

Title of Intervention: Florida Initiative in Telehealth and Education

Website: <http://fite.peds.ufl.edu/>

Intervention Strategies: Individual Education, Supportive Relationships, Environments and Policies

Purpose of the Intervention: To promote remote blood glucose monitoring and online education for school personnel, families and providers

Population: Children with Type 1 diabetes, caregivers, case managers and school nurses

Setting: Volusia County, Florida; home-based, school-based

Partners: University, State department of health for children's medical services

Intervention Description:

- Individual Education: Animated, web-based education programs about Type 1 diabetes were created for children, parents, and caregivers, including school personnel. The educational material was based on American Diabetes Association recommendations. The school section of the web-based program outlined the responsibilities of school personnel, parents and students. It guided users to other modules on the website of relevance to them.
- Supportive Relationships: In order to improve communication of blood glucose data and treatment questions among participants, email accounts were established.
- Environments and Policies: Children were provided with glucose meters. Students and school nurses were given software, cables and training for the transmission of blood glucose readings. In addition, a school clinic was established so that school nurses could see the students.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: School nurses, information technology personnel
- Training: Glucose monitoring and transmission of data
- Technology: Computers, cameras, software, cables
- Space: Not mentioned
- Budget: Line charges and equipment cost of \$18,826
- Intervention: American Diabetes Association recommendations for diabetes care, glucose meters, educational website
- Evaluation: Online tests

Evaluation:

- Design: Cohort
- Methods and Measures:
 - Knowledge was assessed through online tests.
 - Clinic and emergency room visits were tracked.

Outcomes:

- Short Term Impact: Knowledge improved between pre- and post-test.
- Long Term Impact: The mean interval between clinic visits significantly decreased over the course of the program. Hospitalizations and visits to the emergency room also significantly decreased.

Maintenance: Not measured

Lessons Learned: The reduction in hospital days saved \$44,419 per year and the reduction in emergency department visits saved \$2,267. While school nurses accepted the concept of transmitting data via e-mail, very few transmitted information regularly in this manner. Further training of school personnel in the use of secure e-mail might improve the use of e-mail transmission in the future by overcoming privacy concerns.

Citation(s):

Malasanos, T. H., B. D. Patel, et al. (2005). "School nurse, family and provider connectivity in the FITE diabetes project." J Telemed Telecare 11 Suppl 1: 76-8.

Malasanos, T. H., J. B. Burlingame, et al. (2005). "Improved access to subspecialist diabetes care by telemedicine: cost savings and care measures in the first two years of the FITE diabetes project." J Telemed Telecare 11 Suppl 1: 74-6.