

University of Virginia Center for Telehealth

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Definition

The use of technology to enhance access to health care, to improve public health, and to support health-related education using communications services

- *Live interactive videoconferencing*
- *Store and forward technologies*
- *Remote patient monitoring*
- *Health related distance learning*
- *Telehealth is not a specialty in and of itself!*

Benefits of telehealth

- **Patients:**
 - Timely access to locally unavailable services*
 - Enhances patient choice*
 - Spared burden and cost of transportation*
- **Hospital systems**
 - Reduce readmissions*
 - Improve triage, keep patients local*
 - Improve quality indicators*
- **Health professionals (workforce shortages)**
 - Access to consultative services and CME*
 - Evidence based models of care*
- **Public health**
 - Emergency preparedness*
 - Disease surveillance*



UVA Center for Telehealth

- *Integrated program across the service lines and schools within the University that facilitate our missions of:*

Clinical Care

Teaching across the continuum

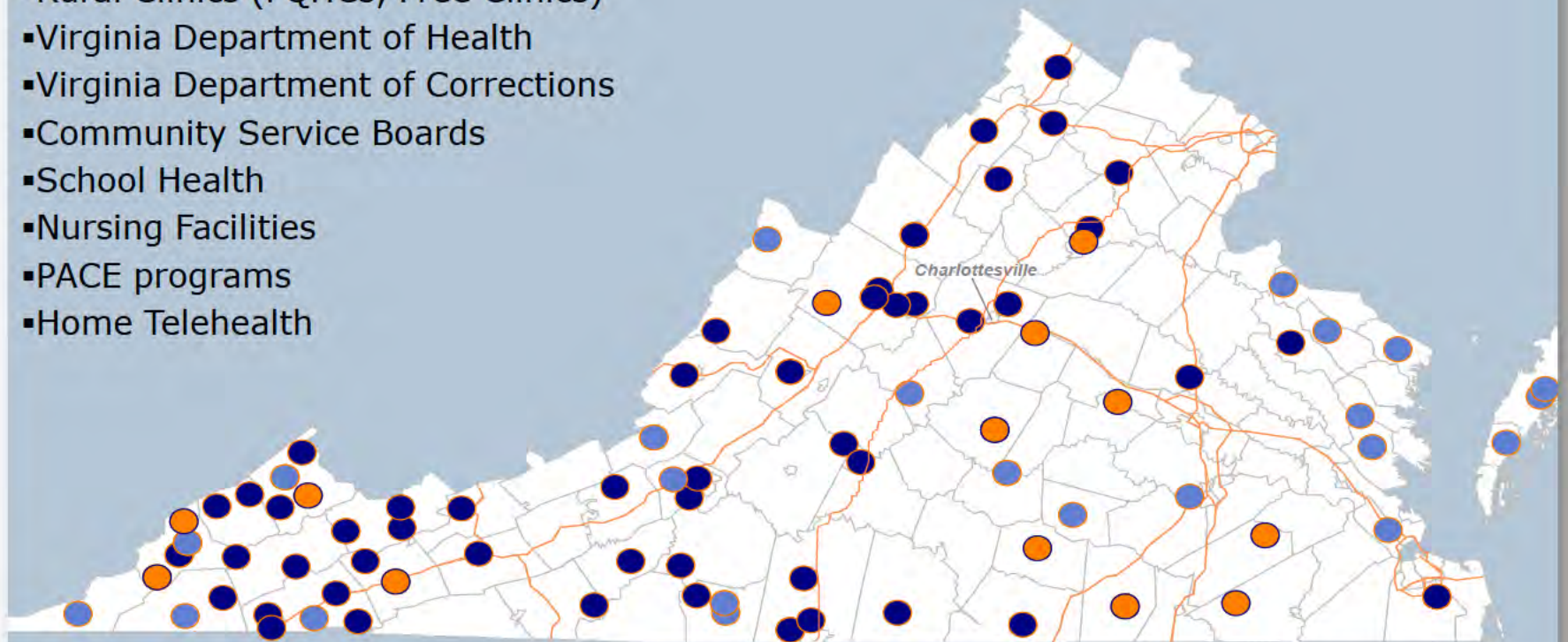
Research and innovation

Public service/Public policy

- *HRSA funded Mid Atlantic Telehealth Resource Center*
- *Academic partner with Specialists on Call*

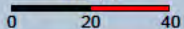
UVA Telemedicine Partner Network (126 sites)

- Community Hospitals
- Health Systems
- Rural Clinics (FQHCs, Free Clinics)
- Virginia Department of Health
- Virginia Department of Corrections
- Community Service Boards
- School Health
- Nursing Facilities
- PACE programs
- Home Telehealth



Scale Legend

Mile(s)



