

Research Abstract Example - Podium Presentation

Abstract of Contribution 232

ID: 232

Oral Abstract

Topics: Clinical: Tools and strategies for providing or leading care for varied populations in the ambulatory care setting., Research: Provides information to build skills to conduct research or disseminate a recent research project with a focus on ambulatory nursing care in any ambulatory care setting with implications for practice.

Keywords: Primary Care, Fall risk management, Computerized Clinical Decision Support, Usability testing

Participatory Development of a Clinical Decision Support System for Evidence-Based Fall Prevention in Primary Care

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BACKGROUND: Falls are a persistent problem for community-dwelling older adults, and they impact nearly one third of the population in rural and urban settings. While fall risk management has been identified as suboptimal little is known about the use of fall prevention guidelines in primary care. The purpose of this study is to report on the development and usability of an interoperable Computerized Clinical Decision Support (CCDS) tool that engages staff and older adults in the fall prevention process and is applicable to rural and urban primary care settings.

METHODS: This multi-site sequential-mixed-methods study first utilized semi-structured interviews, contextual inquiries, and observations with both primary care staff and older adults to understand how these groups engage in the fall risk management process. Expert interviews were then conducted to understand barriers and facilitators to developing an interoperable CCDS using Fast Healthcare Interoperable Resources (FHIR). Finally a prototype was developed and integrated into two electronic health records (EPIC & Athena) to conduct usability testing to measure accessibility, usability, learnability, and acceptability.

RESULTS: We learned that participants valued fall prevention and described similar risk factors across settings. Resource availability differed between rural and urban locations and all participants preferred evidence-based CCDS that easily integrated into workflows. According to our informatics experts barriers to building an interoperable system include variation in Electronic Health Record implementation and ontology usage, limited vendor support, limited workforce knowledge, and limited testing capabilities. In the last phase of this study we conducted usability testing of the ASPIRE CCDS that was based on the first two phases of the study. The system was found to have above average usability compared with benchmarks. Time on task decreased significantly between the first and second scenarios indicating good learnability. However, acceptability data was more mixed with some recommendations being consistently accepted while others were adopted less frequently.

DISCUSSION: Our participants reported higher levels of fall engagement (50%) compared to prior studies (28%). Both patients and staff wanted a solution that provided expert guidance and was tailorable to patient needs. Based on the needs of older-adults and staff we developed a core intervention focused on mobility, medications, and bone health. While the core intervention was the same at both sites, we developed implementation plans for the pilot that were specific to the needs and resources at each location.

CONCLUSION: While falls among community-dwelling older adults represent a significant problem it is possible to mitigate risk using computerized clinical decision support in primary care. While it is possible to develop a common intervention it is important to assess the integration needs at each location and be aware of differences between electronic health records. Users felt the system added value to their clinical practice and moving on to pilot testing was warranted.

LEARNING OBJECTIVES:

- 1) Identify key risk factors that can be address within primary care visits to manage fall risk.
- 2) Understand the importance of usability testing prior to implementing new CCDS.
- 3) Gain awareness of interoperability standards that can support CCDS solutions.

EBP Abstract Example - Podium Presentation

Abstract of Contribution 107

ID: 107

Oral Abstract

Topics: Care coordination and transition management: Provides information for nurses who coordinate care and manage transitions of patients among levels of care, providers, and settings., Clinical: Tools and strategies for providing or leading care for varied populations in the ambulatory care setting., Leadership: Emerging models of leadership, ways to influence outcomes and quality, and experiences integrating new models of care within the fiscally challenged environment to include the changing managed care arena., Research: Provides information to build skills to conduct research or disseminate a recent research project with a focus on ambulatory nursing care in any ambulatory care setting with implications for practice.

Keywords: Ambulatory Care, Metabolic Syndrome, MetS, Shared medical appointments

Addressing Metabolic Syndrome Across Ambulatory Care

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Purpose: The goal of the PACT MetS Class is to educate patients, using a shared medical appointment, on lifestyle modifications needed to improve and prevent adverse health conditions related to metabolic syndrome (MetS).

Background: MetS is a cluster of at least 3 of 5 health conditions (hypertension (HTN), diabetes (DM2), low HDL cholesterol, high triglycerides, and obesity) that increases the risk of heart disease, stroke, and diabetes¹. MetS affects approximately 25% of the US population¹. Therapeutic lifestyle changes (TLC) have been shown to be effective in group settings for one out of three participants, when paired with sustained diet and exercise modifications².

