Quarterly Progress Update

Sy Atezaz Saeed, MD, MS, FACPsysch,
Professor and Chair
Department of Psychiatry and Behavioral Medicine
Brody School of Medicine - East Carolina University

Executive Director
North Carolina Statewide Telepsychiatry Program (NC-STeP)
NC-STeP Advisory Council Meeting
Friday, December 4, 2020
10:30 am – 12:00 pm
Zoom Video Conferencing

Agenda

10:30- 10:35 a.m. Welcome
10:35- 10:40 a.m. Review and Approval of September 25, 2020 Minutes
10:40- 11:30 a.m. NC-STeP FY21-Q1 (Jul-Sep) Performance Data
11:30- 11:45 a.m. Update on Community-Based Pilot(s)
11:45- 11:50 a.m. Old Business
11:50- 11:55 a.m. New Business
11:55- 12:00 p.m. Announcements
12:00 p.m. Adjourn

Join Zoom Meeting
https://zoom.us/j/94650849042?pwd=Vk1uUTVEZGplQVpLVVpLZ0pmbzJIMmU9
Meeting ID: 946 5084 9042
Passcode: 740485
• 41 hospitals in the network, 38 hospitals were live
• 28 hospitals reporting Telepsychiatry patients in their ED
  – not all live hospitals had telepsychiatry patients
• Total number of assessments for this quarter = 1,293
• Total number of encounters for this quarter = 1,149
• Patient assessments billed for Model 1 hospitals = 734
• The Median Length of Stay was 27 hours
• The Average Length of Stay was 50.8 hours
  – 49.9 hours for those discharged to home
  – 60.9 hours for those transferred to another facility
• Average Consult Elapsed Time (in Queue to Exam Complete) for Model 1 hospitals was 4 hours and 15 minutes.
• 783 ED patients who received telepsychiatry services had an IVC in place during their ED stay.
  – 307 (39%) of those patients did not have an IVC in place when discharged.

• Of the ED patients who received telepsychiatry services:
  – 34% were discharged to home
  – 44% were discharged to another facility
NC-STeP Quality Management and Outcomes Monitoring Processes: July – September 2020

- 9 Community based sites were live as of 9/30/20 with 8 sites reporting Telepsychiatry patients.
- There were 912 total behavioral health visits.
  - 63 visits with a Psychiatrist.
  - 849 visits with a behavioral health manager.
<table>
<thead>
<tr>
<th></th>
<th>Since project inception in November 2013</th>
<th>Quarter Jul- Sep 2020</th>
<th>Quarter Oct- Dec 2020</th>
<th>Quarter Jan- Mar 2021</th>
<th>Quarter Apr- Jun 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Patient Encounters</td>
<td>33,173</td>
<td>1,149</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1 Hospital Patient Encounters</td>
<td>20,246</td>
<td>590</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Model 2 Hospital Patient Encounters</td>
<td>12,927</td>
<td>559</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Assessments</td>
<td>44,349</td>
<td>1,293</td>
<td></td>
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</tr>
</tbody>
</table>

(Billed Assessments for Model 1 Hospitals + Number of Patient Encounters for Model 2 Hospitals)
<table>
<thead>
<tr>
<th></th>
<th>Goals</th>
<th>Values Reached</th>
<th>Year-to-Date Total with % of the Yearly Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cumulative Target to be reached by (06/30/2021)</td>
<td>Value Reached as of most recent previous quarter (06/30/2020)</td>
<td>Value Reached as of this reporting quarter (09/30/2020)</td>
</tr>
<tr>
<td><strong>Number of IVCs</strong></td>
<td>1,700</td>
<td>660</td>
<td>783</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>783</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>46% of Yearly Target</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Number of IVCs Overturned</strong></td>
<td>505</td>
<td>219</td>
<td>307</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>307</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>61% of Yearly Target</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Number of Assessments</strong></td>
<td>4,251</td>
<td>1,079</td>
<td>1,293</td>
</tr>
<tr>
<td>(Billed assessments for Model 1 hospitals + Number of patient encounters for Model 2 hospitals.)</td>
<td></td>
<td></td>
<td>1,293</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>30% of Yearly Target</strong></td>
</tr>
<tr>
<td>EVALUATION CRITERIA</td>
<td>BASELINE VALUES/MESURES AS REPORTED ON 03/31/2020</td>
<td>TARGET TO BE REACHED BY 06/30/2021</td>
<td>VALUES/MEASURES REACHED AS OF 09/30/2020</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>1. The number of full-time equivalent (FTE) positions supported by these contracts</td>
<td>4.02 FTEs</td>
<td>4.30 FTEs</td>
<td>4.10 FTEs</td>
</tr>
<tr>
<td>2. The number of overturned involuntary commitments (inpatient admission prevented)</td>
<td>711</td>
<td>505</td>
<td>307 in this quarter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cumulative total since program inception 6,408</td>
</tr>
<tr>
<td>3. The number of participating consultant providers</td>
<td>48</td>
<td>48</td>
<td>42</td>
</tr>
</tbody>
</table>
## NC-STeP Status as of September 30, 2020

