Building New Systems of Care: Training the Next Generation on Telehealth Best Practices
DISCLOSURE: We disclose that we have no relevant financial relationships with commercial interests.

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Telehealth Education
MUSC Center for Telehealth

@MUSCTelehealth
Objectives

1. Define ways in which telehealth education can support the development of clinical services and IT support models.
2. Apply interprofessional team principles to the provision of healthcare services through telehealth supported care.
3. Integrate curriculum across academic health enterprise through all levels of leadership, providership and scholarship.
4. Utilize education processes within the telehealth service development framework to ensure continuous quality improvement.
MUSC Health - Center for Telehealth

• Based at South Carolina’s only comprehensive academic medical center
• Over a decade of experience with telehealth initiatives (MFM, telestroke, telepsych)
• In 2013 - funded by SC Legislature to:
  1) Create a statewide telehealth network
  2) Expand telehealth initiatives throughout SC
South Carolina Telehealth Alliance Strategies

1) Technical Infrastructure (open-access telehealth network)
2) Respond to underserved and rural
3) Service Development
4) **Education and training**
5) Organizational structure
6) Marketing (telehealth awareness)
7) Sustainability (payer engagement)
The Role of Telehealth Education

South Carolina Telehealth

@MUSCTelehealth
Telehealth Education Modalities

- **In-Person**
  - Roundtables
  - Hands-On Demos
  - Mock Calls
  - Facility Tours

- **Synchronous**
  - Videoconferences
  - Case Presentations
  - Simulations

- **Asynchronous**
  - Online Modules
  - Recorded Programs
  - Mobile App Content

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Providers  Learners  Patients
Why is Telehealth Education Important?

- Telehealth education is part of an ecosystem of clinical, research and administrative services
- Education can be the great equalizer
- The demonstration of education about technology through technology serves as a gateway to de-mystify the process
- Telehealth education can be seen as a low stakes investment
- Telehealth is an evolving area of science and application
- Baseline and continuing education are required for future and current providers
Additional Concepts

• Examples include:
  • Continuing education for healthcare providers related to Telehealth applications, processes and equipment
  • Trainee education related to the history and current provision of Telehealth services
  • Community and patient education about how Telehealth services can be accessed locally
  • Partner education about lessons learned from program and service development
How is Telehealth Education Provided?
Connectivity and Applications

- **Broadband Connectivity**
  - Palmetto State Providers Network
  - FCC-Funded Network - Launched in 2008
  - Hospitals, FQHCs, EMS Hubs, Provider Offices

- **Web-Based Services**
  - WebEx
  - Jabber
  - Vidyo
  - Learning Management Systems

- **Mobile Apps**
  - Patient & Consumer Apps
What Does Telehealth Education Look Like in South Carolina?
Our Ecosystem

- Undergraduate Students
- Health Professions Students
- Graduate Medical Education Residents
- Practicing Healthcare Providers
- Community Members: Patients & Caregivers
WHAT: Interprofessional Telehealth Course – Six Colleges

WHY: Demonstrated Need to Train Workforce of Tomorrow

HOW: Online & Telehealth Learning Commons

NEXT STEPS: Resident Education & Curriculum Integration
Practicing Providers

Types of Educational Offerings:
• Privileging and credentialing
• Competency check-off - Roundtables
  • Equipment
  • Processes
• Best practices for tele-presenting and teleconsulting
• Continuing education specific to telehealth programming and evidenced-based practice
• Telehealth simulation education to extend medical decision-making training
Strategy
Define scope of the service
- Condition(s)
- Location of the patient
- Type of providers
- What problem is being solved?

Information Technology Infrastructure Library

Design
- Clinical
  - Protocols
  - Workflows
  - Test Scripts
- Technology
  - Equipment and Site Assessment
  - Procurement
  - Installation
- Administrative
  - Legal
  - Credentialing - Regulatory
  - Billing - Compliance
- Outcomes
  - Performance Metrics
  - KPI Tracking
  - Outcomes Reporting

Transition
- Training
  - Equipment
  - Workflow
- Mock Calls
  - Technology Pre-check
  - Dedicated Support
- Go-Live
  - Dedicated IT Support
  - Dedicated Operational Support

Operations
Meet the needs of the customers!
ITIL Service Timeline

1. Initial Request
2. Director Meeting
3. Service Pre-Check
4. Internal Meeting
5. Workflow, System Changes, Compliance, etc.
6. 1:1 w/ Systems Education
7. Training Roundtable
8. Launch Status Check
9. Go-Live
10. Post Go-Live Review
Training Roundtable Timeline…Countdown to Go-Live

4-3 Weeks Prior: Systems Education
1:1 system specific trainings

2 Weeks Prior: Training Roundtable
- Scope of Practice Guidelines
- Billing Review
- Workflow
- Care Coordination
- Telepresenting/consulting
- Quality Improvement
- Continually Updated Resources
- Equipment & Software Training
- Mock Calls

1 Week Prior: Mock Call
Mock call between provider and site

Go-Live & Post Go-Live
- Go-Live
- Post Go-live Review
- Continual Service Improvement
# Training Roundtable: RACI Matrix

