State of the State: Telehealth in South Carolina

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I have no financial conflicts of interest to disclose.
….the practice of medicine using electronic communications, information technology, or other means between a licensee in one location and a patient in another location…..

-S. 1035: South Carolina Telemedicine Act (2016)

National Trends in Telehealth

The global market is projected to reach over $19.5 billion
US Telehealth adoption, 2017 (n=138)

Comparing the results of HIMSS’ 2014 and 2017 surveys shows that a surge in telemedicine adoption has occurred since 2016. In 2014, adoption was 54%, with a 3.5% annual growth until 2016. Since 2016, study results indicate that adoption has increased 9%.

2017 Inpatient Telemedicine Study. HIMSS Analytics 2017; available at: http://www.himssanalytics.com

Telehealth for efficient, effective care

To Improve the health of all South Carolinians
Telehealth is happening every day, all the time in South Carolina.

112,000+
Real-time video interactions

348K+
Telehealth patient interactions in 2018
Hospital-based Care

Enables
- Regional "Sub-Hub" partnerships for expedited triage
- Shared staffing across health systems

Partnering for Regional Coverage

85% telesroke patients remain in their community for treatment
Managing Across the Continuum of Care

Inpatient teleneurology and EEG services
- Reduced transfer rate (20.2% Vs. 29.4%, P<0.001)
- Cost savings of nearly $5000 per patient

Telehealth Follow-Up Clinic
- Dedicated virtual clinic with regional affiliate health systems

The Impact Of Inpatient Teleneurology Follow Up Consults For Acute Stroke Patients on Transfer Rate and Cost-Reduction
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Best practices and Quality Data Sharing

Sharing of anonymous process metrics
- Ongoing data monitoring
  - tPA delivery times
  - Post tPA process checks
  - Administrative compliance
- Monthly reporting
  - Door-In-Door Out Report
  - Bleed rates
  - Length of stay
  - Disposition and discharge NIHSS
- Quarterly
  - Blinded data sharing across sites
  - Stroke rates and tPA delivery %
  - Transfer rates
  - Thrombectomy rates
  - 90 Call Backs
Focus on Outcomes

Impact of Telestroke Exposure on Outcomes
Adjusted Relative Risk Ratio and 95% CI

- Received IPA
- Received EVT
- In-Hospital Mortality
- Discharge to IRF
- Discharge to SNF
- Discharge to Home

Department of Mental Health

- 18 telepsychiatrists
- 650 comprehensive evaluations per month
- 31% of telepsychiatry patients received 30-day follow-up care vs. 14% in the control group
- $2,300 cost savings per emergency department visit
Department of Mental Health

COMMUNITY TELPSYCHIATRY PROGRAM

Many SC DMH community mental health centers operate clinics in rural counties that are distant from the main center. Telepsychiatry allows psychiatrists based at the main centers to serve outlying clinics without having to travel to those locations. SC DMH’s community mental health system includes approximately 40 outpatient sites.

1,700 psychiatric services per month

SC DMH Scope of Services

- DMH Centers
- DMH Clinics

MEDICATION-ASSISTED TREATMENT (MAT)

300+ patients in 2018 were able to receive lifesaving MAT services via telehealth.
9,483
SC patients monitored

306
lives were potentially saved *

*according to actual vs. predicted mortality statistics

Tele-ICU Monitoring Continues to Expand Across South Carolina

54,659
tele-ICU video assessments conducted in 2018

19,502
tele-ICU program clinical interventions in 2018

694
tele-ICU program emergency responses in 2018

*Data not included
School-Based Telehealth

Number of South Carolina schools with telehealth capability*

*Services vary by county to include acute care and chronic disease management, mental health, group health education, and individual education plan consultation.