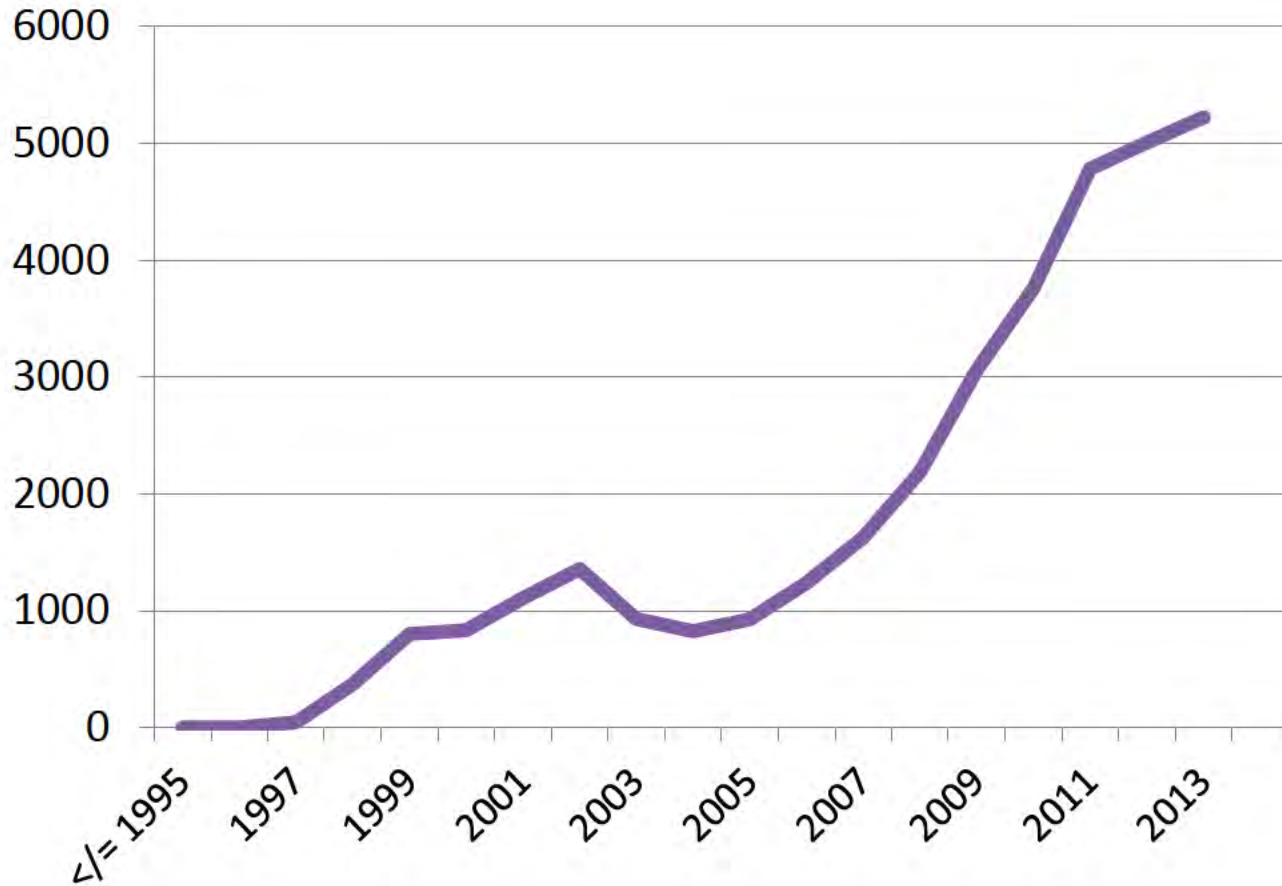
* Includes emergency preparedness only sites.