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020</th>
<th>TARGET TO BE REACHED BY 06/30/2021</th>
<th>VALUES/MEASURES REACHED AS OF 09/30/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. The number of telepsychiatry assessments conducted.</td>
<td>5,105</td>
<td>4,251</td>
<td>1,293 in this quarter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cumulative total since program inception 44,349</td>
</tr>
<tr>
<td>5. The number of telepsychiatry referring sites</td>
<td>58</td>
<td>48</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>38 Live</td>
</tr>
<tr>
<td>6. The reports of involuntary commitments to enrolled hospitals</td>
<td>2,061</td>
<td>1,700</td>
<td>783 in this quarter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cumulative total since program inception 19,036</td>
</tr>
<tr>
<td>EVALUATION CRITERIA</td>
<td>BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020</td>
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<td>VALUES/MEASURES REACHED AS OF 09/30/2020</td>
</tr>
<tr>
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<td>-----------------------------------------------</td>
<td>-------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>7. The average (mean) Length of Stay for all patients with a primary mental health diagnosis across all dispositions.</td>
<td>55 hours</td>
<td>55 hours</td>
<td>QTD Average = 50.8 QTD Median = 27</td>
</tr>
<tr>
<td>8. The rate of &quot;satisfied&quot; or &quot;strongly satisfied&quot; among emergency department staff participating in NC-STeP.</td>
<td>80%</td>
<td>80%</td>
<td>69%</td>
</tr>
</tbody>
</table>
## NC-STeP Status as of September 30, 2020

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020</th>
<th>TARGET TO BE REACHED BY 06/30/2021</th>
<th>VALUES/MEASURES REACHED AS OF 09/30/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. The rate of &quot;satisfied&quot; or &quot;strongly satisfied&quot; among hospital CEOs/COOs participating in NC-STeP.</td>
<td>100%</td>
<td>100%</td>
<td>72%</td>
</tr>
<tr>
<td>10. The rate of &quot;satisfied&quot; or &quot;strongly satisfied&quot; among consulting (hub) providers participating in NC-STeP.</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>EVALUATION CRITERIA</td>
<td>BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020</td>
<td>TARGET TO BE REACHED BY 06/30/2021</td>
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</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>11. The rate of &quot;satisfied&quot; or &quot;strongly satisfied&quot; among emergency department physicians participating in the statewide telepsychiatry program.</td>
<td>85%</td>
<td>85%</td>
<td>50%</td>
</tr>
<tr>
<td>12. Cumulative return on investment to state psychiatric facilities through overturned involuntary commitments (inpatient admission prevented)</td>
<td>$3,839,400</td>
<td>$3,213,403</td>
<td>$1,657,800 Cumulative average since program inception $34,603,200</td>
</tr>
</tbody>
</table>
Number of NC-STeP Patients by Hospital
July - September 2020

- Albemarle: 49
- Beaufort: 39
- Chowan: 6
- Duplin: 59
- Edgecombe: 64
- Outer Banks: 5
- Lenoir: 191
- *McDowell: 4
- *Mission: 44
- *Highland Cashiers: 106
- *Blue Ridge: St. Lukes: 18
- *Transylvania: 73
- *Angel: 111
- *Hugh Chatham: Morehead: 34
- Maria Parham: 76
- Erlanger: 6
- Ashe: 16
- Dosher: 2
- Harris: 41
- Northern of Surry: 13
- Lake Norman: 1
- Halifax: 4
- Pender: 3
- *UNC Johnston: 30
- Betsy Johnson: 90

*NC-STeP hospitals
Percent of Use by Hospital Jul-Sep 2020 (based on number of encounters)

- McDowell: 17%
- Hugh Chatham: 10%
- Transylvania: 9%
- Betsy Johnson: 8%
- Erlanger: 7%
- Angel: 6%
- Outer Banks: 6%
- Duplin: 5%
- Albemarle: 4%
- Beaufort: 4%
- Northern of Surry: 4%
- Maria Parham: 3%
- Iredell: 3%
- UNC Johnston: 3%
- UNC Rockingham: 3%
- All others combined: 7%
Percent of Use for Model 1 Hospitals Jul-Sep 2020

(Based on number of encounters)

- Betsy Johnson: 15%
- Erlanger: 13%
- Outer Banks: 11%
- Duplin: 10%
- Albemarle: 8%
- Northern of Surry: 7%
- Beaufort: 7%
- Maria Parham: 6%
- UNC Rockingham: 5%
- St. Lukes: 3%
- Dosher: 3%
- Lake Norman: 2%
- Iredell: 5%
- all others combined: 5%
Number of Patients by Model

Jul-Sep 2020

- Model 1: 590
- Model 2: 559

Jan-Mar 2020

- Model 1: 483
- Model 2: 506

Apr-Jun 2020

- Model 1: 455
- Model 2: 520
Median Length of Stay for Jul-Sep 2020 = 27 Hours

53% percent of patients had a LOS of 30 hours or less

19 patients had a LOS longer than 300 hours

Number of NC-STeP Patients by LOS Category
Jul - Sep 2020
(in hours)
56.2% percent of patients had a LOS of 30 hours or less

