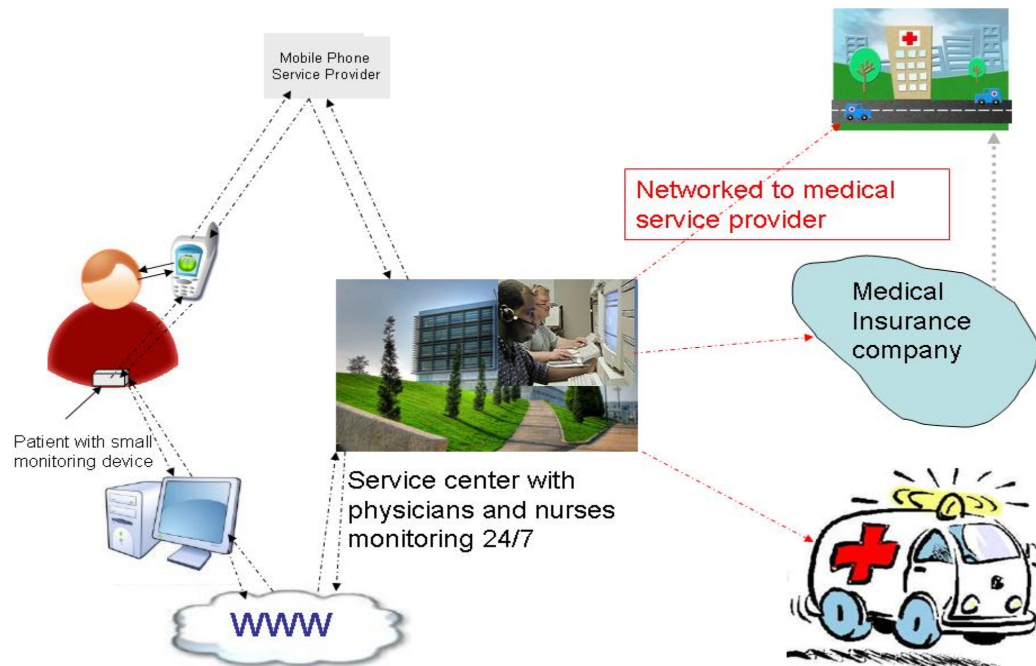
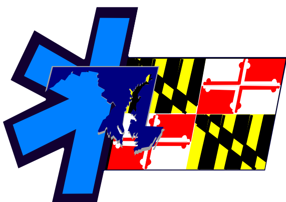
Maryland Rural Health Conference
Telemedicine Task Force – An Update





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Telemedicine/Telehealth

- The use of medical information exchanged from one site to another via electronic communications to improve the health of a patient
- Telemedicine is the practice of medicine
  - Specialist services
  - Patient consultations
- Telehealth is a broader term that includes
  - Health information exchanges (CRISP)
  - Remote patient monitoring
  - Medical education
  - Consumer medical and health information
- While the terms have different meanings, they are frequently linked

Advantages of Telemedicine

- Access to medical care that would otherwise be difficult due to time constraints or distance
- Saves time
- Saves money
- Improves patient outcomes
- Reduces admissions
- Reduces transfers
- Greater patient satisfaction
- Greater provider satisfaction

Telemedicine in Maryland

- **Many ongoing efforts in multiple specialty areas**
  - EMS
  - Psychiatry and addiction
  - ICU critical care (Maryland eCare)
  - Cardiology
  - Pediatrics
  - OB-GYN and perinatal medicine
  - Radiology
  - Neurology
  - ENT
  - Dermatology
  - Chronic disease management
  - Speech pathology

Rural Healthcare Challenges

- **2007 – Maryland Rural Health Plan – Rural access to primary and specialty care is a priority**
- **2008 – Rural Health Roundtable and the Task Force to Review Physician Shortages in Rural Areas: Role of telemedicine?**
- **2009 – TM/TH Roundtable proposed survey**
- **2010 Maryland Telehealth and Telemedicine (THTM) Roundtable – final report published January 2011**

Barriers Identified

1**) Funding**: Reimbursement and other funding is needed for full telehealth implementation and expansion.

