

Mr. Chairman and Members of the Committee:

We are pleased to be here today to discuss the use of Medicare-covered screening and diagnostic services to prevent colorectal cancer and minimize its effect on beneficiaries' health status through early detection and treatment. Colorectal cancer is the second leading cause of cancer death in the United States. Currently, only about a third of all colorectal cancers are diagnosed at an early stage. Widespread screening aims to detect the disease early, and in many cases, the detection and removal of precancerous growths may actually prevent colorectal cancer. The Balanced Budget Act of 1997 expanded Medicare coverage to include colorectal cancer screening services. The Congress' decision to include colorectal cancer screening as a Medicare benefit reflected an awareness that early screening and detection are important to maintaining beneficiaries' health.

At your request, we examined the extent to which this new preventive health service has been used since its addition to the Medicare benefit package. Accordingly, my remarks will focus on (1) the extent to which Medicare beneficiaries (both aged and disabled) are using colorectal cancer screening and diagnostic services and (2) efforts to address barriers identified as limiting use. To do this analysis, we determined patient use rates from Medicare claims data from 1995 through June 1999.<sup>(1)</sup> We could not measure use rates for screening services alone because of coding and other technical issues.<sup>(2)</sup>

In addition, we reviewed recent literature and obtained information from medical specialty organizations, patient advocacy groups, agencies in the Department of Health and Human Services (HHS), and several health maintenance organizations (HMO) with Medicare contracts.

In brief, we found that the use of colorectal cancer screening and diagnostic services by Medicare beneficiaries is very low relative to recommended use rates and has remained almost unchanged over the past 5 years. Although guidelines recommend annual fecal occult blood testing for 0 people aged 50 and older, only 9 percent of fee-for-service beneficiaries received that test each year. Use rates for flexible sigmoidoscopy are significantly lower and have also remained constant at about 2 percent of beneficiaries. Women's use of some colorectal cancer screening and diagnostic services was slightly higher than men's, and white beneficiaries received the services at somewhat higher rates than African Americans, Asians, and Hispanics. Although use data are not available for Medicare beneficiaries in HMOs, research suggests that enrollees in managed care plans are at least as likely to have colorectal cancer screening as those in fee-for-service Medicare. Various factors contribute to the low use of screening and diagnostic services, some of which are beginning to be addressed by public health agencies and private organizations. Key among these is poor patient awareness of recommendations and coverage for screening, physician reluctance to perform the procedures because of the time and complexity involved, and lack of monitoring systems to encourage greater use.

## BACKGROUND

Colorectal cancer is the third most commonly diagnosed cancer for both men and women in the United States. An estimated 129,400 new cases and 56,600 deaths from colorectal cancer were expected in 1999. Among the general population, the colorectal cancer mortality rate in 1997 was 21.6 per 100,000 individuals. Broken down into demographic groups, the mortality rate for African Americans was twice that for Hispanic, Asian, or Native Americans, and for men it was more than 40 percent greater than that for women.<sup>(3)</sup> According to medical experts, the risk factors for colorectal cancer include older age, family history, certain hereditary conditions, a diet high in saturated fat and low in fiber, excessive alcohol, and sedentary life style.

Research shows that the number of people developing and dying of colorectal cancer could be reduced

through screening (identifying people with precursors to or early signs of the disease) and surveillance (monitoring people with previously diagnosed colorectal disease). Studies have shown that in the majority of colorectal cancers, noncancerous polyps grow slowly for 10 years or longer in the colon in a benign state before becoming cancerous. Identification and removal of the polyps during that time can prevent colorectal cancer from developing. In 1997, a consortium led by the American Gastroenterological Association produced clinical practice guidelines to address uncertainty about the choice and frequency of screening tests for different groups of patients.<sup>(4)</sup> For people at average risk of developing colorectal cancer, the practice guidelines recommend that people aged 50 and older have a fecal occult blood test annually, a flexible sigmoidoscopy every 5 years, an optional double-contrast barium enema every 5 to 10 years, and a colonoscopy every 10 years. For groups at high risk, experts recommend more frequent screening through colonoscopy.

