

TELEHEALTH PROJECT SUMMARY TEMPLATE

Please provide information on all major projects in the last ten years (1998-2008) and any planned future projects

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PROJECT NAME: Telehealth Voice Therapy in Remote Regions in the Pacific Basin

ORGANIZATION/AGENCY (and primary contact): Tripler Army Medical Center (TAMC), Department of Surgery, Otolaryngology Service, Speech Pathology Section (P. Mashima)

FUNDING (source and amount): US Army Telemedicine and Advanced Technology Research Center (TATRC) (Project awarded \$173,500 from the "Healthcare Advances through Research in Telehealth")

START UP FUNDS: Same as above

REIMBURSEMENT (submitted/not submitted): N/A

DURATION (start time and date): July 2004 to present

PURPOSE/INTENT (100 words maximum):

Diagnostic and rehabilitative services for communication and swallowing disorders are provided in the Speech Pathology Clinic at TAMC for a patient population from a widely dispersed geographic area. Voice disorders range from mild hoarseness to complete loss of voice and impair communication effectiveness. Patients are medically evacuated from Japan, Korea, and Guam to TAMC for voice therapy. In addition to transportation costs, time away from work, and displacement from family support during their treatment, patients are generally seen for a period of two weeks rather than the recommended course of 8 weeks. The telehealth model of service delivery offers the potential to improve access to and quality of care for this patient population. The focus of this study is to evaluate the clinical appropriateness, technical acceptability, and operational effectiveness for the remote delivery of voice therapy via video teleconferencing.

MAJOR CRITICAL ACCOMPLISHMENTS:

Provided treatment to patients in MTF in Japan who otherwise would not have had access to care. Established proof of concept to demonstrate the validity of remote delivery systems for speech pathology. Presented findings of pilot study in the American Journal of Speech-Language Pathology and at national conferences for speech pathologists.

CRITICAL SUCCESS FACTORS:

Project management and technical support provided by the Pacific Telehealth & Technology Hui were critical to the success of the project. It was also important to have a coordinator at the Naval Hospital in Yokosuka who was hired by the Hui to serve as a "champion" at the remote site.

CRITICAL BARRIERS (overcome or not):

Executing personnel contract for remote site coordinator at NH Yokosuka was difficult and took seven months to complete; provider at TAMC was unable to capture RVUs for treating patients in Japan.

MAJOR LESSON LEARNED:

In addition to addressing clinical, technical and workflow issues when developing a telehealth program, administrative support and cooperative business agreements are critical to ensure successful implementation and sustainment.

CURRENT STATUS (active, planned, dormant, completed, other?):

In process of analyzing data for research project including comparisons of pre- and post-treatment voice samples, fiberoptic laryngoscopy samples, acoustic measures, and patient satisfaction measures. A planned initiative is to use the telehealth model of service delivery for service members with mild traumatic brain injury (mTBI). Telehealth is ideally suited for Speech Pathology's mTBI clinical protocol because of the intensive course of cognitive-communication rehabilitation and the importance of multidisciplinary care. Symptoms associated with mTBI such as fatigue, headaches, blurred vision, memory impairment, and confusion often limit or impede daily activities including driving. Connectivity with satellite clinics via VTC systems will link providers and patients to improve access to care. Because TBI rehabilitation for

Warriors in Transition requires the cooperation of multiple disciplines, a VTC network will also facilitate the coordination of clinical services among providers at TAMC and satellite clinics.

PARTNERING ORGANIZATIONS:

US Army Telemedicine and Advanced Technology Research Center (TATRC)

IS THERE A CLINICAL CHAMPION OR A COMMITTEE OVERSEEING THE TELEMEDICINE PROGRAM?

Speech Pathology's telehealth program is coordinated by Pauline Mashima with technical expertise from John Draude. Gregory Suenaga served as Project Manager and Neil Sakauye served as technical advisor for the research phase.

TECHNOLOGY USED: The synchronous, interactive telehealth model is being used with Tandberg 880 video teleconferencing systems at each site and connectivity over ISDN lines at 384 Kbps.