Physician's Perspectives on Electronic Decision Support Alerts for Obesity Management

Institute for Community Health

Karen Hacker, MD MPH[1,2], Eileen Dryden, Ph.D[1]., Jessica Hardin, MA[1] Julia McDonald,[3,4] MPH, Elsie M. Taveras, MD [3,4]

Cambridge Health Alliance   Harvard Pilgrim HealthCare Institute
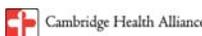
Background

Numerous national organizations have issued evidenced-based guidelines related to pediatric obesity screening and prevention. Despite the availability of these recommendations, multiple studies have shown that primary care physicians find it difficult to adhere to national pediatric obesity screening and prevention guidelines or are unfamiliar with them all together. Health Information Technology (HIT) includes a range of electronic based interventions such as electronic medical records (EMR), clinical point of care technology, computerized provider order entry (CPOE), and SmartSets (standardized progress notes). HIT has great potential for accelerating the adoption of healthcare recommendations and guidelines into physician practice. Yet little is known about how and whether these can be effective. The aim of this study is to further our understanding of provider perspectives on using electronic decision supports for obesity prevention.

Methods/Process

In preparation for a clinical trial using decision alerts we conducted in-depth interviews with 9 Cambridge Health Alliance (CHA) pediatric providers to examine barriers and facilitators to use of an existing electronic alert for obesity. CHA is a public health system serving over 30,000 pediatric patients from diverse backgrounds. Using a "test patient" in the electronic medical record system, pediatricians gave real-time responses about 1) their experience with obesity alerts and the Obesity SmartSet; 2) facilitators and barriers to the use of alerts and SmartSets; and 3) perceptions of effective methods for improving obese patient outcomes. We analyzed the interviews using grounded theory.

Decision Alert
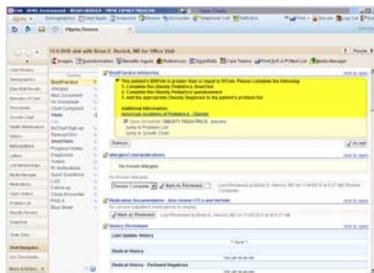
SmartSet
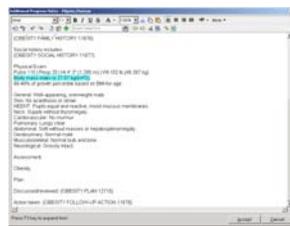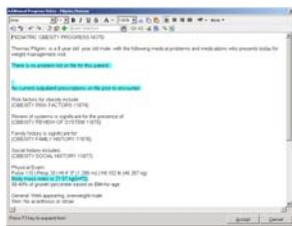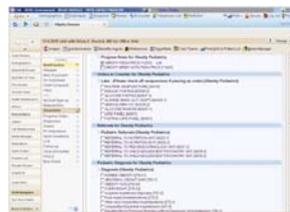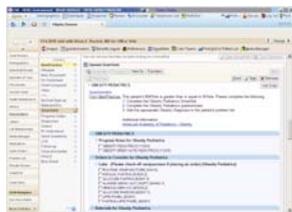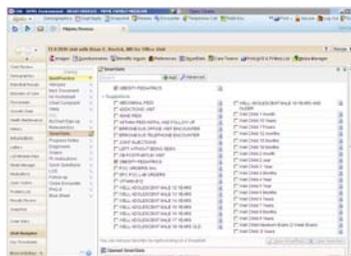
Findings

The interviews yielded three main themes:
1) Physicians experienced "alert" fatigue due to the preponderance of alerts for other conditions such as asthma;
2) SmartSets for obesity were appreciated but needed to be better incorporated into well child visits; and
3) There were doubts that adherence to guidelines would impact patient health given questions about the evidence base related to obesity. Clinicians recommended that alert design incorporate behavioral modification tools to assist physicians in providing behavioral interventions.

"It is alert exasperation. It is a horrible design."

"SmartSets in general need to save time, not make work."

"questionable relationship between the best practices and the evidence."

" ...whoever is going to use these SmartSets has to believe in it. So that to me is the real issue. Because I know every time this is brought up at a meeting, pediatricians go 'Oh, I can't do this. I can't get them to lose weight. I'm not going to be held responsible.' I think we (...) need to build deliberate different message to folks. Show some successes."

"[When the alert comes up for obesity] the default should be put it in the problem list and the provider has to opt out because then that's one less click for me and we're actually improving patient care."

Conclusions

To improve physician's use of obesity decision alerts, education is needed on current evidence and information technology tools should be seamlessly incorporated into physician flow patterns to make their work more efficient.

•The alert should be very brief, not require clicks to other screens, and should include a specific clinical action to do during the visit such as, "Have you checked your patient's BMI?"

•Automate and integrate the process as much as possible.

•Provide greater visibility, education around SmartSets –Multiple methods should be implemented to introduce the staff to a SmartSet and its contents.

1 Institute for Community Health, Cambridge Health Alliance, 2 Harvard Medical School, 3 Department of Population Medicine, Harvard Medical School, 4 Harvard Pilgrim HealthCare Institute