

## Telepsychiatry Improves San Juan County's Mental Health

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Telepsychiatry has been found satisfactory to both patients and clinicians, and to be equal to in-person appointments for efficacy (Love, 2005).

San Juan County, a group of 173 islands located in the Northwest corner of Washington State, is rural, remote, and isolated with no practicing psychiatrists in the county. Thus, access to psychiatric services was a problem for the county's residents. To help address and resolve this problem, the San Juan County Public Hospital District No. 1, DBA Inter Island Medical Center, received a Rural Health Care Services Outreach Grant from the Health Resources and Services Administration (HRSA) for \$375,000 in May 2007. The main goal of the project was to establish, run, and maintain a telemedicine project for three years that provided psychiatric services to the residents of the county.

Because there were no practicing psychiatrists in the county, residents had to travel to the mainland for care via boat, plane, or ferry. Accessing the mainland took an entire day, and the ferry cost was approximately \$50.00 round trip for a car and driver (depending on the season). Because of the extreme distance and costs, residents would either go without psychiatric treatment or the responsibility for their psychiatric care fell to the county's primary care providers.

The San Juan County Telepsychiatry Demonstration project solved the access problem by virtually bringing the psychiatrist to San Juan County via state-of-the-art videoconferencing equipment. The videoconferencing technology, called TelePresence, provided a real "in-person" experience for both the patient and the psychiatrist. One unique feature of the technology was the direct eye contact between both parties, making the encounter more natural.

The project began providing services in December of 2007. After 17 months of service, 50 patients received psychiatric services.

### Program Description

San Juan County, a group of 173 islands located in the Northwest corner of Washington State, is rural, remote, and isolated with no practicing psychiatrists in the county. Thus, access to psychiatric services was a problem for the county's residents. To help address and resolve this problem, the San Juan County Public Hospital District No. 1, DBA Inter Island Medical Center, received a Rural Health Care Services Outreach Grant from the Health Resources and

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extreme distance and costs, residents would either go without psychiatric treatment or the responsibility for their psychiatric care fell to the county's primary care providers.

Inter Island Medical Center (IIMC), San Juan County Health & Community Services, and COMPASS Health established a consortium to govern a telepsychiatry project in San Juan County. In order to secure funds, one of the entities had to be a rural health clinic, which would also serve as the fiduciary. Inter Island Medical Center filled this role after being approached by a psychologist at COMPASS Health, who also played a part in writing the grant proposal. Because of the lack of psychiatric services in the community, IIMC quickly agreed to be a part of the consortium. San Juan County Health & Community Services joined the consortium since the project was county based and focused on mental health services. COMPASS Health is a licensed comprehensive community mental health provider, and has secured funding for, and/or provided health care services to grant-funded projects in diverse areas. COMPASS Health was the provider of psychiatric services to residents of San Juan County. Along with its consortium partners COMPASS collected,

collated, and analyzed project data. COMPASS Health also provided facility space for the provision of psychiatric services and additional in-kind support to the project. The consortium was formed by finding three entities who believed in giving telepsychiatry a try, based on the success of similar services in other rural states. The project recruited a psychiatrist from COMPASS Health by showing how beneficial the project would be for San Juan County. The project assistant served as the care coordinator for the delivery of the psychiatric services and also managed all the day-to-day administrative responsibilities. A dedicated full-time project assistant was vital to the ongoing success of the project.

The project had two overarching goals; 1) to increase access to psychiatric services for underserved populations and 2) to influence health plans to pay for such services in order to sustain services over the long-term. This project addressed high rates of depression in San Juan County, reduced the incidence of untreated psychiatric illness, and examined the cost-offset and community health status effects of psychiatric services.