57.1% percent of patients had a LOS of 30 hours or less

53.6% percent of patients had a LOS of 30 hours or less

57.6% percent of patients had a LOS of 30 hours or less
Median Length of Stay by Quarter
(in hours)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Median Length of Stay (in hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul-Sep 2017</td>
<td>28.5</td>
</tr>
<tr>
<td>Oct-Dec 2017</td>
<td>27.5</td>
</tr>
<tr>
<td>Jan-Mar 2018</td>
<td>29.4</td>
</tr>
<tr>
<td>Apr-Jun 2018</td>
<td>26.2</td>
</tr>
<tr>
<td>Jul-Sep 2018</td>
<td>24.6</td>
</tr>
<tr>
<td>Oct-Dec 2018</td>
<td>24.6</td>
</tr>
<tr>
<td>Jan-Mar 2019</td>
<td>25.3</td>
</tr>
<tr>
<td>Apr-Jun 2019</td>
<td>25.4</td>
</tr>
<tr>
<td>Jul-Sep 2019</td>
<td>27.2</td>
</tr>
<tr>
<td>Oct-Dec 2019</td>
<td>25.4</td>
</tr>
<tr>
<td>Jan-Mar 2020</td>
<td>25.6</td>
</tr>
<tr>
<td>Apr-Jun 2020</td>
<td>24.1</td>
</tr>
<tr>
<td>Jul-Sep 2020</td>
<td>27.0</td>
</tr>
</tbody>
</table>
Average Length of Stay by Quarter for Hospitals Participating in NC-STeP (in hours)
Average Length of Stay by Provider

**Jul-Sep 2020 (in hours)**

- Novant (111 patients at Hugh Chatham)
- Mission (418)
- Old Vineyard (172 patients)
- CBC (251 patients)
- ECU (167 patients)
- UNC (30 patients)

**Apr-Jun 2020 (in hours)**

- Novant (86 patients at Hugh Chatham)
- Mission (429)
- Old Vineyard (151 patients)
- CBC (168 patients)
- ECU (136 patients)
Average Length of Stay by Quarter for Patients Discharged to Home or Transfer
(in hours)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Avg LOS for patients discharged HOME</th>
<th>Avg LOS for patients discharged TRANSFER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-Dec 2017</td>
<td>56.5</td>
<td>59</td>
</tr>
<tr>
<td>Jan-Mar 2018</td>
<td>55</td>
<td>59.3</td>
</tr>
<tr>
<td>Apr-Jun 2018</td>
<td>49.7</td>
<td>54.9</td>
</tr>
<tr>
<td>Jul-Sep 2018</td>
<td>48.9</td>
<td>48.6</td>
</tr>
<tr>
<td>Oct-Dec 2018</td>
<td>44.5</td>
<td>47.8</td>
</tr>
<tr>
<td>Jan-Mar 2019</td>
<td>50.2</td>
<td>53.5</td>
</tr>
<tr>
<td>Apr-Jun 2019</td>
<td>46.3</td>
<td>65.9</td>
</tr>
<tr>
<td>Jul-Sep 2019</td>
<td>45.3</td>
<td>50.3</td>
</tr>
<tr>
<td>Oct-Dec 2019</td>
<td>40.9</td>
<td>48.8</td>
</tr>
<tr>
<td>Jan-Mar 2020</td>
<td>38.2</td>
<td>49.5</td>
</tr>
<tr>
<td>Apr-Jun 2020</td>
<td>49.9</td>
<td>49.9</td>
</tr>
<tr>
<td>Jul-Sep 2020</td>
<td>60.9</td>
<td>60.9</td>
</tr>
</tbody>
</table>

East Carolina University
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NC-STEPI
Average LOS by Discharge Disposition

**Jul-Sep 2020**
(in hours)

- Home: 49.9
- Transfer: 60.9
- Admit: 24.4
- Other: 33.5

**Apr-Jun 2020**
(in hours)

- Home: 40.6
- Transfer: 43.5
- Admit: 19.6
- Other: 41.1
Consult Elapsed Time: July - September 2020

CBC, OV & ECU
Average Consult Elapsed Time
In Queue to Exam Complete
FY21-Q1 July - September 2020
(4 hrs. 15 min.)

Exam Elapsed Time, 2:00:43
In Queue Wait Time, 2:14:36

Comparison CBC, OV & ECU
Average Consult Elapsed Time
In Queue to Exam Complete
FY21-Q1 July - September 2020
(hh:mm:ss)

In Queue Wait Time
Total Elapsed Time

- CBC
- ECU
- OVBHS
Key Processes and Elapsed Times Averages
CBC, OV, ECU: July - September 2020

- Avg. Time from Queue to Intake Start: 2:14:36
- Avg. Intake Duration: 0:22:50
- Avg. Time from Intake End to Psych Exam Start: 3:05:46
- Avg. Exam Duration: 1:09:20
- Total Duration from Queue to Consulted: 4:15:19

Process Time
- Avg. Time from Queue to Intake Start: 2:14:36
- Avg. Intake Duration: 0:22:50
- Avg. Time from Intake End to Psych Exam Start: 3:05:46
- Avg. Exam Duration: 1:09:20

Elapsed Time
- Total Duration from Queue to Consulted: 4:15:19
Percent of Patients by Discharge Disposition

Oct-Dec 2019

- Home: 47%
- Transfer: 10%
- Admit: 1%
- AMA: 0.2%
- Other: 1%

Jan-Mar 2019

- Home: 30.6%
- Transfer: 4.7%
- Admit: 0.2%
- AMA: 33.8%
- Other: 21%

Jul-Sep 2019

- Home: 47%
- Transfer: 5%
- Admit: 1%
- AMA: 1%
- Other: 42%

Apr-Jun 2019

- Home: 36%
- Transfer: 21%
- Admit: 1%
- AMA: 1%
- Other: 42%
IVCs –
By Release Status

