Using Telepsychiatry to Improve Access to Evidence-Based Care

Sy Saeed, M.D., FACPsych,
Professor and Chairman
Department of Psychiatry and Behavioral Medicine
Brody School of Medicine - East Carolina University

Director
NC Statewide Telepsychiatry Program
ACKNOWLEDGEMENTS

The plan for NC-STeP was developed in collaboration with a workgroup of key stakeholders including representatives from universities, NC DHHS, hospitals/healthcare systems, NC hospital Association, NC Psychiatric Association, and LME-MCOs. In addition to the NC General Assembly appropriation of $4 million over two years to fund the program, NC-STeP is partially funded by the Duke Endowment in the amount of $1.5 million. NC DHHS provides administrative oversight of the funding.

Since 1924, The Duke Endowment has worked to help people and strengthen communities in North Carolina and South Carolina by nurturing children, promoting health, educating minds and enriching spirits.

State of North Carolina, Department of Health and Human Services,
Office of Rural Health and Community Care
N.C. DHHS is an equal opportunity employer and provider. 02/2015
Mental disorders are common

- An estimated 26.2% of Americans ages 18 and older (about 1 in 4) Americans have a mental disorder in any one year\(^1\).
  - When applied to the 2004 U.S. Census residential population estimate for ages 18 and older, this figure translates to 57.7 million\(^2\).
- The main burden of illness is concentrated in a much smaller proportion — about 6 percent, or 1 in 17 (13.2 million) — who suffer from a serious mental illness\(^1\).

Psychiatrist numbers per capita stable over time in North Carolina 1995-2013

Source: NC Health Professions Data System, Cecil G. Sheps Center for Health Services Research, UNC.

Year

Primary specialty in psychiatry include physicians indicating a primary specialty in one of the following disciplines: psychiatry, child psychiatry, psychoanalysis, psychosomatic medicine, addiction/chemical dependency, alcohol and drug abuse, tropicals, forensic psychiatry or...
Overall physician numbers however, increase over time

Data from HPDS Data System at Cecil G. Sheps Center, University of North Carolina at Chapel Hill
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, instate, 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.
Distribution of psychiatrists statewide is such that many counties have a shortage

- 29 out of 100 counties in NC have no psychiatrists
- 58 out of 100 counties have a shortage of MH services
  - According to federal guidelines, 58 counties in North Carolina qualify as Health Professional Shortage Areas because of shortages of mental health providers to meet population needs.
Unmet need for mental health professionals among counties with an overall shortage

Darker shades signify counties with a high percentage of unmet need
In recent years North Carolina has seen high emergency department admissions related to behavioral health issues and extended lengths of stays (LOS), ranging from long hours to multiple days\(^1\).

The majority of NC Emergency Departments do not have access to a full-time psychiatrist

- Currently, there are 108 hospitals with either single ED’s, or in some cases, multiple site ED’s across the state with varying degrees of psychiatric coverage.

- The majority of ED’s do not have access to a full-time psychiatrist.
How Long Does It Take to Place BH Patients From NC Hospital EDs?

Average ED Length of Stay (ALOS) for Admitted Behavioral Health Patients

- Community Hospital (Non-Psych): 14 days
- Non-acute Facility: 16 days
- Community Psychiatric Unit: 27 days
- State ADATC: 33 days
- State Psychiatric Hospital: 78 days

Source: NCHA ED Tracker. 2012 Data.
Gap between what we know and what we practice

• A large gulf remains between what we know and what we practice*.

• Large gaps also exist between best evidence and practice in the implementation of guidelines*.

• Failure to follow best evidence highlights issues of underuse, overuse, and misuse of drugs** and has led to widespread interest in the safety of patients***.

