

OFFICE OF

**RURAL HEALTH  
& PRIMARY CARE**



**MINNESOTA DEPARTMENT OF HEALTH**

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# **Rural Health Advisory Committee's Report on Telemental Health in Rural Minnesota**

**July 2010**



Office of Rural Health & Primary Care

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July 29, 2010

Sanne Magnan  
Commissioner of Health  
Minnesota Department of Health  
625 North Robert Street  
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Dear Commissioner Magnan,

We are pleased to present this report from the Rural Health Advisory Committee: *Telemental Health in Rural Minnesota*. In August 2009, the Rural Health Advisory Committee formed a work group on access to mental health services through the use of telehealth. The work group and additional key informants included mental health professionals, primary care professionals, health care educators, technology experts, health system representatives, and local citizen leaders working in the field of telemental health.

Access to adequate mental health services continues to be a great challenge in rural Minnesota. Telemental health provides options for addressing some of these challenges. The work group's focus areas included: 1) the telemental health workforce, 2) financial, legal, and infrastructure issues, and 3) case studies of current telemental use and experiences in rural Minnesota. This report and its recommendations highlight the practice of telemental health, key elements of successful models, and barriers to the provision of telemental health services.

We appreciate the opportunity to contribute this report to the important discussion of improving access to mental health services in rural Minnesota. Thank you for your continued strong support in improving rural health.

Sincerely,



Margaret Kalina  
Chair  
Rural Health Advisory Committee



Jode Freyholtz  
Chair  
Rural Telemental Health Work Group

August 13, 2010

Margaret Kalina, Chair  
Rural Health Advisory Committee  
Douglas County Hospital  
24507 100<sup>th</sup> Street  
Alexandria, MN 56308

Dear Mrs. Kalina,

Thank you for the Rural Health Advisory Committee's report, *Telemental Health in Rural Minnesota*. We commend you and the entire telemental health work group for your efforts for the past six months.

Providing quality and timely mental health care in rural communities is a national problem, and local innovative solutions utilizing technology are certainly needed. We appreciate that the work group studied issues around the provision of telemental health services for rural residents and provided case studies highlighting the benefits and challenges of implementing telemental health services.

The Rural Health Advisory Committee's telemental health work group recognized workforce shortages exist in all of the core mental health and primary care professions in rural Minnesota. It identified several barriers to the widespread implementation and use of telemental health services and drafted nine compelling recommendations.

Thank you for your excellent work. The Minnesota Department of Health is committed to finding solutions to ensure access to mental health services for rural Minnesotans. This report, with its timely and insightful recommendations, is an important step. We look forward to working together to protect, maintain and improve the mental health of all Minnesotans.

Sincerely,

A handwritten signature in blue ink that reads "Sanne Magnan" followed by a horizontal line.

Sanne Magnan, M.D., Ph.D.  
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# Executive Summary

Telemental health refers to the provision of mental health services from a distance,<sup>1</sup> using technology such as teleconferencing. The services provided in telemental health are the same as mental health services provided in person. The difference is patients and providers using telemental health communicate via teleconferencing and may be many miles from one another. Patients are likely to participate in the mental health session at their local primary care clinic, community mental health center, hospital, nursing home, or possibly from their own homes. Providers are most likely participating from their office, clinic or hospital.

Telemental health services are bridging the health services gap for patients with limited access to mental health services, in particular those in rural and frontier communities. Improved access, quality and cost demonstrate that telemental health is a timely and effective way to address mental health needs in rural areas.

Workforce shortages exist in all of the core mental health and primary care professions in rural Minnesota. Lack of access to these professionals is a driving force for the use of telemental health. The technology of telehealth helps to combat the shortage of mental health professionals. The use of teleconferencing is also effective in heightening collaboration among health care professionals. However, the continued shortage of mental health professionals serving rural Minnesota is a primary concern.

Payment and regulatory barriers are a challenge to the success of telemental health. Limited reimbursement, inconsistent reimbursement policies, infrastructure challenges, and credentialing concerns create significant barriers to expanding the use of telemental health in rural Minnesota. An additional barrier in some areas is the availability of a broadband connection and appropriate bandwidth. Compounding these obstacles is the lack of a statewide telehealth network or uniform resources and support.

Patients and providers are currently participating in telemental health, and both generally express satisfaction with the technology and quality of service.<sup>2,3,4,5</sup> Several examples of telemental health services in rural Minnesota are explored in the section *Telemental Health Landscape in Minnesota* on page 35.

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<sup>1</sup> Telemental Health Standards and Guidelines. (2009) American Telemedicine Association.

<sup>2</sup> O'Reilly, R., et al. (2007) Is telemental health equivalent to face-to-face psychiatry? Results from a randomized controlled equivalence trial. *Psychiatric Services*, 58, 836-843.

<sup>3</sup> Simpson, J. et al. (2001) Telemental health as a routine service—the perspective of the patient. *Journal of Telemedicine and Telecare*, 7, 155-160.

<sup>4</sup> Mental Health Televideo Consultations in Rural Primary Care Clinics: Patient Characteristics and Provider Referral Patterns. Jim Boulger, Ph.D., Center for Rural Mental Health Studies. Presented June, 2009.

<sup>5</sup> Myers, K.M., et al. (2007) Feasibility, acceptability, and susceptibility of telemental health for children and adolescents. *Psychiatric Services*, 58, 1493-1496.

## Key Findings

**Benefits.** Several benefits from telemental health in rural Minnesota were identified, including:

- **Increased access to mental health services.** All mental health procedures that are delivered in person can be delivered remotely via telemental health.<sup>6</sup> This provides a means for combating workforce geographic limitations.
- **Increased diagnosis and treatment yield better outcomes.** Earlier intervention and easier access helps patients engage in their care and, ultimately, this will improve mental health outcomes and save health care costs.
- **Cost-effective delivery of mental health services.** More than 85 percent of patients seen via telemedicine remain in their local communities, resulting in lower costs of care and further enhancing the financial viability of the community hospital or clinic.<sup>7</sup> Other potential cost savings come from reduced wait times and a reduction of no-show rates. Costs are reduced overall for patients, providers and health systems, even after including start-up costs for the necessary equipment and technology infrastructure.
- **Enhanced coordination of care.** As the integration of primary care and mental health continues, more psychiatrists are providing peer consultation to family practice physicians, especially in rural Minnesota. Research shows that patients most often discuss their mental health concerns first with their primary care physician. Telemental health also creates an opportunity to engage additional mental health providers.

**Barriers.** The Rural Telemental Health Work Group identified barriers to improving or increasing telemental health services in rural Minnesota. Additional barriers exist; however, many relate to telehealth overall. The following are barriers to telemental health specifically:

- **Information and Training.** Minnesota lacks a central resource for telemental health information and training. Each facility or organization embarking on the provision of telemental health services must locate its own information, causing a great duplication of effort.
- **Reimbursement.** A lack of uniform, consistent and equitable reimbursement for telemental health services creates a significant barrier to providing the service.
- **Infrastructure and Technical Support.** Telemental health cannot happen without the Internet connectivity and equipment. There is inconsistent broadband coverage throughout Minnesota. The start-up costs associated with telemental health can be cost-prohibitive, especially for small, independent facilities and providers.

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<sup>6</sup> Novins DK, Weaver J, Shore J. (2008) Telemental Health Talking Points. *Telemental Health Guide*, [www.tmhguide.org](http://www.tmhguide.org). Retrieved June 21, 2010.

<sup>7</sup> Woods and Poole Economics, Inc. (2006) Complete Economic and Demographic Data Source.

- **Mental Health Workforce Shortages.** The underlying issue in telemental health is the shortage of mental health providers in rural Minnesota. The number of psychiatrists and nurse practitioners certified in adult or child psychiatry has decreased. A limited number of psychologists and licensed clinical social workers are practicing in rural areas. Much needs to be done to increase the number of mental health providers practicing in rural Minnesota.

## Recommendations

Telemental health services have a positive impact on the provision of mental health services in rural Minnesota. The following recommendations address steps toward achieving equal access to telemental health services throughout Minnesota:

- A. Expand and promote a telemental health resource hub (website) to identify best practices, and to educate, inform and provide resources for health care professionals working in telemental health.** Existing organizations, such as the Great Plains Telehealth Resource and Assistance Center (GPTRAC) and the Center for Telehealth and E-Health Law (CTel), should enhance resource availability and coordinate sharing of information to include:
  - Showcasing of models for integrating telemental health into existing programs (e.g., co-location of services, billing, scheduling).
  - Specific health care situations in which telemental health offers a solution or helps achieve a goal (e.g., reduced overall emergency department admissions through increased access to telemental health services).
  - Strategies for replication of successful telemental health programs.
  - Information about common liability risks and misconceptions about telemental health services by primary care providers (e.g., collaborative agreements and remote assessment).
  - Examples and potential use of videoconferencing technology for serving diverse cultures by incorporating translation and interpreter services into the telemental health service.
- B. Enhance the web-based Minnesota Telehealth Registry to identify telemental health providers who are available for consults with rural primary care physicians or to provide telemental health services.** Target the tracking and registry of child psychiatrists, as this is an area of great need. Providers should indicate what percentage of their time or practice will be devoted to telemental health services.
- C. Create a statewide committee to work on resolutions to reimbursement and regulatory issues.** The purpose of the committee is to work with payers on statewide payment, administrative (including credentialing) and regulatory issues and to ensure the implementation and understanding of federal regulations affecting telemental health reimbursement and administration.
- D. Gather existing or develop new methods to assess telemental health program quality and sustainability factors.** Telemental health quality measures should be

developed to determine optimal service thresholds. Efficiency and effectiveness should be included in quality measures. Consumers, providers and health plans should provide input into the design of the quality measures. Best practice models can serve as templates for sustainable telemental health services.

- E. Support technical and telehealth coordinator staff capacities to operate and maintain equipment used to provide telemental health services.** Small, rural hospitals and clinics are especially in need of technical support and may not have staff with the expertise to run equipment and troubleshoot technical issues. Support staff by offering training, sharing issues and answers, and clarifying telemental health coordinator job duties and responsibilities.
- F. Inform stakeholders of existing state, federal and foundation grant funding for starting, maintaining or enhancing telemental health services. Especially needed are funding sources for basic equipment. Consider increasing the amount of funding or dedicating a portion of grant programs to the advancement of telemental health in rural Minnesota.** Potentially applicable grant programs include: Community Services and Community Services Development Grant (Minnesota Department of Human Services), Rural Flex Grant (Minnesota Department of Health), and the Telehealth Network Grant (Health Resources and Services Administration). Examples of funding needs include:
- Equipment for rural mental health crisis teams to access in-time remote psychiatric consults.
  - Laptops for rural mobile medical units and rural home visiting nurses to enable remote access to telemental health services.
  - Telemental health services for incarcerated individuals and consultations for jail health providers. Grant funding could offset costs of diagnostic assessment, medication management and discharge planning.
  - Strategic planning and business planning for sustainable telemental health programs.
- G. Connect psychiatric and mental health training programs with rural practice sites providing telemental health services for practicums and clinical training opportunities.** Build upon and support existing programs and models in the state as demonstration projects and best practices. Create incentives and assistance in developing telehealth curriculum and training. Promote best practices and opportunities for practicing telemental health to new and upcoming graduates.
- H. Enhance loan forgiveness programs for mental health professionals.** The location of the patient should be a consideration for whether some mental health providers are eligible for participation in state and federal loan forgiveness programs, such as the National Health Service Corp (NHSC). If a mental health provider, regardless of the location, is treating a patient located in a Mental Health Professional Shortage Area, the provider should receive enhanced reimbursement or be eligible for loan forgiveness programs. Virtual presence for some mental

health professions with extreme shortages, such as child psychiatry, should be considered equal to physical presence.

- I. Educate state policymakers on the critical need for telemental health services in rural areas.** Demonstrate potential cost savings if needs are addressed and highlight proven models in other states.

# Rural Telemental Health Work Group

The Rural Health Advisory Committee (RHAC) is a governor appointed committee charged with advising the commissioner of the Minnesota Department of Health and other state agencies on rural health issues. In 2003, RHAC formed a statewide work group to study access to mental health services through the primary care system. The result of this work was a January 2005 publication titled *Mental Health and Primary Care in Rural Minnesota*. It examined both national and state information on rural mental health and primary care, surveyed providers from rural clinics on mental/behavioral health issues, surveyed Critical Access Hospitals regarding mental/behavioral health visits to emergency rooms, and looked at examples of promising practices for education and care delivery.

Key findings from this work included:

- Rural primary care providers are seeing an increase in mental/behavioral health patients in their clinics. Primary care providers initiate most mental health diagnoses and are often the prescribers of necessary medications for mental health conditions.
- The shortage of rural mental health providers results in long waits for appointments and long distance travel to obtain specialty care.
- The cost of mental health care and the complexity of payment systems are barriers for patients seeking care.
- A stigma about mental/behavioral health problems is a barrier to care, especially in rural areas.
- Rural primary care practitioners would like more education on managing mental/behavioral health.

Recommendations to improve integration of mental health and primary care addressed the availability of a trained professional workforce in primary and mental health care, adequate funding so health systems are able to provide needed mental health services, and effective state and federal policies that support mental health care.

In 2009, the Rural Health Advisory Committee decided to build on this previous work and take another look at the complicated issue of access to mental health services in rural Minnesota. The mental health system currently faces many of the same problems as the health system in general, including access and increasing costs.<sup>8</sup> Additionally, the mental health system in rural Minnesota has increasing numbers of children with mental health issues, increasing numbers of adults with serious and persistent mental illness, a lack of transportation options, and a lack of psychiatric specialists.

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<sup>8</sup> Farrell SP and McKinnon CR. (2003) Technology and Rural Mental Health. *Archives of Psychiatric Nursing*, Vol. XVII, No. 1, pp 20-26.

Primary care remains the de facto access point to mental health services for the majority of rural patients with psychiatric disorders. Costs to health care systems are great when people in mental health crises end up in emergency rooms. Health professionals in rural clinics and hospitals find few options for suitable mental health care placements.

Telemental health provides options for the delivery of mental health services over a distance. It can be used to provide patient access to mental health screening, assessment, diagnosis and intervention. It can be used to improve mental health and primary care providers' access to consultation, supervision, education and information. Telemental health has demonstrated success as a tool to expand mental health services, reduce health practitioner isolation when treating complicated patients, and increase collaboration and communication between mental health and primary care settings.

### **Work Group Charge**

The Rural Health Advisory Committee charged the Rural Telemental Health Work Group to:

- Discuss the current status of telemental health in rural Minnesota
- Develop recommendations for sustaining and increasing telemental health services in rural Minnesota.

Assumptions related to this work include: (1) there is a lack of timely, affordable, accessible, quality mental health services in rural Minnesota; and (2) telehealth improves access to mental health services. Telemental health services in the following settings were discussed: primary care, hospitals, clinics, mental health centers and veterans' health services facilities.