- Oct-Dec 2019
  - IVCs - percent not released: 63%
  - IVCs - percent released: 37%

- Jan-Mar 2019
  - IVCs - percent not released: 42.5%
  - IVCs - percent released: 57.5%

- Jul-Sep 2019
  - IVCs - percent not released: 62%
  - IVCs - percent released: 38%

- Apr-Jun 2019
  - IVCs - percent not released: 36%
  - IVCs - percent released: 64%
12 MONTH PERIOD  
Jan-Dec 2019  
38% Turnover

12 MONTH PERIOD  
Jan-Dec 2018  
44% Turnover

12 MONTH PERIOD  
Jan-Dec 2017  
43% Turnover

12 MONTH PERIOD  
Jan-Dec 2016  
37% Turnover

12 MONTH PERIOD  
Jan-Dec 2015  
24.5% Turnover

12 MONTH PERIOD  
Jan-Dec 2014  
23% Turnover

Number of IVCs and IVCs Turned Over by Year

East Carolina University  
CENTER FOR TELEPSYCHIATRY  
NC-SteP
Jul-Sep 2020

Number of IVCs and IVC Turnovers by Model

- Model 1 (54% Turnover) - IVCs: 268, IVC Turnovers: 39
- Model 2 (14% Turnover) - IVCs: 289, IVC Turnovers: 39

IVC Turnovers
IVCs

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NC-STEPII
Number of IVCs and IVC Turnovers by Provider

 Jul-Sep 2020

- **CBC (51% Turnover)**: 204 IVCs, 105 IVC Turnovers
- **OV (63% Turnover)**: 152 IVCs, 96 IVC Turnovers
- **ECU (49%)**: 138 IVCs, 67 IVC Turnovers

IVCs and IVC Turnovers by Provider:
- CBC: 204 IVCs, 105 Turnovers
- OV: 152 IVCs, 96 Turnovers
- ECU: 138 IVCs, 67 Turnovers

East Carolina University
Center for Telepsychiatry
NC-TeP

[Images and logos]

- East Carolina University
- Center for Telepsychiatry
- NC-TeP
Satisfaction Surveys

- Satisfaction surveys are done twice a year
- Most recent surveys conducted in September 2020 with 9 groups
- Invitations to participate were sent via electronic mail
- For groups that use the portal (Model 1 ED staff, psychiatrists, and intake specialists) there was a link to the survey on the portal log-in page
- ED staff also received a pop-up within the portal with a link to the survey
- Surveys were completed online via Qualtrics software
Satisfaction surveys were conducted in September 2020 with 9 groups

1. Model 1 Emergency Department Physicians
2. Model 1 Emergency Department Staff
3. Model 1 Provider Psychiatrists
4. Model 1 Psychiatric Intake Specialists
5. Model 1 Hospital CEOs
6. Model 2 Emergency Department Physicians
7. Model 2 Emergency Department Staff
8. Model 2 Provider Psychiatrists
9. Model 2 Hospital CEOs

Each group was given a different survey (with different questions) based on their role in the program.
The following number of individuals from each group responded (N= 62)

- Model 1 Emergency Department Physicians (4 responded)
- Model 1 Emergency Department Staff (31 responded)
- Model 1 Provider Psychiatrists (14 responded)
- Model 1 Psychiatric Intake Specialists (4 responded)
- Model 1 Hospital CEOs (6 responded)
- Model 2 Emergency Department Physicians (0 responded)
- Model 2 Emergency Department Staff (1 responded – results not shown due to small number)
- Model 2 Provider Psychiatrists (1 – results not shown due to small number)
- Model 2 Hospital CEOs (1 responded – results not shown due to small number)

For each group, one summary question is selected for an overall “satisfaction” rate. The overall satisfaction rate is 77.5%.
Model 1 ED Staff: Telepsychiatry consults have enhanced behavioral health patient care in our ED

**this question used to measure overall satisfaction**
Model 1 Hospital ED Staff Results (n=31)

Model 1 ED Staff: The telepsychiatry cart is easy to use
- Disagree: 10%
- Undecided: 13%
- Agree: 77%

Model 1 ED Staff: I received adequate training/instruction preparing me to use the telepsychiatry cart
- Disagree: 3%
- Undecided: 19%
- Agree: 77%

Model 1 ED Staff: The telepsychiatry cart is reliable and seldom goes down.
- Disagree: 16%
- Undecided: 35%
- Agree: 48%

Model 1 ED Staff: Patients are generally cooperative during the telepsychiatry consult
- Disagree: 3%
- Undecided: 19%
- Agree: 77%
Model 1 Hospital ED Staff Results (n=31)

**Model 1 ED Staff: The NC-STeP portal is easy to use.**
- Agree: 77%
- Undecided: 16%
- Disagree: 6%

**Model 1 ED Staff: The training and resources provided adequately prepared me to use the NC-STeP portal.**
- Agree: 74%
- Undecided: 26%
- Disagree: 0%

**Model 1 ED Staff: The NC-STeP portal is reliable and unscheduled downtime is rare.**
- Agree: 68%
- Undecided: 19%
- Disagree: 13%

**Model 1 ED Staff: The level of technical expertise provided by NC-STeP support is adequate.**
- Agree: 61%
- Undecided: 32%
- Disagree: 6%
Model 1 ED Doc: NC-STeP consults have improved the quality of care for mental health and substance abuse patients in our ED

**this question used to measure overall satisfaction**

- Disagree: 25%
- Undecided: 25%
- Agree: 50%
Model 1 Hospital ED Physicians Results (n=4)

Model 1 ED Doc: NC STeP consults are easy to obtain

- Disagree: 25%
- Undecided: 0%
- Agree: 75%

Model 1 ED Doc: NC STeP consultants respond quickly to telepsychiatry requests.

