

Telehealth: A tool for the 21st century

Presentation to the
Healthy Living/Health Services Subcommittee
Joint Commission on Healthcare

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Definitions

“Telemedicine” is the use of medical information exchanged from one site to another via electronic communications to support

- *Medical diagnosis*
- *Ongoing patient care*
- *Remote patient monitoring*

“Telehealth” encompasses a broader definition of remote healthcare that does not always involve clinical services

- *Health-related distance learning*

Benefits of telehealth: triple aim

- *Patients*
 - *Timely access to locally unavailable services*
 - *Spared burden and cost of transportation*
 - *Improvement in quality of care*
- *Health professionals (workforce shortages)*
 - *Access to consultative services*
 - *Access to continuing education*
 - *Capacity development*
- *Communities*
 - *> 90% of patients remain in the local setting*
 - *Enhanced healthcare/economic empowerment* ³

Commonwealth : Commitments to Telehealth

- *Virginia Telehealth Network – 501c3*
- *Virginia Medicaid coverage 2003*
- *Virginia Department of Health*
- *State Rural Health Plan*
- *State Stroke Systems of Care Task Force*
- *MSV, VHHA*
- *Tobacco Indemnification Commission*
- *Joint Commission on Health Care*
 - *2009 Workforce analysis*
- *Virginia General Assembly*
- *VHRI*

2010 Telemedicine Mandate



SB 675 (Wampler)

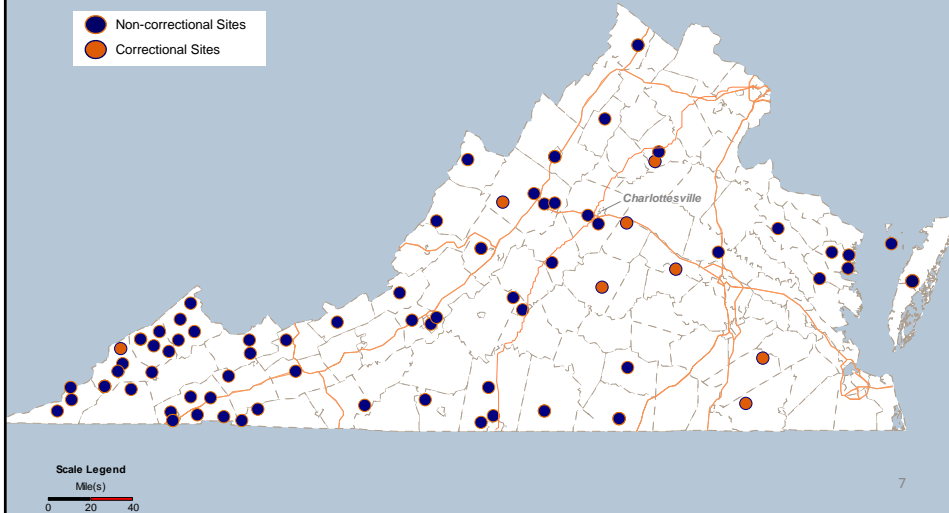
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UVA Center for Telehealth: Services

- *Videoconferencing for patient care*
- *Store and forward applications*
- *Remote patient monitoring*
- *Access to clinical trials*
- *Distance learning*
 - *health professionals*
 - *patients*
 - *students*
- *Workforce development*

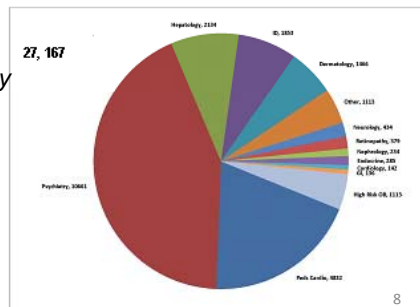
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UVA Telemedicine Partner Network



UVA Program – specialty participants (27,167 encounters through April 12)

- Spared Virginians > 7.2 million miles of travel
- Services in 40 different specialties
 - Emergency
 - Single consults/follow up visits
 - Screenings
 - Mobile digital mammography
 - Screening for diabetic retinopathy



Technologies



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Telehealth opportunities for consideration:

1. *High risk obstetrics telehealth program expansion*
2. *Continue support for the State Stroke Systems of Care Task Force*
3. *Study of models for expansion of tele-mental health services*
4. *Expansion to school-based services*
5. *Expanded chronic disease management – remote patient monitoring programs*

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1. High risk obstetrics telemedicine: Need

- *Premature birth is the leading cause of neonatal and infant mortality in the US & Virginia*
- *Highest rates of premature birth & mortality are in regions with limited access to care and in populations with health disparities*
- *Premature births result in an extraordinary human & financial toll for patients, their families and for the Commonwealth (\$40-50K per week in NICU costs)*

March of Dimes Premature Birth Report Card

Grade for Virginia: C

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UVA high risk obstetrics telemedicine

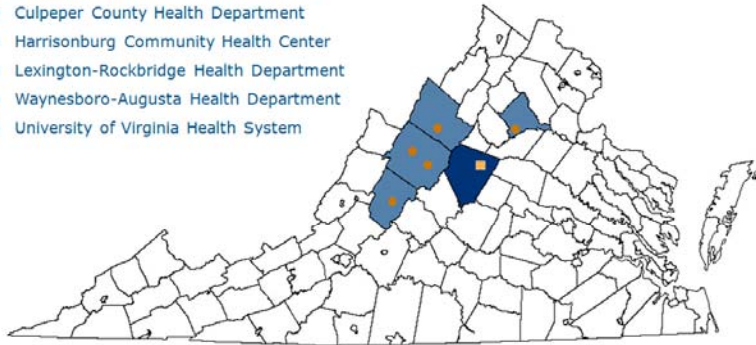
- *Enhanced delivery of obstetrical services to women with high risk pregnancies through the use of telemedicine*
- *Helped ensure access to highest levels of care in our VDH designated perinatal council region*
- *Governor's Productivity Investment Fund – 2007*
- *Health Resources Services Administration - 2009*