### **Work Group Activities**

The Rural Telemental Health Work Group tasks were completed through a variety of activities between November 2009 and the finalization of this report in July 2010. First, a work group of mental health professionals and key informants from a variety of backgrounds met four times between December 2009 and May 2010. After an initial brainstorming session, three main telemental health focus areas for discussion emerged:

- Telemental Health Workforce Issues
- Financial and Legal Issues for Telemental Health
- Infrastructure and Support for Telemental Health.

Second, work group staff reviewed web-based and scientific literature to identify current research, programs and policies that could influence the use or expansion of telemental health in rural areas.

Third, work group staff conducted interviews with key informants to gain greater awareness of the challenges and opportunities to implementing telemental health services in rural Minnesota.

Fourth, work group staff met with providers of telemental health services in various settings to determine how telemental health is being utilized in rural Minnesota.

**Work Group Members**

For a complete list of work group members, additional contributors, work group staff and Rural Health Advisory Committee members, see pages 6-8.

# Rural Telemental Health Overview

**M**ental health is an integral part of a person's general health and well-being. Accessing mental health services in many of Minnesota's rural areas is a significant challenge. Primary care is often the only system for delivering mental health services.<sup>9</sup>

Telemental health refers to the provision of mental health services from a distance,<sup>10</sup> using technology such as teleconferencing. Telemental health services are delivered in a wide variety of settings: primary care clinics, community mental health centers, hospitals, nursing homes, jails, or possibly in patients' own homes. Patients and mental health providers commonly complete the appointment or session via teleconferencing, and may be hundreds of miles apart. The services provided in telemental health are the same as mental health services provided in person.

The evolution of telemental health services occurred alongside advances in the information technology industry. The first telemental health consult occurred in 1959 between the Nebraska Psychiatric Institute in Omaha and Norfolk State Hospital located 112 miles away.<sup>11</sup> Massachusetts General Hospital used emergency psychiatric consults as early as 1968.<sup>12</sup> The development of personal computers and the Internet, along with improvements in audio and video relay technologies, created a broader expansion of telehealth, primarily telemental health services, beginning in the late 1980s.<sup>13</sup>

Improved access, quality and cost demonstrate that telemental health is a timely and effective way to address mental health needs in rural areas.<sup>14</sup> Mental health has consistently been one of the top three most frequently-provided services using telehealth technologies. Telemental health services have the potential to create access to basic and emergency mental health services in rural areas when and where they are most needed.

Yet, access to mental health services in rural Minnesota is an increasing challenge. The shortage of mental health providers, combined with difficulties with transportation and mobility due to age or health conditions, creates a complicated and fragmented system of care. Primary care providers are often the first point of contact for patients with mental health conditions.<sup>15</sup>

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<sup>9</sup> *Mental Health and Primary Care* (2005). Office of Rural Health and Primary Care, Minnesota Department of Health.

<sup>10</sup> *Telemental Health Standards and Guidelines* (2009). American Telemedicine Association.

<sup>11</sup> James, L. and Folen, R. (1999). Behavioral Telehealth: Using Telemedicine to Expand Behavioral Medicine Services, *Journal of Healthcare Information Management*, 13(4).

<sup>12</sup> Murphy, R.L.H., & Bird, K. T. (1974). Telediagnosis: A new community health resource. *American Journal of Public Health*, 64, 113-119.

<sup>13</sup> Smith, Henry A. et al. (1998) *Telemental Health: Delivering Mental Health Care at a Distance*. Health Resources and Services Administration, U.S. Department of Health and Human Services.

<sup>14</sup> *Ibid.*

<sup>15</sup> *Linking Primary Care and Rural Psychiatry* (1998), Psychiatric Services, American Psychiatric Association.

### **Increasing Access**

Although mental disorders are treatable and seeking professional help is encouraged, access to mental health care services in rural areas is limited. This affects a patient's ability to obtain medication, find appropriate community-based support services, and locate nearby inpatient and outpatient services. Patients seeking basic mental health services must navigate a fragmented and complex array of options. Along the way, they may face long wait times, inadequate health insurance coverage, and the stigma of mental illness in their communities.

When patients experience an acute mental health crisis, there are unique and sometimes deadly barriers to treatment. Emergency medical services and police are often forced to transfer patients to a hospital emergency room. Most rural hospitals do not have a psychiatrist on staff, and many have difficulties accessing one immediately. After initial assessment, emergency department staff must locate an available psychiatric hospital bed. Patients are commonly transferred across the state to the nearest available bed.<sup>16</sup> Without adequate medication management and community support services, many patients with serious and persistent mental illness may eventually end up in county jails.<sup>17</sup>

Telemental health services allow patients to access specialty mental health providers for assessment and treatment. Primary care providers experience improved access to mental health specialists for consultation. Psychiatrists, who are few and far between in rural locations, experience reduced professional isolation and convenient access to continuing medical education opportunities. Local crisis response teams can complete remote emergency assessments to expedite treatment and transport decisions.

### **Improving Quality**

Telemental health allows providers to take a collaborative approach to health care decision-making. Primary care providers identify and treat the most common mental health conditions in rural areas (anxiety and depression). Clinical integration is necessary for patients with co-occurring physical health needs. Table 1 illustrates ways telemental health can integrate mental health and primary care.

Future telemental health applications may allow doctors to take better care of larger numbers of patients. Newer Internet-based video technologies will expand and could significantly impact many barriers to providing access to rural people in their homes and communities. Consumers are increasingly reliant on the technologies they use on a daily basis, such as laptops and mobile phones. These technologies lend themselves well to telemental health applications. Physicians will be able to make "house calls" through webcams and do remote monitoring through mobile phone applications.

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<sup>16</sup> *Prairie St. John's Specialty Psychiatric Hospital. (2007) Public Interest Review Application, Minnesota Psychiatric Society.*

<sup>17</sup> James DJ, LE Glaze. (2006) *Mental Health Problems of Prison and Jail Inmates*, Federal Bureau of Justice Statistics.

**Table 1**

<b>Telemental Health Solutions for Integrated Care<sup>18</sup></b>	
<b>Integration Problem</b>	<b>Telemental Health Solution</b>
A primary care practice wants to offer psychiatric services to patients.	Telepsychiatry allows psychiatrists to interview and assess patients directly and provide treatment. <sup>19</sup>
A rural primary care practice wants to have psychiatric consultation services available for physicians treating patients with complex mental health needs.	A primary care physician and psychiatrist consult about patients with complex behavioral health needs; the psychiatrist provides advice; the primary care physician builds skills to treat complex patients. <sup>20</sup>
A rural pediatric practice wants to screen for mental health issues and make accurate diagnoses and referrals.	A web-based mental health guide enables physicians to link families to resources. Parents and teenagers complete a computer survey for a provisional diagnosis. <sup>21</sup>
A rural primary care practice serves an indigent population that struggles with adherence to treatment and has high “no-show” rates.	Patients receive a small computer to connect to their home phone. Patients answer daily questions about their conditions and responses are monitored. Patients receive reminders about medications and self-care. <sup>22</sup>

### **Saving Costs**

Telemental health is a cost-effective way to improve access to specialty mental health services in rural and underserved communities. All mental health procedures that are delivered in person can be delivered remotely via telemental health.<sup>23</sup> More than 85 percent of patients seen via telemedicine remain in their local communities, resulting in lower costs of care and further enhancing the financial viability of the community hospital.<sup>24</sup> Earlier intervention and easier access helps patients engage in their care and, ultimately, this will improve mental health outcomes and save health care costs.

In rural areas, patients face the reality of long commutes to obtain mental health services. When transportation barriers exist, patients often forgo assessment or ongoing care. Telemental health services reduce travel time for mental health professionals and their patients, saving both time and money. Other potential cost savings result from reduced wait times and “no-show” rates. If a health facility can provide a low no-show rate, they may be able to negotiate a lower hourly rate with a psychiatrist and can enroll additional patients in the service. Telemental health services reduce overall costs for patients, providers and health systems even after factoring in start-up costs for necessary equipment and technology infrastructure.

<sup>18</sup> Collins C, Hewson DL, Munger R, Wade T. (2010) *Evolving Models in Behavioral Health Integration in Primary Care*. Milbank Memorial Fund.

<sup>19</sup> Hilty et al. (2006) *Models of Telepsychiatric Consultation – Liason Service to Rural Primary Care*, Psychosomatics 47: 152-157.

<sup>20</sup> Pauze and Gagne. (2005) *Collaborative Mental Health Care in Primary Health Care: A Review of Canadian Initiatives*, Vol.2, Canadian Collaborative Mental Health Initiative.

<sup>21</sup> Edwards, Garcia and Smith. (2007) *Integrating Publicly Funded Physical and Behavioral Health Services: A Description of Selected Initiatives*, Health Management Associates.

<sup>22</sup> [www.healthbuddy.com](http://www.healthbuddy.com). Retrieved June 21, 2010.

<sup>23</sup> Novins DK, Weaver J, Shore J. (2008) Telemental Health Talking Points. *Telemental Health Guide*.

<sup>24</sup> Woods and Poole Economics, Inc. (2006) Complete Economic and Demographic Data Source.

# Telemental Health Workforce

Federal agencies and the National Institutes of Health consider psychiatrists, clinical psychologists, clinical social workers, advanced practice psychiatric nurses and marriage and family therapists as core mental health professions. More than half of all patient visits to primary care physicians are for health problems with components such as anxiety, depression and addictions.<sup>25</sup> Primary care physicians, especially in rural and other underserved areas, often are the mental health system.<sup>26</sup> The Rural Telemental Health Work Group identified primary care physicians, in addition to the core mental health providers, as those most likely to provide mental health services to rural Minnesotans. A list of all licensed or certified mental health professional types in Minnesota, including their scope of practice, is included in Appendix A.

The number of mental health and primary care professionals providing mental health services via telehealth in Minnesota is not known. Workforce shortages exist in all of the core mental health and primary care professions in rural Minnesota. Lack of in-person access to these professionals is a driving force for the use of telemental health. The technology of telehealth may help to combat the shortage of mental health professionals. However, the continued shortage of mental health professionals serving rural Minnesota is still a primary concern.

## Workforce Shortages and Scope

The Health Resources and Services Administration has the authority to designate Health Professional Shortage Areas (HPSAs) based on established criteria such as: 1) being a rural area for the delivery of health services; 2) the area exceeds specified population-to-practitioner ratios; and 3) health services in surrounding areas are too distant, over utilized, or inaccessible.<sup>27</sup> One category of HPSA is mental health. In Minnesota, Mental Health HPSAs are designated solely on the distribution of psychiatrists providing outpatient treatment. Ten counties in the south/southeast region and the seven county metro are not designated; the rest of the state is designated as a Mental Health HPSA<sup>28</sup> (see Map 1).

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<sup>25</sup> The Center for Rural Mental Health Studies, University of Minnesota, Duluth

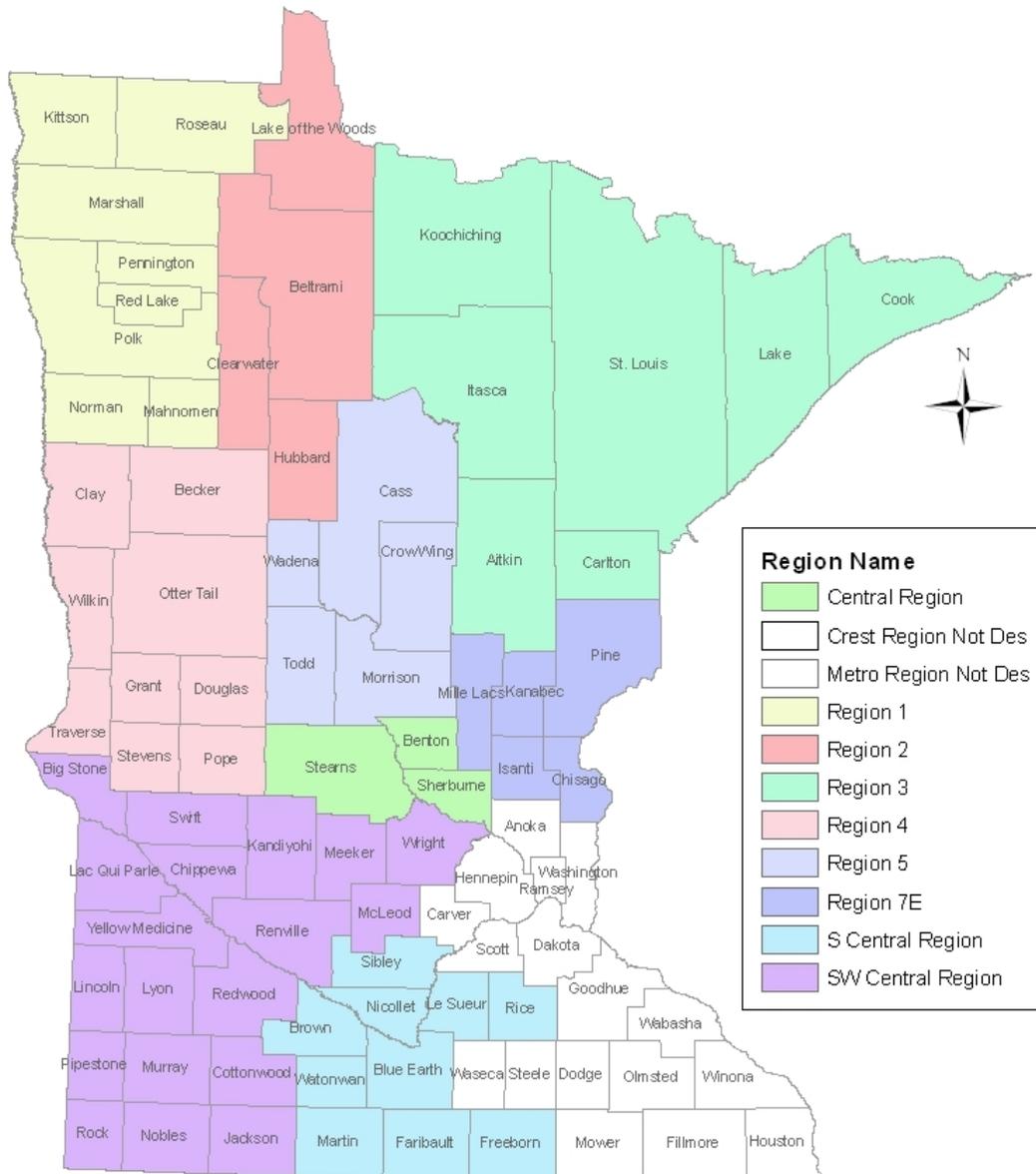
<sup>26</sup> *Linking Primary Care and Rural Psychiatry*, (1998). Psychiatric Services, American Psychiatric Association.

<sup>27</sup> Health Professional Shortage Area Fact Sheet, Medicare Learning Network, Centers for Medicare and Medicaid Services, March 2010.

<sup>28</sup> Office of Rural Health and Primary Care, Minnesota Department of Health.

Map 1

## Minnesota Mental Health Professional Shortage Areas



Source: Minnesota Department of Health  
Office of Rural Health, July 2008

The National Health Services Corps (NHSC) is a federally-funded program available through the Health Resources and Services Administration's Bureau of Health Professions. The program's mission is to recruit health care professionals to deliver care to underserved communities. NHSC has identified psychiatrists, clinical psychologists, psychiatric nurses, clinical social workers and marriage and family counselors as mental health providers eligible for loan repayment in exchange for service in federally designated Mental Health HPSAs.

