Telemedicine in Wisconsin
A report on the Wisconsin environment for patient care at a distance in 2009

Project initiated and funded by the Wisconsin Office of Rural Health

Findings and report generated by Rural Wisconsin Health Cooperative

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Purpose of this report:

The Wisconsin Office of Rural Health commissioned this study of telemedicine-*patient care at a distance*-in Wisconsin to identify existing telemedicine programs in the state and to learn what barriers they face, successes they have achieved and the lessons they have learned. In addition, this report also will examine current state and federal regulations that pertain to telemedicine and consider these for recommendations for policy changes and statewide initiatives.

While the Wisconsin Office of Rural Health is focused on rural health, this project is not intended to look only at rural telemedicine, but rather what is going on throughout the state of Wisconsin. The driving needs for this exercise are related to workforce and quality in patient care. Workforce shortages loom large in the coming years as the retirement age of the workforce grows. A sufficient and qualified workforce was identified in the spring WORH summit as a central issue facing healthcare in Wisconsin. Quality concerns also drive the need for innovation, as reimbursement moves to pay for performance. In addition, while everyone agrees that the cost of starting telemedicine efforts is high, it is also costly when a physician has to travel to do patient care; therefore, managing the internal cost of providing care is also important in understanding what telemedicine brings to the table.

Strategies to create this report:

A survey was administered to a broad range of health care providers in Wisconsin in April, 2009. Partners in distributing the survey included:

- Wisconsin Office of Rural Health
- Wisconsin Hospital Association
- Wisconsin Primary Health Care Association
- Wisconsin Home Care Organization
- Wisconsin Association of Homes & Services for Aging
- Wisconsin Health Care Association

In addition, key informant interviews were conducted, including:

- Wisconsin Department of Regulation & Licensing
- Wisconsin Department of Health Services, Division of Quality Assurance, Bureau of Health Services
- Wisconsin Health Information Network
- Multiple insurance companies

- Multiple Health Care Systems, some who did participate in the original survey and some who did not
- American Telemedicine Association Business and Finance group (discussion on telemedicine with the chair of this group)

A literature search is included in this report and includes the topics covered in the survey. Included topics include the current regulatory environment, legislation, private pay reimbursement status, Medicaid/Medicare, rural health care challenges as they relate to the impact of telemedicine, and resources for the development of telemedicine programs.

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<u>Executive Summary</u>: *what has been learned?*

The Google map of Wisconsin with identified sites of current telemedicine shows that there is a lot more going on in this area than may have been known: *(the link gets updated as new information becomes available)*

http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msid=108885986590397507782.00046b76575517592009f&z=7

And what telemedicine services are they doing? Direct interactive consults in just about *every* area of patient care including:

- Allergy
- Anticoagulation management
- Burn management
- Cardiology
- Child psychiatry
- Social work
- Clinical psychology
- Dermatology
- Diabetes management
- Disease management
- EAP-Employee Assistance Programs
- Endocrinology
- Emergency services
- Gerontology
- Neurology/sleep studies
- Nurse triage
- Nutritional services
- Occupational medicine
- Oncology
- Parkinson assessment
- Pediatrics/school health
- Plastic surgery
- Primary care
- Jail inmate care
- Pulmonary medicine
- Psychiatry
- Research oncology

- Rheumatology
- Speech pathology
- Wound therapy

 In addition, there are numerous hospitals doing electronic (virtual) ICU or E-ICU, tele-radiology, and tele-monitoring particularly in Home Health. Many use consultation between practitioners and distance education.   Some sites are set up to offer just about all of these services at all of their locations, depending on the patient need and provider availability.

Most of Wisconsin is covered by some level of home health care tele-monitoring, where devices in patient homes allow patients to be monitored on an ongoing basis to manage their care and reduce travel on the part of the patient and the provider. A section of the report is devoted to home health specifically as the potential for managing chronic illnesses and reducing hospitalizations and urgent care *may* have one of the most significant impacts on the population's health through telemedicine.

