Exploration of Using Social Media Technology for Pediatric Asthma Management
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Introduction

Asthma is a chronic lung disease that affects 7 million children nationally, costing the United States over $30 million annually as well as 14 million lost school days (1). In Florida, the life time prevalence rate for this incurable condition is slightly higher than the national average prevalence. Concomitantly, the use of social media technology in strengthening the self-management of chronic illnesses like asthma grows.

The goal of this research was to qualitatively detect perspectives, opinions, barriers and benefits among attending and resident physicians as well as parents/caregivers of asthmatic teens who attend a special university asthma clinic about best methods for utilizing social media technology in clinical pediatric asthma management.

Methods

Qualitative research and social marketing methods were used to explore attending physicians’ and residents’ perceptions toward the incorporation of social media technology in adolescents’ asthma management.

Research was conducted during the fall of 2010 in an academic clinical setting with a convenient sample of pediatric attending physicians and pediatric residents. A total of 17 in depth interviews with residents and one focus group, one dyad and three individual interviews with attending physicians were conducted. Interviews were administered by graduate students from USF College of Public Health. The Institutional Review Board of the University of South Florida reviewed and approved this work.

All interviewers were given didactic instruction and experiential training on using the interview guide. Interview guides were developed by the research team and all interviews were recorded. Audio recordings were transcribed, uploaded to and analyzed in Nivivio 8.

Data analysis was completed using open coding method based on a codebook developed by the research team, emerging and explored themes were identified. Utilized codebooks reflect initial marketing mix constructs.

Constant comparative methods aided transcript analysis and all transcripts were analyzed with finely-tuned codebooks. Sorted passages are reported after separate researchers individually read through coded passages and collaboratively compared each other’s notes and came to agreement on statements for reporting.

Observational research was used to identify and illustrate the situational factors that influence social network applications in the USF pediatric health care system. Researchers followed pediatric residents and employed “time sampling” methods (i.e., “pinning” or texting pediatric residents and faculty during their work days at random and during frequent and regular intervals) to monitor the extent to which they have used social media during respective periods of time.

Conclusions

• Doctors acknowledged the importance of self-management among their teen patients.
• Resident physicians seem already connected to social media and modern communication technology like smart phones and text messaging.
• Both groups were concerned about how physician time spent on these tools would be secured, reimbursed, and given devoted time from the work day.
• When sent pinged questions during the work day, physicians described that their connection to the internet during the work day could be utilized to communicate with and follow-up on patients.
• The method for gathering data from physicians through text messaging proved difficult.
• Current codebook themes are being refined for parent/caregiver data.

Results

Pinging Doctors: Brief Results

• Lesson learned: Texting doctors during work hours is a difficult method for gathering data
• Some felt internet can be used to check patient charts as well as email patients themselves
• Doctors felt that at least one doctor in clinic was online at the moment of inquiry
• Messages they would send to their asthma patients include reminders to take their preventive medications, avoid smoking, and do not feel isolated socially, as many others have asthma
• Doctors felt their asthma teen patients felt better after seeing them

References


Martinasek, M., Panzena, A., Schneider, T., Lindenberger, J., Bryant, C., Coularis, M. Attitudes, Beliefs, and Perceptions of Pediatric Healthcare Providers toward Using Social Media in Asthma Care: Utilizing Social Marketing Tools to Tailor Health Education, submitted to American Journal of Health Education (accepted)