A Report on the February 20, 2009
Rural Roundtable on Creating a Telehealth Consortium

A Follow Up to the October 2008 Rural Health Roundtable

Hosted by the Rural Maryland Council and State Office of Rural Health

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Background and Overview:

The Rural Maryland Council (RMC) is an independent state agency and one of about 30 State Rural Development Councils around the country. The RMC's mission is to convene rural stakeholders from across the state to identify challenges unique to rural communities and help craft solutions. One of the tools the Council uses to identify challenges is the Rural Roundtable.

In October 2008, some 70 health, policy and rural leaders from around the state gathered in Annapolis for a Rural Health Roundtable, co-hosted by the RMC and the Maryland State Office of Rural Health (SORH). The purpose of the Roundtable was to develop an action plan to help implement the top strategic priority of the *2007 Maryland Rural Health Plan* and subsequent *2009 Rural Health Implementation Plan (RHIP)*, which is: **to improve the recruitment and retention of rural health providers as a means of increasing access to primary and specialty care and pharmacy services for Maryland's rural citizens**.

Roundtable participants were asked to reach consensus on a top priority for action in each of three tactical approaches identified in the *Rural Health Implementation Plan*: (1) Grow Your Own Health Care Workforce Programs; (2) Recruitment and Retention Programs; and (3) Telehealth as A Solution. They were also asked to reach consensus on a single action item. Participants broke into small groups and then discussed each of the group's results in a plenary session. The telehealth work group, as well as the Roundtable as a whole, determined that, in the area of telehealth, the primary action item should be:

> **To develop a statewide telehealth consortium to support state level telehealth adoption; to share and pursue resources; to educate stakeholders on advancing of telehealth; and to facilitate the development of statewide policies, procedures, and protocols.**

To read a complete report of the Rural Health Roundtable, see:
www.rural.state.md.us/Roundtables/RRT02/Rural_Health_Summary_Report.pdf

Rationale for this Priority: Maryland's rural areas have vast primary care and specialty care shortages; however, using technology to link urban providers with rural populations can be an invaluable way to improve access to quality care in rural areas while reducing overall costs to health systems due to better management of chronic diseases, fewer hospital visits, and health system transportation savings. In addition, **many rural Maryland communities are using innovative practices to deliver healthcare via remote technology now; however, these innovations have no cohesive statewide integration or promotion assessing the feasibility of actually providing services via distance technology.** In addition, several federal grants funding telehealth networks and initiatives were identified; however, Maryland has had no successful applications.

The RMC Health Care Working Committee developed a short- and long-term action plan for moving forward on the recommendations provided by attendees at the Rural Health Roundtable, which included investigating the feasibility of creating a telehealth consortium. On January 28, 2009, the RMC Executive Board formally adopted this plan.

THE TELEHEALTH ROUNDTABLE

Following up on the recommendations proposed at the October Rural Health Roundtable and the RMC's Action Plan, the RMC and the SORH co-hosted a Rural Roundtable on the feasibility of creating a telehealth consortium. Without a fully formed vision or even a clear indication that there was a need or desire for such an entity, the partners planned to hold a small invitation-only meeting with members of the rural regional councils, the Rural Maryland Broadband Cooperative, and selected RMC members. Within a week of sending out the email invitation, both the RMC and SORH began getting requests to forward the email and invite others. While a strong effort to invite all relevant stakeholders was undertaken, with such a short timeframe, many stakeholders engaged in the issue were still not aware or did not make it to the Roundtable. However, by February 20, 2009, more than 30 people attended a two-hour meeting in Annapolis. They were:

