

Leveraging Mobile Technology to Support Pediatric Obesity-Related Behavior Change

*Pediatric Academic Society Meeting 2012
Boston, MA*

Sharifi, M, E Dryden, CM Horan, S Price, J Finkelstein, K Hacker and EM Taveras

Background: Text messaging is a widely accessible and potentially cost-effective medium for encouraging behavior change. Few studies have examined the use of text messaging to effect behavior or parent perceptions of mobile technologies to support behavior change.

Objective: To examine parental acceptability and preferences regarding the use of text messaging and other mobile technologies to support pediatric obesity-related behavior change.

Design/Methods: We conducted 4 focus groups and 8 follow-up interviews with parents of overweight/obese 6-12 year-old children in greater Boston. Group participants completed a brief survey on demographics and mobile technology use and preferences. During groups, parents received sample text messages to catalyze discussion. Interviewees received 3 weeks of text messages prior to a phone interview. Using Nvivo 9.0 software, two analysts systematically compared focus group and interview qualitative data to identify salient and convergent themes as well as unique perspectives.

Results: Focus group participants included 21 mothers and 1 father of diverse race/ethnicity and education levels. Parents were generally enthusiastic about text messaging interventions to support healthy behaviors for their children. They found text messaging innovative and preferable to paper or email communication because it is immediate, brief, and difficult to ignore. Parents anticipated high responsiveness to messaging endorsed by their child's doctor and indicated they would appreciate messages 2-3 times/week, even daily, as long as the content remains relevant. Keys for creating and maintaining relevance include novel information with specific strategies for implementation and personalization of information specific to the child's age, gender, health status, cultural background, and local community. Most felt the negative features of text messaging (limited message size and difficulty retrieving information) could be overcome via multi-modal interventions utilizing text messaging not only to relay information but also as a trigger or link to other media including email, websites, mobile "apps," or patient health portals.

Conclusions: Text messaging is a promising medium for supporting pediatric obesity-related behavior change. Testing actual behavior change in response to text messaging will be a critical next step.