---


** Chassin MR, Galvin RW. *JAMA* 1998;280: 1000-5.

Quality of Health Care Delivered to Adults in the United States

• Only 55% chance of getting appropriate care
  – little difference among the proportion of recommended:
    • Preventive care (54.9 %)
    • Acute care (53.5 %)
    • Care for chronic conditions (56.1%)

McGlynn et al, 2003

The NEW ENGLAND JOURNAL of MEDICINE
Six Imperative Challenges in Redesigning Health Care

1. Redesign care processes
2. Effective use of information technologies
3. Knowledge and skills management
4. Development of effective teams
5. Coordination of care across patient conditions, services, and settings over time
6. Use of performance and outcome measures for CQI & accountability

Institute of Medicine. *Crossing the Quality Chasm*, 2001
Problems

• Access
• Gap between science and practice

Can telemedicine and telepsychiatry help?
Telepsychiatry can offer help!

Telepsychiatry is defined in the statute as the delivery of acute mental health or substance abuse care, including diagnosis or treatment, by means of two-way real-time interactive audio and video by a consulting provider at a consultant site to an individual patient at a referring site.
No longer just a rural area concept

- Improve Efficiency
- Expand service delivery
- Improve Outcomes
Demonstrated Benefits of Telepsychiatry
(Saeed SA, Diamond J, Bloch RM. (2011))

- ↑ access to mental health services
- ↓ geographic health disparities
- ↑ consumer convenience
- ↓ professional isolation
- ↑ recruiting and retaining MH professionals in underserved
- Improved consumer compliance.
- Improved education of mental health professionals.
- Improved coordination of care across mental health system.
- Reduction of stigma associated with receiving mental health services.
Telepsychiatry and e-Mental Health: Clinical Applications

- Diagnostic, therapeutic, and forensic modalities across the age span.
- Points of delivery may include hospitals and their EDs, clinics, offices, homes, nursing homes, schools and prisons.
- Common applications include pre-hospitalization assessment and post-hospital follow-up care, medication management, psychotherapy, and consultation.
• A typical telepsychiatry setup also includes a video camera, microphone, speakers (or headset), and one or two displays (monitors) at each end of the system.

• Often, separate displays or a picture-in-picture (if one display) are used to enable participants to see both outgoing (preview) and incoming video.

• Another consideration is pan-zoom-tilt control of video cameras.
Technical Configuration

- Mobile capability: IP technologies equipped with encryption for interactive
- Patient Room Pan/Zoom/Tilt camera w/far-end control
- Mobile desktop unit for clinic connectivity
Technology

• Historically, interactive telepsychiatry applications have used point-to-point network connections, usually as full or fractional T-1 or Integrated Services Digital Network (ISDN) circuits.

• However, the rapid diffusion of Internet and Ethernet networks has led to the development of videoconferencing systems that can work over these types of networks, i.e. Internet Protocol (IP) networks.

• Most interactive telepsychiatry applications use a minimum of 384 kbps bandwidth, regardless of whether dedicated circuits or IP networks are used.
Where to start?

- Type of TH service identified
- Equipment / network needs
- Available Telecommunication
- Available providers
- Technical and user support
- PHI transfer / MR creation
- F/U to referring provider
- Scheduling / presentation protocol
- Training of users
- ONE number call center
This statewide program was developed in response to Session Law 2013-360 directing the N.C. Department of Health and Human Services' Office of Rural Health and Community Care to "oversee and monitor establishment and administration of a statewide telepsychiatry program." (G.S. 143B-139, 4B).
Governor McCrory was at ECU in August of 2013 to announce funding of a Statewide Telepsychiatry Program (STeP) that will be housed at the ECU Center for Telepsychiatry.
If an individual experiencing an acute behavioral health crisis enters an emergency department, s/he will receive timely specialized psychiatric treatment through the statewide network in coordination with available and appropriate clinically relevant community resources.
ECU Center for Telepsychiatry is the home for statewide program (NC-STeP) that is connecting 76-85 hospital emergency departments across the state of North Carolina to provide psychiatric assessments and consultations to patients presenting at these Eds.
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
NC-STeP Status - January 2015

Hospitals live with NC-STeP

Hospitals in process of going live

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
Quality Management and Outcomes Monitoring