Even with all that is happening, there is extensive room for opportunity for growth. The bottom line for funding for getting started is clearly through grants. Much of the cost of infrastructure to make telemedicine available for the programs in this study came through grants and enterprise funding, and most are unable to move forward with expansion without further grant funding.

In addition, for those doing telemedicine, *if they were successful, the key reasons identified included:*

- **ALL** said patient acceptance
- Communication with partners
- Senior leader buy in
- Provider and Staff acceptance
- Good business and strategic planning
- Grant money
- Consulting services available

Key Findings:

1. FUNDING
    - Grant funding is a must when it comes to the infrastructure costs.
    - There are immense resources available to those interested in creating telemedicine services. The American Recovery and Reinvestment Act (ARRA) stimulus funds include grants for telemedicine. These grants likely will not be for small projects ($50,000

budgets) but rather for large scale innovation. As with most grants, evidence of partnerships and collaborative efforts will be critical to writing a successful grant.

- This report is delivered at a time when stimulus funds grant "*notices of funds available*" (NOFA's) are currently being released. Within Health Information Technology (HIT) grants are opportunities specifically for telemedicine.

- Even though most identified reimbursement concerns as a key barrier, there are several insurance companies who do pay for telemedicine, and Medicare reimburses for a number of telemedicine services.

- For those not doing telemedicine, reimbursement concerns are second only to infrastructure costs.

- For those doing telemedicine, reimbursement was also a concern in their not being as successful as they would like. There appear to be some true barriers to reimbursement, but some have been able to overcome at least some of those barriers which indicate that it is possible. This may indicate an opportunity for education of payers about what telemedicine really can do for their constituents.

- There seems to be some confusion among different providers about what services are reimbursable and what ones are not.

- When insurance companies do pay for telemedicine, very often it relates back to good communication from the providers, a partnership. Some of what surrounds telemedicine is lack of knowledge about it and this knowledge gap is the actual barrier. When there is a good communication and education effort with the pay source, some have experienced that this barrier can be overcome and payment is good.

- ROI-*return on investment* was asked about in the survey. It turned out to be more challenging to quantify at this level of study than originally thought. It is somewhat of a complex question in most cases for people to answer. An in-depth study of ROI would be needed to make a position statement, and at this level, it is still somewhat unknown. What is known is that some organizations do believe they have seen a ROI, some do not. Some of what is difficult to measure, but which bears exploring, is the cost *saved* by offering telemedicine. These would include travel time of providers and all the related costs and loss of revenue while traveling; transporting of patients from remote areas and time lost in critical care (tele-stroke comes to mind here); patients leaving the community for services not offered locally and the revenue that goes with them, etc.

2. LEGISLATION AND REGULATION
   - There are current legislative proposals to increase the capacity of Medicare and Medicaid to fund telemedicine services equal to face to face services. No one can predict how these will go, but there is momentum for these initiatives at the current time.

Within senate bill 457 and house bill 2068 are a number of provisions to expand coverage of telemedicine services.

- In Wisconsin, a provider must be licensed in Wisconsin to provide a health care service. While there is no formal position statement on telemedicine, the WI Department of Regulation and Licensing is involved in an effort to create a Midwest "pact" with Wisconsin, Michigan, Minnesota, Illinois, Iowa and Kansas that would offer a multi-state physician license. This would ease the challenge for providers outside of Wisconsin in getting licensed in multiple states to practice telemedicine across state borders.
- In Wisconsin, certified mental health and substance abuse providers can add telemedicine services with the verification of additional policies and procedures, and the proper equipment, and be viewed the same as face-to-face services. Medicaid reimburses based on these standards.