2) **Leadership**: A lack of state leadership and coordination prevents THTM programs from being established

and/or expanded in a well planned manner that serves the needs of all Maryland citizens.

3) **Broadband**: Poor access to high-speed broadband services in rural areas deprives some rural residents

access to state-of-the-art medical care.

4) **Legal Impediments**: Issues related to licensing and credentialing providers, especially across state lines,

pose legal barriers that have not yet been satisfied and pose potential risk for THTM providers.

Acute Stroke Care Challenges

- **Vulnerabilities of the State Stroke System include:**
  - **Limited number of neurologists and neurosurgeons to take emergency consultation call.**
  - **Increasing demands on tertiary stroke centers with limited communication capabilities.**
  - **Limited bed availability in tertiary centers.**
  - **Time critical needs in acute stroke care**
- **These vulnerabilities could be mitigated with by telemedicine.**

Response to Vulnerabilities

- **2007 and 2009 Maryland Advisory Council on Heart Disease and Stroke cites need for statewide telemedicine for acute stroke care**
- **2010 DHMH "white paper" presented to and supported by the advisory council**
- **2010 Maryland Health Quality and Cost Council establishes Telemedicine Task Force**

Maryland Telemedicine Task Force

- Established June 2010 by the Maryland Health Quality and Cost Council chaired by Lt. Governor Anthony G. Brown and DHMH Secretary John Colmers
- Tasked with developing a plan for statewide telemedicine system in response to challenges with acute stroke care
- Membership: DHMH, Maryland Advisory Council on Heart Disease and Stroke, MHA, Maryland ACEP, MHCC, AHA/ASA, MIEMSS and hospital representatives

Summer and Fall Activities 2010

- Co-chairs Drs. Eric Aldrich (JHU SOM) and Barney Stern (UM SOM) led group of stakeholders
- Stakeholders primarily focused on telestroke
- Report for Quality Council produced, including comprehensive recommendations for a stroke telemedicine system in Maryland

Issues Identified

- **Need for technical standards/interoperability**
- **Broadband access**
- **Regulatory and legal barriers**
  - **Credentialling requirements at both centers**
  - **Licensing requirements across state borders**
- **Costs**
  - **Start up and ongoing**
  - **Vendor or home grown?**
  - **Reimbursement**
    - **Third party payers do not currently cover**
    - **Medicare – covers only professional component and only in rural underserved areas**

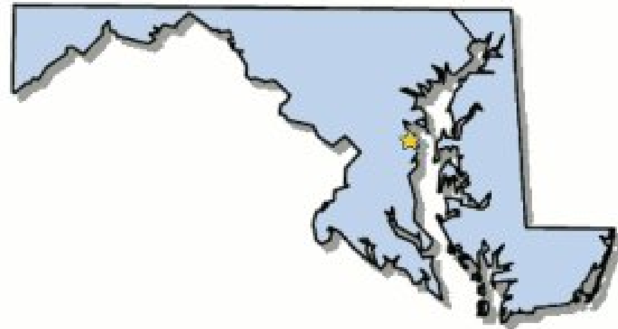
Emergency Department Survey Indicated Need for Broader Approach to Telemedicine

Stroke
Dermatology
Neurology services
Radiology services
Wound care
Burn care
Cardiology services
Pathology
Orthopedic services
Pediatrics
Psychiatric services
Rehab services
ENT services
Perinatal services
Plastic surgery
Trauma care
Neonatal services
Obstetrics

Telemedicine – Statewide Benefits!

