

Health Information Technology to Support Clinical Decision Making in Obesity Care

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Organization:	Arizona State University - Tempe Campus
Mechanism:	PAR: HS08-270: Utilizing Health Information Technology (IT) to Improve Health Care Quality (R18)
Grant Number:	R18 HS 018646
Project Period:	September 2010–July 2013
AHRQ Funding Amount:	\$496,977
Summary Status as of:	December 2010

Target Population: Obesity, Pediatric*

Summary: Domestically, the prevalence of overweight youth has nearly quadrupled in the past four decades. This dramatic increase has led to the emergence of associated comorbidities such as dyslipidemia, hypertension, type 2 diabetes, musculoskeletal disorders, respiratory conditions, and emotional problems. In addition, there are increased risks of cardiovascular disease and cancer as these youth become adults.

The American Medical Association has published recommendations and the National Association of Pediatric Nurse Practitioners has developed family-centered, culturally sensitive, clinical practice guidelines for obesity prevention among youth. However, past research suggests that guidelines rarely change clinical practice and outcomes. Health information technology (IT) may provide a mechanism to better implement these guidelines via decision support and tailored patient education materials. Research is needed to evaluate the role of this technology in the clinical setting.

HeartSmartKids™, a computer support system for clinical decisionmaking and tailoring patient education, has been developed to facilitate the translation of recommendations into practice. This study will employ a comparative-effectiveness trial to evaluate clinician decision support and tailored patient education on the implementation of the current guidelines at school based health clinics. Outcome assessments will be conducted at the provider and system levels. The research aims to eliminate health disparities for the conditions related to childhood obesity via the translation of evidence-based guidelines into practice by the providers who care for youth at risk for these obesity-related conditions.

Specific Aims:

- Evaluate the effectiveness of Web-based training with and without computerized clinical decision support on provider's process and outcome behaviors related to implementing the current guidelines for prevention of obesity and related conditions. **(Upcoming)**
- Explore the role of health IT in the processes of system change for implementation of the guidelines for prevention of obesity and related conditions, including the facilitators, barriers, and impact of the care model on change. **(Upcoming)**

2010 Activities: During the grant's first quarter, efforts have predominately focused on start-up activities including hiring new staff, recruiting clinics, and developing online modules. Twenty-four clinics were recruited for study participation and institutional review board protocols are being developed for each of these sites.

Grantee's Most Recent Self-Reported Quarterly Status (as of December 2010): Overall the project is making progress and meeting most of its aims and milestones. There is a viable plan for achieving other milestones. The project is slightly under-spent due to late distribution of funds.

Preliminary Impact and Findings: This project has no preliminary findings to date.

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

Business Goal: Implementation and Use

* *AHRQ Priority Population*