Colorectal Cancer Control: Providing Adequate Care to Those Who Need It

Otis W. Brawley

Correspondence to: Otis W. Brawley, MD, American Cancer Society and Departments of Hematology, Medical Oncology, Medicine and Epidemiology, Emory University, 250 Williams St, Atlanta, GA 30303 (e-mail: otis.brawley@cancer.org).

Colorectal cancer (CRC) is a notable cause of death and an extremely important tumor in cancer control efforts. There have been tremendous declines in CRC incidence and mortality because of the effectiveness of screening and treatment. Indeed at a time when there is tremendous debate about screening for many cancers, there is no debate that CRC screening and treatment are preventing many deaths (1).

Although there has been success in CRC control, it is a disease in which there are tremendous disparities among populations. That is to say, many more CRC deaths can be averted, and central to the control of CRC is reducing disparities. Any effort to reduce disparities requires providing high-quality screening, diagnosis, and treatment to the entire population as efficiently as possible.

Indeed, an important and vital question for society is, “How can we get adequate high-quality care to include preventive services to those who do not receive it?” In this issue of the Journal, a group of distinguished experts in colon cancer and health disparities provide a blueprint for the further control of CRC (2). Gupta et al. advocate the following:

1. Actively promoting the message, “The best test is the one that gets done.”
2. Developing and implementing strategies for identifying unscreened, uninsured individuals.
3. Developing and implementing organized strategies for screening.
4. Funding and enhancing programs and policies that address the CRC continuum.

Disparities in CRC were first documented by comparing black vs white age-adjusted mortality in the 1980s (3). There were initial concerns that CRC was more aggressive in blacks or the treatments were less effective (4). The biologic difference was initially contradicted by the observation that black and white Americans had very similar age-adjusted mortality rates in the 1970s. The disparity in mortality began in the early 1980s. As effective screening and treatment were developed, white mortality rates declined. Even as black and white mortality rates have gone down since the early 1990s, white rates have declined faster and the black–white disparity has increased. Indeed, the black–white mortality disparity was greater in 2011 (the last year for which data are currently available) than it was in 1990.

A series of well-designed studies showed that equal treatment yields equal outcome among equal patients and race need not be a factor in outcome (5). Some of these studies documented that inadequate screening, diagnosis, and treatment in a higher proportion of black Americans was the cause of most of the black–white disparities (6,7).

Over the past two decades, the medical community has become more aware of the correlation between health disparities and socioeconomic status or, more specifically, social deprivation (8). Increasingly, the focus is shifting from minority or racial health to an emphasis on the underserved. Race is not a biologic categorization; it is a sociopolitical categorization and it is often the sociopolitical aspect of race that causes the disparity. A substantial number of poor or less-educated Americans of all races and ethnicities have disparate outcomes.

There is agreement among medical organizations that adults aged 50 years and older should get regular colorectal screening (9). Standards of diagnosis and treatment have also been set. Thus the underserved are those who do not get timely or adequate screening, get less than adequate diagnostics, and get less than optimal treatment and follow-up. These people are far more likely to have poverty, lack of education, and residence in a medical desert in common, as opposed to race or ethnicity. Indeed, although a higher proportion of blacks are underserved, underserved white Americans substantially outnumber underserved black Americans.

Identifying the underserved and engaging them in the medical system is a huge challenge. In the United States, most screening is opportunistic, meaning the subject has to go to a health-care provider and ask for or be offered screening. In systematic screening, the system seeks out the subject to offer screening and then monitors quality of and completion of care (10). Systematic breast cancer screening programs are common in Europe and in some American health maintenance organizations.

The move toward electronic medical records and billing may help identify people in need of CRC screening who are already engaged in the medical system. Expansion of state Medicaid programs as part of the Affordable Care Act may help identify and engage even more. States that choose not to expand Medicaid risk creating a new underclass. However, tracking and identifying individuals for screening, especially those not enrolled in a health-care system, does have privacy issues.

Public health educational campaigns and patient navigation programs were important in the New York City and state of Delaware demonstration projects (11,12). These programs encouraged a very diverse population of adults aged 50 years or older to seek CRC.
screening. These programs demonstrate how health equity in CRC can be reached.