Table 1. Performance Measure #1: Patients Referred by Primary Care Providers (PCPs)

	October – December 2007	January – March 2008	April – June 2008
Total New Patients Referred	12	18	13

Data Source: SJCPHD Excel Database

Table 2. Performance Measure #2: Patients Provided Services by the Psychiatrist

	October – December 2007	January – March 2008	April – June 2008
Total Number of Patients Seen	10	10	10

Data Source: SJCPHD Excel Database

Table 3. Patient Satisfaction with TelepresenceTech Technology

	December 2007 – February 2008	March 2008 – May 2008
The patient was able to communicate adequately	6.7	6.8
Equipment worked properly	6.3	6.3
Privacy and confidentiality were protected during consultation	6.9	6.9
Overall satisfaction with session	6.8	6.6

Each metric is rated on a scale from 1 (strongly disagree) to 7 (strongly agree).  
Data Source: SJCPHD Excel Database

Table 4. Psychiatrist Satisfaction with TelepresenceTech Technology

	December 2007 – February 2008	March 2008 - May 2008
The psychiatrist was able to communicate adequately	5.6	5.7
Equipment worked properly	5.9	5.9
Privacy and confidentiality were protected during consultation	6.0	5.9
Overall satisfaction with session	5.7	5.8

Each metric is rated on a scale from 1 (strongly disagree) to 7 (strongly agree).  
Data Source: SJCPHD Excel Database

Promotion was a vital part of making the project successful. Primary care providers (PCPs) as well as the public were informed of the services, and notified when changes occurred. Participants had to be referred by their PCP, who oversaw the patient's physical health throughout their time in the project. Once a referral occurred, the project assistant scheduled a paperwork appointment for the first psychiatric consultation for the patient. At each appointment, vital signs were taken and tracked throughout the project. Patients completed a pre and post-session questionnaire to

assess the quality of both the psychiatric session and the technology. Patients had monthly appointments until the psychiatrist determined that the patient could be followed by their PCP.

## Discussion and Evaluation

Data was collected throughout the project to evaluate its effectiveness. Both qualitative and quantitative data was collected and assessed in a Microsoft Access Database. Reports were run and

distributed to interested parties. These reports are also used to promote the project.

Data from the project's 2008 Performance Review was compiled and is displayed in Tables 5 through 8.

the equipment wasn't working to its potential.

Additional data was submitted to HRSA in May 2009 for the time period of 5/1/08-4/30/09, and was used for the Performance Improvement and Measurement System (PIMS). This data allowed

Table 5. Participant Descriptors for Study

# of unduplicated patients served	50
Total # of encounters	179
# of people in the target population with access to new/expanded programs/services	15,000 (Population of San Juan County)
# of people in the target population	125 (Goal # of patients to serve)
# of new and/or expanded services provided	1

Data Source: PIMS Data Submission, HRSA's Electronic Handbook

Table 6. Number of People Served by Age Group that Received Services

Children (0-12)	0
Teens (13-17)	3
Adults (18-64)	41
Elderly (64 and over)	6
Total	50

Data Source: PIMS Data Submission, HRSA's Electronic Handbook

The patient and psychiatrist satisfaction surveys were administered upon the completion of each visit. Survey data was gathered and reviewed periodically to identify ways to improve the project. Performance measure tables are shown below for the time period of December 2007 and May 2008.

From the data collected thus far, it was found that patients were very satisfied with the telepsychiatry project. After discussing the data with the psychiatrist, it was found that the ratings were a bit lower because it was not the traditional type of psychiatry. In addition, it was more difficult to communicate with the patients when

HRSA to help improve the grantees' projects. The relevant data is shown in Table 5. As a demonstration project, there were both successes and challenges.

#### **Successes:**

The success of the project would not be possible without a qualified psychiatrist. Dr. Olga Suslova from COMPASS Health in Everett, WA provided the psychiatric services to referred patients.

Another major success of the project was the technology itself. Without reliable technology and an IT staff, who was readily available for assistance, the project wouldn't have been nearly

Table 7. Insurance Status of Participants

People enrolled for public assistance, i.e., Medicare, Medicaid	7
People who have no insurance	16
People who have third-party insurance	27
Total	50

Data Source: PIMS Data Submission, HRSA's Electronic Handbook

Table 8. Cost Savings

# of patient encounters	179
Ferry cost for off-island psychiatrist	\$50/trip
Psychiatry Time	\$191/hr
179x50 (# of patient encounters x Ferry cost)	\$8950
179x191 (# of patient encounters x Psychiatry Time)	\$34,189
\$8950+\$35,800	<b>Total: \$43,139</b>

as effective. Our IT was provided by Advances in Technology in Everett, WA and technicians could be contacted for immediate troubleshooting. When technical issues did occur, they were solved immediately. In discussion with other providers of telemedicine services, we learned the TelePresence Equipment included unique features that set our project apart from others in the country.

