Proposal:
WNY’s Beautiful Young Minds Telehealth Network for Child and Adolescent Psychiatry

From the New York State Mental Health Taskforce  (August 2004):

**The Problem:** *(American Academy of Child and Adolescent Psychiatrists—April 2004)*

The Surgeon General’s 2000 Report on children’s mental health estimated that 20% of American children and adolescents have a diagnosable mental or emotional illness. Of this number, fewer than one in five receive treatment. Barriers to treatment include a lack of affordability, lack of availability of specialists including child and adolescent psychiatrists, and, stigma. Affordability and increased access will lead to early identification and treatment. Screening and early identification are major recommendations of the President’s New Freedom Commission. The Commission’s Report states that, “If the system does not appropriately screen and treat them early, these childhood disorders may persist and lead to a downward spiral of school failure, poor employment opportunities and poverty in adulthood” *(Achieving the Promise—Transforming Mental Health Care in the US)*.

Of particular concern is the high rate of mental illness present in detainees in Juvenile Correctional Facilities (cited as high as 50%). Psychiatric evaluation and treatment is often limited or delayed in these facilities, where management of mental illness consists of incarceration and isolation.

**Factors Leading to Lack of Affordability and Availability**

- Coverage—limited number of inpatient and outpatient visits (managed care)
- Age Appropriate and Developmentally Appropriate Services—access
- Lack of Coordination Across Systems of Care (e.g. conflicting eligibility)
- Failure in State to Fully Implement Early Periodic Screening Diagnosis and Treatment (EPSDT)
- Scarcity of inpatient hospital beds for crisis care of children
- Shortage of child and adolescent psychiatrists—especially rural areas (e.g. 7000 nationwide—prevalence is between 10 and 15 million)
- Lack of Public Policy Development Regarding use of Medications
- Finance (e.g. for services and for GME)
Anxiety disorders, ADHD and depression are the most common mental illness occurring in children and adolescents.

The Project: Western New York’s Beautiful Young Minds Telehealth Network (WNY BYMTN)

There is a significant need in Western New York for a system of care for child and adolescent psychiatry in both rural and urban locations. The reality of our healthcare environment is an overall lack of availability of professional psychiatric services for children and adolescents and the problem is more pronounced in rural areas. Any system designed to improve availability of services must also be able to handle acute psychiatric care in an emergency, provide access to inpatient care if required, and also meet long term care needs including the monitoring of progress, in order to achieve lasting results. The most common first points of entry into the rural health care system for the psychiatrically ill are the emergency department or a primary care provider office. The goal of this mental healthcare network solution is to use telehealth technologies to improve access for children and adolescents to psychiatric specialists providing the right medical care to the right patient at the right time and in the right place.

The WNY Beautiful Young Minds Telehealth Network is the lead mental health activity for the Western New York Regional Telehealth and Healthcare Informatics Network with support through a grant from the US Office for the Advancement of Telehealth, the Erie County Department of Mental Health, and support from the ECMCC Regional Resource Center in Healthcare Preparedness and Responsiveness. This network was founded with the primary goal to use telehealth and healthcare information technology to address the discrepancies in access to quality health care for rural communities in the 8 county region of western New York.

A list of proposed partners in this effort would include:

- WNY Telehealth and Healthcare Informatics Program and Network, UB Department of Emergency Medicine, Division of Telehealth and Healthcare Informatics
  (David Ellis, Richard Weber, Susan Ellis)
- University at Buffalo (SUNY), School of Medicine and Biomedical Sciences:
  - Department of Psychiatry (Yogesh Bakhai, Calvin Warren);
  - Department of Emergency Medicine (Richard Braen, Dietrich Jehle);
  - School of Public Health and Health Related Professions (Don Rowe)
  - Office of Medical Computing (Ray Dannenhoffer)
- Erie County Office of Mental Health (Michael Wiener)
- Regional Counties Offices of Mental Health
- Erie County Emergency Medical Services (Gregory Skibitsky, John Adolf)
- ECMCC (Marty Hamann, John Fudyma, Brian Murray, Debbie Cancilla)
- The regional Comprehensive Psychiatric Emergency Program (CPEP) at the ECMC
- Kaleida Health, Womens and Childrens Hospital of Buffalo
- BryLin Hospital
- WNY Rural Healthcare Networks: Lake Plains Community Care Network; Southern Tier Healthcare System; Chautauqua Health Network (Ken Oakley)
- The inpatient units for children and adolescent psychiatric care in the region: BryLin Hospital; Erie County Medical Center; Niagara Falls Memorial Hospital; WCA Hospital in Jamestown
Summary of key elements of the proposed telehealth network include:

The core technology for this network has been evaluated and proposed by Veraview Corp. of Buffalo, NY consisting of an MPLS (Multiprotocol Label Switching) Network offered by a local telecommunications provider. This network provides high quality, internet videoconferencing over broadband networks with high security (encryption and VPNs) and quality of service (QOS). Videoconferencing units consist primarily of Polycom videoconferencing systems operating H.323 and H.264 Internet Protocol or if necessary ISDN videoconferencing with both wall-mounted office/exam room units and wireless videoconferencing roll-about units. Existing videoconferencing systems in hospitals and healthcare facilities in the region will be able to participate in the network.