<table>
<thead>
<tr>
<th>Pre &amp; Post Roundtable</th>
<th>Roundtable Components</th>
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<tbody>
<tr>
<td>Schedule Roundtable</td>
<td>ICCE Coordinator</td>
</tr>
<tr>
<td>Post Go-Live Review</td>
<td>A/R</td>
</tr>
<tr>
<td>Systems Educator 1:1</td>
<td>A</td>
</tr>
<tr>
<td>Scope of Practice Guidelines</td>
<td>A/R</td>
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<tr>
<td>Billing Review</td>
<td>A/R</td>
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<td>Care Coordination</td>
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<tr>
<td>Telepresenter and Teleconsultant Responsibilities*</td>
<td>A/R</td>
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<tr>
<td>Quality Improvement Protocols</td>
<td>A/R</td>
</tr>
<tr>
<td>Continually Updated Resources</td>
<td>A/R</td>
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<tr>
<td>Equipment &amp; Software Training</td>
<td>A/C</td>
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<tr>
<td>Mock Call(s)</td>
<td>A/R</td>
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<tr>
<td>Training Documentation</td>
<td>I</td>
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</tbody>
</table>

**Legend:**
- R = Responsible
- A = Accountable
- C = Consented
- I = Informed
Trainees:

Types of Educational Offerings:

• Interprofessional education for health professions trainees
  • Includes students from all six of MUSC colleges
  • Telehealth Team of the Future focuses on changing systems of care
  • Launched in 2014 – Transitioned to a year-round, online course
  • Includes Experiential Component and Team Project
  • Expanded to Health Systems Module in Fall 2018

• Graduate Medical Education
  • Based off Interprofessional curriculum
  • Piloted with Internal Medicine (IM)
  • Expanding to all IM three years and other residency programs
  • Includes Experiential, Shadowing and Certification Components
Patients and Communities:

Types of Educational Offerings:
• In-Person training before discharge with mobile/home monitoring equipment
  • Diabetic Home Monitoring
  • Chronic Heart Failure Management
  • Weight Management
• Mobile App Education
  • Smoking Cessation
  • Pediatric Burn
• Video Conferencing
  • Community Health Conferences
  • Follow-Up Consultations
What Have Been the Translatable Outcomes in South Carolina?
ITIL Continuous Service Improvement Process

Education has a role across all ITIL processes:

- Assists with service design through benchmarking
- Validating workflows
- Keeps services up-to-date
- Provides refresher training
- Ensures built-in opportunities for quality improvement check-ins
- Informs future service development processes
Practicing Providers

Levels & Modalities of Training:
• Education developed and disseminated using multiple modalities
  • Meet learners where and how they want to learn
  • Empower providers to incorporate telehealth processes into their workflow
• Levels of training based on providers’ needs
  • Privileging & Credentialing
  • Competency Check-Off
  • Evidence-Based Practice

Continuing Professional Development:
• Exposure to new modalities of education – tele-simulation training
• Inclusion of new teams of learners – enhanced quality improvement models
Trainees:

• Health Professions Trainees
  • High-levels of IP course satisfaction and self-reported knowledge gain
  • Additional degree programs utilizing elective course
  • Students who entertain other career options in rural and underserved settings

• Graduate Medical Education
  • Residents who want more – more opportunities for training and practice
  • Extension of activities to three years with a formal “sign-off”
  • Opportunities for residents to assist faculty with program development

• Fellows and Interns
  • Research and Clinical Rotations
  • Community Projects – Presidential Scholars
Assessing & Meeting the Need for Trainees

- Challenges include training programs across multiple disciplines and levels (BSN→MD→PhD)
- Baseline knowledge level of trainees is NOT increasing
Knowledge Gain & Potential Career Impact

I would rate my ability to utilize telehealth as part of my current or future clinical, educational or research practice as:

Pre
Post

I would rate my ability to explain how current telehealth applications have contributed to healthcare as:

Pre
Post

Self-Reported Learner Survey Themes – “I Will Use Telehealth To…”

1. Collaborate with external professionals and improve rural access
2. Expand horizon for care delivery and innovation
3. Improve clinical, quality and patient outcomes

http://www.muschealth.org/telehealth
Patients and Communities:

Patients Report:

- Reduction in clinical visits for dressing changes for pediatric burn patients
- Access to educational services for weight loss in their doctor’s offices
  - Majority had not previously had access to any weight/wellness program
  - Benefits for whole family through shared educational experience
- Ability of newly diagnosed diabetic patients to watch “prescribed” videos
  - Reduces initial time for adjustment of diet
  - Allows for more tailored follow-up with dietician
- Allows for community programs to be attended by larger and more diverse groups
  - Ongoing programs on prostate cancer, care transitions, population health
What Are the Opportunities Going Forward?
Optional Verses Required

Telehealth Education Programs are Currently Optional In Many Settings:

• Good way of engaging community providers and extending relationships
• Initiating demos and training can help with program feasibility assessment and recruitment
• Can “walk before you run” – provide patient education and then level-up to consults
• Innovative way to work towards population health goals through team-based collaboration

Telehealth Education Is Becoming Required for Practice:

• State/Federal Legislative Requirements
• Higher Education Accrediting Standards
• Joint Commission Standards
Strategic Opportunities and Collaboration

Robust Telehealth Education Programs Enable:

• Leadership through Content Expertise
• Collaboration through “Low-Stakes” Program Development
• Establishment of Technology and Process to Support Distant Communication
  • Can use low-cost and asynchronous applications
  • Add functionality as programs evolve
• Shared Knowledge-Base of Continuing Education
• Provider-to-Provider Engagement
• New Populations of Patients and Research Participants
• Customized Initiatives Centered on Community Needs
• Early “Wins” that Lead to Sustainable Partnerships
Connect with Us

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