The Medicare benefit for colorectal cancer screening addresses several of the clinical practice recommendations. Before January 1, 1998, Medicare covered the fecal occult blood test, sigmoidoscopy, colonoscopy, and barium enema only for diagnosis and treatment, such as for evaluating a specific complaint or monitoring an existing medical condition. The Balanced Budget Act of 1997 extended coverage of these services for screening purposes, with no coinsurance and deductible for the fecal occult blood test. For all other tests, the cost sharing is the same as for treatment services, which is payment of 20 percent of the Medicare approved amount after the yearly deductible.<sup>(5)</sup> For people at average risk for colorectal cancer (those with no predisposing factors), Medicare now pays for a screening fecal occult blood test every year and a screening sigmoidoscopy every 4 years for beneficiaries aged 50 and older. In addition, for individuals at high risk, Medicare covers a screening colonoscopy every 2 years.<sup>(6)</sup> For both risk groups, a double-contrast barium enema may be substituted at the same frequency as the sigmoidoscopy or the colonoscopy, if the physician believes that it is appropriate.

#### FEW BENEFICIARIES HAVE COLORECTAL CANCER SCREENING OR USE DIAGNOSTIC SERVICES

Overall use of colorectal cancer screening and diagnostic services among Medicare beneficiaries is generally low. Despite the issuance of the clinical practice guidelines in 1997 and the expanded Medicare benefit that became effective in 1998, use has not changed significantly since 1995. Use rates for these services varied slightly among demographic groups and across states. Studies show that the use of colorectal cancer screening services in managed care health plans is the same as or higher than in fee-for-service arrangements.

#### Overall Use of Colorectal Cancer Screening and Diagnostic Services Remains Low

Despite the fact that nearly all older Americans report having a regular source of health care and a large majority report receiving routine checkups, Medicare beneficiaries' use of colorectal cancer services falls far short of recommended levels. In 1999, 14.1 percent of beneficiaries had one or more of the covered services (fecal occult blood test, flexible sigmoidoscopy, colonoscopy, or double-contrast barium enema) for screening or diagnostic purposes.<sup>(7)</sup> Overall use is roughly equivalent to rates in 1995, when 13.6 percent of beneficiaries used any of these services.

Among the colorectal cancer screening and diagnostic services, the most common and least invasive is the fecal occult blood test. In 1999, the use rate for this service was 9.1 percent of beneficiaries, well below the recommended rate of once a year.<sup>(8)</sup> In the same year, the use rate for flexible sigmoidoscopy, which is covered every 4 years, was 1.9 percent, while 3.8 percent of beneficiaries received a

colonoscopy.<sup>(9)</sup>

Similar data are not available on the use of colorectal cancer services by enrollees in the Medicare managed care program, called Medicare+ Choice, because the Health Care Financing Administration (HCFA) does not require Medicare+Choice plans to report patient-specific data. However, evidence suggests that colorectal cancer screening rates among Medicare HMO beneficiaries may be similar to or higher than use rates among fee-for-service beneficiaries. In a recent synthesis of studies on the use of preventive care, researchers found that enrollees in managed care plans were at least as likely as those in other plans to obtain colorectal cancer screening services.<sup>(10)</sup> One-third of comparisons of colorectal cancer screening use found that managed care enrollees were more likely to use the services and two-thirds of comparisons found no difference in use between enrollees in managed care plans and nonmanaged care plans. Enrollees in group and staff model HMOs-which accounted for 4.4 percent of Medicare beneficiaries in 1998-were significantly more likely than those in fee-for-service Medicare or other types of HMOs to obtain preventive services in general.