1. Mirlene Andre, Systems Programer, University of MD School of Medicine
2. Belal Bakir, Medical Director, Diabetes Initiative, Department of Health and Hygiene
3. Ted Beckmann, Director, Information Technology, McCready Foundation
4. Bonnie Braun, Director, Hershel Horowitz Center for Health Literacy
5. Jon P. Burns, Senior VP and CIO, University of MD Medical System
6. Rhonda Chatman, American Heart Association
7. Michelle Clark, Director, State Office of Rural Health
8. Sylonda Davis, Manager, Strategic Planning, University of Maryland Medical Center
9. John Dillman, Executive Director, Upper Shore Regional Council
10. Jenifer Fahey, Program Director, Perinatal Telemedicine Program, University of MD School of Medicine
11. Sandi Fleischer, Program Manager, Rural Maryland Council
12. Jake Frego, Executive Director, Eastern Shore AHEC
13. Rodney Glotfelty, Health Officer, Garrett County Health Department
14. Brian Grady, Director, Telemental, University of Maryland
15. Edward J. Grogan, VP, Information Services and CIO, Calvert Memorial Hospital
16. C. Bernadette Johnson, Director of Program Services, Mid-Atlantic Association of Community Health Centers
17. Virginia Keane, President, Maryland Academy of Pediatrics
18. Annie Kronk, Board Member, Rural Maryland Council
19. Ilise Marrazzo, Maternal & Child Health Nurse Consultant, DHMH
20. Michael T. McCarty, Sr. Director & Chief Network Officer, Johns Hopkins Health System
21. Tom McLoughlin, Chair, RMC Health Care Working Committee
22. Shiraz I. Mishra, Associate Professor, University of MD School of Medicine
23. Patrick Mitchell, Executive Director, Maryland Broadband Cooperative
24. Vanessa Orlando, Executive Director, Rural Maryland Council
25. Maria R. Prince, Medical Director, Office of Chronic Disease Prevention, DHMH
26. Michele Randolph, Research Analyst, SORH, DHMH
27. Audrey Regan, Program Administrator, Center for Maternal & Child Health, DHMH
28. David Sharp, Director, Center for Health Information Technology, Maryland Health Care Commission
29. Susan Stewart, Executive Director, Western Maryland AHEC
30. Tom Tudor, Board Member, Maryland Broadband Cooperative
31. Scott Warner, Executive Director, Midshore Regional Council
32. Jo Wilson, Vice President, Ancillary Support Operations, Western Maryland Health System

The meeting was facilitated by Dr. Bonnie Braun, the Endowed Chair & Director of the Herschel S. Horowitz Center for Health Literacy at the University of Maryland School of Public Health. Dr. Braun is also an Associate Professor, State Family Policy Specialist, with Maryland Cooperative Extension and a long-time member of the RMC Executive Board.

WELCOME AND PARTICIPANT INTRODUCTIONS:

After a brief welcome and overview of the SORH *State Rural Health Plan* and the RMC's Rural Health Roundtable, participants were asked to introduce themselves by name, title, organization and then, to identify themselves as one of six possible occupations. The identifiers broke down as follows:

- **Information Technologist – 6** attendees identified themselves as such
- **Health Provider – 3** attendees identified themselves as such
- **Health Educator – 3** attendees identified themselves as such
- **Health Administrator – 11** attendees identified themselves as such
- **Economic Developer – 1** attendees identified themselves as such
- **Other – 8** attendees identified themselves as such *(Note: Several in this category were associated with the Rural Maryland Broadband Cooperative and could have been identified as an economic developer.)*

SPEAKING THE SAME LANGUAGE: DEFINITION OF TERMS

EXERCISE: Attendees were provided with a sheet of several different definitions of telehealth and telemedicine, as developed by other agencies and organizations. They were asked to work in pairs and briefly review these definitions and select the one that came the closest to their notion of telehealth. Dr. Braun, the facilitator, noted that this definition would be used as a working definition for the day; however, if the group moves forward with a consortium, some effort will have to be expended to develop a more appropriate definition.

DISCUSSION: For purposes of the Roundtable, the definition below was the one selected by most people. Several attendees included suggested changes to the definitions provided. All the definitions and comments are included in Appendix A.

> **Telehealth is the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration. *(Health Resources and Services Administration)***

After the definition was secured, Mr. Patrick Mitchell, Executive Director of the Rural Maryland Broadband Cooperative, was asked to give a brief update on the state's effort to build a broadband network in rural and underserved areas of the state. He outlined where the network was complete, where it was under construction and what the long-term plan was. For more about the Cooperative and its work, see: www.mdbc.us

MAP IT, MARYLAND! A VISUAL AID TO CURRENT PROJECTS

EXERCISE: After the definition was secured and attendees had an overview of where the network was (and would soon be), a large map of Maryland was placed on an easel. Attendees who were involved in either delivering or receiving some sort of telehealth service – whether it was clinical, administrative, or educational -- were asked to identify their programs. Push pins were put into the map to indicate where services were provided or delivered. More than ten projects were identified as providing or receiving

services within Maryland, while four projects were identified as delivering or receiving services outside Maryland. The scope and richness of telehealth projects going on across the state and across border states became quickly apparent. Subsequent action plans will follow up with individual pilots to garner exact details.

