

IMPLEMENTING  
MAILED FECAL  
IMMUNOCHEMICAL  
TEST OUTREACH TO  
IMPACT COLORECTAL  
CANCER SCREENING

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# BACKGROUND OF THE PROJECT

- Brief overview of the problem
  - 2<sup>nd</sup> leading cause of cancer death in the United States
- History of this problem
  - Lack of EBP approach to help impact completion of CRCS
- Project need
  - Impact UDS measurements
  - Impact patient completion with CRCS
- A SWOT analysis was conducted to determine internal and external factors, such as strengths, weaknesses, opportunities, and threats, that would potentially impact the project's needs and success.

# SYNTHESIS OF LITERATURE

- Search strategy
  - EBP
- Themes
  - CRC, CRCS, FIT Outreach
- Change recommendation based on the synthesis of the literature.
- Primary foundational article
  - [file:///D:/Stephanie.Martinez.jamainternal\\_coronado\\_2018\\_oi\\_180052.pdf](file:///D:/Stephanie.Martinez.jamainternal_coronado_2018_oi_180052.pdf)

# EVIDENCE-BASED PRACTICE QUESTION

- To what degree would the implementation of Coronado et al's research on fecal immunochemical test (FIT) outreach impact completion rates with colorectal cancer screening among adult patients in a primary care clinic in Arizona?

# THEORETICAL FRAMEWORK

- Nursing theory
  - Dorothea Orem's self-care deficit nursing theory
  - Actions which facilitate or impede CRCS completion?
- Evidence-based change model
  - Prochaska & DiClemente's transtheoretical model (TTM)
    - Behavior changes
      - 6 stages
  - How will this drive practice change?
    - Identify barriers
    - Identify what works!

# CHRISTIAN WORLDVIEW

- Christian duty; share God's love, mercy, and kindness
  - Colossians verse 3:23-24
  
- Christian faith & improving CRCS....how does it relate?
  - Common good for all people

# PURPOSE STATEMENT

The purpose of this quality improvement project was to determine if the implementation of Coronado et al's research on fecal immunochemical test (FIT) outreach would impact completion rates with colorectal cancer screenings among adults. The project was piloted over an 8-week period in urban Arizona primary care clinic.

- Independent Variable:
  - Coronado et al's research on fecal immunochemical test (FIT) outreach
- Dependent Variable:
  - Completion rates with colorectal cancer screenings (percentage computed as screened)

# INTERPROFESSIONAL COLLABORATION

- Internal and external stakeholders
- Support required
  - Supportive roles
- Characteristics of the team
  - Role of the project manager



# FEASIBILITY

- Project needs overview
- Staff needed
- Supplies
- Technology
- Costs

# PROJECT MANAGEMENT PLAN

- Step 1
  - Obtain GCU IRB approval
- Step 2
  - Educate staff (email, meetings, educational handout on CRCS)
  - Review mailed FIT outreach intervention with staff
    - Review/discuss staff roles
    - Providing FIT kit to patient
- Step 3
  - Follow-up (1 week phone call)
    - FIT kit completed?
      - Clarify any questions about test?
      - Barriers?
  - Results in EHR?

# SETTING AND SAMPLE POPULATION

- Setting
  - Project site description
    - Non-profit/HRSA Federally funded
    - Large urban area; low SES community
    - Family practice
    - Food bag program, sliding scale services, various community outreaches
- Population
  - Primary care clinic patients
    - Ages 45-75 years old
    - Due for CRCS
    - Multiple ethnicities & languages
  - Sampling procedures
    - Patients attending the clinic
      - Pre-and Post intervention measurement periods

# INSTRUMENTATION AND DATA SOURCE

- Data Source
  - EHR
- Instrument
  - Excel Spreadsheet
- Validity
  - Sensitivity, specificity, PPV, and NPV
- Reliability
  - Kappa and level of agreement statistics

# BIAS AND ETHICAL CONSIDERATIONS

- Potential bias
  - Related to project methodology
  - Related to design
  - Related to sampling procedures
  - Related to data collection
  - Related to data interpretation
- Ethical considerations
  - The project was approved by GCU's IRB as a quality improvement project.