#### The Use of Screening and Diagnostic Services Varied Slightly Among Demographic Groups and States

Analyzing use rates by patients' demographic characteristics, we found that use varied only slightly by age, race, gender, and geography. These rates also remained relatively constant over the 5-year study period. (See appendix for a breakout of demographic and geographic differences in use rates.) Specifically,

- Women had higher use rates in 1999 for fecal occult blood test (about 10 percent, compared with 8 percent for men) and similar rates for flexible sigmoidoscopy and colonoscopy.
- Beneficiaries aged 70 to 79 were most likely to use screening and diagnostic services, but their use rates were only about 13 percent higher than for those aged 65 to 69 or 80 to 84.
- White beneficiaries received the screening and diagnostic services at consistently higher rates (about 15 percent in 1999) than Asians (about 13 percent), African Americans (approximately 9 percent), or Hispanics (approximately 8 percent).
- In general, a higher percentage of beneficiaries in Massachusetts and Rhode Island (18 to 20 percent) received screening and diagnostic services consistently over the 5-year period than beneficiaries in other states. (See figure 2 for more information about use rates across states.)

#### EFFORTS TO OVERCOME BARRIERS TO COLORECTAL CANCER SCREENING

Many factors affect the use of colorectal cancer screening services, including patient, physician, and delivery system issues. Some patients find the procedures overly invasive, and others, including some physicians, may be unaware that an effective preventive opportunity exists and that Medicare provides coverage. In addition, the lack of attention to colorectal cancer screening compared with other preventive services may also be a reason for its low use. Federal agencies, medical societies, and patient groups are undertaking a variety of initiatives to improve the use of colorectal cancer screening.

#### Patient Barriers

Researchers have identified a lack of patient awareness, understanding, and inclination as the most significant factor inhibiting the use of colorectal cancer screening services. In a 1997 report, the Agency for Healthcare Research and Quality (AHRQ) found a very low level of awareness about the risks of colorectal cancer and its symptoms among adults. It also found that people are more likely to participate

in screening when they understand the nature of the disease and feel they are at risk for it. Good communication between health care providers and patients and the effective use of educational materials could enhance patient participation in screening, AHRQ researchers concluded.

Although information for patients is essential, it may not be enough.<sup>(11)</sup> In 1998, the Centers for Disease Control and Prevention (CDC), in partnership with HCFA, conducted 14 focus groups with adults aged 50 and older to examine the factors that inhibit appropriate use of colorectal cancer screening. Consistent with AHRQ's 1997 study, CDC found that the participants were not aware that colorectal cancer is the third most prevalent cancer, nor were they aware of the benefits of screening and early detection. However, the focus groups also revealed that older adults, particularly those older than 65, are unwilling to discuss issues of colorectal cancer screening, even with their physicians.<sup>(12)</sup> Representatives of several physician and patient groups echoed these results, telling us that many people find colorectal cancer screening tests inconvenient or embarrassing or that they may be concerned about potential discomfort during the screening.

Because Medicare now covers colorectal cancer screening services, HCFA is taking steps to promote beneficiary awareness of the new benefit, as are other agencies within HHS. For example,

- HCFA's Medicare and You handbook, which was mailed last year to all beneficiaries, describes the colorectal cancer screening benefit along with other covered preventive services. In addition, HCFA has distributed pamphlets regarding colorectal cancer screening to beneficiary groups, posters for senior citizen centers, and television and radio public service announcements, some of which target women and African Americans.
- Along with the American Cancer Society, CDC has established the National Colorectal Cancer Roundtable to bring together state health departments, professional medical societies, and other public and private organizations to promote colorectal cancer screening among medical providers and the public. The roundtable seeks to determine clinical and consumer barriers to screening, assess current public awareness of and interest in screening, and develop and disseminate promotional messages.
- In collaboration with HCFA and the National Cancer Institute (NCI), CDC has launched a public awareness campaign, "Screen for Life," to promote colorectal cancer screening that includes public service announcements and brochures in both English and Spanish, press kits, and a Web site on colorectal cancer ([cdc.gov/cancer/screenforlife](http://cdc.gov/cancer/screenforlife)). CDC has also supported studies regarding participation in screening.

