

Stay safe, healthy and connected



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Definition: Telehealth

The delivery of patient care and consultations over a distance using telecommunications technologies.



Live interactive videoconferencing

Store and forward technologies

Remote patient monitoring

Virtual care, e-care, telephone care

m-Health



Not a specialty in and of itself!

The need, the opportunity and why telehealth?

- *We are an aging population*
By 2030, more than 71.5 million Americans will be older than 65
- *We suffer from high rates of chronic illness*
Nearly 50% of American adults have at least one chronic illness
- *Chronic disease is expensive*
More than 75% of healthcare costs are spent on chronic disease
25% of spending is on inpatient costs
- *There are serious workforce shortages and geographic maldistributions of providers*

Benefits of telehealth

- *Patients*
 - Timely access to locally unavailable services*
 - Improves chronic disease management*
 - Reduces the burden and cost of transportation for care*
- *Health professionals (workforce shortages)*
 - Access to consultative services*
 - Supports collaborative care delivery models*
- *Hospital systems*
 - Decreases readmissions*
 - Improves triage, keeps patients local when appropriate*
- *Communities*
 - Increased broadband deployment, hospital viability*



Models

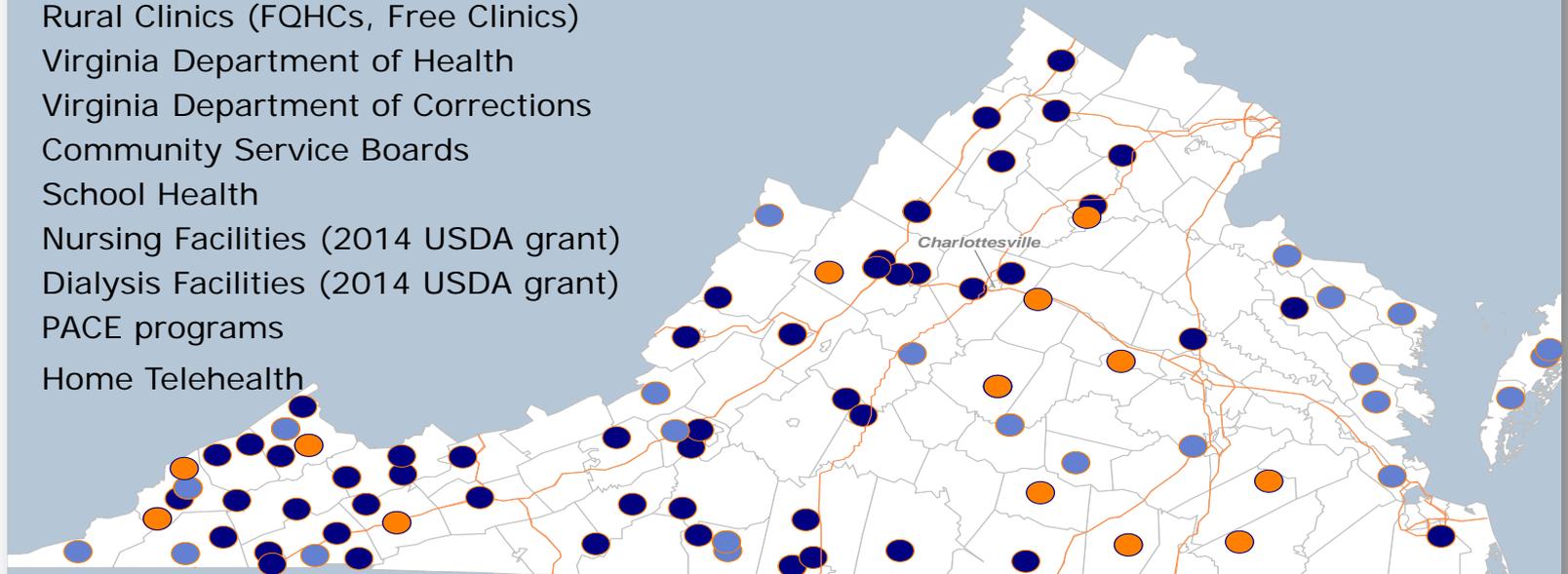
- *Health system (including academic) classical hub and spoke models, many also extending to the home*
- *Aging in place models*
- *Veterans Health Administration*
- *Telemedicine services companies*
Specialty care, Primary care adjuncts, Remote patient monitoring
- *Retail clinics*
- *Workplace clinics*
- *Direct to consumer market*
Within systems, Payer developed