- **December 2010 - Stroke Telemedicine Task Force representative attended the Rural Health Telemedicine Roundtable**

- **A larger picture emerges: Timely access to care is a statewide issue that telemedicine can improve**



Mary M is a 28 year old working mother from the Eastern Shore who experienced increasing difficulty caring for her newborn baby while suffering from extreme feelings of inadequacy and guilt. She became increasingly depressed and sought care from her primary care physician. Through a telemedicine consultation set up by her physician in his office, Mary was diagnosed by a psychiatrist in Baltimore with post-partum depression and put on an antidepressant and scheduled for continued counseling through the local mental health center. As she steadily improved, the psychiatrist continued to monitor Mary and her care through periodic telemedicine consultations. Because Mary did not have to travel the long distance required to receive the care of the psychiatrist, she was able to continue to care for child and keep up with work.

John P is a 50 year old diabetic with hypertension who experienced the onset of right sided weakness and difficulty speaking. His symptoms resolved, but then returned several times over the next two hours, so he called 911 and was transported to a community hospital that was 10 minutes from his suburban home. At the hospital he was quickly assessed by the triage nurse and taken for a CT scan. The emergency physician made a diagnosis of acute stroke, but had several questions about the CT scan results and the best management of Mr. P's condition given the several hours of delay before diagnosis. Because time was of the essence and there was no neurologist available at the hospital, via a telemedicine link, a neurologist at one of the academic centers in Maryland reviewed the CT scan, observed and interviewed the patient, and discussed the case with the emergency physician. It was decided to treat Mr. P with fibrinolytics. He experienced an excellent neurologic recovery and has received follow up care that has reduced the threat of another stroke.

Sarah G is a 65 year old patient Baltimore City resident with a number of medical problems including asthma and diabetes. She has been admitted to the hospital and was seen in the emergency department multiple times a year in the past to control both her diabetes and asthma. After her most recent admission, she was enrolled in a new program that provided her with additional patient education and a home health nurse who made regular visits at first. Once her condition was stabilized, home health personnel continued to monitor Sarah through a telemedicine link to her home. They were able to monitor her asthma and blood sugars three times a week and reduced the number of follow up visits as her condition continued to improve. Sarah has continues to see her primary care physician, but has not required any further hospital admissions or emergency department visits in the past 18 months and is feeling much better.

New Directions for the Telemedicine Taskforce

- **In late 2010, Secretary Colmers proposed two state agencies, MIEMSS and MHCC, direct a broader telemedicine initiative, to include other specialty needs in addition to stroke, via use of three advisory groups: clinical, technical, and financial**
- **Mechanism established to coordinate with telemedicine work of Maryland Rural Health Association and Rural Maryland Council**

Clinical Advisory Group

- **Chaired by Robert Bass, MD**
- **Tasked with defining clinical needs**
- **30 participants including clinicians, hospital administration, public health, rural health, and other interests**
- **Five meetings to date**

Clinical Advisory Group

- Mission and timeline
- Current and potential uses of TM
- Dr. Karen Reuban, UVA, discussed Virginia's experience with TM
- Key drivers of TM development: reimbursement and state leadership
- Further discussed uses
- Dr. David Finney – CRISP and the interface with telemedicine
- Dr. Claudia Baquet, discussed UMAB experience with TM
- Dr. David Winn, changes in CareFirst reimbursement
- Virginia Rowthorn, JD, UMD Law School white paper on legal issues
- Formulated recommendations and developed clinical vignettes

Technology Solutions and Standards Advisory Group

- Chaired by David Sharp, PhD
- Tasked with making recommendations regarding the standards that are required to support interoperable telemedicine in Maryland
- Approximately 30 participants consisting of hospital Chief Information Officers, representatives from the state designated health information exchange, clinicians, local health departments, and technology vendors
- Four meetings to date
  - Current functionalities of the technology available to implement telemedicine
  - Standards supporting interoperability from other industries
  - The committee drafted principles for interoperable standards
    1. Acute care hospitals should support interoperable telemedicine networks using Internet transport protocols
    2. The standards should define a minimum technology to be in place
    3. Information related to telemedicine consults should be able to be imported into an electronic health record
    4. An interoperable telemedicine infrastructure should support resource management or directory services
    5. An interoperable telemedicine infrastructure should be affordable, scalable, and support open standards
  - Two telemedicine vendors, MedVision and System Source, overviewed their technology

