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# Can We Achieve an 80% Screening Rate for Colorectal Cancer by 2018 in the United States?

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In this issue of *Cancer*, Meester et al<sup>1</sup> have predicted that approximately 280,000 new cases of colorectal cancer (CRC) and 200,000 CRC deaths could be averted by 2030 if CRC screening rates increased from the current National Health Interview Survey rate of 58% (self-reported) to 80% by 2018. From a public health perspective, the impact of such an increase would no doubt be large: 16,500 fewer cases of CRC per year (a 12% reduction in the number of cases) and 12,000 fewer deaths from CRC per year (a 24% reduction in the number of deaths).<sup>2</sup> The bigger question is how do we, as a nation, reach 80% adherence to CRC screening?

Current self-reported CRC screening rates in the National Health Interview Survey are at 58%.<sup>3</sup> This is self-reported, however, and true screening rates are most likely <50% for adults aged 50 years.<sup>4</sup> Therefore, one challenge is ensuring accurate, via medical record, accounting of real, state-of-the art CRC screening. A consistent national standard of what constitutes state-of-the-art CRC screening needs to be clarified to physicians, patients, and insurers.<sup>5</sup> Colonoscopy is the most preferred method of screening, because any polyps found can easily be removed in the same procedure, and the entire colon is visualized.<sup>6</sup> Colonoscopy has been validated in a randomized trial to have a mortality benefit.<sup>7</sup> However, not everyone can tolerate a colonoscopy, has access to colonoscopy services, or can afford any copayments. Thus, other modalities (eg, fecal occult blood test, fecal immunochemical test, and flexible sigmoidoscopy) can also be of benefit, and their efficacy has also been established in randomized controlled trials.<sup>8-11</sup> Guidelines established by the American College of Physicians regarding the suggested frequency by risk status should be followed.<sup>5</sup>

Furthermore, study after study has shown that the number one reason patients receive CRC screening is because their physician recommended the test.<sup>12</sup> Physicians must recommend the test to all eligible patients and provide follow-up to ensure the recommendation was followed. This is easier in some practice settings than others; for example, large integrated

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health systems have systems in place to remind physicians and provide follow-up of recommendations, whereas many Federally Qualified Health Centers do not even have electronic reminder or medical record systems due to operating on a lower revenue scale. Thus, system-level interventions could facilitate achieving this screening goal. Patient-directed education, navigation services, and other types of interventions work best when integrated with physician-level and system-level activities.<sup>13-18</sup>

Finally, underserved populations need special attention to ensure that disparities in screening, incidence, and mortality do not increase. Historically, when newer technologies are introduced, the more affluent part of society tends to benefit more from the effects of this technology. This was true for breast cancer treatment<sup>19</sup> as well as access to state-of-the-art chemotherapy drugs.<sup>20</sup> Thus, strategies should be introduced to address CRC disparities at the start. The Patient Protection and Affordable Care Act will help to reduce some disparities in access, but just signing individuals up for a health plan will not ensure that they receive proper and timely screening examinations.

The best way to reach the goal of 80% adherence to CRC screening is through a large (statebased or national) multilevel initiative that includes policy makers, community organizations, and payors, as well as health care organizations, health care practitioners, and the public. The Delaware Experiment has documented the success of such an initiative at the state level, not only increasing CRC screening rates from 57% in 2002 to 74% in 2009, but also eliminating disparities in screening, incidence, mortality, and late stage of disease,<sup>21</sup> while decreasing health care costs. Delaware has shown the way toward realizing this increase in CRC screening and eliminating black-white disparities in CRC outcomes. The challenge is to convince other states and the United States as a whole to adopt Delaware's strategy.

We offer the challenge-who will accept?

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#### REFERENCES

- 1. Meester RG, Doubeni CA, Zauber AG, et al. Public health impact of achieving 80% colorectal cancer screening rates in the United States by 2018. Cancer. 2015; 121 000-000.
- 2. American Cancer Society. Cancer Facts & Figures, 2015. American Cancer Society; Atlanta, GA: 2015.
- 3. Centers for Disease Control and Prevention. [Accessed February 13, 2015] National Health Interview Survey. Available at: http://www.cdc.gov/nchs/nhis.htm
- Reiter PL, Katz ML, Oliveri JM, Young GS, Llanos AA, Paskett ED. Validation of self-reported colorectal cancer screening behaviors among Appalachian residents. Public Health Nurs. 2013; 30:312–322. [PubMed: 23808856]
- Qaseem A, Denberg TD, Hopkins RH, et al. Clinical Guidelines Committee of the American College of Physicians. Screening for colorectal cancer: a guidance statement from the American College of Physicians. Ann Intern Med. 2012; 156:378–386. [PubMed: 22393133]