Nationally, there are approximately 4.5 mental health professionals per 10,000 population in rural areas, compared to 9.7 mental health professionals per 10,000 population in metropolitan areas.<sup>29</sup>

### **Advanced Practice Psychiatric Nurses**

In Minnesota, nurses with advanced training through either a nurse practitioner program or a clinical nurse specialist program can diagnose and treat mental health issues under a collaborative agreement with a physician (usually a psychiatrist), including prescribing medications. Advanced practice nurses with psychiatric certifications include certified nurse practitioners (CNP) with adult and/or family psychiatric certification and certified nurse specialists (CNS) with adult and/or child psychiatric certifications. According to the Minnesota Board of Nursing and the Office of Rural Health and Primary Care, 62 CNPs with psychiatric certification were practicing in Minnesota in 2008. Of those, 13 (21 percent) practiced in rural counties. Also in 2008, there were 96 practicing CNSs with psychiatric certification, 10 of whom were located in rural counties.

### **Licensed Independent Clinical Social Workers**

Licensed independent clinical social workers may engage in clinical practice, without supervision. Clinical practice includes the diagnosis and treatment of psychosocial function, disability or impairment, including addictions and emotional, mental and behavioral disorders. Treatment may include psychotherapy.<sup>30</sup>

Minnesota allows exceptions to licensing of practicing clinical social workers. For example, social workers employed by the county or state are not required to maintain a license in order to practice clinical social work. In addition, some who do have a license to practice clinical social work may no longer be practicing in Minnesota. Therefore, it is difficult to ascertain the number of clinical social workers providing mental health services in Minnesota. The Office of Rural Health and Primary Care and the Board of Social Work are collaborating on a data collection process. This should provide more useful information regarding practicing clinical social workers.

In 2009, there were 3,380 licensed independent clinical social workers in Minnesota, according to the Board of Social Work. Of those, 159 (approximately 5 percent) have

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<sup>29</sup> Thomas, Kathleen et al. *County-Level Estimates of Mental Health Professional Supply in the United States*. Psychiatric Services, October 2009.

<sup>30</sup> Minnesota Statutes 148D.050.

mailing addresses in rural counties. Eight rural counties have no board registered licensed clinical social workers.

### **Primary Care Physicians**

Physicians with specialty certification in family practice, general internal medicine, pediatrics, obstetrics and gynecology often make up the practice of primary care. These are the physicians treating patients for common illness and prevention of chronic conditions. Research shows that patients most often discuss their mental health concerns first with their primary care physician. Primary care physicians provide the majority of mental health care in the United States.<sup>31</sup> Of all primary care patients treated in 1998, 42 percent were diagnosed with clinical depression by their primary care physician; 47 percent were diagnosed with generalized anxiety disorder.<sup>32</sup> Between 11 and 36 percent of all primary care patients have a psychiatric disorder. Only half of the patients are diagnosed. Of those who are undiagnosed and have symptoms of a psychiatric disorder, 32 percent say they would first seek mental health care from their primary care physician.<sup>33,34</sup>

Bolstering the capacity of rural primary care providers to address mental health concerns is imperative. Primary care physicians in rural areas already face competing demands, limited time and resources, multiple needs of patients, and economic forces determining reimbursements.<sup>35</sup> A survey of rural primary care physicians revealed that many feel they are not adequately trained to provide a full range of mental health services.<sup>36</sup> Fewer community resources in rural areas also lead to less support and referral opportunities for primary care physicians. Additionally, medical literature cites that the relationship between primary care physicians and mental health professionals is often strained; much of this is due to a perceived lack of professional regard for the other's profession.<sup>37</sup> Provider training and relationship development aside, the systems in which care is provided (i.e., health insurance coverage and reimbursement) drive much of the primary care physician's actions in mental health diagnosis. Coding and payment methods, contractual relationships and mental health performance measurement for primary care physicians could be better aligned with evidence-based practices.<sup>38</sup>

In Minnesota, an estimated 7,410 primary care physicians are practicing at least part time. Approximately 650 primary care physicians are practicing in rural areas of the state. Approximately 72 percent of all rural physicians are primary care physicians. The

<sup>31</sup> Gallo JJ, Coyne JC. The challenge of depression care in late life: bridging science and screening in primary care. *JAMA* 2000; 284 (12), 1570-2.

<sup>32</sup> National Mental Health Association. May 2000.

<sup>33</sup> Simon GE, VonKorff M. (1995) Recognition, management and outcomes of depression in primary care. *Archives of Family Medicine*, 4(2) 99-105.

<sup>34</sup> Schwenck TL. (2000) Screening for depression in primary care. *JAMA*, 284(11) 1379-80.

<sup>35</sup> Badger, L, Robinson, H, Farley, T; *Management of Mental Disorders in Rural Primary Care A Proposal for Integrated Psychosocial Services*, The Journal of Family Practice, Aug. 2003.

<sup>36</sup> Geller, J, *Rural Primary Care Providers' Perceptions of Their Roles in the Provision of Mental Health Services: Voices From the Plains*, The Journal of Rural Health, Summer 1999, p. 329.

<sup>37</sup> Ibid.

<sup>38</sup> Frank, R, et al. (2003) Aligning Incentives in the Treatment of Depression in Primary Care With Evidence-Based Practice. *Psychiatric Services*, 24 (682-687).

majority (49 percent) of all licensed primary care physicians are family practice physicians, and 30 percent are internal medicine physicians.<sup>39</sup>

### **Psychiatrists**

Psychiatrists are physicians certified in treating mental disorders. They counsel patients, diagnose illness and prescribe medication, and order and analyze psychological and laboratory tests. In addition to direct patient care, some psychiatrists oversee the patient care that psychiatric nurses provide through collaborative agreements. As the integration of primary care and mental health continues, more psychiatrists are also providing peer consultation to family practice physicians, and other mental health professionals especially in rural Minnesota.

An estimated 446 psychiatrists are licensed and practicing in Minnesota.<sup>40</sup> Fewer than 90 (12 percent) practice in rural areas. Fifty rural counties in Minnesota have no practicing psychiatrists.<sup>41</sup> Most of the psychiatrists practicing in rural areas are located in regional community mental health centers or hospitals. Sixty-five percent of Minnesota's psychiatrists practice in the Twin Cities area; 14 percent practice in Olmsted County.<sup>42</sup>

### **Psychologists**

The licensed psychologist, practicing independently, observes, evaluates, interprets or modifies human behavior by application of psychological principles such as psychotherapy, counseling, assessment and diagnosis.<sup>43</sup> The Minnesota Board of Psychology reports 3,288 licensed psychologists practicing in Minnesota as of 2003 (the most recent data available). This is approximately 66.8 psychologists per 100,000 population, well above the national average of 31.1 per 100,000 population.<sup>44</sup> However, psychologists, like other health professionals, are concentrated in metropolitan areas of Minnesota. Differences in psychologist-to-population ratios vary widely from zero in 13 rural counties to 123.7 per 100,000 in Hennepin County.

### **Telemental Health Participation, Training and Experience**

Several telemental health networks include providers in rural Minnesota. The largest is the Minnesota Association of Community Mental Health Programs. This association comprises more than 80 community-based mental health clinics and programs linked through virtual presence communication technologies.

A survey of Minnesota's Critical Access Hospitals (CAHs) showed that 55 percent of CAHs use telemedicine to provide patient services. Of those, 12 (28 percent) report using telemedicine to provide behavioral health or psychiatric services.<sup>45</sup> Refer to the section

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<sup>39</sup> *Distribution of Physician Specialties in Minnesota*. Office of Rural Health and Primary Care, Minnesota Department of Health, November 2009.

<sup>40</sup> *Ibid.*

<sup>41</sup> Office of Rural Health and Primary Care, Minnesota Department of Health

<sup>42</sup> *Ibid.*

<sup>43</sup> Minnesota Statutes 148.89.

<sup>44</sup> SAMHSA, 2002.

<sup>45</sup> Flex Program Evaluation: Critical Access Hospital Satisfaction, Challenges, and Next Steps. Office of Rural Health and Primary Care, Minnesota Department of Health, October 2009.

*Telemental Health Landscape in Minnesota* for information on several organizations and networks providing telemental health in rural Minnesota.

Providers are largely satisfied with the practice of telemental health. Surveys conducted by the Center for Rural Mental Health show high rates of primary care and mental health provider satisfaction.<sup>46</sup> Most mental health professionals receive telehealth training on the job. The delivery of mental health services via telehealth is not specifically included in most medical school, nursing or other mental health professional curricula or clinical training program in Minnesota. As the number of facilities with capacity and equipment to provide telemental health services increases, students studying and training for mental health careers in rural communities will more frequently be exposed to telemental health as part of their clinical training.

The Center for Rural Mental Health Studies (CRMHS), located within the University of Minnesota Medical School-Duluth and associated with the Academic Health Center of the University of Minnesota, exposes medical students to the practice of telemental health and the CRMHS model. The model CRMHS uses integrates primary patient care with mental health care. Patients access mental health services through their primary care provider, who coordinates virtual consultations with a mental health professional as needed. This is the only example of curriculum-based, school-specific training in telehealth for mental health professionals found in Minnesota.

Rural-specific medical training and experience is available through the University of Minnesota's Rural Physician Associate Program (RPAP). RPAP provides clinical training for third-year medical students who live and train for nine months in a rural Minnesota community. Students see patients in a variety of settings. If any of these settings (e.g., hospital, clinic, emergency room, nursing home) utilize telehealth, students are likely to observe or participate in providing services this way, although telehealth information or training is not a component of the program. Four out of five former RPAP students practice in primary care.<sup>47</sup>

The Minnesota Consortium for Advanced Rural Psychology Training (MCARPT) prepares newly graduated psychology doctorate students for clinical practice in rural, frontier and underserved areas. The MCARPT curriculum and experience trains students to understand the unique challenges and opportunities of a rural psychology practice. Fifteen cooperating agencies participate in MCARPT, providing students with multiple rotational experiences at a variety of organizations.<sup>48</sup> Currently, one participating agency provides mental health services via telehealth. MCARPT sees the need and interest for additional telemental health sites, and expresses concern about funding and capacity to participate in telemental health.<sup>49</sup> MCARPT is based in Detroit Lakes, Minnesota.

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<sup>46</sup> Mental Health Televideo Consultations in Rural Primary Care Clinics: Patient Characteristics and Provider Referral Patterns. Jim Boulger, Ph.D., Center for Rural Mental Health Studies, June 2009.

<sup>47</sup> [www.med.umn.edu/RPAP/about/home.html](http://www.med.umn.edu/RPAP/about/home.html). Retrieved June 1, 2010.

<sup>48</sup> [www.mcarpt.org](http://www.mcarpt.org). Retrieved June 10, 2010.

<sup>49</sup> Personal interview with Cyndi Anderson, MCARPT Executive Director, June 10, 2010.

## Professional Practice Standards

The American Telemedicine Association (ATA) recently developed practice standards and guidelines for telemental health. The documents provided reference and support for the practice of telemental health and for decision-making in developing and providing telemental health services. The ATA published two complementary guides: *Telemental Health Standards and Guidelines* and *Evidence-Based Practice for Telemental Health*. The documents serve as a guide for providing appropriate mental health services via telehealth technologies and as a best practice reference based on clinical empirical experience. The ATA acknowledges the potential role for several types of mental health providers, and states that ultimately, it is the primary care physician who will decide on and oversee telemental health as a service for the patient if it is deemed appropriate.<sup>50,51</sup>

In 2002, the Internet Therapy Committee, sponsored by the Minnesota Board of Marriage and Family Therapy, published a report addressing the use of the Internet in providing mental health therapy. The report serves as a reference document for summaries and acknowledgements of practice standards, policies and issues for consideration in relation to any use of the Internet in providing mental health services. The report focuses on the use of telecommunications, and deemed the practice of telemedicine outside the scope of its objectives. Therefore, portions of the report may provide standards and guidelines for some aspects of telemental health, but it does not specifically address the practice of telemedicine. The Minnesota Board of Psychology and the Minnesota Board of Social Work also participated on the Internet Therapy Committee.<sup>52</sup>

The National Association of Social Workers and the Association of Social Work Boards developed *Standards for Technology and Social Work Practice*. These standards address the critical skills social workers should use in delivering social work services.<sup>53</sup> These guidelines do not specifically address telemental health; rather, they speak to the use of technology in general. Following these standards will enhance social workers' abilities to deliver social work and mental health services via videoconferencing.

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<sup>50</sup> Telemental Health Standards and Guidelines. American Telemedicine Association. May 2009

<sup>51</sup> Evidence-Based Practice for Telemental Health. American Telemedicine Association. May 2009.

<sup>52</sup> Final Report of the Internet Therapy Committee. Minnesota Board of Marriage and Family Therapy. December 2002.

<sup>53</sup> *Standards for Technology and Social Work Practice*. (2005) National Association of Social Workers and Association of Social Work Boards.

# Financial, Legal and Infrastructure Issues

In the next few years, there will be a dramatic increase in the development of telehealth services. A recent national survey found two out of three health care decision-makers had implemented some kind of telehealth project.<sup>54</sup> Among those who had not yet invested, 50 percent planned to implement a project in the next year. The same survey also found that 89 percent of health providers believe telehealth will transform health care in the next 10 years.

Although telemental health services are becoming more widespread, there are financial, legal and infrastructure challenges to broader implementation and use. Financial challenges include start-up costs, ongoing operational costs and limited reimbursement. Legal challenges include credentialing, licensing and information privacy and security. Infrastructure challenges include broadband availability and state telehealth network development.

## Start-up Costs

As long as sufficient broadband technologies are available, start-up costs for telemental health services are fairly minimal. In addition to appropriate Internet connectivity, only basic videoconference equipment, space and contractual arrangements with mental health providers are necessary to provide telemental health services. Equipment costs, such as cameras and monitors, have decreased significantly in recent years. A few years ago, a typical consultation room setup required an upfront investment of \$10,000-\$40,000. Now the same equipment costs a few thousand dollars and prices continue to drop. A wide range of equipment options is available, from intricate high-definition video systems to simple webcams used as peripherals or installed on laptop computers.

Start-up cost considerations include facility modifications to ensure privacy, security and ease of use of the technology. The “art” of telemental health is in details such as using auto-presets for ease of flow, understanding proper alignment of the camera, and helping the patient feel comfortable. To accommodate posture and movement visualization by mental health providers, multiple camera angles and wireless headsets or microphones may be necessary, increasing start-up costs slightly. Many telemental health rooms are used for multiple purposes including provider education, regional or statewide meetings, or other telehealth applications. This multi-use increases the facilities’ return on their equipment purchase investments.

## Ongoing Operational Costs

Equipment maintenance, transmission costs and ancillary staff support often are not covered by existing reimbursement plans and translate into additional costs when

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<sup>54</sup> [www.intel.com/pressroom/archive/releases/20100518corp.htm](http://www.intel.com/pressroom/archive/releases/20100518corp.htm) Retrieved June 21, 2010.

compared with face-to-face services. Originating sites bear the greatest burden of ongoing operational costs because they do not capture a return on investment in equipment, room usage and staff time. States with strong telehealth networks gain leverage and may barter with telecommunications companies to lower ongoing operational costs.