UVA Center for Telehealth (“traditional”)

- *Integrated program across the service lines and schools within the University that facilitate our missions of:*
 - Clinical Care*
 - Teaching*
 - Research and innovation*
- *Centralized coordinated program within Health System*
- *HRSA funded Mid Atlantic Telehealth Resource Center*
- *FCC Pilot program awardee, Rural Healthcare Support Mechanism*

UVA Telemedicine Partner Network (128 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 (2014 USDA grant)
- Dialysis Facilities (2014 USDA grant)
- PACE programs
- Home Telehealth



** Includes emergency preparedness only sites.*

Patients served

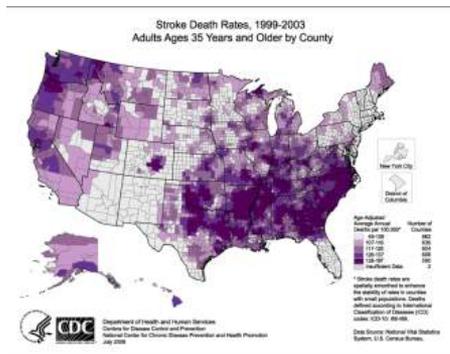
- *>40,000 patient encounters in Virginia*
Additional international outreach
Additional remote patient monitoring
- *> 30,000 teleradiology services/year*
- *Spared Virginians > 9 million miles of travel*
- *Services in >45 different sub-specialties*
Emergency
Single consults/follow up visits
Block scheduled clinics
Screenings with store forward technologies
Care coordination/remote patient monitoring program

Technologies: secure, interoperable, FDA approved



Tele-stroke

- *Need: High morbidity, high mortality, high cost condition – when every second counts*
- *Low utilization of TPA nationwide*
- *Telestroke programs improve access to stroke neurology services*
- *FCC pilot program helped to bring our partners together*



Tele-ophthalmology

- *Opportunity for collaborative models using digital imaging*
- *Conditions requiring screening and/or annual examinations (diabetic retinopathy)*
- *Image acquisition standards*
- *Practice guidelines*

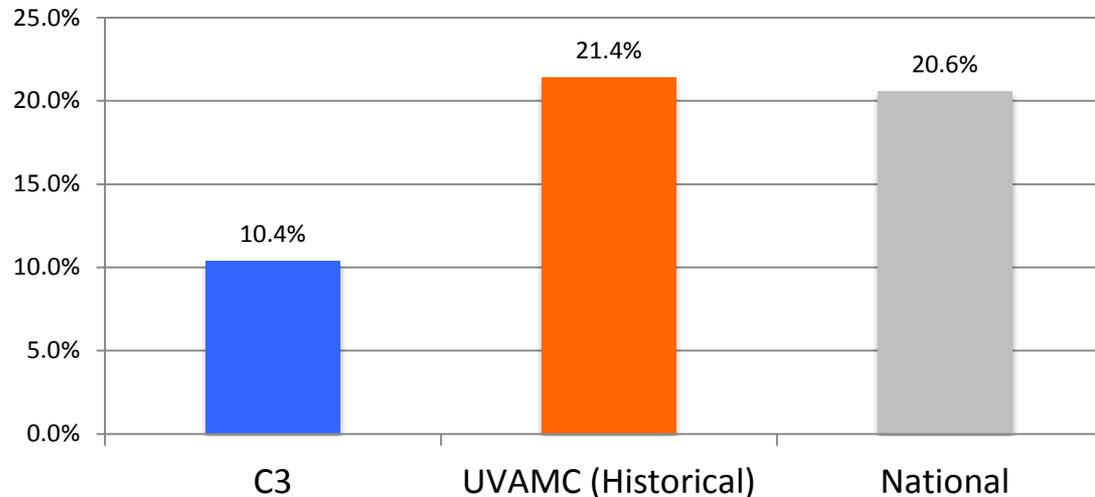


Remote Patient Monitoring/Home telehealth UVA-BroadAxe Care Coordination Center (“C3”)