DISCUSSION: At the end of the exercise, participants were asked if they were aware of all the projects mentioned. None said they were, and several expressed surprised that they were unaware of many of the programs being described. In addition, there were instances of programs within institutions that were unaware of each other. Participants also noted that many of the projects were fragmented and isolated, and that most, if not all, came into being during the last five years and were still evolving.

Participants expressed great interest in developing a statewide inventory of telehealth projects and programs in order to find out who was doing what and where were they doing it. They also indicated that they wanted to know if any of those programs have been evaluated somehow, and that they would like to see those evaluations. There was also a discussion about sustainability and how many of those programs could survive over the long term. Several indicated that an inventory would show whether there was excess capacity available to be used by other specialties than the one currently using telehealth technology in each pilot.

VISIONING: GAP ANALYSIS AND BRAINSTORMING

EXERCISE: With the map in the front of the room, Dr. Braun led a brainstorming exercise about what could be achieved, what we need to know, what barriers we need to overcome and what we need to do next to create a consortium – and whether it was worth it.

Dr. Braun asked the group to discuss reasons for creating a consortium.

By working together, a consortium could:

- Develop a statewide inventory of who is doing what and ensure that individual programs don't compete against each other for federal funding. For instance, federal HIT funding is available but if every project applies separately, rather than working together to benefit the State of Maryland, individual programs may end up hurting each other, with no one winning;
- Coordinate information and resources to ensure that we do not set up separate systems for separate specialties, but use what resources are available now across different disciplines, where feasible;
- Join forces and work as a group to make the case for reimbursements (i.e., changes to Medicare, private payers, etc.);
- Ensure consistent delivery of a higher level of care. Rural areas are less likely to be on the cutting edge of medicine, but they can be by having access to it through telehealth networks;
- Ensure quality of care by developing a structure that identifies the best and safest practices, and information about those practices can be more easily disseminated through a consortium;
- Speed up clinical care – i.e., increases the speed of diagnosis and consultation. For instance, a rural provider may hesitate to make a diagnosis or prescribe treatment without seeing radiology tests. If s/he sees it quickly, the patient gets treated more quickly;
- Develop policies and guidelines and advocate for policy development on issues that need to be addressed;
- Create economies of scale. A telehealth infrastructure can be affordable because it would likely meet a widespread demand.

Dr. Braun asked what would it would take to make a consortium happen?

To make a consortium feasible, a planning group would have to;

- Conduct a survey to find out what we really have in Maryland now. By finding out what already exists, we can see how those program addressed their hurdles and gaps and barriers without reinventing the wheel;
- Study other state models to see how they work together and decide what part of them could be replicated in Maryland. (Perhaps investigate the Telemedicine Association of Virginia);
- Complete a needs assessment to determine what each jurisdiction needs and what type of service they would want the consortium to provide;
- Identify potential funding sources so that we don't miss any opportunities;
- Look for existing information about current studies and share them with everyone;
- Need to create a consensus of goals for a consortium;
- Involve others who are not at the meeting today, such as payers, RHIOs and others involved with telehealth programs/projects.

Dr. Braun asked what the barriers are to creating a consortium.

At the front of the room, large flip charts were lined up with general subject headings, such as "Legal/Liabilities", "Reimbursement/Licensure", "Hardware/Equipment," etc. Pads of post-it notes were distributed and roundtable participants were asked to write down all the barriers they could think of and place the post it note on the appropriate flip chart. Not surprisingly, the group identified a plethora of barriers. A list of all the items noted are in the Appendix B. This exercise was designed to pull together the barriers a consortium would have to face if the group decided to move forward.

Dr. Braun summarized the brainstorming exercise by noting that there were reasons for moving forward, but also barriers and tasks that had to be done before any statewide body could be formed and operational in any meaningful way.

Dr. Braun asked if anyone was interested in continuing the discussion.