3. WORKFORCE
   - Workforce is clearly impacted when telemedicine is used. A story from northern rural Wisconsin reinforces this. Recruiting a child psychiatrist for northern Wisconsin can take years. A county mental health service is able to utilize a child psychiatrist from a different location through telemedicine, and has shown hundreds of thousands of dollars in reduced out of home placements and reduced emergency department costs. These costs were prevented through increased access to ongoing quality outpatient care and monitoring.
   - EICU offers a similar story, when intensivists can be nearly impossible to recruit to remote areas, (sometimes even challenging in not so remote areas), the electronic ICU offers not only the provider, but evidence of quality improvements and shortened lengths of stay from the around-the-clock patient electronic monitoring. While a hospital is unable to bill and get reimbursed for the virtual provider, in turn they are not paying for their own provider and are still able to provide other services to that patient that they can bill for on behalf of patients who otherwise may have been sent elsewhere.
   - Matching up the area of need with the resource can pose challenges at times. If for example the originating site for tele-psychiatry does not have an adequate supply of psychiatrists, it is not going to be able to respond to the receiving site's patient's needs and access is not improved.
   - Wisconsin counties are showing an interest in expanding telemedicine services such as court commitment hearings. This would save money on the cost of transporting patients from hospitals to courts via law enforcement.

4. RESOURCES OTHER THAN FUNDING
   - Even if adequately funded, telemedicine initiatives can break down when there are not effective change leaders spearheading the effort. Telemedicine needs leaders who can champion the effort, bring together key stakeholders, communicate effectively, plan strategically, build partnerships, and guide people through the challenges of change. There is telemedicine equipment in Wisconsin, originally funded by grants, that is not being used (after the grant program was completed) because of this lack of championing change.
   - The equipment needs to be used to be useful; this may seem evident, but some stated that the more staff uses the equipment and gets a comfort level with it the more likely they will be successful. If it doesn't get used regularly, people get "scared" of it again and decide it isn't possible.
   - Patient acceptance is facilitated when staff is trained to help them feel comfortable with the technology. Most successful programs identified that patient acceptance is key to their success, and this doesn't happen automatically. Staff needs to be comfortable with the technology and guide patients through the use of it.
   - The other pressing current priorities in health care seem to be a barrier to some organizations in pursuing telemedicine. The list of health care challenges is long, well before one even gets to the topic of "should we enter the realm of telemedicine?"
   - To do telemedicine with anything less than the highest quality infrastructure for the technology seems to be a recipe for failure. If it is reliable, patients will see it as being as good as face to face. If it is unreliable, it will not succeed.
   - If you want to do telemedicine, look for the "wheel"; it's probably already being done, lessons have been learned, and there are many leaders in this field willing to share what they have learned.
   - There are some leaders in this field who emerged in the conversations. At the risk of leaving someone out unintentionally, these specific organizations should be mentioned as they can help others who are interested in learning from them particularly in Wisconsin. Included in the conversations for this study are the VA hospitals in Madison and Tomah, Marshfield Clinic, Aurora Health Care, Froedert, UW Hospital, Gunderson Lutheran, and Aspirus Health Care. In addition, several home health care organizations are well on their way in home monitoring in telemedicine and cover most of the state in at least a limited amount, including Aurora, Home Health United, Northwest Wisconsin Home Care, Ministry Home Care, and Aspirus Home Care.
   - Patients accept this technology! They like not having to drive long distances to get care that can be delivered close to home. Access to specialty care, reduced travel time and costs, reduced time away from work for appointments, increased speed of diagnosis and treatment all play into the satisfaction patients have with this technology.

Additional Resources:

There are numerous resources linked in this study to give breadth and depth to these findings, as well as offer "how-to's" for anyone considering or working on projects to begin or expand telemedicine services.

It is an exciting time for this study. The current economic and political climate is a time of change and the reality of more change yet to come. Funding may be at an all time high for opportunities to grow telemedicine infrastructure.

A significant source of information for this study is the American Telemedicine Association, http://www.americantelemed.org This group is like an "undercurrent" of telemedicine energy throughout the country that is on top of legislative, quality, technology and other pertinent issues which comprise telemedicine. Members network in their interest area, and are a powerful resource for anyone interested in telemedicine.

In addition, the Office for the Advancement of Telehealth http://www.hrsa.gov/telehealth has (in addition to multiple additional resources) a manual titled, "A Guide to Getting Started in Telehealth", which is about 400 pages and covers a number of specialty areas to help people get started. http://telehealth.muhealth.org/general%20information/getting.started.telemedicine.pdf

Among other resources, the Telemedicine Information Exchange, TIE, is a platform for all things telemedicine, http://tie.telemed.org