51.4% reduction in hospital readmissions

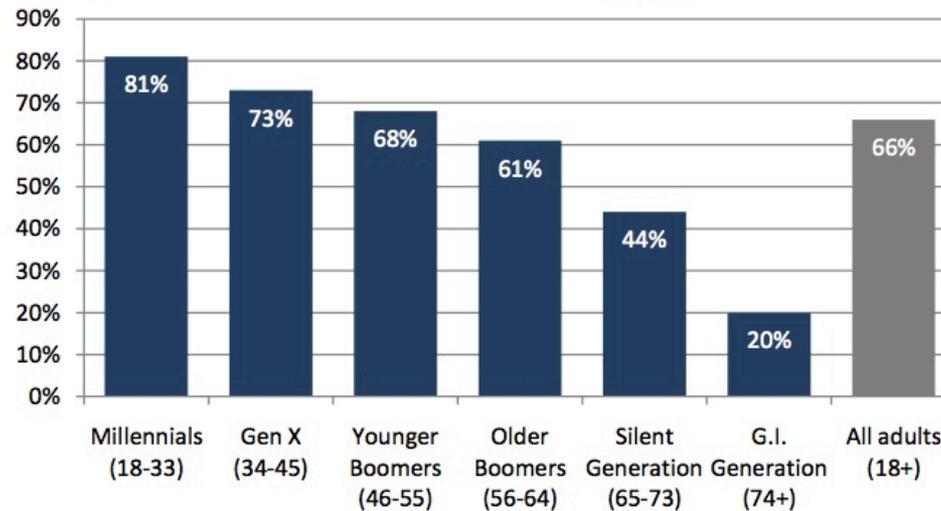
AMI, Pneumonia, CHF, COPD

367 patients enrolled over 7 months



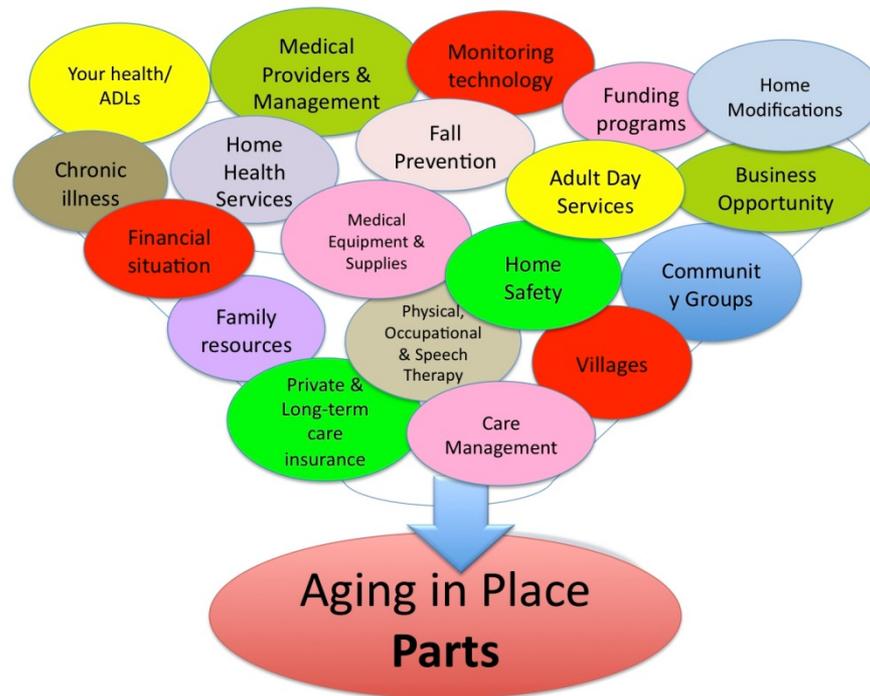
Broadband in the home

Percentage of adults with home broadband, by generation



Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

Aging in Place



Schematic courtesy of Louis Tenenbaum

Opportunities: Improve Federal Payment Mechanisms

Medicare reimbursement of telehealth services remains low

- *2013: Medicare reported <\$12 million dollars in reimbursements nationwide*
- *Rural requirement for originating site; the home is not eligible*
- *Rural definition is poorly aligned with specialty workforce shortages, limits sustainability models and more importantly, access to care for our seniors*

Federal policies



Opportunity for greater coordination across the federal agencies!

Chapter 10. Healthcare 2010 National Broadband Plan

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)*
- *FSMB launching a new expedited licensure process and guidelines*
- *Correctional telehealth opportunities*
- *State health information exchanges (including the VHA)*

The future of telehealth



- *Safe, secure, sustainable care delivery models*
- *Collaboration with the AMA, the specialty societies, FSMB, consumers and industry (technology, telecoms, payers)*
- *Greater broadband adoption*
- *Encourage greater federal inter-agency alignment*
- *Expand the evidence base*
- *True integration into mainstream healthcare*