# DATA ANALYSIS

- Step-by-step description of data analysis procedures
  - GCU IRB approval
  - Collected demographic data, insurance status, and CRCS from EHR
  - Input into Excel file
  - Coded numerically
  - IBM SPSS Statistics for analysis
- Specific tests
  - Pearson chi-square test
- Rationale for each test
  - Compares two independent groups; nominal level outcome

# DESCRIPTIVE DATA-SAMPLE POPULATION

Table 1  
Descriptive Data for Age

Variable	Comparative (n = 70)		Implementation (n = 279)	
	M	SD	M	SD
Age	57.70	7.70	55.74	7.95

Table 2  
Descriptive Data for Gender, Race, Ethnicity, Primary Language, and Insurance Status

Variable	Comparative (n = 70)		Implementation (n = 279)	
	n	%	n	%
<b>Gender</b>				
Male	19	27.1	97	34.8
Female	51	72.9	181	64.9
Not Reported	0	0.0	1	.40
<b>Ethnicity</b>				
Hispanic	53	75.7	153	54.8
Non-Hispanic	17	24.3	122	43.7
Not Reported	0	0.0	4	1.4
<b>Race</b>				
African American	14	20.0	48	17.2
Asian	1	1.4	0	0.0
Caucasian	45	64.3	159	57.0
Other	10	14.3	66	23.7
Not Reported	0	0.0	6	2.2
<b>Primary Language</b>				
English	23	32.9	180	64.5
Oromo	1	1.4	0	0.0
Somali	2	2.9	7	2.5
Spanish	44	62.8	90	32.3
Not Reported	0	0.0	2	.70
<b>Insurance Status</b>				
Commercial	4	5.7	54	19.4
Government Subsidized	47	67.1	162	58.1
Other	19	27.2	62	22.2
Unknown	0	0.0	1	.40

# RESULTS

## Chi-square Results for CRCS Completion Rates

Variable	Comparative (n = 70)		Implementation (n = 279)		X <sup>2</sup> (1)	p
	n	%	n	%		
CRCS Completion	28	40.0	69	24.7	6.50	.011



# INTERPRETATION OF FINDINGS

- Alignment with other original research studies
  - Lee et al.'s (2021)
- Project findings confirmed or opposed previous published scholarly works.
- Statistical significance?
- Clinical significance?

# STRENGTHS AND LIMITATIONS

- Project strengths
  - Education
  - Diversity
  - Identification of barriers with CRCS completion
- Project limitations
  - Supply
  - Sub-resource patient lists
  - Lack of follow-up phone call

# IMPLICATIONS

- Theoretical Implications
  - Dorothea Orem's SCDNT
- Nursing Practice Implications
  - Importance to practice
    - CRC-2<sup>nd</sup> leading cause of cancer death
  - Contributions to the nursing profession
    - CRCS completion
    - Provider awareness=patient outcomes
  - Influence Practice Change
    - Awareness of CRC, CRCS
    - EBP approaches
    - Reduce healthcare disparities

# RECOMMENDATIONS-FUTURE PROJECTS

- Recommendation One
  - Extended follow-up/strategies for FIT kit completion
- Recommendation Two
  - Previous FIT kit use?
- Recommendation Three
  - CRCS nurse navigator
- Recommendation Four
  - Colonoscopy
- Recommendation Five
  - Text message prompts

# RECOMMENDATIONS-SUSTAINABILITY

- Recommendation One
  - Continued CRCS education and awareness
    - March-National colorectal cancer awareness month!
- Recommendation Two
  - Chief complaint (CC) “colon cancer screening”
- Recommendation Three
  - One-week follow-up

# ADDITIONAL PLANS FOR DISSEMINATION

- Additional dissemination
  - Present project findings
    - Monthly provider meeting
    - Power Point Presentation
  - Sustained FIT outreach at site; inclusion of CRCS navigator
- Peer-reviewed journal for publication
  - *JAANP/JNP*
  - Abstract/poster presentation
  - Contribution to nursing

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