- All participating clinical providers:
  - Participate in a Peer review process
  - Meet quality and outcome standards
• Supports all the HIT functions required of NC-STeP
• The portal is a group of separate but related technologies that serves as the primary interface through which data is reviewed and created regarding patient encounters, including:
  – Scheduling of patients and providers
  – Exchanging clinical data for patient care
  – Collection of encounter data to support the needs of network managers and billing agents and to support timely referrals
NC-STeP Portal is a “Health Information Exchange System” with the following features:

- Direct Messaging and CCD/CCDA to deliver clinical information via DirectTrust HISP, using MU standards
- Scheduling function to match patients with providers
- Reporting of utilization, program needs, population health
- Billing data formatted and delivered to ECU Physicians
- NCHA Psychiatric and Substance Abuse Bed Board linkage
• Collaborative development process
• Using Lean/Agile techniques to help manage the project
• Key components of the process include:
  – Design Team
  – Configuration / Development
  – Testing
  – Training
  – Roll-Out Team
  – Support Team
For Method 1 Hospitals
Hospitals use the Portal directly for one or more consults for each patient encounter. The Portal securely sends the appropriate clinical, administrative, billing, and reporting data in a timely manner to the appropriate destination.

For Method 2 Hospitals
Hospitals have their own psychiatrists and billing services, and send required data elements to the Portal on a periodic basis. It is up to each hospital to follow their own workflow and generate a reliable report in the format prescribed by NC-STeP.
<table>
<thead>
<tr>
<th>Status</th>
<th>#</th>
<th>Hold</th>
<th>Elapsed</th>
<th>Arrival</th>
<th>Encounter</th>
<th>Facility</th>
<th>Locatn</th>
<th>Consit</th>
<th>Name</th>
<th>DOB</th>
<th>Contact</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending</td>
<td></td>
<td></td>
<td>0d 0h 59m</td>
<td>12/30</td>
<td>32479</td>
<td>Hospital1</td>
<td>ED</td>
<td>no. 1</td>
<td>Thomas, Joseph</td>
<td>04/21/1987</td>
<td>910-456-4577</td>
<td>Review</td>
</tr>
<tr>
<td>Pending</td>
<td></td>
<td></td>
<td>0d 0h 59m</td>
<td>04/25</td>
<td>32474</td>
<td>Hospital1</td>
<td>ED</td>
<td>no. 1</td>
<td>Douglas, Sammi</td>
<td>08/15/1998</td>
<td>910-456-4577</td>
<td>Review</td>
</tr>
<tr>
<td>Pending</td>
<td></td>
<td></td>
<td>0d 0h 59m</td>
<td>04/27</td>
<td>32469</td>
<td>Hospital1</td>
<td>ED</td>
<td>no. 1</td>
<td>Lee, John</td>
<td>06/18/1995</td>
<td>910-456-4577</td>
<td>Review</td>
</tr>
<tr>
<td>Queue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake Underway</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake Underway</td>
<td></td>
<td></td>
<td>0d 16h 32m</td>
<td>04/14</td>
<td>30474</td>
<td>Hospital1</td>
<td>ED</td>
<td>no. 3</td>
<td>Anderson, Karen</td>
<td>01/17/1985</td>
<td>910-456-4577</td>
<td>Update</td>
</tr>
<tr>
<td>Intake Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exam Underway</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consulted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billed</td>
<td></td>
<td></td>
<td>4d 20h 40m</td>
<td>04/14</td>
<td>30474</td>
<td>Hospital1</td>
<td>ED</td>
<td>no. 1</td>
<td>Anderson, Karen</td>
<td>01/17/1985</td>
<td>910-456-4577</td>
<td>Update</td>
</tr>
<tr>
<td>Billed</td>
<td></td>
<td></td>
<td>4d 20h 40m</td>
<td>04/27</td>
<td>30505</td>
<td>Hospital1</td>
<td>ED</td>
<td>no. 1</td>
<td>Duncan, Clay</td>
<td>05/17/1980</td>
<td>910-456-4577</td>
<td>Update</td>
</tr>
</tbody>
</table>
**Advance Directives**