In addition, some health plans that participate in Medicare+Choice have set up programs to encourage the appropriate use of screening services. While these activities do not represent those of the managed care industry overall, they illustrate a variety of approaches to improving patients' use of colorectal cancer screening tools. For example:

- Kaiser Permanente in Northern California has screened more than 300,000 members older than 50 with sigmoidoscopy and has reported a one-third reduction in advanced colorectal cancer cases among the targeted population.
- Group Health Cooperative in Puget Sound has used mailings to members to provide information about the importance of regular screening and to improve familiarity with the screening procedures.
- Aetna U.S. Healthcare mails a fecal occult blood test kit to members aged 50 and older, along with instructions for completing the test, and educational materials about colorectal cancer. The plan's Prudential Center for Health Care Research is conducting a study to determine the rate of colorectal cancer screening among plan members older than 50, assess barriers to screening, and

improve screening rates.

### Physician Barriers

Physicians practices, too, can affect rates of colorectal cancer screening. In a 1999 report, CDC stated that physicians may lack skills (such as training in prevention) or time to counsel patients, or they may be unfamiliar with updated colorectal cancer screening guidelines (which now have broad-based support).<sup>(13)</sup> A study of primary care physicians in a large health care system found that half of those trained in flexible sigmoidoscopy chose not to perform this procedure. The reasons most often given were the time required for the procedure, the availability of adequately trained staff, and the availability of flexible sigmoidoscopy services from other clinicians.<sup>(14)</sup> One study has also attributed the reluctance of primary care physicians to provide this screening to their impression that reimbursement rates are inadequate to cover their costs.<sup>(15)</sup>

Federal agencies, physicians' groups, and others have special programs to address the lack of widespread physician use of these services. For example,

- To obtain nationally representative data on barriers to colorectal cancer screening and early intervention, NCI is supporting a survey of primary and specialty care physicians and health plan medical directors that will assess physicians' knowledge, attitudes, and practice patterns.
- Both the American Association of Family Physicians (AAFP) and the American College of Physicians have guidelines for their members. In addition, AAFP distributed information to its members about the new Medicare coverage for these services and the importance of screening patients.
- A program developed by a large academic medical center in Louisiana has an arrangement with local primary care physicians that allows patients to be referred to the clinic one morning every week, without appointments, for screening flexible sigmoidoscopies.

### Health System Barriers

Colorectal cancer screening may also be limited by insufficient attention to prevention, in general, and a lack of systems to track and monitor the provision of screening services. The Healthy People 2010 report noted that measuring and reporting how well preventive care is provided are essential to greater compliance with recommendations. It recognized that significant progress in the delivery of clinical preventive services is unlikely without appropriate data systems. Physicians' practices often lack service tracking systems that could automatically notify patients of the need for routine preventive services.

Unlike other preventive care services, such as cholesterol screening, breast cancer screening, and cervical cancer screening, colorectal cancer screening is not a component of the Health Plan Employer Data and Information Set (HEDIS), a standardized, voluntary HMO performance reporting system developed by the National Committee on Quality Assurance (NCQA).<sup>(16)</sup> NCQA plays an influential role in prevention by including HEDIS reporting in its accreditation standards. That is, plans seeking accreditation encourage their network physicians to improve the delivery and reporting of measured services.<sup>(17)</sup> AHRQ, with support from CDC, is working with NCQA and researchers at RAND and the Harvard University School of Public Health to develop measures of colorectal cancer screening that could possibly be included in HEDIS. Developing effective measures to determine whether enrollees are screened appropriately is more challenging because only one of the screening services is recommended annually.

## CONCLUDING OBSERVATIONS

Our data suggest that the use of colorectal cancer screening and diagnostic services is quite low among Medicare beneficiaries. There is substantial room for better outreach and education. Consensus on appropriate clinical practice and expansion of coverage to ensure reimbursement are only first steps. In addition to these developments, efforts under way to enhance public awareness of the risks of colorectal cancer and the benefits of screening may result in the greater use of these services over time.

Mr. Chairman, this concludes my statement. I would be happy to answer any questions from you and other members of the Committee.