Patients served

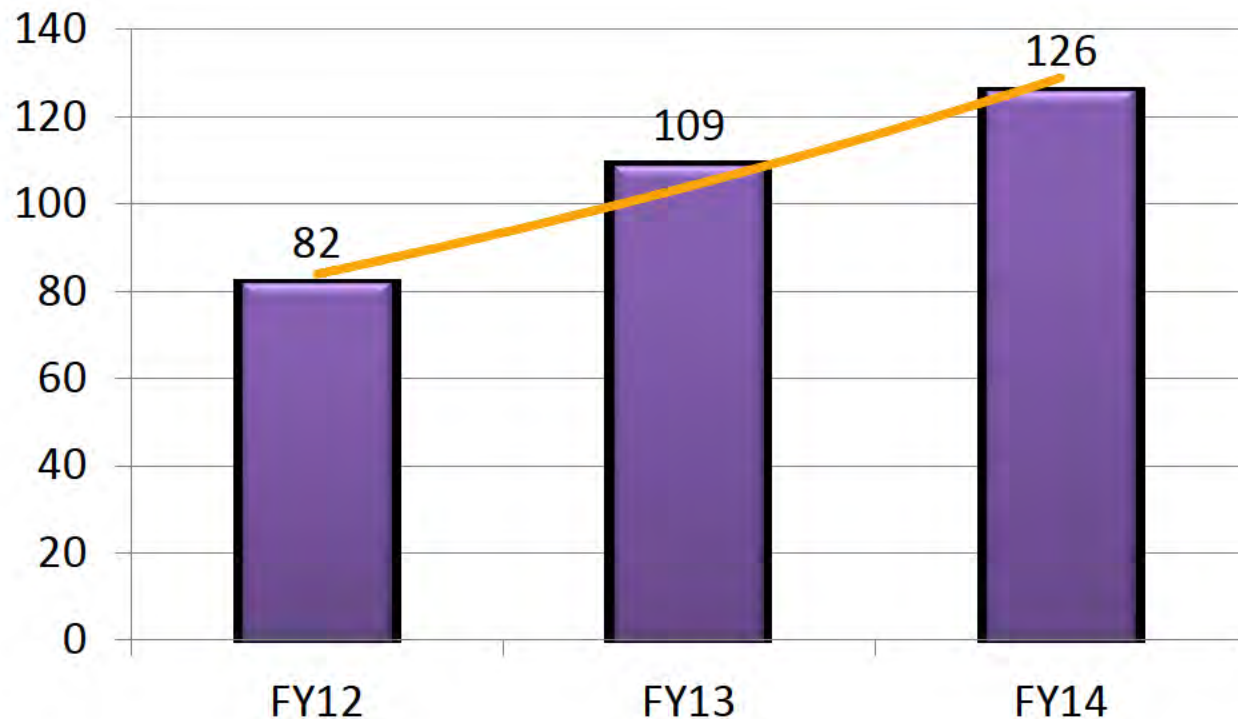
- *>38,400 patient encounters in Virginia*
Additional international outreach
- *> 30,000 teleradiology services/year*
- *Spared Virginians > 8.8 million miles of travel*
- *Services in >40 different sub-specialties*
(primarily live interactive video-based)
 - Emergency*
 - Single consults/follow up visits*
 - Block scheduled clinics*
 - Screenings with store forward technologies*
 - Remote patient monitoring*



UVA Telemedicine Annual Clinical Encounters



UVA Telemedicine Partner Network Expansion (126 sites)



Technologies: HIPAA compliant, interoperable



Clinical services

- *Cancer Center*
- *Cardiology*
- *Dentistry*
- *Dermatology*
- *Diabetes Education*
- *Endocrinology*
- *ENT*
- *Emergency Medicine*
- *Gastroenterology*
- *Genetic Counseling*
- *Geriatrics*
- *Gynecology*
- *Hematology*
- *Infectious Disease*
- *Mammography*
- *Neonatology*
- *Nephrology*
- *Neurology - general*
- *Neurology - stroke*
- *Neurosurgery*
- *Nutrition*
- *Obstetrics – High Risk*
- *Ophthalmology*
- *Orthopedics*
- *Ostomy*
- *Pain Management*
- *Patient Monitoring*
- *Pediatric specialties*
- *Pediatric Critical Care*
- *Plastic Surgery*
- *Psychiatry – Adult*
- *Psychiatry – Child & Family*
- *Psychiatry – Emergency*
- *Pulmonology – Cystic Fibrosis*
- *Radiology*
- *Rheumatology*
- *Surgery*
- *Thoracic Cardiovascular Surgery*
- *Toxicology / Poison Control*
- *Transplant*
- *Urology*
- *Wound Care*

International collaborations: Clinical outreach, capacity development

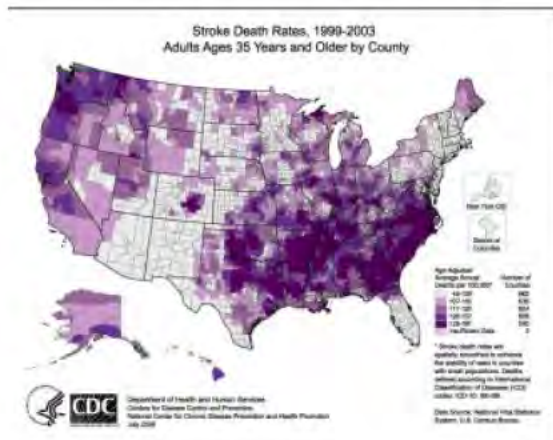


Clinical services:

- *Evidence based*
- *Spectrum of care across the continuum*
- *Primarily live interactive video based*
- *Requested by community partner*
- *Aligned with health status indicators*

Tele-stroke

- *Need: High morbidity, high mortality, high cost condition – when every second counts*
- *Urban distribution of stroke neurologists*
- *Low utilization of TPA nationwide*
- *Telestroke programs improve access to stroke neurology services*
- *UVA: TPA use increased from 0% to 25% of rural stroke patients*



