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

SUMMARY WRITER: MAJ Jordan Pinsker, MD (jordan.pinsker@amedd.army.mil)

PROJECT NAME: Pediatric Diabetes Education Portal (PDeP)

ORGANIZATION/AGENCY (and primary contact): Tripler Army Medical Center, Department of Pediatrics (Endocrinology)

FUNDING (source and amount): $170,000.00 – US Army Telemedicine and Advanced Technology Research Center (TATRC) Army Medical Department (AMEDD) Advanced Medical Technology Initiative

START UP FUNDS: N/A

REIMBURSEMENT (submitted/not submitted): N/A

DURATION (start time and date): Started 29 Sep 08

PURPOSE/INTENT (100 words maximum):

Childhood diabetes is a chronic disease that if not managed well can lead to numerous complications including heart disease, eye disease, kidney disease and neuropathy. Education about their disease is given at the time of diagnosis, but these materials can be overwhelming for new patients and are often not fully understood. Therefore families are in need of continued education as they encounter problems managing their diabetes.
Tripler Pediatric Endocrinology Clinic plans to augment the Pacific Asynchronous TeleHealth System (PATH) with the Pediatric Diabetes Education Portal (PDeP), and to use new technologies in the pediatric endocrinology clinic to prevent hyperglycemia while avoiding hypoglycemia.

MAJOR CRITICAL ACCOMPLISHMENTS:

The PDeP system will be an internet based web site for patients and families consisting of:
1) Electronic versions of all the patient education materials that are given at diagnosis for continual review.
2) Fingerstick A1c testing to give immediate feedback to patients while still at the clinic, but also posted to the PDeP website for review. By allowing instant feedback and review of A1c results, Tripler providers expect to see improved diabetes control and improved compliance with treatment plan changes.
3) A Continuous Glucose Monitoring System (CGMS) as a tool to give patients and families more insight into when hypoglycemia is occurring. Summary screens of CGMS readings will also be posted to the PDeP site for patient review.
4) Patient to physician electronic communication that will enable the physician to refer the patient back to the appropriate education resource on the site. This system is HIPAA compliant, will generate increased workload capture and increase access to care.

CRITICAL SUCCESS FACTORS:

Physician and patient (or parent) participation

CRITICAL BARRIERS (overcome or not):

Financial support for ongoing development beyond initial phase.

MAJOR LESSON LEARNED:

These different modalities of evaluation and education that provide frequent feedback to patients should improve overall diabetes care, as shown by lower A1c results and improved patient satisfaction. Further projects will focus on real time uploading of blood sugar logs to the system using cellular and Bluetooth devices to improve access to care.

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

Active

PARTNERING ORGANIZATIONS:

US Army Telemedicine and Advanced Technology Research Center (TATRC)

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

Clinical Champion

TECHNOLOGY USED: web-based