The New York City and Delaware programs relied heavily on colonoscopy for screening. All screening modalities must be used if we are to get to a national screening prevalence of 80% to 90% of residents aged 50 years or older (10). The screening community accepts that colonoscopy, sigmoidoscopy, and fecal occult blood testing (FOBT) are effective (1). This message is important and must be broadcast widely because many medical professionals consider colonoscopy the gold standard and think FOBT as low-tech and inferior.

It is interesting that the best-quality clinical trial to support any colon cancer screening method is the Minnesota Cancer Control Study. This prospective, randomized trial showed that annual FOBT reduced risk of death by 35% and was associated with a 20% relative risk reduction in CRC (13). Results of today’s FOBT appear to be far better than the tests of the 1990s.

It is interesting that Neugut and Lebwohl note that an over-reliance on colonoscopy as the preferred test may be a factor in screening disparity (14). The unavailability of colonoscopy and the prejudice against other screening methods can often translate into no screening. On the other hand, the logistics of yearly compliance and follow-up of at-home FOBT or every 3- to 5-year sigmoidoscopy can be so difficult that a once-every-10-year colonoscopy can have advantages.

Even an expansion of the use of FOBT and sigmoidoscopy will require additional physician education and increased availability and possibly redistribution of colonoscopy resources (15). There are studies showing that full colon evaluation after a positive FOBT frequently does not happen (16,17). Colonoscopies are not available or are rationed in some areas. I know of one Federally Qualified Health Center where each primary care physician is allotted 12 colonoscopies per month. These colonoscopies can be used for diagnostics or screening. If a physician has more than twelve patients needing a colonoscopy, he/she must wait until the following month or borrow a colonoscopy appointment from another physician.

Patterns-of-care studies show that a substantial proportion of Americans diagnosed with cancer get less than optimal medical care. This is also true in CRC. In 2008, Ward and colleagues showed that the 5-year survival rate of insured Americans with stage 2 CRC was superior to that of uninsured Americans with stage 1 CRC (18). Patterns-of-care studies have also demonstrated that the poor are less likely to have an appropriate number of lymph nodes resected (19,20). The poor are more likely to receive inferior quality care for a number of reasons. Sometimes, it is because of systems issues such as the socioeconomic deprivation of doctors and clinics with the appropriate skills (21). At times, it is because of patient issues such as comorbid diseases making aggressive treatment inappropriate or patient refusal (19,22).

The Affordable Care Act and its reliance on Accountable Care Organizations may improve access to quality care for some, but not for all. True control of CRC requires going beyond a reform of health care. We need to transform how we view, provide, and use health care. We need a system that values and rewards the provision of quality care to include quality preventive services to all Americans.

We need a campaign to encourage CRC screening and a system to identify those who need it. We need a system to offer CRC screening and monitor quality in screening, diagnosis, and treatment. This requires an infrastructure that does not exist in most American communities.

Implementing such a system requires thoughtful policy at multiple levels, as well as awareness and involvement at multiple levels of organization. We need a movement in local communities and collaboration between health-care organizations and insurance providers, as well as local, state, and national politicians.

Our health-care system is incredibly inefficient and at times irrational. CRC screening and treatment comprise a series of simple, low-tech, not very expensive life-saving technologies. We are unable to provide them to all in need even though the United States has by far the most expensive health-care system in the world. Americans spend more than $2.7 trillion per year on health care (23). That is more than $8000 per American per year, nearly twice the cost of the second most expensive country.

Thousands of lives could be saved every year by an organized program of high-quality CRC screening, diagnosis, and treatment. I do not like “disease Olympics” in which one cancer competes to take resources away from another cancer or disease, but CRC needs a public awareness campaign.

This campaign needs to target health-care providers, policy makers, and the general public. People, especially policy makers, need to understand that many CRC deaths are avoidable. It is my opinion that policy makers will react the fastest if there is a grassroots demand for action.

How can we get adequate high-quality care to include preventive services to those who do not receive it? This is not a political or civil rights question; this is an ethical and human rights question.

References

**Affiliations of author:** American Cancer Society, Atlanta, GA; Departments of Hematology, Medical Oncology, Medicine and Epidemiology, Emory University, Atlanta, GA.