<table>
<thead>
<tr>
<th>Directive</th>
<th>Response</th>
<th>Recorded Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are Advance Directives on file?</td>
<td>No</td>
<td>02/06/15 3:17pm</td>
</tr>
<tr>
<td>Do you have an Advance Directive?</td>
<td>No</td>
<td>02/06/15 3:17pm</td>
</tr>
<tr>
<td>Patient has Living Will?</td>
<td>No</td>
<td>09/09/14 3:37am</td>
</tr>
<tr>
<td>Patient has Medical / Health Care Power of Attorney?</td>
<td>No</td>
<td>09/09/14 3:37am</td>
</tr>
</tbody>
</table>

**Problems**

<table>
<thead>
<tr>
<th>Medical Problems</th>
<th>Problem</th>
<th>Onset Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>09/14/2014</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>Suicide and self-inflicted injury</td>
<td>09/14/2014</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>Cellulitis and abscess</td>
<td>09/14/2014</td>
<td>Active</td>
<td></td>
</tr>
</tbody>
</table>

**Medications**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
<th>Route</th>
<th>Sig</th>
<th>Days/Qty</th>
<th>Instructions</th>
<th>Order Date</th>
<th>Discontinued Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buspirone HCl</td>
<td>10 Mg</td>
<td>ORAL</td>
<td>2 times daily</td>
<td></td>
<td></td>
<td>09/09/14</td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>Venlafaxine HCl</td>
<td>150 Mg</td>
<td>ORAL</td>
<td>once daily</td>
<td></td>
<td></td>
<td>09/09/14</td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>Hydroxyzine Pamoate</td>
<td>25 Mg</td>
<td>ORAL</td>
<td>4 times daily as needed PRN anxiety</td>
<td></td>
<td>take 1-2 tabs four times daily as needed for anxiety</td>
<td>09/09/14</td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>Quetiapine Fumarate</td>
<td>50 Mg</td>
<td>ORAL</td>
<td>2 times daily</td>
<td></td>
<td></td>
<td>09/09/14</td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>Alprazolam</td>
<td>0.5 Mg</td>
<td>ORAL</td>
<td>4 times daily as needed PRN anxiety</td>
<td></td>
<td></td>
<td>09/09/14</td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>Oxycodone/Acetaminophen (Oxycodone-Acetaminophen 5-325 Mg*)</td>
<td>0 Ea</td>
<td>ORAL</td>
<td>every 4 hours as needed PRN moderate pain</td>
<td>14 Qty</td>
<td></td>
<td>09/14/14</td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>Amoxicillin/Clavulanate Potassium</td>
<td>875 Mg</td>
<td>ORAL</td>
<td>every 12 hours</td>
<td>14 Qty</td>
<td></td>
<td>09/14/14</td>
<td></td>
<td>Active</td>
</tr>
</tbody>
</table>
PSA Bed Board
North Carolina Psychiatric and Substance Abuse Bed Availability

Find Beds | Manage Beds | Manage Users | Manage Site | FAQ | Help | Logout

Find a Bed

Region: Eastern
Gender: ANY GENDER
Age: ANY
Commitment: ANY COMMITMENT
Include zero bed listings

Notice: NCHA behavioral health providers request that all referrals be initiated by a telephone call to the unit rather than a paper submission by fax or other means. Contact information can be obtained by clicking the name of the provider listed below, or by clicking here for a list of North Carolina hospitals.

Some NCHA inpatient providers have agreed to accept the Regional Access Referral Form (RARF) as a standard referral document for behavioral health patients. Click here (PDF,1MB) for a copy of the RARF form.