- 6. Levin B, Lieberman DA, McFarland B, et al. American Cancer Society Colorectal Cancer Advisory Group; US Multi-Society Task Force; American College of Radiology Colon Cancer Committee. Screening and surveillance for the early detection of colorectal cancer and adenomatous polyps, 2008: a joint guideline from the American Cancer Society, the US Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology. CA Cancer J Clin. 2008; 58:130–160. [PubMed: 18322143]
- 7. Zauber AG, Winawer SJ, O'Brien MJ, et al. Colonoscopic polypectomy and long-term prevention of colorectal-cancer deaths. N Engl J Med. 2012; 366:687–696. [PubMed: 22356322]
- Atkin WS, Edwards R, Kralj-Hans I, et al. UK Flexible Sigmoidoscopy Trial Investigators. Onceonly flexible sigmoidoscopy screening in prevention of colorectal cancer: a multicenter randomized trial. Lancet. 2010; 375:1624–1633. [PubMed: 20430429]
- Hardcastle JD, Chamberlain JO, Robinson MH, et al. Randomised controlled trial of faecal-occultblood screening for colorectal cancer. Lancet. 1996; 348:1472–1477. [PubMed: 8942775]
- Segnan N, Armaroli P, Bonelli L, et al. SCORE Working Group. Once-only sigmoidoscopy in colorectal cancer screening: follow-up findings of the Italian Randomized Controlled Trial— SCORE. J Natl Cancer Inst. 2011; 103:1310–1322. [PubMed: 21852264]
- Quintero E, Castells A, Bujanda L, et al. COLONPREV Study Investigators. Colonoscopy versus fecal immunochemical testing in colorectal-cancer screening. N Engl J Med. 2012; 366:697–706. [PubMed: 22356323]
- 12. Ramdass P, Petraro P, Via C, Shahrokni A, Nawaz H. Providers role in colonoscopy screening for colorectal cancer. Am J Health Behav. 2014; 38:234–244. [PubMed: 24629552]
- Sequist TD, Zaslavsky AM, Marshall R, Fletcher RH, Ayanian JZ. Patient and physician reminders to promote colorectal cancer screening: a randomized controlled trial. Arch Intern Med. 2009; 169:364–371. [PubMed: 19237720]
- Lasser KE, Murillo J, Lisboa S, et al. Colorectal cancer screening among ethnically diverse, lowincome patients: a randomized controlled trial. Arch Intern Med. 2011; 171:906–912. [PubMed: 21606094]
- Pignone M, Winquist A, Schild LA, et al. Effectiveness of a patient and practice-level colorectal cancer screening intervention in health plan members: the CHOICE trial. Cancer. 2011; 117:3352– 3362. [PubMed: 21319147]
- Wang CY, de Dieu Tapsoba J, Anderson ML, et al. Time to screening in the systems of support to increase colorectal cancer screening trial. Cancer Epidemiol Biomarkers Prev. 2014; 23:1683– 1688. [PubMed: 24891548]
- 17. Clouston K, Katz A, Martens PJ, et al. CIHR/CCMB Team in Primary Care Oncology (PCO-NET). Does access to a colorectal cancer screening website and/or a nurse-managed telephone help line provided to patients by their family physician increase fecal occult blood test uptake?: results form a pragmatic cluster randomized controlled trial. BMC Cancer. 2014; 14:263. [PubMed: 24739235]
- Hewitson P, Ward AM, Heneghan C, Halloran SP, Mant D. Primary care endorsement letter and a patient leaflet to improve participation in colorectal cancer screening: results of a factorial randomized trial. Br J Cancer. 2011; 105:475–480. [PubMed: 21829202]
- Wu XC, Lund MJ, Kimmick GG, et al. Influence of race, insurance, socioeconomic status, and hospital type on receipt of guideline-concordant adjuvant systemic therapy for locoregional breast cancers. J Clin Oncol. 2012; 30:142–150. [PubMed: 22147735]
- Bradley CJ, Given CW, Dahman B, Fitzgerald TL. Adjuvant chemotherapy after resection in elderly Medicare and Medicaid patients with colon cancer. Arch Intern Med. 2008; 168:521–529. [PubMed: 18332299]
- 21. Grubbs SS, Polite BN, Carney J, et al. Eliminating racial disparities in colorectal cancer in the real world: it took a village. J Clin Oncol. 2013; 31:1928–1930. [PubMed: 23589553]

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