Counties with School-Based Telehealth
School-Based Telehealth

Demonstrated a **22% reduction** in ED visits for children with asthma

Tiered Call Pool Workflow

1. **School nurse requests visit**
2. **Priority 1 providers alerted**
3. **Priority 2 providers alerted**
4. **Priority 3 providers alerted**
Efficiency Metrics: Monthly Snap Shot

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Provider Response Time</td>
<td>8 minutes 52 seconds</td>
</tr>
<tr>
<td>Average Duration of Visit</td>
<td>16 minutes 8 seconds</td>
</tr>
<tr>
<td>% of Priority 1 Providers Taking Case</td>
<td>93%</td>
</tr>
<tr>
<td>% of Priority 2 Providers Taking Case</td>
<td>7%</td>
</tr>
<tr>
<td>% of Priority 3 Providers Taking Case</td>
<td>0%</td>
</tr>
</tbody>
</table>

Remote Patient Monitoring

- Centralized Nurse Monitoring
- Primary Care
- Primary Care
- Primary Care
Telehealth in the Medical Home

- In-Clinic Video consult
- Medical Home
- Case-based Mentoring Consultation
- Regional Specialty Clinics
- eConsult

Telementoring
Telehealth in the Medical Home

Annual Number of Outpatient Consultations

1,700+ consultations

OT Nutrition Services
- Allows providers to collaborate and bring specialty care to patients in need.
- Reduces barriers by allowing space easily accessible to both patient and provider.
- Services are available to both pediatric and adult populations.
- Most Registered Dietitians live and work within the 3 major metros
  - ≥ 80% of this county’s adults are overweight or obese
  - ≥ 70% of this county’s adults are overweight or obese
Nutrition Counseling Visit Compliance

**Percent Patient Attendance at Initial Visit**

- Telenutrition: 68%
- In-person Nutrition: 60%

**Percent Return Visits Attendance**

- Telenutrition: 50%
- In-person Nutrition: 20%

E-consults

- My patient needs to see a specialist about a specific clinical issue.
- I have a clear clinical question for a specialist to help me manage my patient's care plan.
- I appreciate having an enhanced referral, where the POP can help work the most out of the in-person visit.
- I help the POP with my recommendations, so that the POP can continue managing the patient's care.

Figure 2. Higher eConsults, Fewer Low-Complexity Specialty Visits

- Total new visits with E&M of 1, 2, or 3
- Total eConsults
Patient Engagement Cycle

At-risk Population

Text-based "light touch" outreach

Prevention need identified

Triage to care with virtual option

Platform integration with EHR and care system

Prescribed virtual management

High engagement, prescribed virtual care
(Virtual check in, RPM, Prescribed App)

Outreach and Screening

Soft Touch Entry

Text-based Services: Telehealth Resiliency and Recovery Program

TRRP: A 5-Step Program

STEP 1  EDUCATE AND ENROLL PATIENTS IN TRRP
Meet patients admitted to our Level I Trauma Center who have experienced a Level A or B traumatic injury; provide education about mental health recovery after traumatic injury and enroll in 10-day follow-up screen.

STEP 2  TRACK EMOTIONAL RECOVERY
Enroll patients in our automated text-message symptom monitoring service so that they may track their emotional recovery in the 10-day period between discharge and phone screen.

STEP 3  30-DAY MENTAL HEALTH PHONE SCREEN
Mental health telephone screen with patients (or caregivers of young children); refer positive screens for comprehensive mental health assessment.

STEP 4  COMPREHENSIVE MENTAL HEALTH ASSESSMENT
Full diagnostic assessment provided in-person or via home-based telehealth (based on patient's preference).

STEP 5  DELIVERY OF BEST PRACTICE TREATMENT
Best-practice mental health treatment for post traumatic stress disorder, depression, or related conditions provided in person or via home-based telehealth (based on patient's preference).
Direct-to-Patient

Telehealth Visit Time of Day

| Day | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Sun |  3|  4|  1|  4|  2|  8|  1| 11| 25| 28| 43| 42| 21| 28| 20| 16| 17| 15| 12| 14| 14|  9|  4|  2|
| Mon |  2|  1|  3|  2|  9| 14| 28| 56| 64| 52| 40| 32| 41| 36| 26| 19| 17| 12|  9| 13|14|  7|  7|
| Tue |  4|  4|  1|  1|  6| 20| 33| 65| 55| 64| 41| 55| 50| 36| 30| 30| 25| 17| 17| 13| 12|  8|  5|  2|
| Wed |  7|  1|  6|  7| 14| 27| 64| 34| 10| 35| 40| 27| 29| 26| 30| 23| 10| 10| 15|  9|  4|  7|
| Thu |  4|  4|  1|  2| 13| 27| 40| 61| 43| 42| 36| 34| 31| 22| 21| 26| 14| 11|  9|  4|  9|  2|
| Fri |  4|  2|  3|  4| 17| 27| 55| 59| 48| 41| 31| 30| 26| 16| 12|  6| 11|  6|  5|  2|  7|
| Sat |  4|  1|  1|  5|  5| 16| 24| 34| 29| 26| 14| 18| 12| 14| 14|  7|  6| 10| 10|  4|  9|  3|