There was no charge to the patient to participate, a clear economic advantage of the project. This added to community buy-in. The estimated amount of cost-savings for the 50 patients due to participation in telepsychiatry totaled \$43,139. Table 8 displays the cost savings.

### Challenges:

One challenge the project overcame was a change in psychiatrist during our first year. At first, the

patients and the primary care providers were concerned about this change. The providers were concerned for continuity of care for their patients. Despite this, the organization and planning of the new psychiatrist and the project assistant, allowed the transition to occur without any glitches.

In August of 2008, HRSA completed a performance review on our project. Maria Garcia with the Office of Performance Review in Seattle conducted the visit to enhance the performance of HRSA funded programs and assist grantees in their ongoing efforts to provide quality services with a focus on improving outcomes. A report and action plan was compiled, which showed that the project was successful. A result of the performance review was the need for technical assistance funds to create a Microsoft Access Database that could be used to review and

provide quality assurance and outcomes analysis. The project applied and received the funding to have Dan Rivera, a data analyst and consultant, create the database. Data extracted from this database allowed for a comprehensive evaluation of the project.

Of primary interest was the “consumer” satisfaction of the telepsychiatry experience. How did using this technology application compare with a “real” in-person encounter? We were able to determine the economic impact this project had for both consumers and for the larger health care system. Will payers now regard this as a reimbursable treatment modality? As the project has high public visibility, we will also look at any effect the project may have on changing community attitudes toward mental illness.

In December of 2008, the project assistant attended the Telehealth Peer Learning Sustainability Training in Nashville, TN. This allowed the project assistant to not only network with grantees from all over the country, but also attend a sustainability training led by Keith Williams, a successful statewide telehealth program administrator. In addition, each year the project director and/or the project assistant attend the HRSA Outreach Grantee Meeting in Washington DC.

### **Next Steps**

Because the Telepsychiatry Project is only funded through April 2010, the consortium is working on a sustainability plan to ensure the project continues. This has been one of the biggest challenges, as not all insurance companies are reimbursing for telepsychiatry services.

San Juan County is on track to building a critical access hospital by 2013. It is the hope of the new hospital to be wired for telehealth services. If this occurs and the project is sustained, telepsychiatry is likely to continue in San Juan County. In addition, we hope to recruit other psychiatrists

who can provide services over the technology from their own home. This would eliminate the overhead costs of an office, providing more incentive for psychiatrists. Other sustainability efforts include finding additional modalities to use the equipment for fee-for-service. The equipment could be used to train hospital staff, teachers, and community members in a variety of areas for a fee. Consultations between healthcare providers could also be done over the TelePresence Equipment. This would allow for more continuity of care for residents of San Juan County. Data from the project will be presented to insurance companies such as GroupHealth Cooperative and Regence BlueShield, with the hope of reimbursement for telepsychiatry services.

John Manning, the Director of San Juan County Health & Community Services, describes the significance of the project and how it relates to public health, “Providing mental health services is essential to the overall health of the community. Failing to provide adequate care puts a strain on family members, friends and neighbors who work and live with the mentally ill. With adequate care most individuals with a mental illness can be productive citizens contributing to our island society.”

### **Key Findings**

- The success of the project would not be possible without a qualified psychiatrist, who was willing to take part in this type of project.
- Without reliable technology and an IT staff, who was readily available for assistance, the project wouldn't have been nearly as effective.
- A dedicated full-time project assistant to help on the patient end was vital to the ongoing success of the project.
- With adequate care most individuals with a mental illness can be productive citizens contributing to our island society.
- Telepsychiatry is effective.

## References

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