Building a Statewide Telehealth Network

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The Tale of Two Pineapples
The Scene

- South Carolina is a small state – 40th in U.S. by size
- Pockets of urban/suburban/rural areas – 24th in U.S. by population
- Health rankings:
  - 43rd in U.S. for overall health
  - Low high school graduation rates
  - High levels of obesity – 42.5% of black residents
  - High incidence of preterm births – ranked 47th in low birth weight
  - High levels of violent crime

Source: America’s Health Rankings
South Carolina’s Population Density

Source: U.S. Census, 2010
Our Story – Building Infrastructure

- South Carolina AHEC

- Palmetto State Providers Network
  - Federal Communications Commission/Universal Service Administrative Company
  - FRC, LLC – SCANA Corp/Palmetto Net

- Academic Medical Schools
  - Medical University of South Carolina
  - University of South Carolina

- Rural, Urban & Tertiary Hospitals
Building a Healthcare Superhighway

- Palmetto State Providers Network (PSPN)
  - Initially Funded in 2009 - $9.5 million
  - FCC Rural Health Pilot Program and USAC
  - Dedicated Broadband Connections for Healthcare Delivery & Education
- Originally Connected 57 Individual Locations Across South Carolina. Today, Healthcare Connect Fund:
  - 34+ hospitals and healthcare systems
  - 42+ FQHCs
  - 11+ educational/other providers
- FCC Funds Cover 65% of Costs for Eligible Locations
PSPN – The Fast & Secure Lane

- Private Broadband, Symmetrical Commodity & Internet2 Connectivity
- Dedicated Video Traffic & Video Bridge
- Scalable Service
  - 10 Mbs – Base
  - + 10 Mbs Increments
- Layer 2 & 3 Circuits – Connectivity to Health Information Exchanges
- HIPAA and FERPA Compliant
Telehealth On-Ramp

- Education
  - Gateway to Telehealth
  - Non-Threatening & Optional
  - Address Long Standing Access Issues

- Clinical Services
  - Access to Specialist
  - Emergency Consults – Stroke, OB, Mental Health
  - Improved Care Coordination

- Research
  - Wider Participation of Study Participants
  - Examination of Telehealth Technologies to Deliver Services
Our Educational Reach

- Community Members: Patients & Caregivers
- K12 & Undergraduates Students
- Health Professions Students
- Practicing Healthcare Providers
- Graduate Medical Education Residents
SC AHEC – On the Bus

- HRSA Funded Equipment Grant – 2010

- Collaboration of the South Carolina AHEC System
  - Program Office at MUSC
  - Four Regional Centers
  - Rural & Underserved Hospitals
  - Academic Medical Centers
  - PSPN Partner Organizations

- South Carolina Health Occupations Outreach Learning System (SCHOOLS)
SCHOOLS: Then and Now

2011
- 25 Locations
- 68 Programs
- >700 Participants
- Programming for Healthcare Professionals
- Support of Telehealth Initiatives

2014
- 52 Locations
- 161 Programs
- >2,800 Participants
- Programming for Healthcare Professionals, Students, Patients and Community Members
- Leading Telehealth Initiatives
Examples of Ongoing Initiatives

- South Carolina College of Pharmacy – Grand Rounds
- MUSC Pediatric Morning Report for Community Providers
- TITAN Case Presentations – Medical Management of HIV/AIDS
- Emergency Management System – Quality Improvement Programs
- APRN Monthly Update – Practicing Providers
- American University of Beirut Medical Center – Baliant Training
- Bench to Bedside - Undergraduate Health Career Preparation (7 Colleges and Universities Statewide)
The Magic Behind the Curtain

- Approval to Offer Professional Credits Through Distance and Online Programs
- Online Registration Portal
  - User Login
  - Registration
  - Pre-Post Tests/Evaluations
  - Certifications
- Network and Technology Improvements
- Faculty Engagement and Speaker Buy-In
Improving Care & Access

Data shows that these programs contribute to:

- Improved knowledge
- Practice improvement
- Provider engagement
- Provider recertification
- Cost/Time Savings
- Patient and caregiver support
Opportunities for Partnership