- Disagree: 50%
- Undecided: 0%
- Agree: 50%

Model 1 ED DOC: NC STeP consults are complete and thorough.

- Disagree: 0%
- Undecided: 0%
- Agree: 100%

Model 1 ED DOC: NC Step disposition recommendations are helpful

- Disagree: 0%
- Undecided: 25%
- Agree: 75%
Model 1 Hospital ED Physicians Results (n=4)

- Model 1 ED Doc: NC STeP documentation is straightforward
  - 100% Agree

- Model 1 ED Doc: NC-STeP consults have made me more comfortable assessing and treating patients with mental health/substance abuse issues
  - 25% Disagree
  - 25% Undecided
  - 50% Agree

- Model 1 ED Doc: Telepsychiatry consults have improved the work flow in the ED
  - 50% Disagree
  - 50% Agree
Model 1 Psychiatric: I am satisfied with providing psychiatric consults via telepsychiatry

**this question used to measure overall satisfaction

Disagree | Undecided | Agree
---|---|---
0% | 0% | 100%
Model 1 Provider Psychiatrist Results (n=14)

Model 1 Psychiatrist: Telepsychiatry is an effective and efficient way of assessing and treating behavioral health patients

- Agree: 100%
- Undecided: 0%
- Disagree: 0%

Model 1 Psychiatrist: I believe the quality of psychiatric care I provide via telepsychiatry is comparable to the quality of care I deliver face to face

- Agree: 100%
- Undecided: 0%
- Disagree: 0%

Model 1 Psychiatrist: Telepsychiatry increases my productivity and/or efficiency.

- Agree: 93%
- Undecided: 7%
- Disagree: 0%

Model 1 Psychiatrist: The telepsychiatry desktop unit is straightforward to use

- Agree: 100%
- Undecided: 0%
- Disagree: 0%
Model 1 Provider Psychiatrist Results (n=14)

Model 1 Psychiatrist: The telepsychiatry desktop unit is reliable and seldom down

- Disagree: 0%
- Undecided: 29%
- Agree: 71%

Model 1 Psychiatrist: The NC-STEp portal is straightforward to use.

- Disagree: 0%
- Undecided: 7%
- Agree: 93%

Model 1 Psychiatrist: I received adequate training and resources preparing me to use the portal system

- Disagree: 0%
- Undecided: 0%
- Agree: 100%

Model 1 Psychiatrist: The NC-STEp portal works well without excessive delays or downtime

- Disagree: 0%
- Undecided: 14%
- Agree: 86%
Model 1 Psychiatric Intake Specialist Results (n=4)

Intake Specialist: I am satisfied with providing psychiatric consults via telepsychiatry
**this question used to measure overall satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Model 1 Psychiatric Intake Specialist Results (n=4)

Intake Specialist: Telepsychiatry is an effective and efficient way of assessing and treating behavioral health patients

Intake Specialist: I believe the quality of psychiatric care I provide via telepsychiatry is comparable to the quality of care I deliver face to face

Intake Specialist: Telepsychiatry increases my productivity and/or efficiency.

Intake Specialist: The telepsychiatry desktop unit is straightforward to use
Model 1 Psychiatric Intake Specialist Results (n=4)

Intake Specialist: The telepsychiatry desktop unit is reliable and seldom down

- Disagree: 25%
- Undecided: 25%
- Agree: 50%

Intake Specialist: The NC-STeP portal is straightforward to use

- Disagree: 0%
- Undecided: 0%
- Agree: 100%

Intake Specialist: I received adequate training and resources preparing me to use the portal

- Disagree: 0%
- Undecided: 0%
- Agree: 100%

Intake Specialist: The NC-STeP portal works well without excessive delays or downtime

- Disagree: 0%
- Undecided: 0%
- Agree: 100%
Model 1 Hospital CEO: The overall quality of care for psychiatric patients utilizing our ED has improved

**this question used to measure overall satisfaction**

- Disagree: 17%
- Undecided: 17%
- Agree: 67%
Model 1 CEO/CNO/CFO Results (n=6)

Model 1 Hospital CEO: The LOS for psychiatric patients in our ED has reduced

- Disagree: 0%
- Undecided: 17%
- Agree: 50%

Model 1 Hospital CEO: Overall, ED throughput has improved.