<table>
<thead>
<tr>
<th>Current Beds Matching Criteria Above</th>
<th>Description</th>
<th>Beds</th>
<th>Time Elapsed</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal Plain Hospital</td>
<td>Adult Acute/Substance Abuse/Detox</td>
<td>0</td>
<td>22 mins</td>
<td>55 miles</td>
</tr>
<tr>
<td>Vidant Medical Center</td>
<td>DD (MR/MI)</td>
<td>4</td>
<td>38 mins</td>
<td>21 miles</td>
</tr>
<tr>
<td>Vidant Medical Center</td>
<td>Geriatric - Psych/Med</td>
<td>0</td>
<td>38 mins</td>
<td>21 miles</td>
</tr>
<tr>
<td>Vidant Medical Center</td>
<td>Adult Psych</td>
<td>0</td>
<td>38 mins</td>
<td>21 miles</td>
</tr>
<tr>
<td>Halifax Regional Medical Center</td>
<td>Adult</td>
<td>0</td>
<td>2 hours</td>
<td>70 miles</td>
</tr>
<tr>
<td>Cape Fear Valley Behavioral Health Care</td>
<td>Adult Psych</td>
<td>2</td>
<td>2 hours</td>
<td>113 miles</td>
</tr>
<tr>
<td>Walter B. Jones Alcohol and Drug Abuse Treatment Center</td>
<td>Female Acute Care Unit</td>
<td>10</td>
<td>4 hours</td>
<td>22 miles</td>
</tr>
<tr>
<td>Walter B. Jones Alcohol and Drug Abuse Treatment Center</td>
<td>Substance Abuse - Adult - Pregnant</td>
<td>0</td>
<td>4 hours</td>
<td>22 miles</td>
</tr>
<tr>
<td>Walter B. Jones Alcohol and Drug Abuse Treatment Center</td>
<td>Substance Abuse - Adult - Mom w/Baby &lt; 1 Year Old</td>
<td>0</td>
<td>4 hours</td>
<td>22 miles</td>
</tr>
<tr>
<td>Walter B. Jones Alcohol and Drug Abuse Treatment Center</td>
<td>Male Acute Care Unit</td>
<td>1</td>
<td>4 hours</td>
<td>22 miles</td>
</tr>
</tbody>
</table>
A data collection and management system gathers program data from:

- hospitals participating in the NC-STeP
- psychiatric services providers

Each participating referral site submits monthly patient encounter data electronically to the Center.

- includes unique patient identification number, arrival date and time information, discharge date and time information, patient discharge disposition, and IVC status.
• The Center aggregates the referral site data for each quarterly reporting period and conducts analysis to determine the metrics below. Analysis is conducted for each individual site and for the program overall.
  • Total number of assessments
  • Length of stay
  • Length of stay by discharge disposition
  • Number of IVCs
  • IVC turnover rate
  • Percent of patients by discharge disposition
• The Center reports this data quarterly and develops ongoing procedures (graphs, charts, progress reports) so that these metrics can be monitored and compared over time to assess the program outcomes and monitor program quality.
Total Number of ED Telepsychiatry Patients by hospital - for January - December 2014

Number of Telepsychiatry Patients by Hospital
Percent of ED Telepsychiatry Patients by Discharge Disposition
January - December 2014

- Home: 39%
- Transfer: 52%
- Admit: 5%
- Against Medical Advice: 3%
- Other: 1%
Percent of Telepsychiatry Patients by Discharge Disposition
Jan - March 2015

- 49% Home
- 41% Against Medical Advice
- 9% Admit
- .7% Transfer
- .1% Other
Median Length of Stay for Jan 2014 – Dec 2014 = 23.6 Hours

62% percent of patients Had a LOS of 30 hours or less

NC STeP January - December 2014
Number of Patients by LOS Category (in hours)
Median Length of Stay in Hours

- Nov-Dec 2013: 16.5 hours
- Jan-March 2014: 23.3 hours
- April-June 2014: 24.6 hours
- July-Sept 2014: 26.6 hours
- Oct-Dec 2014: 18.9 hours
- 12 Month Period Jan-Dec 2014: 23.6 hours

Source: East Carolina University, Center for Telepsychiatry
How Long Does It Take to Place BH Patients From NC Hospital EDs?