The evidence

Stroke

JOURNAL OF THE AMERICAN HEART ASSOCIATION

American Stroke
AssociationSM

A Division of American
Heart Association



A Review of the Evidence for the Use of Telemedicine Within Stroke Systems of Care. A Scientific Statement From the American Heart Association/American Stroke Association

Lee H. Schwamm, Robert G. Holloway, Pierre Amarenco, Heinrich J. Audebert, Tamilyn Bakas, Neale R. Chumbler, Rene Handschu, Edward C. Jauch, William A. Knight, IV, Steven R. Levine, Marc Mayberg, Brett C. Meyer, Philip M. Meyers, Elaine Skalabrin, Lawrence R. Wechsler and on behalf of the American Heart Association Stroke Council and the Interdisciplinary Council on Peripheral Vascular Disease

Stroke published online May 7, 2009;

DOI: 10.1161/STROKEAHA.109.192360

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Chronic Disease Management: Remote Patient Monitoring Care Coordination Center – C3: January 2014

53% reduction in hospital readmissions

Categories		Program to Date
Clients enrolled in C3		241
# of 30-day readmission clients		26
% of clients readmitted within 30 days		10.8%

23%

Benchmark historical 30-day readmission
rate for UVAMC



10.8%

C3 30-day readmission rate

Issues for consideration in any telehealth program

- *Reimbursement*
- *Funding of telehealth (Stark, Anti-kickback)*
- *Informed consent*
- *Ensure privacy and confidentiality (HIPAA)*
- *Credentialing and privileging – CMS, Joint Commission*
- *Licensure*
- *Malpractice*
- *Practice guidelines and technical standards*
- *Telecommunications venue/costs*
- *Integration with EMRS/HIE*
- *Interagency malalignment related to policies*

2012 IOM Workshop

- *Evolution of telehealth*
- *Telehealth evidence base*
- *Technological developments*
- *Actions to further the use of telehealth to improve health care outcomes while controlling costs*



Key Findings

- *Improve payment mechanisms*
- *Streamline licensure and credentialing processes*
- *Develop a trained workforce in the practice and delivery of telehealth services*
- *Explore the role of telehealth in new care delivery models*
- *Conduct more research to improve the evidence base for telehealth*
- *Federal government funds grants, research and contracts through 16 different agencies*

Improve Federal Payment Mechanisms

Medicare reimbursement of telehealth services remains low

- *2011: CMS reported <\$6 million dollars in reimbursements nationwide to distant site providers*
- *CBO scores have consistently had a negative impact on legislation*
- *Rural requirement for originating site including for ACOs*
- *Non-MSA definition of rural limits sustainability models and more importantly, access to care for our seniors*
- *Rural definition is poorly aligned with specialty workforce shortages*

Urban areas under Medicare

- *The Grand Canyon, Arizona*



Improve State Policies and Payment Mechanisms

- *Medicaid expansion opportunity*
 - >40 state Medicaid programs currently cover telehealth*
 - Most state programs pay for transportation*
- *Private pay mandates (20 states plus DC)*
- *Boards of Medicine: No prior in-person requirement*
- *Health insurance exchange: Benchmarks include telehealth*
- *Correctional telehealth opportunities*
- *State health information exchanges (including the VHA)*



Credentialing and Privileging

- *CMS 2011 rule change allows for a proxy credentialing and privileging process in the revised Conditions of Participation standards*
- *Must hold an accepted license within the state*
- *Must be bound by a legal agreement between entities*
- *Must share quality data*

Licensure

- *Movement towards licensure portability*
- *FSMB medical licensure compact model*
 - *Not modeled after the nurse licensure compacts*
- *Consider malpractice coverage implications!*

Recent federal legislation/actions

- *47 bills with telehealth provisions!*
- *Harper - Telehealth Enhancement Act of 2013 (HR 3306)*
 - *Add incentive to reduce Medicare hospital readmissions*
 - *Expands originating sites to include the home*
 - *Allow Medicare accountable care organizations (ACOs) to use telehealth*
- *Nunes – Medicare Telemedicine Enhancement Act of 2013 (HR 3077)*
 - *Licensure portability to serve Medicare beneficiaries*
- *Rangel – VETS Act (HR 2001)*
 - *Licensure portability for VHA providers*
- *2014 CMS physician payment schedule*
- *FDA guidance document on mobile medical applications*

The future of telehealth



- *Outcomes analyses: clinical and economic*
- *Practice guidelines in collaboration with specialty societies*
- *Standards for interoperability of devices*
- *Broadband expansion*
- *Demonstration projects*
- *Collaboration between patients, providers, policymakers*
- *Engagement with AMA, FSMB and state medical societies*
- *HRSA funded telehealth resource centers*
- *Integration into mainstream medicine*