VIRTUAL URGENT CARE

South Carolina Virtual Care Visits
Greenville Health System, McLeod Health, MUSC Health, Palmetto Health

What Patients Value Most about SmartExam
- Received care quickly
- Affordable
- Through interview
- Avoided travel time
- Avoided going to clinic
- Care was delivered by my health care provider
- Other

MUSCHealth
Changing What's Possible | MUSCHealth.org
Linking Virtual Urgent Care to Virtual Wellness

Remote Patient Monitoring

“Pool” Urgent Care Providers

Consumer

Primary Care Home

Patient

Consumer

Patient

35

36
Remote Patient Monitoring

29 different clinics are participating in this program. To date, 760+ patients have enrolled in the program.

REMOTE PATIENT MONITORING FOR PREGNANT MOTHERS

850 expecting mothers used the BabyScripts app in 2018
Medicare Reimbursement

- A rural Health Professional Shortage Area (HPSA) located either outside of a Metropolitan Statistical Area (MSA) or in a rural census tract; or
- A county outside of a MSA

Only 54% of South Carolina Zip Codes are eligible for Medicare Telehealth Reimbursement

2018 MedPAC report:
- utilization still low
  - (0.3% of Part B beneficiaries)
- significant growth in Medicare
  - (79% increase from 2014-16)

Telehealth Medicare Eligible

*Zip code eligibility determined by HRSA Medicare Telehealth Payment Eligibility Analyzer

Telehealth Expansion Waiver

Next Generation ACO Model

- Eliminates rural geographical restriction
- Allows patient’s home as an eligible site
- Allows use of asynchronous telehealth services (e.g. telederm and ophthalmology)
CMS Telehealth – CY2019 Physician Fee Schedule

- **Brief Communication Technology-based Service, e.g. Virtual Check-in**
- **Asynchronous Remote Evaluation of Pre-Recorded Patient Information**
- **Interprofessional Internet Consultation**
- **Additional Proposals**

Reimbursement Advocacy Priorities

**Patient Location**

- Medicare Rurality Restrictions: Understanding there are many barriers to care in addition to a patient’s location, the SCTA urges Medicare to remove geographic restrictions based on rurality.

- Originating Site Facility Fee: To prevent a financial disincentive for using telehealth within primary care settings, the SCTA urges government and private payers to provide a facility fee payment amount that is equivalent to the Medicare reimbursement of $25.76 in order to cover the cost of the visit for the primary care provider.

- Homes as Originating Sites: The SCTA urges all payers to include the patient’s homes as a covered originating site for live video with providers. Connecting with patients via video, in the home has proven to be useful and beneficial for follow-up care for chronic conditions, such as COPD. In home video visits are also beneficial for urgent care needs.
## Reimbursement Advocacy Priorities

### Provider Type

Government and private payers are urged to expand their lists of covered providers who regularly provide care for patients, to include:

- Physician assistants
- Nurse practitioners
- Nurse mid-wives
- Clinical psychologists
- Master’s degree level mental health providers (example: LSW-CF)
- Registered dieticians
- Physical therapists, occupational therapists, and speech language pathologists

### Service

- **Mobile Health:** Government and private payers are urged to begin covering store and forward telehealth modality, specifically online visits (asynchronous), for urgent and on-demand care. There are several commercial companies that connect patients to national providers, but the SCCTA supports the use of online visits with South Carolina providers to ensure coordinated care.

- **Remote Patient Monitoring:** Private payers and Medicaid are urged to follow Medicare’s coverage of remote patient monitoring to better manage patients with chronic conditions.

- **e-Consults:** The SCCTA urges government and private payers to cover services rendered between primary care providers and specialists using e-consult platforms. e-Consults have the potential to provide relief for specialty shortages and can improve the current PCP specialist referral process.
In Conclusion……..