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Current Partner Network

- Augusta-Staunton Health Department
- Culpeper County Health Department
- Harrisonburg Community Health Center
- Lexington-Rockbridge Health Department
- Waynesboro-Augusta Health Department
- University of Virginia Health System



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Delivering Results

Issues	Before HROB Program	After HROB Implementation
Gestational Age at First Visit	17 weeks	13 weeks
Entry into Care	25% after 20 weeks	All before 20 weeks
Missed Appointments	11% of visits	4.4% of visits
Rate of pre-term birth	16.5%	12.5 %

Preliminary data shows a reduction of pre-term delivery by 25% through High Risk OB Telemedicine*

*305 High Risk OB patients have been seen through telemedicine from March 2009 through May 15, 2012

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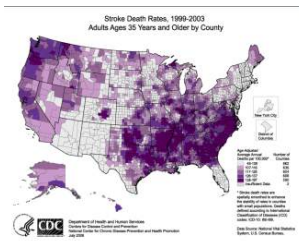
High risk ob telehealth : the opportunity

- *Strong partnerships with VDH, Local Health Departments , FQHCs, community providers*
- *Proposal submitted to CMMI to expand statewide (UVA, VCU and EVMS, VDH)*
 - *Proposal \$5.7 million*
 - *Awaiting funding decision*
- *State and/or federal support is needed for statewide program expansion and to ensure sustainability*

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2. Stroke Telemedicine and Tele-Education Program

- *Stroke is the 3rd leading cause of death in Virginia*
- *tPA (tissue plasminogen activator) can reduce damage if administered within 3 hours from symptom onset*
- *With tPA, 30-50% chance of complete recovery*
- *Only a small fraction (2%) of acute stroke patients are treated with tPA nationwide (<1.5% in Virginia)*



The innovation

- *Tele-stroke programs use live, HD video-conferencing over broadband*
- *Facilitate immediate access to high quality specialty stroke neurology care, and triage*

Studies demonstrate that tele-stroke is far superior to telephone access for acute stroke evaluations



Improving Care and Outcomes

- *Partnership with Culpeper Regional Hospital and Bath Community Hospital*
- *Other programs are developing in larger community hospitals in the Commonwealth*



UVA & Partners have increased the use of life-saving tPA from 0 to 17%

Telestroke: The opportunity

- *Continue support for the State Stroke Systems of Care Task Force*
- *Request \$25,000 per year to advance statewide education programs through Task Force*

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3. Tele-mental health: the need

- *Shortage of mental health providers in all regions of the Commonwealth*
- *Consultations, medication management*
 - *Improved access, shorter wait times*
 - *High rates of patient satisfaction in all age groups*
 - *Controlled studies show efficacy = face to face psychiatry*
- *NUMBER **ONE** request for services*

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Tele-mental health

- *UVA has supported more than 11,000 patient encounters*
 - *Child and adolescent and adult services*
 - *Emergency consultations in community hospital EDs*
 - *Collaborative case management*
 - *Workforce capacity challenges*
- *Other programs within the Commonwealth*
- *DMHMRSAS was a trailblazer with the Appal-link telepsychiatry program*

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Tele-mental health: the opportunity

- *Request a study to determine potential public-private partnerships and models to further expand access to mental health services through telemedicine*

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4. School based services: the need

- *Reduced funding for school nurses*
- *Higher rates of chronic disease in children*
- *Limited access to pediatric specialty services for many children with chronic diseases, including child and adolescent behavioral health services*
- *School based telemedicine programs are flourishing in other states, with a proven reduction in ER visits*
- *Policy barriers adversely impact ability to provide telemedicine services in schools*

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School based services: the opportunity

- *Request VDH, DMAS, Department of Education and academic health centers explore the opportunity to collaborate to expand services to children in the Commonwealth*

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5. Remote monitoring and Home telehealth

- *Effective tool for chronic disease management*
- *ACA – Penalties for readmissions*
- *UVA – Home telehealth partnership with Habitat for Humanity, other programs and innovations*
- *VA Care Coordination and Home Telehealth*
 - *19% reduction in readmission for the same diagnosis, 53% reduction in hospital days*
 - *High rates of patient satisfaction*
- *NC Medicaid pilot (FQHC) reduced readmissions by 70%, and emergency visits by 80%*

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Remote monitoring and Home telehealth: the opportunity

- *Request DMAS investigate funding for chronic disease management programs in the home setting using remote patient monitoring and care coordination in the Medicaid program*

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Telehealth opportunities for consideration by the Joint Commission:

- 1. Fund the High risk obstetrics telehealth program expansion, if federal grant funds are insufficient*
- 2. Continued support for the State Stroke Systems of Care Task Force*
- 3. Request a study of models for expansion of tele-mental health services*
- 4. Request VDH, DMAS, Department of Education and academic health centers investigate expanding to school-based services*
- 5. Request DMAS investigate expanding chronic disease management - home telehealth - remote patient monitoring programs*