All said they were willing to continue talking. She also asked who was willing to join a leadership team to figure out how to move the conversation forward. Seven participants volunteered to be on a leadership committee, staffed by the Rural Maryland Council and State Office of Rural Health, that would guide the committee's work. They are (in alphabetical order):

1. Jon P. Burns, Senior VP and CIO, University of Maryland Medical System
2. John Dillman, Executive Director, Upper Shore Regional Council
3. C. Bernadette Johnson, Director of Program Services ,Mid-Atlantic Assoc of Community Health Centers
4. Virginia Keane, President, Maryland Academy of Pediatrics
5. Michael T. McCarty, Sr. Director & Chief Network Officer, Johns Hopkins Health System
6. Shiraz I. Mishra, Associate Professor, University of MD School of Medicine
7. Tom Tudor, Board Member, Maryland Broadband Cooperative

Staff:

1. Michelle Clark, Director, State Office of Rural Health
2. Vanessa Orlando, Executive Director, Rural Maryland Council

The RMC and SORH will soon call a meeting of the leadership committee. The most immediate tasks before it are listed below.

NEXT STEPS:

The RMC and SORH will convene a meeting (i.e., most likely a teleconference) of the Leadership Team within the next two weeks to determine how best to move forward. The team will also discuss ways to address the recommendations that were consistently raised during the Roundtable, which were to**:**

1. Create a consensus of goals – both immediate goals, interim goals and long-term goals
2. Develop a comprehensive definition for telehealth and telemedicine for the purposes of the consortium;
3. Conduct an inventory of telehealth projects currently going on in the state (i.e., what capacity is available through them now, what gaps and barriers they overcame to become operational, etc.);
4. Study what other states are doing and determine how much can be replicated in Maryland and what can't.

All Roundtable participants are welcome to provide any input to these next steps and recommendations.

Contacts and Resources:

Michelle Clark
Director
State Office of Rural Health
Email: MClark@dhmh.state.md.us
Phone: 410-767-5121
Web: www.fha.state.md.us/ohpp/ruralhlth

Vanessa Orlando
Executive Director
Rural Maryland Council
Email: orlandva@mda.state.md.us
Phone: 410-841-5772
Web: www.rural.state.md.us

Maryland Rural Health Plan: www.fha.state.md.us/pdf/ohpp/DHMH_Rural_Health_Plan_07.pdf
Maryland Rural Health Roundtable: www.rural.state.md.us/Roundtables/RRT2_08.html

APPENDIX A

SPEAKING THE SAME LANGUAGE: DEFINITION OF TERMS

Attendees were provided with the definitions of telehealth and telemedicine, shown below. Some attendees submitted suggested changes and comments to the definitions. They are shown in bulleted italics below the definition:

1. **Telehealth is the use of electronic information and telecommunications technologies to support clinical health care, patient and professional health-related education, public health and health administration.** ***(Health Resources and Services Administration)***

    - *Attendee suggested that the word "long-distance" be replaced with the word "remote" since services are sometimes delivered in relatively close proximity. (Four people made a similar comment.)*
    - *This definition encompasses telemedicine and other public health components, especially in rural areas.*
    - *This is broad based, covers providers and patients, includes clinical and education, matches other definitions (FCC and HRSA). Wary of including specific reference to "types" of technology because they may change.*
    - *Add "and other areas as the need develops."*

2. **Telehealth includes such technologies as telephones, facsimile machines, electronic mail systems, and remote patient monitoring devices which are used to collect and transmit patient data for monitoring and interpretation. While they do not meet the Medicaid definition of telemedicine they are often considered under the broad umbrella of telehealth services.** ***(Centers for Medicaid and Medicare Services)***

    - *This definition is limited by defining technology. Technology evolves too quickly to be thoroughly defined.*

3. **Telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve a patient's health. Telemedicine is viewed as a cost-effective alternative to the more traditional face-to-face way of providing medical care (e.g., face-to-face consultations or examinations between provider and patient) that states may choose to cover.**