Methods: Participants with MetS who expressed readiness for lifestyle changes were enrolled in shared medical appointments conducted twice monthly for 3 months. During each appointment, subject matter experts educated patients on diet, exercise, diabetes, high cholesterol, hypertension, stress management, yoga, Tai Chi, personal health coaching, and sustaining healthy behavioral changes. Body measurements and weights were obtained at initial, mid-point and final classes, along with entry and exit questionnaires. Accountability logs were completed daily to identify and personalize patient behavioral changes.

Findings: Participants showed an overall decrease in Hgb A1c by 3%, a decrease in weight totaling 122%, and a waist circumference decrease by 10%. The questionnaire yielded high patient satisfaction, decreased stress levels, and lower blood pressure readings.

Conclusions: Shared medical appointments are effective in promoting lifestyle changes that positively impact metabolic syndrome. It is imperative that medical professionals implement TLC to decrease MetS associated risk factors, support cost savings, and foster optimal quality of life.

Clinical Implications: Educating patients on MetS using a shared medical appointment can decrease medication dependence for management of chronic conditions and associated diseases, decrease costs to the hospital facility, and improve quality of life for the patients.

References:

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Quality Improvement Abstract Example - Poster Presentation

Abstract of Contribution 114

ID: 114**Poster Abstract**

Topics: Research: Provides information to build skills to conduct research or disseminate a recent research project with a focus on ambulatory nursing care in any ambulatory care setting with implications for practice.

Keywords: text messaging; tonsillectomy; post operative care; automation

Creation of 'Tonsil Texts' Program to Provide Support and Education to Caregivers during Postoperative Tonsillectomy Period

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Background

Pediatric patients account for 26.8 million emergency department (ED) visits annually, costing an estimated 7.8 billion dollars¹. The otolaryngology (ENT) clinic identified 179 ED visits in 2022 and 130 ED visits in 2021 within 30 days of tonsillectomy. Extensive post-op education is provided during clinic visits, although retention remains variable, contributing to preventable ED visits.

Purpose

To utilize a text messaging program, Tonsil Texts, to decrease ED visits after tonsillectomy, provide support and education to caregivers, and provide access to contact ENT with concerns.

Methodology

This quality improvement project was one implementation strategy in a larger health literacy initiative. Staff conducted a root cause analysis and created a key driver diagram to identify barriers. Two barriers to caregiver retention of information were identified, including delay between visit and surgery and the amount of information provided. To address these barriers, Tonsil Texts were initiated.

Systemwide analytics built a report including all patients undergoing tonsillectomy, which communicated with PatientEXP software to send automated text messaging in English or Spanish. All patients were enrolled beginning December 2022, but could opt-out. Families received post-op video instructions on the child's surgery date, providing time to watch while their child was in the operating room. Additional messages were sent on post-op days 2, 4, and 7 with reinforcement of care and encouragement. All messaging included a hyperlink to the patient portal and the clinic phone number. A survey was sent on day 14, indicating the end of standard messaging and post-op period, and requesting feedback on program timeline and messaging.

Results

Our ENT surgeons have completed 729 tonsillectomies in 2023, with 80 patients returning to the ED within 30 days (10.97%). This shows trending improvement from 2022 where 13.7% of patients returned (n=1299), and 2021 where 13.4% returned (n=967).

As of June 2023, 96.15% of caregivers found Tonsil Texts helped to manage their child's pain after surgery (n=78). 98.72% found the Tonsil Texts information was useful and delivered on the appropriate days and times. 97.44% indicated that the messaging helped them know who to contact for concerns. Caregivers reported positive feedback suggesting the texts "helped [her daughter] cope", were received "right on time", and came through "just before [she] wanted to call and ask a question."

Due to continued calls about ear pain, an expected post-op finding, messaging was updated. Continued review of feedback and nursing calls will guide Tonsil Texts changes.

Implications

Caregivers often struggle managing postoperative pain, hydration, and other concerns for up to 2 weeks after surgery. Tonsil Texts reinforces education on postoperative care symptoms and management, normalizing their child's experience, and providing easy access to the ENT department if additional concerns arise. Nurses may work with their IT departments to create automated processes, such as Tonsil Texts, that support the needs of patients and families. Implementing health literacy practices in post-surgical teaching, and innovating methods to improve information retention, can improve patient outcomes and reduce costs.