- Internal & external funding through grants
  - Obesity Management – Practice Group Consults
  - Oral Health – Specialty Consultations

- Specialized outreach efforts for specific diseases and patient populations

- Support for emerging telehealth networks (training, meetings)

- Better understanding of technology by communities, providers, funders and legislators
New Partners

- Expansion of PSPN Facilities:
  - Healthcare Systems
  - FQHCs/Rural Health Clinics
  - Private Practices

- Palmetto Care Connections – HRSA Telehealth Resource Center Technical Assistance Grantee

- State Appropriation - $14,000,000
  - Creation of Center for Telehealth at MUSC – State Coordinating Entity
Gateway to Telehealth – Addressing Needs

- Tele-education activities support providers and patients
- Provides real-time access to evidence-based advances
- Helps support practice changes occurring with telehealth and electronic health records
- Eases participants into the use of the technology for telehealth communication
- Creates new partnerships between knowledge centers and community practices
Center for Telehealth Initiatives

- REACH MUSC Telestroke
- Pediatric Emergency and Critical Care Telehealth
- Critical Care Outreach (Tele-ICU)
- Telemental Health
- Teleneurology & TeleEEG
- School Based Telehealth
- Maternal Fetal Telemedicine
- Virtual Tele Consult
- National Crime Victims Research & Treatment Center
Telehealth “Wins”

• Stroke Care
  • 24/7 Stroke Consultations Save Lives and Improve Outcomes
  • 4,651 Patients Have Received Stroke Care Since 2008
  • 809 Patients Have Received tPA Treatments
  • Since the Program’s Inception, the Number of Patients Within a 60-Minute Drive of a Certified Stroke Center has Increased from 38% to 76%

Time = Brain
Telehealth “Wins”

- Critical Consults
  - Pediatric Emergency and Critical Care Telemedicine to Community ER’s
  - Provide Critical Care Specialist Support at the Time it is Needed Most
  - Speak Directly to Children and Their Families Prior to Transfer
  - Reduce Unnecessary Transfers and Air Transports (Helicopter Transport Cost Over $10,000 per Transfer)
Telehealth “Wins”

- High-Risk Maternal Medicine
  - 50 more babies born at term over four years
  - Reduction of $1.2M in Health Care Costs
    - Maternal Care
    - Neonatal Care
    - Pediatric Care
- Potential Decrease in Special Needs Children
- Expansion of services in Family Medicine and Internal Medicine Provider Offices Across 8 County Area Through DHHS Appropriation
Challenges & Opportunities

- Recognizing and Diffusing Turf Conflicts
- Lack of Connectivity to Remote Providers
- Lack of Parity in Third-Party Reimbursement
- Different Levels of Technical and Educational Expertise Across Facilities
- Reduced Federal Subsidies – Pilot Program to Healthcare Connect Fund
- Evolving Business Models
Challenges & Opportunities

- Standardization and Capacity of Platforms and Peripherals
- Confluence of ACA and EHR Implementation
- Licensing and Credentialing (Big Strides with Credentialing By Proxy)
- Identification of Priority Areas
- Integration of Silos
- Workforce Capacity, Supply and Demand Models
Not Reinventing the Wheel

- Leveraging Existing Resources to Offer New Services and Applications
- Utilizing Telehealth Champions
- Extending Services – Not Always Developing New Ones (Choosing the Right Tool for the Need)
- Recognizing the Multi-Faceted Components of Telehealth
  - Education (Student and Practicing Provider)
  - Research
**Reinventing the Wheel – What’s Next?**

- Increased Support for Hospitals and Providers
- New Models of Education, Clinical Care and Research
- Shorter Time Between Development & Dissemination
  - Bench to Bedside Research
  - Clinical Partnerships
  - Educational Programming – Health Care Reform to Ebola
- Better Health Outcomes
Come Visit!

- [www.scahec.net/schools](http://www.scahec.net/schools)
- [www.muschealth.org/telehealth](http://www.muschealth.org/telehealth)
- [www.palmettocareconnections.org](http://www.palmettocareconnections.org)
- [www.pspnsc.org](http://www.pspnsc.org)