1. We used physician claims from Medicare's 5 percent Standard Analytic File, which contains all claims for a 5 percent sample of Medicare Part B beneficiaries.
2. We included diagnostic and treatment codes in developing our use rates because it is likely that at least some services coded as diagnostic are for screening. In fact, one study has estimated that approximately 44 percent of beneficiaries who had a diagnostic fecal occult blood test in 1995 could be identified as lacking clinical evidence of a digestive system disease or general symptoms and therefore represented a screening population. In addition, physicians might not have used the new screening codes consistently on their 1998 and 1999 claims for colorectal cancer screening since the amount reimbursed for the new screening services was the same as that for diagnostic services. Furthermore, colonoscopies begun as a screening procedure are coded as treatment procedures under certain circumstances, such as if a polyp is removed.
3. Mortality rates per 100,000 in 1997 were 28.8 for blacks, 21.1 for whites, 14.5 for Native Americans, 13.5 for Asians, 12.8 for Hispanics, 26.0 for men, and 18.4 for women. See HHS, Healthy People 2010 (Washington, D.C.: 2000).
4. These guidelines were based on work initially funded by the Agency for Health Care Policy and Research (now the Agency for Healthcare Research and Quality, or AHRQ). After the agency discontinued its guideline program in May 1996, the project was completed with funding from several professional associations in fields related to gastroenterology. The American Cancer Society, the Crohn's and Colitis Foundation of America, and a number of other organizations have endorsed the guidelines.
5. The President's proposed budget for fiscal year 2001 calls for eliminating copayments, and deductibles for these services to further facilitate patient's access to care.
6. There is no minimum age for a screening colonoscopy for high-risk beneficiaries.
7. We estimated 1999 use rates from claims paid between January and June 1999. The overall use rates include treatment colonoscopies because such procedures may have been initiated for screening purposes. Although screening colonoscopy is covered only for beneficiaries at high risk for colorectal cancer, diagnostic and treatment colonoscopy is covered for all beneficiaries.
8. This may be an undercount of actual use. Because fecal occult blood testing is inexpensive (payments average less than \$4.00 per service), it may be performed more often than it is billed to Medicare.
9. We did not separately identify rates for double-contrast barium enema because use was extremely low.
10. Kathryn A. Phillips and others, "Use of Preventive Services by Managed Care Enrollees: An Updated Perspective," Health Affairs, vol. 19, no. 1 (Jan.-Feb. 2000), pp. 102-16.
11. A recent study of elderly patients visiting their primary care providers for routine office visits examined the effect of information on preferences for colorectal cancer screening. It found that a large proportion preferred not to be screened and concluded that factors other than information determine screening decisions. See A. M. Wolf and J. B. Schorling, "Does Informed Consent Alter Elderly Patients' Preferences for Colorectal Cancer Screening? Results of a Randomized Trial," Journal of General Internal Medicine, vol. 15, no. 1 (Jan. 2000), pp. 24-30.
12. CDC expected to find a certain level of reluctance regarding sigmoidoscopy, colonoscopy, and barium enema, which are

involved screening tests that require significant preparation and, in some cases, a hospital (usually outpatient) visit. They were surprised to find resistance to the fecal occult blood test, which patients reported as unpleasant, confusing, and frustrating.

13. CDC, Morbidity and Mortality Weekly Report, vol. 48, no. 6 (Feb. 19, 1999), pp. 116-21.

14. J. D. Lewis and others, "Primary Care Physicians' Decisions to Perform Flexible Sigmoidoscopy," Journal of General Internal Medicine, vol. 14, no. 5 (May 1999), pp. 297-302.

15. See J. D. Lewis and D. A. Asch, "Barriers to Office-Based Screening Sigmoidoscopy: Does Reimbursement Cover Costs?" Annals of Internal Medicine, vol. 130, no. 6 (Mar. 1999), pp. 525-30.

16. HEDIS data are the most commonly used HMO performance measures for the under-65, employer-insured, HMO population.

17. NCQA accreditation is important to public and private purchasers, who view it as an indicator of HMO quality.