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Introduction

- Colorectal or colon cancer (CRC) is the second most commonly diagnosed cancer in both men and women in the U.S. (Jemal et al., 2009).
- Although screening decreases CRC incidence (Burt, 2010) and mortality, currently, less than 50% of the eligible population undergoes regular CRC screening (American Cancer Society, 2010).
- The advent of biomarker technologies such as a blood-based CRC screening test (Septin 9 blood test; ARUP Laboratories, 2010) may increase CRC screening by decreasing barriers currently contributing to health disparities.
- Septin 9, a new blood-based biomarker CRC screening test, detects methylated Septin 9 DNA with 90% sensitivity and 89% specificity. This test requires no preparation and is recommended to occur every 1-2 years. Septin 9's ability to detect precancerous polyps is undetermined, and the test is not intended to replace colonoscopy.**
- This study is the first to assess patient beliefs about and interest in the Septin 9 test.

Method

- Design:** We are in the process of recruiting 120 adults to participate in a series of focus groups stratified by Race/Ethnicity (White, Black or African American, and Hispanic or Latino/a) and Screening Status (previously screened, never screened).
- Quantitative and qualitative data are collected through group discussion and pre- and post-questionnaires.
- Participants are given information about 4 tests: Colonoscopy, sigmoidoscopy, FOBT, and Septin 9.
- Participants (all at population risk for CRC):**
 - n* = 50; 42% male
 - Aged 48 to 73 (*M* = 59, *SD* = 7.67)
 - 74% Caucasian; 12% African American; 6% Hispanic
 - 54% previously screened for CRC
 - 84% currently have healthcare coverage
 - Median income is \$40-\$49K

References

- American Cancer Society (2008). Colorectal Cancer Facts & Figures 2008-2010. Atlanta: American Cancer Society.
- ARUP Laboratories. (2010). *Septin 9 (SEPT9) methylated DNA detection by real-time PCR* : 2003243. Retrieved September 22, 2010 from ARUP's Laboratory Test Directory Web site: <http://www.aruplab.com/guides/ug/tests/2003243.jsp>
- Burt, R. W. (2010). Strategies for colon cancer screening with considerations of cost and access to care. *Journal Of The National Comprehensive Cancer Network: JNCCN*, 8(1), 2-5.
- Jemal, A., Siegel, R., Ward, E., Hao, Y., Xu, J., & Thun, M. J. (2009). Cancer Statistics, 2009. *CA Cancer J Clin*, 59(4), 225-249.

Results

Table 1. Factors that participants *like* about the Septin 9 test*

| Any positive | 82% |
|--|-----|
| Procedure (convenience, simplicity, comfort, time required, no preparation, less involved) | 74% |
| High accuracy | 44% |
| Lower cost | 36% |
| Frequency | 12% |
| Ability to increase screening rates | 6% |

Table 2. Factors that participants *do not like* about the Septin 9 test*

| Any negative | 32% |
|--|-----|
| More research needs to be done | 14% |
| Inability to detect precancerous growths | 10% |
| Higher cost | 6% |
| Potential lack of insurance coverage | 6% |
| Possibility of false positives | 2% |
| Frequency (too often) | 2% |

*Taken from the open-ended items on the post-discussion questionnaire

Figure 1. Participants' beliefs about CRC screening strategies

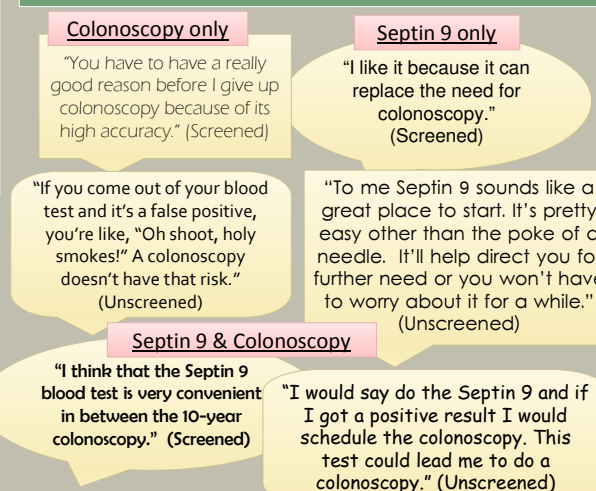
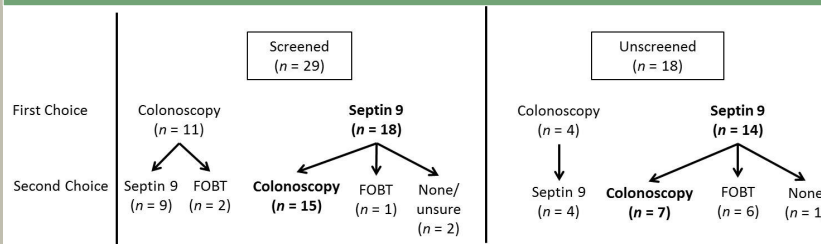


Figure 2. Decision tree of participants' prediction of first and second screening choice stratified by screening status



- 64% selected Septin 9 as their first choice.
- 30% selected colonoscopy as their first choice.
- There were no significant differences in participants' first choice based on screening status, gender, religion, marital status, healthcare coverage, or race/ethnicity.

Preliminary Conclusions

- The majority of participants listed advantages of the Septin 9 test such as convenient, noninvasive aspects of the procedure and high accuracy, while only one-third listed disadvantages such as the need for more research and the test's inability to detect precancerous polyps.
- The majority of participants, regardless of screening status, selected the Septin 9 test as their first choice for future CRC screening.
- However, participants spontaneously considered a wide variety of screening strategies which included various combinations of having the Septin 9 test and/or colonoscopies in the future.

Future Research

- This study is the first in a series. We plan to conduct 3 additional phases:
 - Focus groups will be conducted with primary care physicians from multiple settings to assess physician interest in and willingness to recommend the Septin 9 blood test to patients.
 - Information from the initial patient focus groups will be used to design a quantitative survey to assess patients' preferences and perceived barriers and benefits of CRC screening.
 - Finally, we will assess differential predictors of Septin 9 and colonoscopy uptake by offering screening in a prospective longitudinal study.