There are three types of ongoing costs associated with network transmission: the monthly costs of long-distance service access, the varying costs of long-distance service usage, and the cost of bridging service.<sup>55</sup> Monthly and hourly charges depend on the set-up (see Table 2). Bridging service is required to connect three or more sites.

**Table 2**

<b>Network Transmission Costs for Telemental Health Services<sup>56</sup></b>		
	<b>Monthly access</b>	<b>Hourly usage</b>
ISDN	\$30-100/circuit	\$35-60/hour
T-1	\$400-8000	0
Bridging service	0	\$45-60/hour per site

Most health care or mental health organizations have little technical expertise to maintain telecommunications equipment. Ongoing staff support is needed for equipment maintenance and system integration. Some health organizations hire a pool of qualified technicians while others train staff members already working onsite.

In addition to IT staff, site coordinators at each origination and hub site are available to interact with the patient and provide technical or other needed support. Site coordinator duties may include scheduling, preparing equipment for use, providing instructions to the patient or provider, assisting with troubleshooting, reporting or performance improvement activities related to telemental health services.<sup>57</sup>

**Reimbursement Limitations**

One of the primary barriers to wider implementation and use of telemental health services is the absence of consistent reimbursement policies. The Patient Protection and Affordable Care Act of 2010 includes payment models that should foster adoption of innovative care delivery approaches, including telehealth. However, there are current limitations to telemental health reimbursement based on geography, coding and provider eligibility. Other challenges relate to differences in telehealth reimbursement for mental and behavioral health care services versus primary or specialty health care services.

Telehealth was originally identified as a rural-centric solution to health care access issues, so reimbursement mechanisms have been based on services for patients from rural underserved areas. Telehealth reimbursement policies from Centers for Medicare & Medicaid Services require that patients live in or have access to a telemental health

<sup>55</sup> Smith, Henry A. et al. (2001) *Telemental Health: Delivering Mental Health Care at a Distance*. Health Resources and Services Administration, US Department of Health and Human Services.

<sup>56</sup> Ibid.

<sup>57</sup> [www.gptrac.ahc.umn.edu/toolbox/personnel-information.php](http://www.gptrac.ahc.umn.edu/toolbox/personnel-information.php) Retrieved June 15, 2010.

service in a federally designated Mental Health HPSA that is not included in a metropolitan statistical area (MSA).

In Minnesota, geographic designations pose challenges to equitable telemental health reimbursement. Mental Health HPSAs are designated solely on the distribution of psychiatrists providing outpatient treatment. Residents from rural areas that do not qualify as Mental Health HPSAs need ongoing mental health care that could be provided through telemental health services. Ten rural or micropolitan counties in the south/southeast region of Minnesota are currently not designated as Mental Health HPSAs (see Map 1).<sup>58</sup>

MSAs are defined as counties with at least one urban core area of 50,000 people or more. Rural communities that are hours away from an urban core, but within the same county, are still defined as metropolitan. For example, St. Louis County has a metropolitan designation because of Duluth and Polk County is also an MSA because of East Grand Forks. There may be limited or no availability of specialists serving rural communities in MSA-designated counties because specialists tend to be concentrated in urban core areas.

Medicare reimbursement for telemental health services is based on Current Procedural Terminology (CPT) codes. Some telemental health services have codes that are reimbursed and others are not. In December 2009, the American Telemedicine Association (ATA) requested code changes to reimburse additional telemental health services that had demonstrated feasibility.<sup>59</sup> For example, discharge planning (from an inpatient or day hospital to a mental health or substance abuse program) had been well researched and results supported its provision through telemental health (see Table 3).

**Table 3**

<b>Telemental Health CPT Codes and Medicare Reimbursement</b>		
<b>CPT codes</b>	<b>Telemental Health Services</b>	<b>Reimbursement</b>
90801	Psychiatric diagnostic interview exam	YES
90804-90809	Individual psychotherapy	YES
96116	Neurobehavioral status exam	YES
96118-96119	Neuropsychological testing	NO
99231-99232	Subsequent hospital care	NO
99238-99239	Discharge day service	NO

Reimbursement for telemental health services is limited to certain providers. Those eligible for reimbursement through Medicare include physicians, nurse practitioners, physician assistants, nurse midwives, clinical nurse specialists, clinical psychologists, clinical social workers, and registered dietitians or nutritionists. Other mental health practitioners are not eligible to receive Medicare reimbursement for telemental health services.

<sup>58</sup> Office of Rural Health and Primary Care, Minnesota Department of Health.

<sup>59</sup> [www.americantelemed.org/files/public/policy/ATA%20code%20request%202009.PDF](http://www.americantelemed.org/files/public/policy/ATA%20code%20request%202009.PDF)  
Retrieved June 21, 2010.

Reimbursement rates vary depending on if Medicare, Medicaid or private insurance covers the specific telehealth service. Reimbursement for telemental health also varies based on the type of service provided. Table 4 makes comparisons between reimbursement for mental and behavioral health services and primary and specialty health services offered via telemedicine.<sup>60</sup>

**Table 4**

<b>Telehealth Reimbursement for Mental Health vs. Primary and Specialty Care Services</b>							
<b>Type of Service</b>	<b>Medicare Originating Site</b>	<b>Medicare Provider Site</b>	<b>Medicaid / MinnesotaCare Originating Site</b>	<b>Medicaid / MinnesotaCare Provider Site</b>	<b>Minnesota Health Plans Originating Site</b>	<b>Minnesota Health Plans Provider Site</b>	<b>Comments</b>
Mental or Behavioral Health	Pays 88% of facility fee charge (\$23 per \$26 charge); facility absorbs remaining costs; in HPSA or non-MSA only (rural setting)	Same as in person; same CPT codes with modifier	No Payment; site provides oversight and room; typically split reimbursement with provider	Same as in person; for dual eligible only	Some cover select mental health services <ul style="list-style-type: none"> <li>▪ BCBS</li> <li>▪ Medica</li> <li>▪ Health-Partners</li> <li>▪ UCare</li> </ul>	Some cover select mental health services <ul style="list-style-type: none"> <li>▪ BCBS</li> <li>▪ Medica</li> <li>▪ Health-Partners</li> <li>▪ UCare</li> </ul>	Originating sites do not capture return on investment in equipment, room and staff time; high patient acceptance; variable no-show rates
Primary and Specialty Medicine	Pays 77% of facility fee charge (\$20 per \$26 charge); facility absorbs remaining costs	Same as in person; same CPT codes with modifier	Pays 40% of facility fee charge (\$10.40 per \$26 charge); facility absorbs remaining costs	Same as in person; same CPT codes with modifier	Some pay up to 80% fee; facility absorbs the remaining costs	Generally, same as in-office visit; for provider time only	Originating site facility fee is not adequate to meet expenses; rural hospitals keep patient in area

Note: “Originating Site” is where the patient is located. “Provider Site” is the mental health provider location.

<sup>60</sup> Minnesota Telehealth Registry (2007) [www.health.state.mn.us/divs/orhpc/pubs/telehealth.pdf](http://www.health.state.mn.us/divs/orhpc/pubs/telehealth.pdf) Retrieved June 21, 2010.

## Medicare Reimbursement

Medicare reimbursement for telemental health follows a hub and spoke model. The hub (origination site) receives administration fees. The provider is reimbursed the same for remote services as face-to-face services. A recent expansion in January 2009 approved telehealth coverage in community mental health centers and allowed nursing homes to charge a facility fee when providing telehealth services. Medicare sites currently eligible for reimbursement include physician offices, hospitals, Critical Access Hospitals (CAH), Rural Health Clinics, Federally Qualified Health Centers, hospital-based or CAH-based renal dialysis centers, skilled nursing facilities, and Community Mental Health Centers.

## Medicaid Reimbursement

Medicaid is the largest payer of mental health services in the United States, accounting for 26 percent of total national mental health care spending. A scan of the Medicaid reimbursement environment in the Midwest shows variation in coverage for telehealth services by state (see Table 5).<sup>61</sup>

**Table 5**

<b>State</b>	<b>Medicaid Reimbursement for Telemedicine</b>
Iowa	<ul style="list-style-type: none"> <li>▪ No concern with location or whether by telemedicine or in person</li> <li>▪ Pay for codes that meet the criteria of “appropriate code billed and standards of practice within community are met”</li> <li>▪ Do not pay for store and forward</li> <li>▪ Do not pay for e-mail consults</li> <li>▪ No facility fee</li> </ul>
Minnesota	<ul style="list-style-type: none"> <li>▪ Pay for two-way interactive and store and forward</li> <li>▪ Do not pay for e-mail consults</li> <li>▪ Very small facility fee</li> <li>▪ Medically appropriate codes are paid at same rate as in person</li> <li>▪ GT modifier for interactive; CQ for store and forward</li> </ul>
Nebraska	<ul style="list-style-type: none"> <li>▪ Use GT modifier on codes</li> <li>▪ Can bill transmission fee at \$.08/min</li> <li>▪ No facility fee</li> </ul>
North Dakota	<ul style="list-style-type: none"> <li>▪ Recipient must be present during the provision of the services</li> <li>▪ Appropriate CPT codes are used by consulting site along with GT modifier</li> <li>▪ Originating site uses HCPC code Q3014</li> <li>▪ Physicians at both originating and consulting sites may bill for services</li> <li>▪ Supplies needed for procedures performed are part of the procedure and not separately billed</li> </ul>
South Dakota	<ul style="list-style-type: none"> <li>▪ Limited codes</li> <li>▪ Pay for interactive (GT modifier)</li> <li>▪ Pay for store and forward (GQ modifier)</li> <li>▪ No facility fee</li> </ul>

<sup>61</sup> <http://gp trac.ahc.umn.edu/toolbox/reimbursement.php> Retrieved March 2, 2010

## **Private Insurance Reimbursement**

In Minnesota, there is no state law addressing private insurance reimbursement for telehealth services. Fourteen other states have enacted legislation to address this issue. See Appendix B for details on other states' laws to address reimbursement issues.

Many of the state's largest insurers are showing growing interest in reimbursing doctors for telehealth consults. UnitedHealth and Blue Cross are using a webcam service provided by American Well, a Boston-based company.<sup>62</sup> Large employers, like Delta Air Lines and Medtronic, are signing up for these online care services to connect doctors with patients at their home or workplace. These trends signal positive changes in the private insurance reimbursement environment for the future.

## **Credentialing**

Centers for Medicare and Medicaid Services (CMS) and many other payers and providers require credentialing to review health care provider qualifications. This information may include training, references, certifications, licenses and insurance coverage. For telemental health, credentialing is required at each origination site (the remote site or patient location site) and for each telehealth provider. The staff time required for this process serves as an immediate deterrent to telehealth adaptation and use for rural hospitals under tight personnel and financial resource constraints.

CMS proposed new regulations in May 2010 to address the credentialing and privileging of physicians and practitioners providing telemedicine services.<sup>63</sup> The proposed rule change appears to ensure that hospitals will be able to credential and grant privileges to telemedicine physicians. The rule change would reduce the burden and duplicative nature of the traditional credentialing and privileging process for Medicare-participating hospitals and Critical Access Hospitals engaged in telemedicine agreements.

## **Licensing**

Healthcare professionals obtain a license to practice medicine through state-based systems. A complication for telemental health services is encountered when the provider and patient are located in different states. Some states, including Minnesota, have adopted a special purpose license for physicians to cover telehealth interactions.<sup>64</sup>

## **Information Privacy and Security**

If health care facilities use standard cameras to create the telemental health connection, there can be barriers with bandwidth and hardware at the remote site. Desktop video across the Internet is not always completely secure. There must be encryption capabilities to secure connectivity hardware. Software vendors are aware of HIPAA regulations around patient health information and are working on encryption measures to address these issues. There are also some privacy and confidentiality concerns around mental

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<sup>62</sup> M. Freudenheim. (5/28/10). The Doctor Will See You Now. Please Log On. *New York Times*.

<sup>63</sup> [www.americantelemed.org/files/public/policy/Fed\\_Reg\\_C\\_P%281%29.pdf](http://www.americantelemed.org/files/public/policy/Fed_Reg_C_P%281%29.pdf) Retrieved June 21, 2010.

<sup>64</sup> MN Statute 147.032 – Interstate Practice of Medicine, [www.telehealthlawcenter.org/loadattachment.php?attachmentid=174\\_1744\\_327](http://www.telehealthlawcenter.org/loadattachment.php?attachmentid=174_1744_327) Retrieved June 22, 2010.

health treatment that must be addressed through soundproofing and windowless environments.

### **Broadband Infrastructure**

Telemental health services depend upon access to a high-speed broadband connection for high quality video and audio. Broadband refers to a network connection with high bandwidth. Telemental health services require adequate bandwidth at least in the range of 384-768Kbps. Most of Minnesota's rural hospitals and rural community mental health centers are able to obtain access to this minimal level of service; however, the costs for high-speed service increase with geographic distance.

The Rural Health Care Program of the Universal Service Fund (USF) makes discounts available to rural hospitals and nonprofit mental health facilities for telecommunications services and monthly Internet service charges in order to bring them into parity with urban facilities. The program, however, currently does not cover installation of new services or equipment, and therefore has not fully met the needs of rural telemental health service providers.

In 2007, in an effort to build statewide and regional health care networks to support rural health, the Federal Communications Commission (FCC) created the Rural Health Care Pilot Program, which expands upon the Rural Health Care Program by including large urban providers and subsidizing equipment and construction costs. The FCC authorized \$5.4 million in subsidies for the Greater Minnesota Telehealth Broadband Initiative (GMTBI), a consortium representing approximately 120 hospitals and community mental health programs, to build a statewide network to support rural providers. The three-year project is currently underway.

While provider-to-provider connectivity is critical, a vision for providing telemental health services to patients in their homes is also dependent upon widespread availability of broadband. In October 2009, the Minnesota Ultra High-Speed Broadband Task Force produced a report recommending that all residents of Minnesota have access to minimum broadband speeds of 10-20 Mbps (download) and 5-10 Mbps (upload)<sup>65</sup>. In conjunction with the task force report, maps produced by ConnectMN<sup>66</sup> showed a wide variance in residential broadband availability, varying from 37 percent in Cook County to 99 percent in Stevens County.

The American Recovery and Reinvestment Act of 2009 (ARRA) provided significant incentives to strengthen broadband. The Rural Utilities Service (RUS) recently awarded funding for two projects in rural Minnesota. The Northeast Service Cooperative received \$43 million in grants and loans to bring fiber to northeastern Minnesota for health care and education purposes. The Minnesota Wireless Expansion Project received \$1.1 million in grants and loans to expand broadband in west central and south central Minnesota.

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<sup>65</sup> [www.ultra-high-speed-mn.org/CM/Custom/UHS%20Broadband%20Report\\_Full.pdf](http://www.ultra-high-speed-mn.org/CM/Custom/UHS%20Broadband%20Report_Full.pdf) Retrieved June 10, 2010.

