Date
Service Dates 10/01/2013 – 06/30/2016

- Blue Shield, 5.48%
- Commercial, 16.65%
- Medicaid, 6.02%
- Medicare, 20.26%
- Other, 20.51%
- Self-pay, 31.09%
NC-STeP Charge Mix
QTD 2016 – Quarter 4

- Commercial: 22%
- Medicaid: 7%
- Medicare: 13%
- Self-pay: 58%
NC-STeP Charge Mix
FYTD 2016 – Quarter 4

- Self-pay, 32.59%
- Blue Shield, 5.06%
- Commercial, 21.42%
- Medicaid, 2.84%
- Medicare, 18.27%
- Other, 19.82%
Model 2 Hubs/Hospitals = 29

- Cone = 6
- Cape Fear = 2
- Mission = 8
- Novant = 5
- Wake = 8
Hospital Status Report as of May 4, 2016

Model 1 Hubs/Hospitals = 29
Old Vineyard = 14

1. Randolph*
2. Albemarle*
3. Murphy*
4. Chatham*
5. Morehead*
6. Ashe
7. Dosher
8. Pender
9. Alleghany
10. St. Luke
11. Our Community
12. Southeastern
13. Northern Hospital of Surry
14. UNC Hillsborough

* Credentialing started
## Hospital Status Report as of May 4, 2016

**Model 1 Hubs/Hospitals = 29**  
Carolina Behavioral = 15

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
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</tr>
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<tbody>
<tr>
<td>1</td>
<td>Vidant Duplin</td>
<td></td>
<td>9</td>
<td>Wilson Medical</td>
</tr>
<tr>
<td>2</td>
<td>Vidant Outer Banks</td>
<td></td>
<td>10</td>
<td>DLP Maria Parham</td>
</tr>
<tr>
<td>3</td>
<td>Vidant Chowan</td>
<td></td>
<td>11</td>
<td>DLP Harris</td>
</tr>
<tr>
<td>4</td>
<td>Vidant Bertie</td>
<td></td>
<td>12</td>
<td>DLP Swain</td>
</tr>
<tr>
<td>5</td>
<td>Vidant Edgecombe</td>
<td></td>
<td>13</td>
<td>DLP Person</td>
</tr>
<tr>
<td>6</td>
<td>Vidant Beaufort</td>
<td></td>
<td>14</td>
<td>Halifax</td>
</tr>
<tr>
<td>7</td>
<td>Vidant Roanoke Chowan</td>
<td></td>
<td>15</td>
<td>Lake Norman</td>
</tr>
<tr>
<td>8</td>
<td>Lenoir Memorial</td>
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</tbody>
</table>

* credentialing started
Hospital Status Report as of May 4, 2016

On Hold = 4
• First Health Hoke
• First Health Montgomery
• First Health Moore
• First Health Richmond

Closed = 2
• Yadkin
• Pungo

Terminated = 10
• Wayne Memorial Hospital
• Davie Medical Center
• Nash Health
• Carolina East Hospital
• Sampson
• Columbus Regional
• Lexington
• Carteret
• Martin
• Washington
Providers

- Model 2 = 20
- Old Vineyard = 8
- Carolina Behavioral = 7
- DC/Weekend Hub = 2 (eventually 3)