Average ED Length of Stay (ALOS) for Admitted Behavioral Health Patients

- Community Hospital (Non-Psych): 14
- Non-acute Facility: 16
- Community Psychiatric Unit: 27
- State ADATC: 33
- State Psychiatric Hospital: 78

Source: NCHA ED Tracker. 2012 Data.
NC STeP: Number of IVCs for Participating Hospitals
by Quarter and for Year 2014

- Nov-Dec 2013: 367, 102
- Jan-March 2014: 369, 70
- April-June 2014: 729, 202
- July-Sept 2014: 832, 213
- Oct-Dec 2014: 817, 153
- 12 Month Period Jan-Dec 2014: 3099, 666

Legend:
- Blue: Number of IVCs
- Red: Number of IVCs Turned Over
IVCs - By Release Status - January - December 2014

- 79% released
- 21% not released
IVCs - by Release Status
January - March 2015

- 73.3% released
- 26.6% not released

[Chart showing 73.3% for released IVCs and 26.6% for not released IVCs]
Satisfaction Survey: End of Year-1 Results

Telepsychiatry consults have improved patient care in our ED

Patients are generally cooperative during the telepsychiatry consult

Patients appear comfortable using the system to talk with the doctor
NCSTeP
CHARGE MIX
CALENDAR YEAR 2014
(based on initial status)

Blue Shield, 4.9%
Commercial, 9.8%
Medicaid, 12.0%
Medicare, 21.7%
Other, 19.5%
Self-Pay, 32.0%
## Who are the beneficiaries? (Who should pay for it?)

<table>
<thead>
<tr>
<th>Entity</th>
<th>Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients and Families</td>
<td>How to quantify reduced distress/disability, functional improvement, quality of life, gainful employment, etc.</td>
</tr>
<tr>
<td>Communities</td>
<td>How to quantify better &quot;citizenship”, reduced homelessness, crime reduction, more self reliance, etc.</td>
</tr>
</tbody>
</table>
| NC-Medicaid + “Indigent Care” (? MCOs)      | NC State projected cost savings from over turned IVC's for self-pay and Medicaid = $4,441,239  
Cost savings from reduced recidivism = ?  |
| Third Party Payors                          | Projected cost savings from overturned IVC's = $1,133,261  
Cost savings from reduced recidivism + ?   |
| Sheriff Department                          | Projected cost savings to Sheriff Department from overturned IVCs= $535,404                                                                                                                                 |
| Hospitals                                   | Costs savings from increased throughput in the ED.                                                                                                                                                           |
Opportunities

• While telepsychiatry makes it possible to transcend geographical boundaries and utilize workforce nationally, even globally, we’ll never be successful in resolving NC workforce shortages if our MH workforce was located outside our geographical boundaries.

• We must build capacity for caring for these patients in our communities.
  – Creating collaborative linkages across continuums of care

• NC-STeP can be expanded to taking care of patients in community-based settings.
Opportunities

• NC-STeP is positioned well to create collaborative linkages and develop innovative models of mental health care:
  • EDs and Hospitals
  • Communities-based mental health providers
  • Primary Care Providers
  • FQHCs and Public Health Clinics
  • Others

• NC-STeP web portal, accessible by participating providers, as a central point for coordinated care.
• Evidence-based practices to make recovery possible.
Opportunities

• The current program is not funded for seizing the opportunities to build capacity by:
  – taking care of patients in community-based settings.
  – creating collaborative linkages across continuums of care

• NC-STeP has the capability, and workable models, to expand to the community-based settings, if funded.
Contact

Sy Saeed, M.D., M.S., FACPspych
Professor and Chairman
Department of Psychiatry and Behavioral Medicine
Brody School of Medicine  |  East Carolina University

Director
North Carolina Statewide Telepsychiatry Program (NC-STeP)

Phone: 252.744.2660  |  e-mail: saeeds@ecu.edu  |  Website: http://www.ecu.edu/psychiatry
Mail:  Brody School of Medicine, 600 Moye Boulevard, Suite 4E-100, Greenville, NC 27834
NC-STeP
STATEWIDE TELEPSYCHIATRY PROGRAM