<sup>66</sup> [www.connectmn.org](http://www.connectmn.org) Retrieved June 14, 2010.

### **State Telehealth Network Infrastructure**

In addition to a robust telecommunications infrastructure to support telemental health, Minnesota is lagging behind most other states in comprehensive telehealth network or system development. While there have been efforts to build telemental health networks, such as the Minnesota Association of Community Mental Health Programs' New Connections<sup>67</sup> program and the Minnesota Telehealth Network,<sup>68</sup> these efforts have been isolated and dependent upon grant funding, and therefore difficult to sustain.

States that have built coordinated telehealth networks and systems appear to have common characteristics that support sustainability: a combination of federal and state funding for provider and network start-up costs, adequate high-speed broadband and subsidies, and a reimbursement rate structure supported by statewide policy. Those states with existing laws to establish reimbursement rates paid by private insurers for telehealth services also enjoy strong statewide telehealth networks. See Appendix C for more information on telemental health networks in other states.

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<sup>67</sup> [www.macmhp.org/pdfs/Overall\\_Project\\_Description.pdf](http://www.macmhp.org/pdfs/Overall_Project_Description.pdf). Retrieved June 10, 2010.

<sup>68</sup> [www.mntelehealthnetwork.org/](http://www.mntelehealthnetwork.org/). Retrieved June 7, 2010.

# Rural Minnesota's Telemental Health Landscape

**T**elemental health services are becoming available in a wide variety of settings: jails, hospitals, nursing homes, primary care clinics, public health settings, community mental health centers, and patients' own homes. These services may address patients' mental health needs through therapy or consultation, or may be used for broader purposes such as education or administration. The following case studies highlight telemental health services offered in a variety of settings in Minnesota. Site visits and interviews with key program staff served as the primary source of information.

**The Veteran Administration Midwest Health Care Network** is part of one of the largest telemental health networks in the world. The Veterans Health Administration (VHA) serves as a model for best practices. While it was initially unclear which mental health services could be implemented using telehealth technologies, the VHA has demonstrated successful delivery of numerous treatment modalities including medication management, individual psychotherapy, group therapies, substance abuse treatment, and Post-Traumatic Stress Disorder programs.

The Veteran Administration Midwest Health Care Network has community-based outpatient clinics (CBOCs) in many rural Minnesota and Wisconsin locations including Twin Ports/Superior, Hayward/Eau Claire, Rochester, St. James, Mankato and Hibbing. CBOCs have provided telemental health services in Minnesota since 2001. This network is expanding in the northwest metro area and will eventually include 45-50 clinical sites. A state plan to expand telemental health services will address a large service gap in northern Minnesota from Hibbing to International Falls.

The Veteran Administration Midwest Health Care Network has telemental health services integrated in primary care provider offices. Additional "pods" are set up with mental health services embedded and available through other clinical locations. Currently 30 staff (including psychiatrists, psychologists, nurse practitioners, physician assistants, registered nurses and social workers) provide telemental health services through this network. Providers benefit from an electronic medical record system that is integrated with primary care notes and searchable by date or type of service.

The Veteran Administration Midwest Health Care Network identified types of patients who need special assistance to use telemental health services effectively. Hard of hearing patients have limitations and need headphones. Patients with dementia need a health aide or loved one to translate, operate equipment, and collect collateral information. Patients with personality disorders are the most difficult to treat through remote methods.

The Veteran Administration Midwest Health Care Network has ideas for further expansion and use of telemental health. The VA envisions triaging stable patients with

general depression and anxiety to primary care settings and utilizing telemental health services (if limited) for high need patients with co-occurring health disorders or patients with severe and persistent mental illness. The Veteran Administration Midwest Health Care Network would like to do collaborative planning with community mental health clinics to make best use of all telemental health sites and equipment available across the state. Staff supports the creation of a national telemental health license. It would be a federal requirement for practice, eliminate licensing issues, and could be supported through a standard yearly fee.

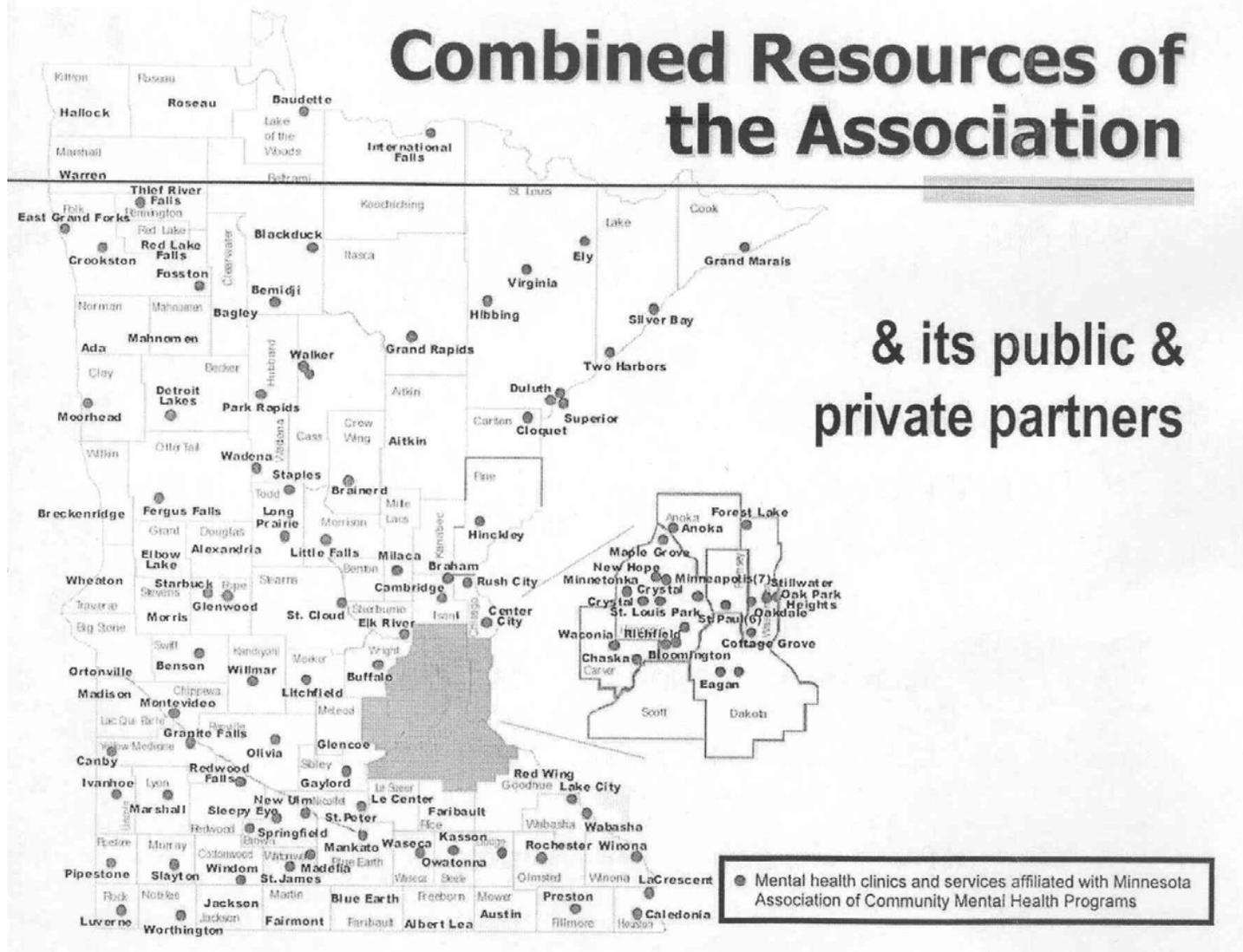
**The Minnesota Association of Community Mental Health Programs (MACMHP)** is a statewide not-for-profit membership organization representing community mental health and other service provider agencies throughout the state. The Association is a leader in the planning and implementation of community mental health services in Minnesota and across the nation through a membership in the National Council for Community Behavioral Healthcare. MACMHP advocates for increased funding as well as innovative and expanded programs for community-based providers.

*New Connections for Community Mental Health* is a statewide program to solve chronic problems rural Minnesotans face obtaining appropriate mental health care. The mission is to provide Minnesotans with high quality, efficient and effective mental health services, on demand, in their own communities near their natural supports of families and friends. More than 80 community-based mental health clinics and programs are linked through virtual presence communication technologies. This statewide network of nonprofit mental health centers and clinics improves access to mental health services while increasing market demand for broadband infrastructure in rural areas (see Map 2).

The first phase of connection for this network is focused on mental health care consumers and provider organizations across Minnesota. The second phase will expand cooperation among health, education and human services sectors at large—hospitals, clinics, nursing homes, group homes—to enable collaborative care. The *New Connections for Community Mental Health* program hopes to achieve results in the following areas:

- Crisis services – enable rural hospitals and other sites to receive urgent diagnostic evaluation, consultation and crisis counseling services any day at any time.
- Health care provider capacity development – strengthen and sustain the behavioral health provider infrastructure for added responsibilities.
- Primary care access – enable rural health care consumers to access primary care providers who will be better prepared to care for patients living with mental illness.
- Health care disparities – reduce health care disparities based on geography and cultural background, making equitable access and culturally competent services available statewide.
- Expert specialty services – provide expert specialty services to patients with low incidence disorders where due to population density it is not viable to locate highly trained mental health professionals.
- Earlier access to services – reduce the suffering of thousands of people with mental health disorders who seek timely treatment and often receive help only in crisis or emergency situations.

Map 2



**The Northwestern Mental Health Center** is a county-owned nonprofit serving six counties (Kittson, Marshall, Mahnomen, Norman, Polk and Red Lake) in northwest Minnesota. It provides a range of mental health services to individuals and families. It focuses on prevention of mental health problems, early intervention to limit the impact of problems, and treatment of mental health conditions to reduce or eliminate long-term effects of mental illness.

The Northwestern Mental Health Center is expanding the scope of its services through telemental health. It provides telepsychiatry services for patients in the region through a main location in Crookston or a branch clinic in East Grand Forks. The psychiatrist providing these services is located in the state of Washington. It provides additional outpatient telemental health services to four primary health care sites, two long-term care facilities and one jail. Northwestern Mental Health Center is currently exploring how to extend the jail telemental health program to small county jails for infrequent but critical access to incarcerated mentally ill patients.

One of the primary care sites utilizing telemental health services through the Northwestern Mental Health Center is the Mahnomen Health Center, a Critical Access Hospital in Mahnomen, Minnesota. A mental health therapist can access a psychiatrist for consults or arrange psychiatric services for patients in a private room in the hospital. This co-location of services helps to eliminate stigma. It also provides support to primary care physicians who treat the majority of patients with mental or behavioral health issues. While most individual psychotherapy sessions are conducted in person, it is helpful for the mental health therapist to be connected to a psychiatrist to manage medications and patients with complex mental health issues.

The Northwestern Mental Health Center currently has four Polycom units and uses large screens to facilitate multi-site communication. It enhanced the telemental health system with the recent installation of the next generation of ITV units through VIDYO. This extends the capability to as many as 40 partners for remote access and communication across the region. The Northwestern Mental Health Center hosts monthly meetings to allow agencies across the region to participate in systems development conversations and service coordination without the need for staff to travel. The staff also participate in many state level meetings by ITV, avoiding the need to travel to the Twin Cities metro area.

Currently, the Northwestern Mental Health Center subsidizes its telemental health services and is looking for additional funding mechanisms to make it sustainable. As technology evolves and becomes less expensive, the Northwestern Mental Health Center looks ahead to a future when clinicians have desktop access and can easily provide remote mental health services.

**The Cass Lake Indian Health Service (IHS)** provides primary health care services for Ojibwe (Chippewa) individuals and other residents of northern Minnesota. A telemental health program was created through a three-year Healthier Minnesota Clinic Fund grant. The purpose of the grant was to use telepsychiatry to address the needs of rural patients with low incomes experiencing depression. The program enables psychiatrists to assess

patients, provide medication management and follow-up mental health services through a remote connection. The telepsychiatry program is in the third year of the grant cycle and will transition from grant funding to a reimbursement model of sustainability.

A psychiatrist is available approximately three days a month to provide direct consults with patients. The quality of the interaction between this provider and patients is the same as in person and patient satisfaction is high. A social worker coordinates the program by setting up appointments and staying nearby to schedule follow-up appointments when the session is finished. The social worker provides mental health services that are complementary to those provided by the psychiatrist. Individual psychotherapy and culturally relevant therapies, such as flower remedies, are used to ease anxiety and depression. These additional therapies support mental health care and maintenance.

A department within the Cass Lake IHS provides technical support, which utilizes a T1 line, and performs system maintenance to ensure a viable connection. At the start of the Cass Lake IHS telemental health program, the Veteran's Administration loaned Tanberg equipment. It required no third party bridging system and was easy to use. Since the VA requested that the equipment be returned, Cass Lake purchased a new Polycom system and can connect without the use of a third party system.

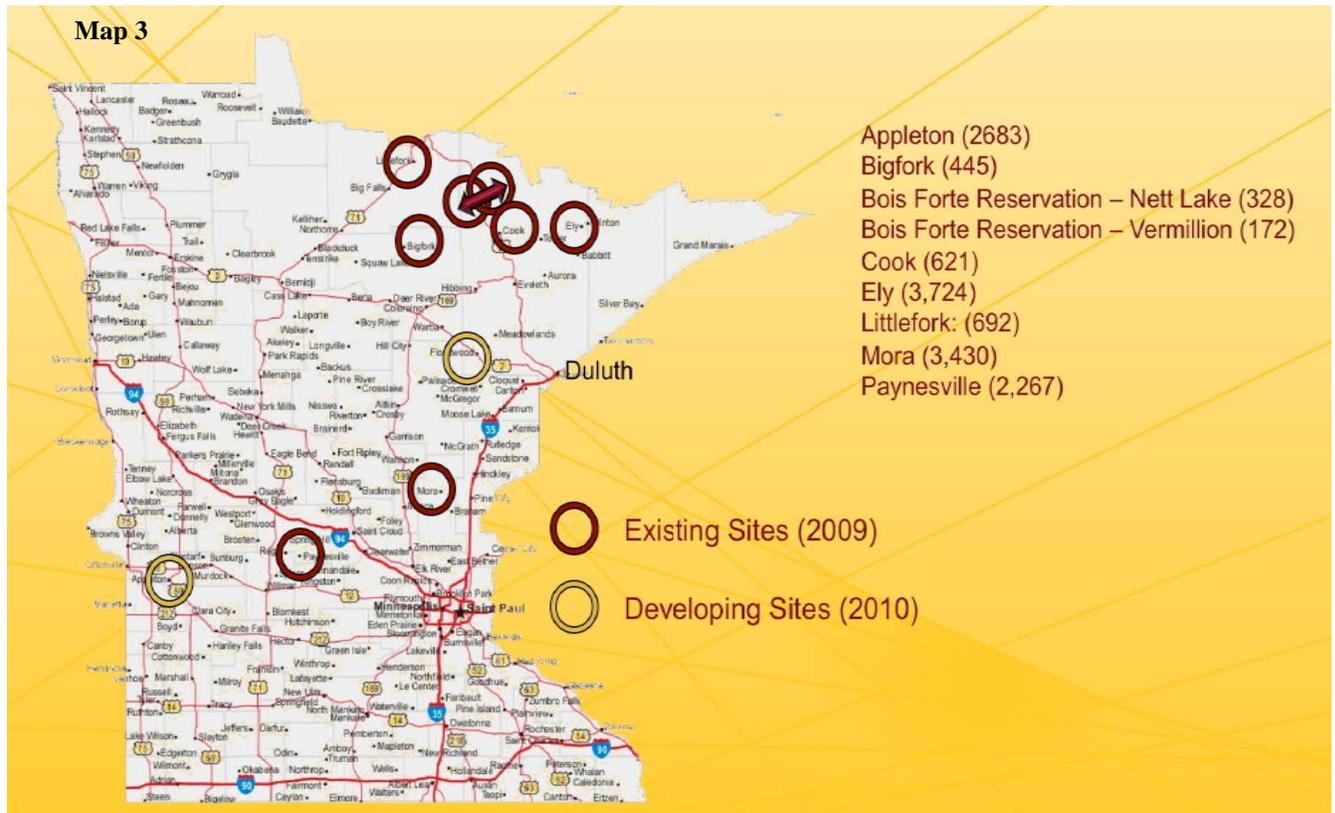
A high patient no-show rate is the biggest frustration with this telemental health program. The psychiatrist provides services through a contract at a rate of \$200 per hour. The provider is paid whether the patients arrive or not. Much of the social worker's time is spent scheduling and rescheduling patients, to make the best use of the time available. At the time of this interview, 14 people were on the wait list for intake to see a psychiatrist.

