

# Patient Preferences for Colorectal Cancer Screening

## TO THE EDITORS:

In the July issue of *The American Journal of Managed Care*, Schroy et al<sup>1</sup> reported on preferences for colorectal cancer (CRC) screening tests in relation to currently recommended screening modalities (ie, fecal occult blood testing (FOBT), flexible sigmoidoscopy, colonoscopy, double contrast barium enema (DCBE), and stool DNA (sDNA) testing. Participant preferences were elicited in relation to information provided about different types of screening tests. Survey respondents represented a convenience sample of average-risk individuals between 50 and 75 years of age with no prior CRC screening. The authors found that colonoscopy was the most preferred CRC screening option, followed by noninvasive stool blood testing. Screening with flexible sigmoidoscopy and DCBE were less frequently preferred alternatives. The authors also reported that study participants preferred sDNA over FOBT.

As noted above, specific features of the different CRC screening tests were described to study participants to elicit preferences. Thus, the nature of these descriptions is a central factor that conditioned participant responses. The authors noted that information provided to the participants about the recommended CRC screening tests was “nearly identical” to that used in an earlier research project.<sup>2</sup> However, information provided about sDNA in the current study was not used in the earlier project. In that study, details about the process used to develop a decision aid that described CRC screening tests were provided; text describing the screening tests was not available. That information would have helped the reader gain some insights into what test characteristics were featured in the descriptions and which of these characteristics might have accounted for the observed preference differences. This point is particularly relevant to the observation that participants tended to prefer sDNA over guaiac-based FOBT.

The authors acknowledge that they may have overstated sDNA accuracy in their description of that test. In addition, the description of FOBT offered to study participants was related to guaiac-based FOBT. Fecal immunochemical testing, a stool blood test to detect fecal hemoglobin, was not presented as an alternative. This omission is important as fecal immunochemical testing has removed many inconvenient and unpleasant aspects of guaiac-based FOBT and may be a more acceptable type of stool blood test. In one report, patients eligible for CRC screening were randomized to receive either a mailed guaiac-based FOBT kit or a fecal immunochemical test kit. Screening participation was significantly higher among patients who received the fecal immunochemical test as compared with those who received the guaiac-based FOBT.<sup>3</sup> These data, along with findings reported in the current worthwhile study, suggest the need for more information on comparative preferences for guaiac-based FOBT, fecal immunochemical testing, and sDNA testing. Finally, there are substantial differences in cost to consumers for sDNA, fecal immunochemical testing, and guaiac-

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based FOBT. Test descriptions in comparison studies should include these differences in costs.

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### IN REPLY:

We appreciate Dr Myers' comments and concur that the content of the descriptions for the different attributes of each screening test included in our decision aid strongly influence patient preferences for a particular screening strategy. Contrary to Dr Myers' concern, however, this information is provided in our survey instrument, which was posted online at [www.ajmc.com](http://www.ajmc.com), as noted in the article, rather than as an appendix to the text due to space considerations. The information included for each of the test features discussed for sDNA testing was derived primarily from manufacturer's instructions for specimen procurement, published performance data, and preliminary results of a study that examined patient perceptions and screening preferences among a cohort of subjects participating in a multicenter comparison of sDNA testing versus guaiac-based FOBT for detecting colorectal neoplasia, using colonoscopy as a gold standard. The final results of that study, which included 4042 mostly average-risk patients, found that sDNA testing was not only perceived to have a number of advantages over both FOBT and colonoscopy but also preferred by patients experienced with all three tests.<sup>4</sup>

Although we acknowledge that one of the limitations of our study was that we may have inflated the accuracy of sDNA testing ("medium-high") for "precancerous" polyps in size, based on revised performance data published after its completion, it remains unknown whether subjects who selected sDNA testing because of accuracy would have changed their preference, because most patients lack awareness about colorectal polyps and their significance.<sup>5</sup> Moreover, it remains to be seen whether recent technological advances that have markedly improved sensitivity for colorectal cancers might also improve sensitivity for advanced adenomas.<sup>6</sup>

We also concur with Dr Myers' comments regarding fecal immunochemical testing (FIT) for occult blood. We did not include FIT in our comparisons with other screening tests as it was not endorsed as an alternative to guaiac-based FOBT at the time we initiated our study. FIT clearly has a number of advantages over guaiac-based testing, both in terms of performance and patient acceptance. Notwithstanding Dr Myers' call for future studies comparing patient preferences for sDNA testing versus FIT, we believe that our results support our overall conclusion that patients who prefer options other than colonoscopy prefer noninvasive stool-based tests to sigmoidoscopy and barium enema.

The issue of whether cost information should be presented in decision aids for colorectal cancer screening is debatable. Although the magnitude of out-of-pocket

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costs may influence patient preferences, studies to date have provided conflicting data, as discussed by Dr Pignone in the accompanying editorial.<sup>7</sup> Moreover, cost considerations rarely influence provider or patient utilization, as demonstrated by recent national trends in the use of colonoscopy as the preferred screening test over all other recommended options, despite its higher cost. Because of the wide variation in coverage, we believe cost issues should be a secondary consideration after patients identify a preferred screening option within the context of shared decision making.

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### References

1. Schroy PC 3rd, Lal S, Glick JT, Robinson PA, Zamor P, Heeren TC. Patient preferences for colorectal cancer screening: How does stool DNA testing fare? *Am J Manag Care.* 2007;13:393-400.
2. Ling BS, Moskowitz MA, Wachs D, Pearson B, Schroy PC. Attitudes toward colorectal cancer screening tests: A survey of patients and physicians. *J Gen Intern Med.* 2001;16:822-830.
3. Cole SR, Young GP, Esterman A, Cadd B, Morcom J. A randomized trial of the impact of new faecal haemoglobin test technologies on population participation in screening for colorectal cancer. *J Med Screen.* 2003;10:117-122.
4. Schroy PC 3rd, Heeren TC. Patient perceptions of stool-based DNA testing for colorectal cancer screening. *Am J Prev Med.* 2005;28:208-214.
5. Schroy PC 3rd, Lal SK, Wilson S, Heeren TC, Farraye FA. Deficiencies in knowledge and familial risk communication among colorectal adenoma patients. *J Clin Gastroenterol.* 2005;39:298-302.
6. Itzkowitz SH, Jandorf L, Brand R, et al. Improved fecal DNA test for colorectal cancer screening. *Clin Gastroenterol Hepatol.* 2007;5:111-117.
7. Pignone M. Patient preferences for colon cancer screening: the role of out-of-pocket costs. *Am J Manag Care.* 2007;13:390-391. ■

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