Evaluation of patients will continue to take place in rural primary care providers offices, emergency departments, public health offices, juvenile detention centers, and other primary care locations.

When a need for emergency psychiatric care for a child or adolescent (age<18) is identified, the regional dispatch center - Video911 Center, Erie County Emergency Communications (MERS) is contacted by phone. The location, chief complaint and acuity level of the patient is identified.

MERS will enter the location into the Telehealth Whiteboard with the receiving location identified as ECMCC CPEP which will cause the name of the calling facility to appear on the whiteboard screen while at the same time either by call or directly, an overhead page is announced in the CPEP.

The Remote Facility will then dial into the video number for CPEP or be set up into a multi-point conference call facilitated by the Video911 Center at MERS.

An emergency psychiatric consultation can then take place between the rural facility with its patient and CPEP. This private and confidential evaluation can be conducted by both physician psychiatrists and mental health workers from CPEP.
In addition, the system is enhanced if the local rural mental health worker who will continue to follow the patient primarily is involved in the evaluation and development of a treatment plan in the rural emergency department. Many ERs page the local mental health worker to the ER as part of the routine evaluation of mental health patients in their rural community.

It will be important, particularly in the rural community, to maintain the involvement of the local Departments of Mental Health and the local mental health worker in the patient’s evaluation and ultimate treatment plan.

The bed status of the inpatient units in the area can be monitored by CPEP or MERS and updated by the facilities on a regular basis. The patient should be able to go directly to these sites of inpatient care as indicated, or discharged to a home setting.

Success of this network design is supported by its similarity to the organization of the Tele-Stroke Network developed by the Province of Ontario, Canada’s NORTH Networks based in Toronto. They have successfully linked a 24 hour critical care dispatch center, Criticall, with a province-wide telehealth network, NORTH, with Neurology specialty care providers at home, to provide rural emergency departments with 24x7 Neurology evaluations for TPA in Stroke.

**Comments on financial support and sustainability for BYMTNetwork:**

Discussions on Telehealth reimbursement by NYS Medicaid have occurred and are in progress with a goal of full reimbursement for emergency and ongoing psychiatric evaluation facilitated by telehealth technologies. Benefit to Medicaid would be gained by reducing travel for consultation currently provided by Medicaid. Information and opportunities for discussion will be provided to the commercial payers in the region for reimbursement of consultations largely based on similar practice in other states. Medicare reimbursement is available for a significant portion of the rural counties and rural areas in metropolitan service areas. Requests for reimbursement will be based on

Erie County Department of Mental Health (Michael Wiener) has supported the installation of telehealth videoconferencing equipment into ECMC’s Comprehensive Psychiatric Emergency Program (CPEP). The model for this integration of telehealth technology into emergency practice is the ECMC Emergency Department, which has been practicing telehealth for the past 10 years with 51 correctional facilities statewide and regional rural emergency departments. This support will allow for videoconferencing equipment to be available to psychiatrists in CPEP for their participation in the network primarily from their conference/consultation room, work areas for mental health workers, psychiatric clinics and offices.

Wireless videoconferencing roll-about units are currently being installed in 3 rural emergency departments in western New York: United Memorial Medical Center (Batavia), Wyoming County Community Hospital (Warsaw), and Tri-County Hospital / TLC Healthcare Network (Gowanda). Support for additional equipment in the rural
emergency departments and child and adolescent psychiatric inpatient unit hospitals (WCA, Jamestown; Niagara Falls Memorial; Bry-Lin; and ECMCC) are being pursued. Efforts are ongoing to expand the network to include all rural hospitals in western New York, thereby forming a comprehensive network of access points for the emergency telemental health network. The network will also identify videoconferencing units currently installed in hospitals in western New York for possible dual-use as assessment sites for child and adolescent psychiatry, since there are no specific needs required for psychiatric assessment other than a videoconferencing unit, adequate lighting and privacy.

This proposal seeks to coordinate with existing telehealth facilities and build telehealth infrastructure where needed, into the primary care offices in the counties, the local hospitals, the local health departments, nursing care facilities, EMS units, school health units and healthcare workforce development sites. The concept of developing telehealth and informatics together in a rural county dovetails with regional efforts in the 8-county region of WNY to develop the Local Health Information Infrastructure (LHII). The goal will be to connect rural primary care and specialty provider’s offices as part of the National Health Information Infrastructure (NHII) effort and will serve as a model for other rural counties.

David G. Ellis, MD, FACEP
Director, Division of Telehealth and Healthcare Informatics
Department of Emergency Medicine
University at Buffalo (State University of New York)
Erie County Medical Center Corporation

Phone:       (716) 898-5347
             (716) 898-5230 Secretary (Michele)
Pager:       (716) 642-4957
Mobile:      (716) 982-3839
Email:       dellis@ecmc.edu