On the wish list for the Cass Lake IHS telepsychiatry program is a list of psychiatrists willing to provide telemental health services in rural Minnesota. At times, the program needed more providers and had funds to pay. However, program coordinators were unable to locate a psychiatrist willing to provide telemental health services who also had knowledge of Ojibwe culture and traditional healing modalities.

**The Center for Rural Mental Health Studies (CRMHS)** is a nonprofit established in 2000 to address the gaps in mental health services that exist in the medically underserved areas of Minnesota. The mission of the CRMHS also includes identifying the factors that contribute to mental health disparities in rural and frontier areas, as well as studying mechanisms for removing barriers to mental health treatment.

The CRMHS is a multidisciplinary group of health care professionals with specialties in psychology, family medicine, psychiatry, nursing and pharmacy. The CRMHS is located within the University of Minnesota Medical School-Duluth and associated with the Academic Health Center of the University of Minnesota. A major initiative of the CRMHS, which began in 2003 at the request of a rural physician, is to implement and expand a rapid response, consultative model to improve mental health care in rural clinic settings via the Rural Telemental Health Network (RTMHN). Since 2003 the CRMHS has expanded their telemental health service to 11 primary care facilities in Appleton,

Bigfork, Cook, Ely, Floodwood, Littlefork, Moose Lake, Mora, Paynesville, and two sites on the Bois Forte Reservation in Minnesota (see Map 3).



CRMHS uses a model that integrates primary patient care with mental health care. As a result, the primary care practitioner is the access point for patients seeking mental health consultations and the patient is served virtually in their medical home. This collaborative and integrative model allows patients to quickly receive mental health consultations within their chosen primary medical clinic (medical home) rather than waiting months and traveling significant distances. This rapid consultation is accomplished by linking rural primary care facilities and patients with mental health staff through real time televideo connections. It includes rapid scheduling of consultations (within seven days) and immediate feedback to the referring provider regarding treatment recommendations.

As televideo connects CRMHS to patients within their rural primary medical center, the CRMHS consultants are essentially part of the patient’s primary care home rather than external providers. As a result, mental health and medical care are delivered at the same location, decisions about mental health are coordinated with primary care providers, mental health consultations are seamlessly integrated into clinic operations, and recommendations for and responses to treatment are efficiently entered into records in the patients’ medical homes. The growth of the CRMHS telemental health service has resulted in improved and expanded access to mental health care in areas designated as health professional shortage areas (HPSA) and medically underserved areas (MUA).

A primary medical care provider refers patients to the CRMHS for a telemental health consult. Following the patient consultation, the mental health provider contacts the referring practitioner to discuss treatment recommendations. The primary care practitioner writes all prescriptions to ensure continuity of patient care. A one- to two-page letter is faxed to the primary care practitioner and mailed to the patient within 48 hours. This open communication style creates provider transparency and offers patients the ability to take an active role in their care.

The telemental health program offered through the CRMHS began with few resources, which helped to streamline services. The CRMHS has no large financial backers and without external grants could not be a sustainable program. Medical school faculty and other staff have made telemental health services a part of their jobs, but are not receiving additional remuneration for providing services. Some important aspects of the CRMHS model could be replicated, including a primary care consulting focus and open communication methods. Others are unique, such as in-kind staff support from the University of Minnesota.

On the wish list for CRMHS is access to electronic health records (EHRs) for easier health information exchange. A challenge to telemental health is how to cross platforms securely and receive integrated patient records when providers and patients use multiple health information exchange systems. Sometimes limited patient information is shared and it would be better to have a full medical record. It is possible, but not cheap, to get an integrated EHR system. CRMHS is currently looking for grants to make this happen.

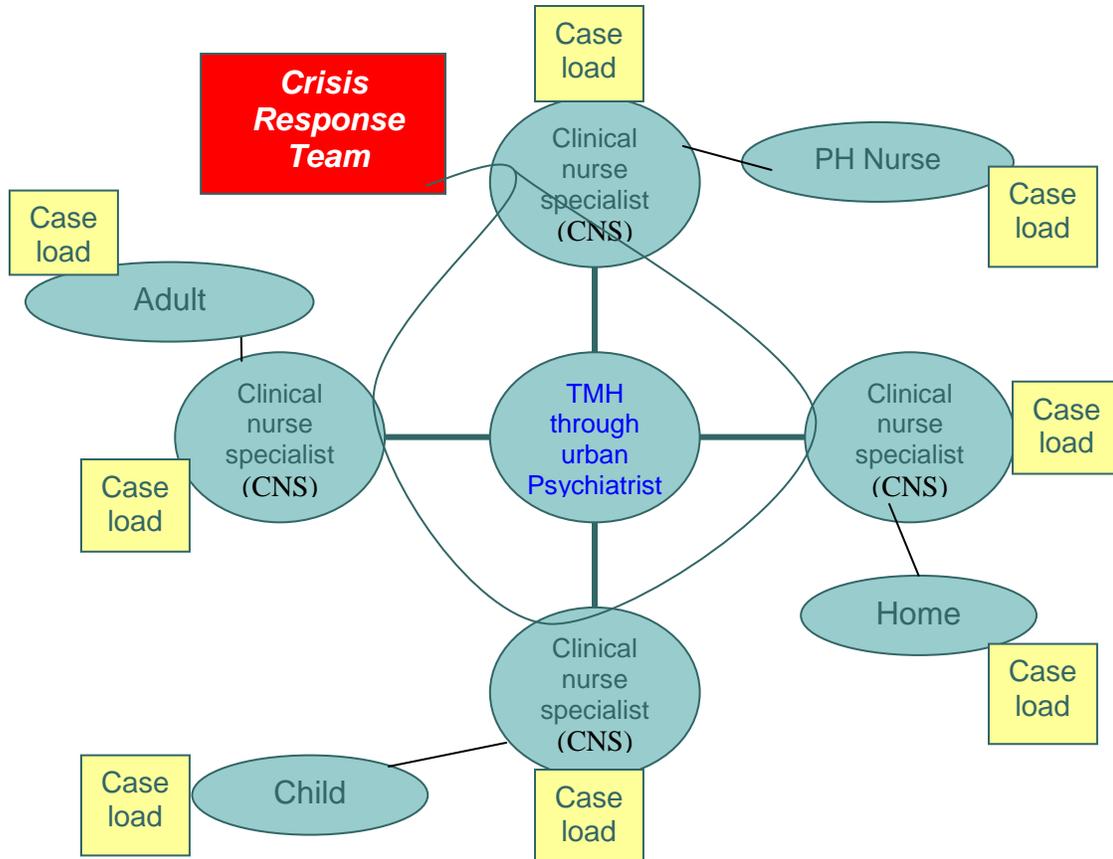
CRMHS is working to influence policymakers and academic institutions to develop a mental health system that is sustainable for rural Minnesota. In 2009, the CRMHS was named one of 12 international finalists in the “Rethinking Mental Health: Improving Community Wellbeing” competition through the Robert Wood Johnson Foundation and Ashoka’s Changemakers.

**Kanabec County Health and Human Services** is located in Mora in central Minnesota. It manages several county-based programs providing some types of mental health services. Public health programs provide screening and community-based prevention. Maternal and child health programs provide screening and referral during prenatal visits. Senior health promotion and home care services programs utilize screening questions and make referrals to primary care if an elderly resident is at risk for depression. Family services provides case management for those with serious and persistent mental illness.

Kanabec County Health and Human Services added telemental health services to their range of services to meet local mental health needs. Clinical nurse specialists (CNSs) use telemental health to connect with a psychiatrist for consults and to see patients on a limited basis. Using this “extender model,” four part-time CNSs cover a five-county area including Chisago, Isanti, Kanabec, Pine and Mille Lacs. Kanabec County contracts with one adult and two child psychologists to provide services to a large caseload of patients. Another psychologist does court ordered assessments. This “extender model” is loosely

based on the DIAMOND model except CNSs are used instead of case workers or CNSs work directly with case workers (see Figure 1).

**Figure 1: Kanabec County Health and Human Services “Extender Model” Diagram**



CNS caseloads are heavy and medication management issues are complex. CNSs can be called by crisis response teams to do assessments. In these cases, crisis management and avoiding unnecessary hospitalizations is key. In a recent six-month period, at least two inpatient psychiatric hospitalizations were prevented using crisis response teams and CNS assessments.

The county would like to offer more CNS consults in rural areas. Currently, county-based mental health services are connected to crisis management, but not to primary care settings. They are involved in a five-county regional grant to look at the possibility of increased CNS use at clinical sites. Until there is a way to break even financially, advantages for primary care to use an extender model will be unrealized and silos will be maintained. CNSs get referrals from crisis management teams and primary care, but pitfalls to coordinated care include communication gaps and scheduling issues.

Staff is recruited for the telemental health program through personal networking. A clinical nurse specialist from Kanabec County, who is currently employed by the county,

previously taught in a university setting. She uses her extensive network to recruit new nursing graduates, especially those originally from the five county region. She attracts students to internships with CNSs, which exposes them to practice in a rural area. An urban psychiatrist with a willingness to reach out to underserved rural populations was selected to do psychiatric consults. He owns a private psychiatric hospital and works out of his urban home. He contracts for his time using a shared risk agreement.

Kanabec County Health and Human Services has identified many benefits to telemental health. Mental health professionals are able to spend more time providing services rather than travelling to meet with patients. The time it takes to access a mental health professional is shorter. Still, there are challenges to tailoring mental health services to meet clients' needs. Kanabec County Health and Human Services would like to make services more portable for dual diagnosed clients with physical challenges, or for patients with agoraphobia or schizophrenia. For portable telemental health services to work, a wireless broadband service is required. Sensitive video equipment must be protected in a mobile unit and gas and vehicle maintenance costs must be covered.

There is a connection between the lack of mental health services and increasing numbers of mentally ill people incarcerated in rural jails. In Kanabec County, borderline personality cases are more common than in the past and many newly identified cases are difficult to treat. Often these patients end up in county jails. Court services use televideo equipment to conduct hearings, but rarely is the technology used to increase access to mental health services. A deputy will transfer prisoners to see a CNS if they need medication management beyond the scope of the jail nurse. Currently, state public health grant money cannot be used to provide direct services. Pre-release planning and follow-up services are needed to ensure the mentally ill do not continue to cycle between the health and corrections systems.

With additional funding, Kanabec County Health and Human Services would expand their telemental health program to include ER connectivity (remote consults prior to admission) and mobile units focused on medication management (a cost effective way to avoid hospitalizations). Foster or group home access to telemental health would also be at the top of the list. Group home staff could access weekly sessions with psychiatrists to adjust medications. They would be connected to the necessary expertise and support to take on difficult cases. This is especially important since the case load for child psychiatry is growing and becoming more complex. Looking ahead at the area's rural and aging demographics, they anticipate a growing need for geriatric mental health consults to address Alzheimer's issues and conduct provider education using telehealth.

Kanabec County Health and Human Services is working with the county IT department on a documentation system and maintenance of a client database to eliminate procedural barriers to efficient telemental health use. This would be unnecessary if they were able to implement and exchange electronic health records and standardize electronic forms across all billing systems. A centralized statewide credentialing process for mental health providers and telemental health sites would be more efficient. Currently, much time and effort is spent on the credentialing process. Addressing administrative barriers to

telemental health programs could help usher in a new wave of virtual access to mental health care in rural areas.

**The Avera Health eConsult Program** is a pioneering telehealth model for rural health care delivery. It serves 26 Critical Access Hospitals in South Dakota and southwestern Minnesota, as well as clinics and other health facilities in the region. The eCare program provides 24-hour rural access to specialty care physicians and pharmacists through the eConsult application. Telehealth services are offered in the areas of psychiatry, dermatology, pediatrics, neurology, pulmonology and other specialties. Psychiatry is one of the largest specialty areas for the eConsult application (see Table 26).

**Table 6**

<b>Avera Psychiatric eConsults by Fiscal Year (2002-2009)</b>			
<b>YEAR</b>	<b>All eConsults</b>	<b>Psychiatric eConsults</b>	<b>% Psychiatric eConsults</b>
FY 2002	659	147	22%
FY 2003	980	499	51%
FY 2004	947	493	52%
FY 2005	886	168	19%
FY 2006	1,780	110	6%
FY 2007	2,616	184	7%
FY 2008	3,773	601	16%
FY 2009	4,470	1,045	23%
<b>TOTAL</b>	<b>16,111</b>	<b>3,247</b>	<b>20%</b>

Critical Access Hospitals and mental health centers serve as remote sites for telemental health consults. The origination site is a routine exam room in a location convenient for the consulting psychiatrist. This helps to create a seamless work flow environment for the psychiatrist who covers in person and remote consults.

The growth in mental and behavioral health needs has been rapid. In four years, the Avera hospital in Sioux Falls went from using 60 beds to 110 beds for mental and behavioral health patients. Although needs are great, access to psychiatrists is a challenge. With an average of four psychiatry residents placed in Sioux Falls locations each year, the Avera system has a realistic chance of recruiting half of these residents. They are exploring the idea of using an extender model to employ more mid-levels to meet the demand for mental health services and plan to recruit from an in-state psychiatric nurse practitioner program.

Psychiatric eConsults are primarily used to provide direct mental health services to patients in remote locations. They are also being used to support renal and liver transplant patients. A psychiatric evaluation is completed on renal transplant recipients and donors, and liver transplant donors. This support program has achieved high satisfaction levels from doctors serving transplant patients.