- Disagree: 17%
- Undecided: 17%
- Agree: 67%

Model 1 Hospital CEO: Overall, ED staff satisfaction has improved

- Disagree: 17%
- Undecided: 33%
- Agree: 50%

Model 1 Hospital CEO: There has been an improvement in discharge planning and referrals for psychiatric patients in our ED

- Disagree: 0%
- Undecided: 33%
- Agree: 67%
Model 1 CEO/CNO/CFO Results (n=6)

Model 1 Hospital CEO: Medical staff’s understanding of mental health issues and treatment options in our ED has improved

- Disagree: 17%
- Undecided: 33%
- Agree: 50%

Model 1 Hospital CEO: Our hospital’s use of NC-SteP consultants has been cost effective

- Disagree: 17%
- Undecided: 33%
- Agree: 50%

Model 1 Hospital CEO: I would recommend NC-SteP to other hospitals

- Disagree: 17%
- Undecided: 33%
- Agree: 50%

Model 1 Hospital CEO: I would pursue additional uses of telemedicine technology for other medical specialty areas

- Disagree: 0%
- Undecided: 33%
- Agree: 67%
NC-STeP Charge Mix
QTD 2021 - Quarter 1

- Blue Shield, 8.87%
- Commercial, 5.49%
- LME/IPRS, 6.85%
- LME/MCOS, 32.55%
- Medicaid, 0.63%
- Medicare, 11.94%
- Other, 0.73%
- Self-pay, 32.95%
- Other, 0.73%
- Medicaid, 0.63%
- Medicare, 11.94%
- LME/MCOS, 32.55%
- LME/IPRS, 6.85%
- Commercial, 5.49%
- Blue Shield, 8.87%

East Carolina University
CENTER FOR TELEPSYCHIATRY
NC-STeP
NC-STeP Charge Mix – Project to Date
Service Dates: October 1, 2013 – September 30, 2020

- Blue Shield: 5.83%
- Commercial: 5.59%
- LME/IPRS: 2.52%
- LME/MCOS: 24.19%
- Medicaid: 3.78%
- Medicare: 17.87%
- Other: 6.34%
- Self-pay: 33.88%
<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>BASELINE VALUES/MEASURES AS REPORTED ON 3/31/2020</th>
<th>VALUES/MEASURES REACHED AS OF 09/30/2020</th>
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</thead>
<tbody>
<tr>
<td>1. The number of full-time equivalent (FTE) providers supporting the program</td>
<td>.70 FTEs</td>
<td>.70 FTEs</td>
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<tr>
<td>2. The number of community-based sites contracted</td>
<td>8</td>
<td>9</td>
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<tr>
<td>3. Number of patient visits with medical (psychiatric) doctor</td>
<td>81</td>
<td>63</td>
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<tr>
<td></td>
<td></td>
<td>YTD= 63</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PTD= 739</td>
</tr>
<tr>
<td>4. The number return visits</td>
<td>524</td>
<td>755</td>
</tr>
<tr>
<td></td>
<td></td>
<td>YTD= 755</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PTD= 4,087</td>
</tr>
<tr>
<td>5. The number of patient visits with a mid-level provider</td>
<td>613</td>
<td>849</td>
</tr>
<tr>
<td></td>
<td></td>
<td>YTD= 849</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PTD= 4,382</td>
</tr>
<tr>
<td>6. The number of new patient visits</td>
<td>169</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td></td>
<td>YTD= 157</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PTD= 1,106</td>
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</table>
## NC-STeP Community-Based Sites’ Patient Visits

<table>
<thead>
<tr>
<th></th>
<th>Since project inception in October 2018</th>
<th>During Calendar Year 2018</th>
<th>During Calendar Year 2019</th>
<th>During Quarter Jan-Mar 2020</th>
<th>During Quarter Apr-Jun 2020</th>
<th>During Quarter Jul-Sep 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Visits with Medical Doctor</strong></td>
<td>739</td>
<td>8</td>
<td>536</td>
<td>81</td>
<td>51</td>
<td>63</td>
</tr>
<tr>
<td><strong>Patient Visits with Mid-Level Provider</strong></td>
<td>4,382</td>
<td>7</td>
<td>2,006</td>
<td>613</td>
<td>907</td>
<td>849</td>
</tr>
<tr>
<td><strong>Total Patient Visits</strong></td>
<td>5,212</td>
<td>15</td>
<td>2,633</td>
<td>694</td>
<td>958</td>
<td>912</td>
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<tr>
<td>Patient Visits</td>
<td>Goals</td>
<td>Values Reached</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total for most recent full fiscal year (July 1, 2019 - June 30, 2020)</td>
<td>Value Reached as of most recent previous quarter (06/30/2020)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Value reached as of this reporting quarter (9/30/2020)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>With medical doctor</td>
<td>438</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>63</td>
<td></td>
<td></td>
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<tr>
<td>With mid-level provider</td>
<td>2,661</td>
<td>907</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>849</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>New patient visits</td>
<td>629</td>
<td>134</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>157</td>
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<tr>
<td>Return patient visits</td>
<td>2,455</td>
<td>824</td>
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<tr>
<td></td>
<td></td>
<td>755</td>
<td></td>
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</tr>
</tbody>
</table>
NC-STeP Community Appointments by Site

Appointments, Visits Kept, Rescheduled, Cancelled, No Show
July - September 2020

Total Appointments  Visits Kept  Rescheduled  Cancelled  No Show
Camden  173  119  42  12  19  7  11  1
Gates  174  44  8  9  6
Pasquotank  616  398  85  8  10  18  26
Hyde  75  52  8  3  10  18  26
Martin  116  93  8  3  10  18  26
Craven  188  108  18  7  1  8  17
Duplin  54  38  7  1  8
Wilson  38  17  18

East Carolina University
Center for Telepsychiatry
NC-STeP
NC-STeP Community Appointments by Site
Appointments, Visits Kept, Rescheduled, Cancelled, No Show
January - December 2019