    - *Objects to the word 'cost effective.' Telemedicine isn't just about value.*

4. **Telemedicine is a rapidly developing application of clinical medicine where medical information is transferred via telephone, the Internet or other networks for the purpose of consulting, and sometimes remote medical procedures or examinations.** ***(Wikipedia)***
    - *The word "transferred" should be "applied."*
    - *Delete "rapidly developing" and the word "sometimes" and this is the best definition. (2)*
    - *Rewrite to read "for the purpose of consulting, public health and health administration, and sometimes remote medical procedures or examinations."*
    - *The key word in this definition is "clinical".*

5. **Telemedicine use of medical information exchanged from one site to another via electronic communication to improve patients' health. Closely associated with telemedicine is the term "telehealth," which is often used to encompass a broader definition of remote healthcare that does not always involve clinical services.** ***(American Telemedicine Association)***

    - *Liked definition #5 because it acknowledges the distinction between telemedicine and telehealth.*
    - *This is the best definition but could be re-worked with definition #1*
    - *Combine with number #1 and rewrite.*
    - *This is not a definition. It's not clear*

APPENDIX B

BARRIERS (BRAINSTORMING EXERCISE)

Participants were asked to write down all the barriers they could think of and place the post it note on the appropriate flip chart. The notations are shown as written by participants)

LEGAL/LIABILITY

- Liability insurance - provision of care and by whom: receiver or sender (Cyber liability insurance?)
- Legal/liability concern – sending video or images to hospital center for early diagnosis without select documentation is challenge
- Coverage/indemnification for providers giving telemedicine services to underserved populations
- Liability – impact on malpractice insurance
- Legal – patient/physician confidentiality – subject to HIPPA
- Legal Liability – Some organization (infrastructure) support/advisor but not legal members of consortium
- Coordinating statewide policy on legal/liability issues will reduce duplicative efforts
- Legal/liability concern – practicing in state with no reciprocity
- Crossing state lines – who owns liability
- Malpractice needs to be altered or capped for telehealth services
- Legislation articulating legal protection and liability relative to telehealth
- Would a consortium have more weight in advocating for changes in regulations/law

REIMBURSEMENT/LICENSURE

- State reciprocity, regulations and licensure - agreements
- Reimbursement – all participants receive fee
- Third party payers
- Medicare and Medicaid coverage/acceptance
- Private payer participation
- Consistent fees and codes
- Question: If receiving hospital pays for hardware and sending site carries risk of diagnosis, who charges for the service?
- Requests
    - Office of Rural Health provide assistance in grant writing, application completion and identifying sources of funding
    - Office of Rural Health assist health care organizations in rural areas to obtain broadband funding available from utility tax

HARDWARE/EQUIPMENT

- Compatibility of hardware and software
- Connectivity issues
- Implementation of standards
- Cost – start up, upgrades
- Technical assistance and support
- Collaboration across specialties

- Maintenance
- Duplicity of equipment – multiple purpose/use for economy
- Sender versus receiver – who purchases and sustains

NETWORK/INFRASTRUCTURE

- Standards development
- Develop collaborative partnership between hubs/major centers
    - Coordination
    - Authority
    - Sharing infrastructures/networks for multiple initiatives
- Connectivity across Maryland priority to delivery
- Efficient and appropriate fiber capacity
- Cost – Development, sustainability, expansion
- Content development
- Expansion [In home care, clinics and doctor offices]
- Questions
    - Players and how to get them
    - Sanction non-participants
    - Will consortium provide cost savings
    - Value to develop infrastructure and populate with content later
    - What applications cannot be done due to lack of infrastructure (telesurgery)
- Comments/Requests
    - Hopkins network is ready; but, the cost for remote and small hospitals is very high. Perhaps a solution is low cost access for such facilities.
    - Current projects are heavily (and discreetly) content driven
    - The Department of Pediatrics at my university used to project pediatric grand rounds to 5 hospitals in rural areas; but, had to stop due to lack of funding. This raises the question of affordability on a continuing basis.
    - Network Maryland and Broadband Cooperative need to provide specs, costs, sustainability and security information

OTHER/GENERAL

- Leadership – Who, how, why
- Network Control – Who, how, why
- Role of state created versus private entities
- Funding availability and sustainability
- Research and outcome data collection
- Program utilization and promotion
- Comprehensive list of all telehealth projects in Maryland
- Physician (particularly specialists) and other healthcare shortages-will telehealth assist in addressing such issues