Technology Solutions and Standards Advisory Group

- The American Telemedicine Association provided an overview of updates to telemedicine policy at the national level
- Members were provided with an update on the various telemedicine activities underway in Maryland
- Members discussed various standards and criteria that needs to be adopted statewide to support interoperability of telemedicine to build on existing health IT initiatives
- Harmonize vocabulary to define everyday technology terms
- Identify key technology requirements and criteria to support interoperability
- Evaluate opportunities to coordinate telemedicine adoption with existing health information exchange and electronic health record initiatives
  - Develop a flow chart of telemedicine networks and connections in Maryland

Financial and Business Model Advisory Group

- **Chaired by Ben Steffen**
- **Tasked with defining reimbursement requirements and financial support for telemedicine**

Key Assumptions:

- **Financial and Business Model discussions need to be informed by recommendations**
  - **Clinical Advisory Group**
  - **Technical Solutions and Standards Advisory Group**
- **Look to experience of early adopters**
  - **Virginia – January 1, 2011 established a requirement that carriers reimburse providers for care delivered using telemedicine which has now been expanded to Maryland**
  - **Medicare has longstanding policies on reimbursement of services delivered via telemedicine.**
    - **Telemedicine is limited under Medicare by location of originating care**
    - **Aligned with other HHS policies related HPSAs, these definitions are not beneficial to the rapid diffusion of telemedicine**

Financial and Business Model Advisory Group

Key questions that the Advisory Group will resolve

- **The Advisory Group is currently gathering information and data regarding:**
  - **Types of services to be covered,**
  - **Financing the technical infrastructure to support telemedicine,**
  - **Approaches to covering telemedicine services, e.g., limiting telemedicine to rural areas or populations with limited access,**
  - **Carrier business rules that need to change,**
  - **Challenges to integrating distance providers into standard clinical care, and**
  - **Approaches to ensure that patients covered under fully insured (individual, small, and large group) and self-insured contracts can benefit from telemedicine.**

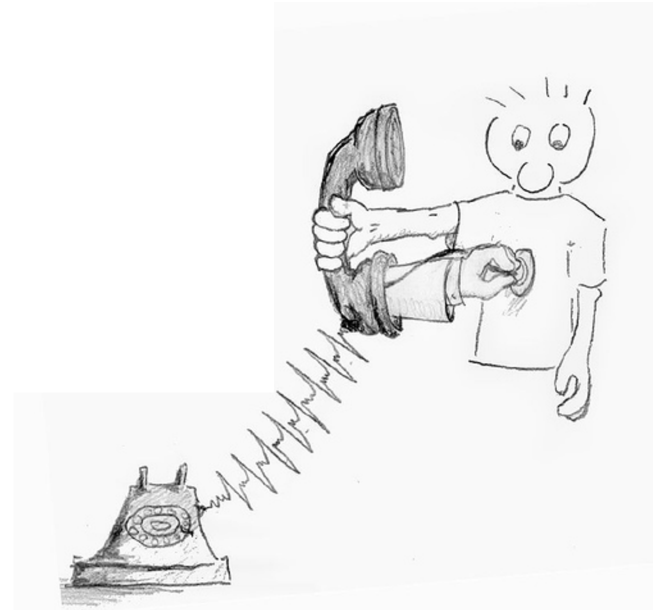
The Financial and Business Model Advisory Group

Areas where we hope to provide recommendations

- **Types of services (CPT codes) to covered,**
- **Approaches to funding the needed infrastructure,**
- **Scope of coverage for telemedicine,**
- **Carrier and practice business and operating rule changes that need to occur, and**
- **Approaches to support rapid diffusion of telemedicine including provider and patient education.**

Next Steps

- Drafting Telemedicine Task Force Report
  - First draft nearly complete
- Final report to the Health Quality and Cost Council in December



Questions/Comments?