Total Appointments
Visits Kept
Rescheduled
Cancelled
No Show
NC-STeP Community Visits by Site
by provider type
July - September 2020

Psychiatric Provider Visits
BH Manager Visits
NC-STeP Community Visits by Site and by Provider Type
January - December 2019

Psychiatric Provider Visits  BH Manager Visits
NC-STeP Community Visits by Site
New and Follow-up
January - December 2019

- Camden: 121 (New) 428 (Follow-up)
- Gates: 54 (New) 122 (Follow-up)
- Pasquotank: 152 (New) 949 (Follow-up)
- Hyde: 85 (New) 130 (Follow-up)
- Martin: 28 (New) 41 (Follow-up)
- Craven: 115 (New) 233 (Follow-up)
- Duplin: 65 (New) 67 (Follow-up)
- Macon: 11 (New) 14 (Follow-up)
41 hospitals in the network. 38 live.

44,349 total psychiatry assessments since program inception

6,408 IVCs overturned
  - Cumulative return on investment = $34,603,200
    (savings from preventing unnecessary hospitalizations)

Six Clinical Provider Hubs with 42 consultant providers

Administrative costs below industry standard

Over 33% of the patients served had no insurance coverage
• 9 community-based sites.
• 4,826 total patient visits since program inception in October 2018.
  – 739 total patient visits with a psychiatrist
  – 4,087 total patient visits with a mid-level provider
# Hospital Status Report as of September 2020

## Model 1 – Live

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Contract Date</th>
<th>Portal Go Live</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vidant Outer Banks Hospital</td>
<td>10/01/2013</td>
<td>08/08/2016</td>
</tr>
<tr>
<td>Vidant Bertie Hospital</td>
<td>10/01/2013</td>
<td>08/15/2016</td>
</tr>
<tr>
<td>Vidant Chowan Hospital</td>
<td>10/01/2013</td>
<td>08/15/2016</td>
</tr>
<tr>
<td>Vidant Edgecombe Hospital</td>
<td>10/01/2013</td>
<td>08/15/2016</td>
</tr>
<tr>
<td>Sentara Albemarle Medical Center</td>
<td>10/01/2013</td>
<td>08/17/2016</td>
</tr>
<tr>
<td>Vidant Beaufort Hospital</td>
<td>10/01/2013</td>
<td>08/22/2016</td>
</tr>
<tr>
<td>Vidant Duplin Hospital</td>
<td>10/01/2013</td>
<td>08/22/2016</td>
</tr>
<tr>
<td>Lenoir Memorial Hospital</td>
<td>01/01/2014</td>
<td>09/06/2016</td>
</tr>
<tr>
<td>St Lukes Hospital</td>
<td>03/01/2014</td>
<td>09/07/2016</td>
</tr>
<tr>
<td>UNC Rockingham Hospital</td>
<td>04/01/2015</td>
<td>10/05/2016</td>
</tr>
<tr>
<td>DLP Harris Regional Medical</td>
<td>07/01/2015</td>
<td>10/14/2016</td>
</tr>
<tr>
<td>DLP Swain Community Hospital</td>
<td>07/01/2015</td>
<td>10/14/2016</td>
</tr>
<tr>
<td>Erlanger Murphy Medical Center</td>
<td>05/01/2015</td>
<td>10/26/2016</td>
</tr>
<tr>
<td>DLP Maria Parham Medical Center</td>
<td>07/01/2015</td>
<td>11/15/2016</td>
</tr>
<tr>
<td>J. Arthur Dosher Memorial Hospital</td>
<td>04/01/2015</td>
<td>01/07/2017</td>
</tr>
<tr>
<td>Ashe Memorial Hospital</td>
<td>06/01/2015</td>
<td>01/26/2017</td>
</tr>
<tr>
<td>Northern Hospital of Surry County</td>
<td>11/01/2015</td>
<td>03/07/2017</td>
</tr>
<tr>
<td>Halifax Regional Medical Center</td>
<td>03/15/2015</td>
<td>08/08/2017</td>
</tr>
<tr>
<td>Southeastern Regional Memorial</td>
<td>05/01/2014</td>
<td>08/08/2017</td>
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<tr>
<td>DLP Person Memorial Hospital</td>
<td>07/01/2015</td>
<td>08/17/2017</td>
</tr>
<tr>
<td>Lake Norman Regional Medical Center</td>
<td>10/01/2014</td>
<td>10/17/2017</td>
</tr>
<tr>
<td>Pender Memorial Hospital</td>
<td>09/01/2014</td>
<td>12/07/2017</td>
</tr>
<tr>
<td>DLP Maria Parham Franklin</td>
<td>03/01/2018</td>
<td>02/01/2019</td>
</tr>
<tr>
<td>Central Harnett Hospital</td>
<td>07/01/2019</td>
<td>02/21/2020</td>
</tr>
<tr>
<td>Betsy Johnson Hospital</td>
<td>07/01/2019</td>
<td>02/21/2020</td>
</tr>
<tr>
<td>Lenoir Memorial Hospital</td>
<td>01/01/2014</td>
<td>10/15/2016</td>
</tr>
</tbody>
</table>
Hospital Status Report as of September 2020