Other telemental health applications address continuing education needs. Psychiatry Grand Rounds is available on an internal video network. This one hour per month learning opportunity helps primary care doctors stay up to date on the latest advances in psychiatric patient care. Friday Forum is a one and a half hour monthly session to address child psychiatry issues. It is accessible via the Internet for school personnel and child mental health practitioners.

To meet regional inpatient psychiatric needs, Avera behavioral health services staff work directly with counties. They contract for mental health holds with 18-20 counties and use telehealth resources to link into county-based court systems. This is possible because Minnesota law allows placement in border states, including South Dakota, for 72-hour mental health holds. Demand for these services grew after Minnesota's regional treatment centers were downsized.

Avera participates in an 18-county mental health consortium in southeastern Minnesota. Avera is working to create a plan for emergency psychiatric services to help smaller emergency departments with assessments. The goal is to avoid unnecessary transports and delays in access to assessments. The hope is to get patients the right level of intervention and create an easier, more responsive process for psychiatric placements. Although there is a low volume of services needed, timely and appropriate placements are important to avert crisis situations. Emergency eConsults could be used in the future to assist ambulance personnel, crisis response teams and law enforcement in finding appropriate placements for emergency mental and behavioral health patients.

# Summary and Recommendations

Residents of many areas in rural Minnesota lack timely, affordable, accessible, quality mental health services. To obtain screening, diagnosis and treatment, rural residents must often wait weeks and even months for an appointment with a mental health professional and travel great distances to receive services. Many rural residents opt to seek care through their local primary care providers. Primary care providers may not have adequate training or support for diagnosing and treating mental health disorders. Inconsistencies in insurance coverage and third-party reimbursement for mental health services in primary care settings create additional obstacles to the provision of mental health services.<sup>69</sup>

Many barriers to the availability of mental health services in rural Minnesota can be addressed through the practice of telemental health, which is the provision of mental health services using a live exchange between remote sites through videoconference connections. Through this technology, consultation and care is available in a growing number of rural community health centers, primary care clinics, hospitals and emergency departments. As access to and understanding of the technology and equipment increases, telemental health services will commonly be offered in more settings such as nursing homes, schools and individual households. Videoconferencing also allows for ongoing education and training of rural mental health and primary care providers.

The Rural Telemental Health Work Group recommends that telemental health services be enhanced and expanded in rural Minnesota. The key findings address the benefits of and barriers to increased telemental health services.

## Key Findings

**Benefits.** Several benefits from telemental health in rural Minnesota were identified, including:

- **Increased access to mental health services.** All mental health procedures that are delivered in person can be delivered remotely via telemental health.<sup>70</sup> This provides a means for combating workforce geographic limitations.
- **Increased diagnosis and treatment yield better outcomes.** Earlier intervention and easier access helps patients engage in their care and, ultimately, this will improve mental health outcomes and save health care costs.
- **Cost-effective delivery of mental health services.** More than 85 percent of patients seen via telemedicine remain in their local communities, resulting in lower costs of care and further enhancing the financial viability of the community

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<sup>69</sup> Bachman, J. et al (2006) Funding Mechanisms for Depression Care Management: Opportunities and Challenges. *General Hospital Psychiatry* 28 (278-288).

<sup>70</sup> Novins DK, Weaver J, Shore J. (2008) Telemental Health Talking Points. *Telemental Health Guide*, [www.tmhguide.org](http://www.tmhguide.org)

hospital or clinic.<sup>71</sup> Other potential cost savings come from reduced wait times and a reduction of no-show rates. Costs are reduced overall for patients, providers and health systems, even after including start-up costs for the necessary equipment and technology infrastructure.

- **Enhanced coordination of care.** As the integration of primary care and mental health continues, more psychiatrists are providing peer consultation to family practice physicians, especially in rural Minnesota. Research shows that patients most often discuss their mental health concerns first with their primary care physician. Telemental health also creates an opportunity to engage additional mental health providers.

**Barriers.** The Rural Telemental Health Work Group identified barriers to improving or increasing telemental health services in rural Minnesota. Additional barriers exist; however, many relate to telehealth overall. The following are barriers to telemental health specifically:

- **Information and Training.** Minnesota lacks a central resource for telemental health information and training. Each facility or organization embarking on the provision of telemental health services must locate its own information, causing a great duplication of effort.
- **Reimbursement.** A lack of uniform, consistent and equitable reimbursement for telemental health services creates a significant barrier to providing the service.
- **Infrastructure and Technical Support.** Telemental health cannot happen without the Internet connectivity and equipment. There is inconsistent broadband coverage throughout Minnesota. The start-up costs associated with telemental health can be cost-prohibitive, especially for small, independent facilities and providers.
- **Mental Health Workforce Shortages.** The underlying issue in telemental health is the shortage of mental health providers in rural Minnesota. The number of psychiatrists and nurse practitioners certified in adult or child psychiatry has decreased. A limited number of psychologists and licensed clinical social workers are practicing in rural areas. Much needs to be done to increase the number of mental health providers practicing in rural Minnesota.

## Recommendations

Telemental health services have a positive impact on the provision of mental health services in rural Minnesota. The following recommendations address steps toward achieving equal access to telemental health services throughout Minnesota:

- A. **Expand and promote a telemental health resource hub (website) to identify best practices, and to educate, inform and provide resources for health care professionals working in telemental health.** Existing organizations, such as the Great Plains Telehealth Resource and Assistance Center (GPTRAC) and the

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<sup>71</sup> Woods and Poole Economics, Inc. (2006) Complete Economic and Demographic Data Source.

Center for Telehealth and E-Health Law (CTel), should enhance resource availability and coordinate sharing of information to include:

- Showcasing of models for integrating telemental health into existing programs (e.g., co-location of services, billing, scheduling).
- Specific health care situations in which telemental health offers a solution or helps achieve a goal (e.g., reduced overall emergency department admissions through increased access to telemental health services).
- Strategies for replication of successful telemental health programs.
- Information about common liability risks and misconceptions about telemental health services by primary care providers (e.g., collaborative agreements and remote assessment).
- Examples and potential use of videoconferencing technology for serving diverse cultures by incorporating translation and interpreter services into the telemental health service.

**B. Enhance the web-based Minnesota Telehealth Registry to identify telemental health providers who are available for consults with rural primary care physicians or to provide telemental health services.** Target the tracking and registry of child psychiatrists, as this is an area of great need. Providers should indicate what percentage of their time or practice will be devoted to telemental health services.

**C. Create a statewide committee to work on resolutions to reimbursement and regulatory issues.** The purpose of the committee is to work with payers on statewide payment, administrative (including credentialing) and regulatory issues and to ensure the implementation and understanding of federal regulations affecting telemental health reimbursement and administration.

**D. Gather existing or develop new methods to assess telemental health program quality and sustainability factors.** Telemental health quality measures should be developed to determine optimal service thresholds. Efficiency and effectiveness should be included in quality measures. Consumers, providers and health plans should provide input into the design of the quality measures. Best practice models can serve as templates for sustainable telemental health services.

**E. Support technical and telehealth coordinator staff capacities to operate and maintain equipment used to provide telemental health services.** Small, rural hospitals and clinics are especially in need of technical support and may not have staff with the expertise to run equipment and troubleshoot technical issues. Support staff by offering training, sharing issues and answers, and clarifying telemental health coordinator job duties and responsibilities.

**F. Inform stakeholders of existing state, federal and foundation grant funding for starting, maintaining or enhancing telemental health services. Especially needed are funding sources for basic equipment. Consider increasing the amount of funding or dedicating a portion of grant programs to the**

**advancement of telemental health in rural Minnesota.** Potentially applicable grant programs include: Community Services and Community Services Development Grant (Minnesota Department of Human Services), Rural Flex Grant (Minnesota Department of Health), and the Telehealth Network Grant (Health Resources and Services Administration). Examples of funding needs include:

- Equipment for rural mental health crisis teams to access in-time remote psychiatric consults.
- Laptops for rural mobile medical units and rural home visiting nurses to enable remote access to telemental health services.
- Telemental health services for incarcerated individuals and consultations for jail health providers. Grant funding could offset costs of diagnostic assessment, medication management and discharge planning.
- Strategic planning and business planning for sustainable telemental health programs.

**G. Connect psychiatric and mental health training programs with rural practice sites providing telemental health services for practicums and clinical training opportunities.** Build upon and support existing programs and models in the state as demonstration projects and best practices. Create incentives and assistance in developing telehealth curriculum and training. Promote best practices and opportunities for practicing telemental health to new and upcoming graduates.

**H. Enhance loan forgiveness programs for mental health professionals.**

The location of the patient should be a consideration for whether some mental health providers are eligible for participation in state and federal loan forgiveness programs, such as the National Health Service Corp (NHSC). If a mental health provider, regardless of the location, is treating a patient located in a Mental Health Professional Shortage Area, the provider should receive enhanced reimbursement or be eligible for loan forgiveness programs. Virtual presence for some mental health professions with extreme shortages, such as child psychiatry, should be considered equal to physical presence.

**I. Educate state policymakers on the critical need for telemental health services in rural areas.** Demonstrate potential cost savings if needs are addressed and highlight proven models in other states.

## Appendix A: Minnesota Mental Health Professionals Scope of Practice

PROFESSION	LICENSING BOARD	SCOPE OF PRACTICE
<p>Licensed Professional Clinical Counselors (LPCC)</p>	<p>Minnesota Board of Behavioral Health and Therapy</p> <p><a href="http://www.bbht.state.mn.us/Home/tabid/91/Default.aspx">www.bbht.state.mn.us/Home/tabid/91/Default.aspx</a></p>	<p>To qualify as a LPCC, an applicant must have completed 4,000 hours of post-master's degree supervised professional practice in the delivery of clinical services in the diagnosis and treatment of mental illnesses and disorders in both children and adults. The scope of practice of a licensed professional clinical counselor includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>• implementation of professional counseling treatment interventions including evaluation, treatment planning, assessment, and referral;</li> <li>• direct counseling services to individuals, groups, and families;</li> <li>• counseling strategies that effectively respond to multicultural populations;</li> <li>• knowledge of relevant laws and ethics impacting practice;</li> <li>• crisis intervention;</li> <li>• consultation; and</li> <li>• program evaluation and applied research. (M.S. 148B.50, 148B.5301)</li> </ul>
<p>Licensed Professional Counselors (LPC)</p>	<p>Minnesota Board of Behavioral Health and Therapy</p> <p><a href="http://www.bbht.state.mn.us/Home/tabid/91/Default.aspx">www.bbht.state.mn.us/Home/tabid/91/Default.aspx</a></p>	<p>To qualify as a LPC, an applicant must have completed 2,000 hours of post-master's degree supervised professional practice in the delivery of clinical services in the diagnosis and treatment of mental illnesses and disorders in both children and adults. The scope of practice of a licensed professional counselor includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>• implementation of professional counseling treatment interventions including evaluation, treatment planning, assessment, and referral;</li> <li>• direct counseling services to individuals, groups, and families;</li> <li>• counseling strategies that effectively respond to multicultural populations;</li> <li>• knowledge of relevant laws and ethics impacting practice;</li> <li>• crisis intervention;</li> <li>• consultation; and</li> <li>• program evaluation and applied research. (M.S. 148B.50, 148B.53)</li> </ul>

PROFESSION	LICENSING BOARD	SCOPE OF PRACTICE
Marriage and Family Therapist (MFT)	Minnesota Board of Marriage and Family Therapy <a href="http://www.bmft.state.mn.us">www.bmft.state.mn.us</a>	Practices under supervision for two years, then practices independently. Marriage and Family Therapists have graduate training (a Master’s or Doctoral degree) in marriage and family therapy and at least two years of clinical experience before licensure. Marriage and Family Therapists are mental health professionals trained in psychotherapy and family systems, and licensed to diagnose and treat mental and emotional disorders within the context of marriage, couples and family systems. Marriage and Family Therapy is recognized as a “core” mental health profession, along with psychiatry, psychology, social work and psychiatric nursing.  (M.S. 148B.29)
Psychiatrist (MD)	Minnesota Board of Medical Practice <a href="http://www.state.mn.us/portal/mn/jsp/home.do?agency=BMP">www.state.mn.us/portal/mn/jsp/home.do?agency=BMP</a>	Practices independently without supervision. A psychiatrist is a physician certified by the American Board of Psychiatry and Neurology.  (M.S. 147)
Certified Clinical Nurse Specialist (RN, CNS) – Adult psychiatric certification	Minnesota Board of Nursing <a href="http://www.state.mn.us/portal/mn/jsp/home.do?agency=NursingBoard">www.state.mn.us/portal/mn/jsp/home.do?agency=NursingBoard</a>	Practices independently under a collaborative agreement with a physician. May prescribe drugs and therapeutic devices. May function as a direct care provider, case manager, consultant, educator, and researcher. May accept referrals from, consult with, cooperate with, or refer to all other types of health care providers, including but not limited to physicians, chiropractors, podiatrists, and dentists. Requires completion of no less than 30 hours of formal study in the prescribing of psychotropic medications and medications to treat their side effects which included instruction in health assessment, psychotropic classifications, psychopharmacology, indications, dosages, contraindications, side effects, and evidence of application.  (M.S. 148.171)

PROFESSION	LICENSING BOARD	SCOPE OF PRACTICE
<p>Certified Clinical Nurse Specialist (RN, CNS) – Child/adolescent psychiatric certification</p>	<p>Minnesota Board of Nursing <a href="http://www.state.mn.us/portal/mn/jsp/home.do?agency=NursingBoard">www.state.mn.us/portal/mn/jsp/home.do?agency=NursingBoard</a></p>	<p>Practices independently under a collaborative agreement with a physician. May prescribe drugs and therapeutic devices. May function as a direct care provider, case manager, consultant, educator, and researcher. May accept referrals from, consult with, cooperate with, or refer to all other types of health care providers, including but not limited to physicians, chiropractors, podiatrists, and dentists. Requires completion of no less than 30 hours of formal study in the prescribing of psychotropic medications and medications to treat their side effects which included instruction in health assessment, psychotropic classifications, psychopharmacology, indications, dosages, contraindications, side effects, and evidence of application.</p> <p style="text-align: right;">(M.S. 148.171)</p>
<p>Certified Nurse Practitioner (RN, CNP) – Adult psychiatric certification</p>	<p>Minnesota Board of Nursing <a href="http://www.state.mn.us/portal/mn/jsp/home.do?agency=NursingBoard">www.state.mn.us/portal/mn/jsp/home.do?agency=NursingBoard</a></p>	<p>Practices independently under a collaborative agreement with a physician. May prescribe drugs and therapeutic devices. May function as a direct care provider, case manager, consultant, educator, and researcher. May accept referrals from, consult with, cooperate with, or refer to all other types of health care providers, including but not limited to physicians, chiropractors, podiatrists, and dentists.</p> <p style="text-align: right;">(M.S. 148.171)</p>
<p>Certified Nurse Practitioner (RN, CNP) – Family psychiatric certification</p>	<p>Minnesota Board of Nursing <a href="http://www.state.mn.us/portal/mn/jsp/home.do?agency=NursingBoard">www.state.mn.us/portal/mn/jsp/home.do?agency=NursingBoard</a></p>	<p>Practices independently under a collaborative agreement with a physician. May prescribe drugs and therapeutic devices. May function as a direct care provider, case manager, consultant, educator, and researcher. May accept referrals from, consult with, cooperate with, or refer to all other types of health care providers, including but not limited to physicians, chiropractors, podiatrists, and dentists.</p> <p style="text-align: right;">(M.S. 148.171)</p>

