

Improving Colorectal Cancer Screening in Primary Care

By

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Introduction

- Colorectal cancer(CRC)–preventable, one of
 - the most identified cancer
 - 2nd leading cause of cancer deaths in U.S.
- 40% of adults are non compliant with screening
- 2015 new cases= 93,090 with 47,900 deaths
- National expenditures=\$6.5 billion
- Global expenditure=\$99 billion
- Screening rates range from 35–65% whereas national goal is 85%

Problem Statement

- Identified problem: Low CRC screening of Veterans at VASNHS primary care
- 2015 third quarter performance measure data shows 77% compliance of screening vs. national standard of 85%
- Age adjusted incidence rate = 49.1 per 100,000 people
- Applied to VA= 1,424 but in 2011=3,642 cases
- Treatment cost for each Veteran:
 - early detection \$30,000 vs. late detection \$120,000/patient
 - Direct cost of each cancer episode: \$30,000–\$ 80,000
 - Total cost for treatment of new cases: \$8.3 billion

Objectives

- 1) To improve the CRC compliance rate of Veterans in the Southeast primary care clinic from 77% to 85% through a team based approach using a theory based educational intervention by the nurses.
- 2) To increase knowledge and confidence of the nurses in their role as public health agents.
- 3) To increase the self-identified proficiency of the nurses in the performance of their health promoting skills following the theory based education about CRC screening guidelines.

Project Design/Methods

- Setting
 - Southeast Primary Care Clinic
- Target Population
 - LPNs and RNs assigned to two PACT teams
 - Veterans from 50–75 years old
- Design
 - Rates of CRC screening compared before and after intervention
 - Comparison of facility quarterly colorectal preventive index performance measures before and after intervention

Project Design and Methods (continued)

- Pre-test and post-test questionnaire will be completed by the nurses
- Implementation
 - CRC screening hand outs, posters and advertisement on patient channel implemented
 - Evidence and theory based education provided to the nurses of the two PACT teams
 - Implement team based approach in screening
 - Nurses identifying eligible Veteran for screening
 - Provision of education about CRC, screening and modalities by the nurses
 - Nurses ordering FIT for moderate risk Veterans and educating about collection/return of specimen
 - Nurses utilizing FOBT tracking tool to follow up patient that complied with screening, results and needing further management
- Evaluation
 - PDSA Cycle utilized
 - Electronic health record (EHR) were run smoothly to determine how many patients had completed screening
 - The post test questionnaire was used immediately following intervention evaluating the nurses knowledge, confidence and proficiency of the nurses
 - Accessed facility quarterly performance record to determine the current CRC performance rate
- Statistical Analysis
 - Descriptive statistics to describe the nurses knowledge, confidence and proficiency about screening
 - t test to determine the difference of CRC screening compliance rate before and after intervention

Results

- 1) t test demonstrated a statistically significant increase in CRC screening in the two PACT teams that participated from 224 to 435 Veterans
- 2) Post intervention CRC quarterly performance rate of 83.68% compared to the pre intervention rate of 77% illustrated improvement of CRC screening in the facility
- 3) Post-test demonstrated significant increase (91.6%) in the nurses' skills knowledge, proficiency and confidence after the educational intervention
- 4) PACT team's nurses demonstrated readiness to practice their health promoting and function as public health agents in promoting CRC screening
- 5) The team based approach reflected improved collaboration and coordination of care for Veterans needing safe and effective care

Summary and Conclusions

- 1) The combination of interventions seemed most successful in raising rates compared to any one intervention alone
- 2) The team based approach is ideal for improving CRC screening compliance in primary care
- 3) The nursing education program improved the knowledge, proficiency and confidence of nurses in educating Veterans to comply with CRC screening
- 4) Continued educational intervention to nurses is needed to be proficient in bridging knowledge gap of patients, assessing readiness for change and engaging them to a health promoting activity
- 5) Findings supported the PDSA model in guiding steps of intervention from development through implementation and evaluation of observed changes
- 6) The completion of the QI project created a positive implications in policy and nursing practice through the nurses' engagement in developing new processes to increase CRC screening in primary care
- 7) The QI project emphasized the importance of team based approach, educational interventions and collaboration in primary care to achieve a n efficient and safe care for the Veterans

Future Projects and Implications

- 1) Implement and evaluate the interventions to the six different primary care clinics of the VA Southern Nevada Healthcare System
- 2) Address other workflow issues, the need for educational modules and skills assessment trainings to better manage primary care needs of the Veterans
- 3) Explore reasons the patient does not follow through on the screening and examine strategies to promote follow through on screening