Model 1 – In Process

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Contract Date</th>
<th>Portal Go Live</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park Ridge Health</td>
<td>10/01/2018</td>
<td>10/27/20</td>
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<tr>
<td>UNC Wayne Memorial Hospital</td>
<td>01/01/2020</td>
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</tr>
<tr>
<td>Hugh Chatham Hospital</td>
<td>03/01/2020</td>
<td>TBD Moving from Model 1 to 2</td>
</tr>
<tr>
<td>Hospital Name</td>
<td>Program Status</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td>DLP Central Carolina Hospital</td>
<td>Reviewing Contract</td>
<td></td>
</tr>
<tr>
<td>Our Community Hospital</td>
<td>Reviewing Contract</td>
<td></td>
</tr>
<tr>
<td>Pioneer Community Hospital of Stokes (Greene)</td>
<td>Reviewing Contract</td>
<td></td>
</tr>
<tr>
<td>Pioneer Community Hospital of Stokes (King)</td>
<td>Reviewing Contract</td>
<td></td>
</tr>
<tr>
<td>Washington County Hospital</td>
<td>Reviewing Contract</td>
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</table>
## Hospital Status Report as of September 2020

### Model 2

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Go Live Date/Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Fear Valley Medical Center</td>
<td>06/2014</td>
</tr>
<tr>
<td>Cape Fear Valley Bladen Hospital</td>
<td>07/2014</td>
</tr>
<tr>
<td>McDowell Hospital</td>
<td>07/2014</td>
</tr>
<tr>
<td>Mission Hospital</td>
<td>07/2014</td>
</tr>
<tr>
<td>Mission Children’s Hospital</td>
<td>08/2014</td>
</tr>
<tr>
<td>Blue Ridge Regional Hospital</td>
<td>09/2014</td>
</tr>
<tr>
<td>Transylvania Regional Hospital</td>
<td>09/2014</td>
</tr>
<tr>
<td>Angel Medical Center</td>
<td>01/2015</td>
</tr>
<tr>
<td>Highlands-Cashiers Hospital</td>
<td>03/2015</td>
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<tr>
<td>Cape Fear Valley Hoke Hospital</td>
<td>06/2016</td>
</tr>
<tr>
<td>UNC Johnston, Clayton</td>
<td>06/2016</td>
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<tr>
<td>UNC Johnston, Smithfield</td>
<td>06/2016</td>
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<tr>
<td>Hospital Name</td>
<td>Hospital Name</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Alleghany Memorial Hospital</td>
<td>Martin County General</td>
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<td>Carolina East</td>
<td>Nash General Hospital</td>
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<td>Carteret</td>
<td>Sampson</td>
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<td>Columbus Regional</td>
<td>UNC Hillsborough</td>
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<tr>
<td>Davie Medical</td>
<td>WakeMed Apex</td>
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<td>DLP Rutherford Regional Medical Center</td>
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<td>FirstHealth Richmond Memorial Hospital</td>
<td>WakeMed Raleigh</td>
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<td>FirstHealth Sandhills Regional Medical</td>
<td>WakeMed Raleigh Children's ED</td>
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<tr>
<td>Lexington</td>
<td>WakeMed Psychiatric Observation Unit</td>
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<tr>
<td>Wilson Memorial Hospital</td>
<td>DLP Haywood Hospital</td>
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<tr>
<td>UNC Chatham</td>
<td>Novant Brunswick</td>
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<td>Novant Clemmons</td>
<td>Novant Forsyth Medical</td>
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<td>Novant Presbyterian Hospital</td>
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<td>Wesley Long Hospital</td>
<td>Annie Penn Hospital</td>
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<td>Moses H. Cone Memorial Hospital</td>
<td>Women’s Hospital – Cone Health</td>
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<td>Alamance Regional Medical Center</td>
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## Hospital Status Report as of September 2020

No Information Available

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<thead>
<tr>
<th>Hospital Name</th>
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<th>NC-STeP Model</th>
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<td>Cherokee Indian Hospital</td>
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<td>New Hanover</td>
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<tr>
<td>Onslow Memorial</td>
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<tr>
<td>Scotland Health</td>
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<tr>
<td>Wilkes Regional Medical</td>
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</tbody>
</table>
Sy Atezaz Saeed, MD, MS, FACPsych
Professor and Chairman
Department of Psychiatry and Behavioral Medicine
Brody School of Medicine | East Carolina University

Executive Director
North Carolina Statewide Telepsychiatry Program (NC-STeP)
Phone: 252.744.2660 | e-mail: saeeds@ecu.edu
Website: http://www.ecu.edu/psychiatry
Mail: 600 Moye Boulevard, Suite 4E-100,
Greenville, NC 27834
NC-STeP Advisory Council Meeting
Friday, December 4, 2020
10:30 am – 12:00 pm
Zoom Video Conferencing

Agenda

10:30- 10:35 a.m. Welcome
10:35- 10:40 a.m. Review and Approval of September 25, 2020 Minutes
10:40- 11:30 a.m. NC-STeP FY21-Q1 (Jul-Sep) Performance Data
11:30- 11:45 a.m. Update on Community-Based Pilot(s)
11:45- 11:50 a.m. Old Business
11:50- 11:55 a.m. New Business
11:55- 12:00 p.m. Announcements
12:00 p.m. Adjourn

Join Zoom Meeting
https://zoom.us/j/94650849042?pwd=Vk1uUTVEZGplQVpLVVpLZ0pmbzIMUT09

Meeting ID: 946 5084 9042
Passcode: 740485