PROFESSION	LICENSING BOARD	SCOPE OF PRACTICE
Licensed Psychologist (LP)	Minnesota Board of Psychology  <a href="http://www.psychologyboard.state.mn.us">www.psychologyboard.state.mn.us</a>	Practices independently without supervision. May observe, evaluate, interpret or modify human behavior by application of psychological principles, methods, or procedures including: <ul style="list-style-type: none"> <li>• psychotherapy;</li> <li>• psycho-educational services and treatment;</li> <li>• assessment by testing and other means of intelligence, personality, abilities, interests, aptitudes, and neuropsychological functioning;</li> <li>• testimony as an expert witness concerning the characteristics of an individual;</li> <li>• consultation and supervision; and</li> <li>• research and teaching.</li> </ul> <p style="text-align: right;">(M.S. 148.89)</p>
Licensed Graduate Social Worker (LGSW)	State of Minnesota Board of Social Work  <a href="http://www.socialwork.state.mn.us">www.socialwork.state.mn.us</a>	Practices under supervision. May engage in clinical practice under supervision of an independent clinical social worker. <p style="text-align: right;">(M.S. 148D.050)</p>
Licensed Independent Clinical Social Worker (LICSW)	State of Minnesota Board of Social Work  <a href="http://www.socialwork.state.mn.us">www.socialwork.state.mn.us</a>	Practices independently without supervision. May engage in clinical practice. Clinical practice is the diagnosis and treatment of psychosocial function, disability, or impairment, including addictions and emotional, mental, and behavioral disorders, including plans based on a differential diagnosis. Treatment may include psychotherapy. <p style="text-align: right;">(M.S. 148D.050)</p>

PROFESSION	LICENSING BOARD	SCOPE OF PRACTICE
Licensed Independent Social Worker (LISW)	State of Minnesota Board of Social Work  <a href="http://www.socialwork.state.mn.us/">http://www.socialwork.state.mn.us/</a>	May engage in clinical practice under supervision of an independent clinical social worker.  (M.S. 148D.050)
Licensed Social Worker (LSW)	State of Minnesota Board of Social Work  <a href="http://www.socialwork.state.mn.us/">http://www.socialwork.state.mn.us/</a>	Practices under supervision. May <b>not</b> engage in clinical practice.  Practice includes: <ul style="list-style-type: none"> <li>• assessment</li> <li>• case management</li> <li>• client-centered advocacy</li> <li>• client education and counseling</li> <li>• crisis intervention</li> <li>• referral.</li> </ul> (M.S. 148D.050)
Certified peer specialist		The commissioner of human services shall develop a training and certification process for certified peer specialists, who must be at least 21 years of age and have a high school diploma or its equivalent. The candidates must have had a primary diagnosis of mental illness, be a current or former consumer of mental health services, and must demonstrate leadership and advocacy skills and a strong dedication to recovery. The training curriculum must teach participating consumers specific skills relevant to providing peer support to other consumers. In addition to initial training and certification, the commissioner shall develop ongoing continuing educational workshops on pertinent issues related to peer support counseling.  (M.S. 256B.0615)

PROFESSION	LICENSING BOARD	SCOPE OF PRACTICE
Mental Health Behavioral Aide		<p>Practices under the direction of a mental health professional to implement the rehabilitative mental health services identified in the client’s individual treatment plan.</p> <p>A level I mental health behavioral aide must:</p> <ul style="list-style-type: none"> <li>• be at least 18 years old;</li> <li>• have a high school diploma or general equivalency diploma (GED) or two years of experience as a primary caregiver to a child with severe emotional disturbance within the previous ten years; and</li> <li>• meet pre-service and continuing education requirements under subdivision 8.</li> </ul> <p>A level II mental health behavioral aide must:</p> <ul style="list-style-type: none"> <li>• be at least 18 years old;</li> <li>• have an associate or bachelor’s degree or 4,000 hours of experience in delivering clinical services in the treatment of mental illness concerning children or adolescents; and</li> <li>• meet pre-service and continuing education requirements in subd. 8.</li> </ul> <p style="text-align: right;">(M.S. 256B.0943, subd. 7)</p>
Mental Health Rehabilitation Worker		<p>Practices under the direction of a mental health practitioner or mental health professional and under the clinical supervision of a mental health professional in the implementation of rehabilitative mental health services as identified in the recipient’s individual treatment plan who:</p> <ul style="list-style-type: none"> <li>• is at least 21 years of age;</li> <li>• has a high school diploma or equivalent;</li> <li>• has successfully completed 30 hours of training during the past two years in all of the following areas: recipient rights, recipient-centered individual treatment planning, behavioral terminology, mental illness, co-occurring mental illness and substance abuse, psychotropic medications and side effects, functional assessment, local community</li> </ul>

		<p>resources, adult vulnerability, recipient confidentiality; and</p> <ul style="list-style-type: none"> <li>• meets the qualifications in subitem (A) or (B):</li> </ul> <p>(A) has an associate of arts degree in one of the behavioral sciences or human services, or is a registered nurse without a bachelor’s degree, or who within the previous ten years has:</p> <ol style="list-style-type: none"> <li>(1) three years of personal life experience with serious and persistent mental illness;</li> <li>(2) three years of life experience as a primary caregiver to an adult with a serious mental illness or traumatic brain injury; or</li> <li>(3) 4,000 hours of supervised paid work experience in the delivery of mental health services to adults with a serious mental illness or traumatic brain injury; or</li> </ol> <p>(B) (1) is fluent in the non-English language or competent in the culture of the ethnic group to which at least 20 percent of the mental health rehabilitation worker’s clients belong;</p> <ol style="list-style-type: none"> <li>(2) receives during the first 2,000 hours of work, monthly documented individual clinical supervision by a mental health professional;</li> <li>(3) has 18 hours of documented field supervision by a mental health professional or practitioner during the first 160 hours of contact work with recipients, and at least six hours of field supervision quarterly during the following year;</li> <li>(4) has review and co-signature of charting of recipient contacts during field supervision by a mental health professional or practitioner; and</li> <li>(5) has 40 hours of additional continuing education on mental health topics during the first year of employment.</li> </ol> <p style="text-align: right;">(M.S. 256B.0623, subd.5)</p>
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Subd. 17. **Mental health practitioner.** “Mental health practitioner” means a person providing services to persons with mental illness who is qualified in at least one of the following ways:

- (1) holds a bachelor's degree in one of the behavioral sciences or related fields from an accredited college or university and:
  - (i) has at least 2,000 hours of supervised experience in the delivery of services to persons with mental illness; or
  - (ii) is fluent in the non-English language of the ethnic group to which at least 50 percent of the practitioner's clients belong, completes 40 hours of training in the delivery of services to persons with mental illness, and receives clinical supervision from a mental health professional at least once a week until the requirement of 2,000 hours of supervised experience is met;
- (2) has at least 6,000 hours of supervised experience in the delivery of services to persons with mental illness;
- (3) is a graduate student in one of the behavioral sciences or related fields and is formally assigned by an accredited college or university to an agency or facility for clinical training; or
- (4) holds a master's or other graduate degree in one of the behavioral sciences or related fields from an accredited college or university and has less than 4,000 hours post-master's experience in the treatment of mental illness.

Subd. 18. **Mental health professional.** “Mental health professional” means a person providing clinical services in the treatment of mental illness who is qualified in at least one of the following ways:

- (1) in psychiatric nursing: a registered nurse who is licensed under sections 148.171 to 148.285; and:
  - (i) who is certified as a clinical specialist or as a nurse practitioner in adult or family psychiatric and mental health nursing by a national nurse certification organization; or
  - (ii) who has a master's degree in nursing or one of the behavioral sciences or related fields from an accredited college or university or its equivalent, with at least 4,000 hours of post-master's supervised experience in the delivery of clinical services in the treatment of mental illness;
- (2) in clinical social work: a person licensed as an independent clinical social worker under chapter 148D, or a person with a master's degree in social work from an accredited college or university, with at least 4,000 hours of post-master's supervised experience in the delivery of clinical services in the treatment of mental illness;
- (3) in psychology: an individual licensed by the Board of Psychology under sections 148.88 to 148.98 who has stated to the Board of Psychology competencies in the diagnosis and treatment of mental illness;
- (4) in psychiatry: a physician licensed under chapter 147 and certified by the American Board of Psychiatry and Neurology or eligible for board certification in psychiatry;
- (5) in marriage and family therapy: the mental health professional must be a marriage and family therapist licensed under sections 148B.29 to 148B.39 with at least two years of post-master's supervised experience in the delivery of clinical services in the treatment of mental illness;

(6) in licensed professional clinical counseling, the mental health professional shall be a licensed professional clinical counselor under section 148B.5301 with at least 4,000 hours of post-master's supervised experience in the delivery of clinical services in the treatment of mental illness; or

(7) in allied fields: a person with a master's degree from an accredited college or university in one of the behavioral sciences or related fields, with at least 4,000 hours of post-master's supervised experience in the delivery of clinical services in the treatment of mental illness.<sup>72</sup>

For further detail on Minnesota Statutes, visit: [www.revisor.leg.state.mn.us/statutes](http://www.revisor.leg.state.mn.us/statutes).

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<sup>72</sup> Minnesota Statutes 245.462 (2009). [www.revisor.mn.gov/data/revisor/statute/2009/245/2009-245.462.pdf](http://www.revisor.mn.gov/data/revisor/statute/2009/245/2009-245.462.pdf) Retrieved on June 21, 2010.

## Appendix B: Telehealth Reimbursement Legislation in Other States

State	Legislation Summary
California (1996)	Prohibits insurers from requiring face-to-face contact between clinician and patient for services appropriately provided through telemedicine. Provides mental health providers with equal reimbursement as providers of acute psychiatric inpatient hospital services.
Colorado (2001)	No health plan for a person in a country with 150,000 or fewer residents may require face-to-face contact between a provider and a covered person for services provided through telemedicine, excluding telephone and fax consultations.
Georgia (2005)	Payment must be provided for services covered under the health benefit policy and appropriately provided through telemedicine.
Hawaii (2003)	No health insurance plan shall require face-to-face contact between a health care provider and a patient as a prerequisite for payment for services appropriately provided through telehealth, excluding telephone and fax consultations.
Kansas (1999)	In-person contact between a health care practitioner and a patient shall not be required for health care services delivered through telehealth that are otherwise eligible for reimbursement.
Kentucky (2002)	Prohibits Medicaid and private insurers from excluding coverage for services provided through telemedicine if the consultation is provided through an approved network.
Louisiana (1995)	Providers at telehealth origination site shall be reimbursed at a rate of not less than 75% of the amount of reimbursement for an office visit. Prohibits policies that discriminate against payments for telemedicine.
Maine (2009)	Requires health insurance providers to cover services provided through interactive audio, video or other electronic media.
New Hampshire (2009)	An insurer may not deny coverage on the sole basis that the coverage is provided through telemedicine if the health care service would be covered if it were provided through in-person consultation.
Oklahoma (1997)	Health care plans cannot deny coverage for services provided through audio, video or data communications to allow compensation for patient consultations and diagnoses and the transfer of medical information.
Oregon (2009)	Must provide coverage of telemedical health services if: (a) the plan provided coverage of the service when provided in person; (b) the service is medically necessary and supported by evidence-based medical criteria; and (c) the service does not duplicate or supplant a health service that is available to the patient in person.
Texas (2003)	May not exclude a telemedicine medical service or telehealth service from coverage under the plan solely because the service is not provided through a face-to-face consultation.
Virginia (2010)	Requires insurers, health subscription plans, and health maintenance organizations to fully cover the cost of telemedicine services.

## Appendix C: Telemental Health Networks in Other States

State/Network	Network Description
Arizona – The Northern Arizona Regional Behavioral Health Authority  <a href="http://www.narbha.org">www.narbha.org</a>	The Northern Arizona Regional Behavioral Health Authority manages a comprehensive telemental health network (NARBHAnet) that uses two-way interactive videoconferencing to connect mental health experts and patients in remote locations. It has been recognized as one of the best telemedicine programs in the United States, tallied more than 50,000 clinical psychiatric sessions, and saved travel costs.
Kansas – Kansas University Medical Center  <a href="http://www.kumc.edu">www.kumc.edu</a>	The Kansas University Medical Center provides a range of specialty services through 14 clinical sites in rural Kansas. The telepsychiatric component is only one program within the telehealth network. Use of an existing network (cost-sharing) allows the telepsychiatric application to be successful.
Montana – Eastern Montana Telemedicine Network  <a href="http://www.emtn.org">www.emtn.org</a>	Eastern Montana Telemedicine Network is a consortium of not-for-profit medical and mental health facilities linking health care providers and their patients throughout Montana and Wyoming. This telemental health network includes shared sites for all physicians practicing in the network and has demonstrated large out-of-pocket savings for their patients.
Oregon – RodeoNet Mental Health System  <a href="http://www.opb.org/programs">www.opb.org/programs</a>	This telemental health network began through a three-year Federal Office of Rural Health Policy (ORHP) Rural Health Outreach grant in 1991. The grant allowed for use of a new statewide telecommunications system (Oregon ED-NET), which offered the capability of video-conference via satellite and dial-up access, for the delivery of mental health services, training and information. With expanded use of technology, services now include psychiatric consultation, case management and medication management for rural Oregonians.
Texas – The Burke Center/ JSA Health  <a href="http://www.jsahealthmd.com">www.jsahealthmd.com</a>	The Burke Center—which provides services to a relatively small number of people spread out in 12 counties in East Texas—uses the telepsychiatry services of JSA Health to conduct emergency evaluations at any time, thus keeping people in mental health crises out of emergency rooms and

	the hospital’s mental health units.
<p>Virginia – The Appal-Link Network</p> <p><a href="http://www.cmcsb.com/Appal.htm">www.cmcsb.com/Appal.htm</a></p>	<p>The Appal-Link Network began through a three-year federal Office of Rural Health Policy (ORHP) Rural Health Outreach grant in 1995. Overall, 1,190 patient contacts occurred over the Appal-Link Network during the first two years of the project’s operation. Medication review, case consultation, discharge planning, commitment hearings, family visits and staff training activities occur daily over this network. In 2000, this network established a telepsychiatry clinic to serve hundreds of veterans in the region.</p>
<p>Wisconsin – Marshfield Clinic Telehealth Network (MCTN)</p> <p><a href="http://www.marshfieldclinic.org">www.marshfieldclinic.org</a></p>	<p>The Marshfield Clinic TeleHealth Network (MCTN) was initiated through a federal Office of Rural Health Policy (ORHP) Rural Telemedicine Grant in 1997. This telemental health network places videoconference equipment in physicians’ offices and has expanded from 18 to over 40 regional sites.</p>