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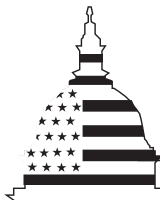
Report to the Chairman, Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

April 2002

MEDICARE

Beneficiary Use of Clinical Preventive Services



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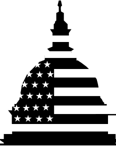
Abbreviations

BRFSS Behavior Risk Factor Surveillance Survey
CDC Centers for Disease Control and Prevention
CMS Centers for Medicare and Medicaid Services
NCI National Cancer Institute
PRO Peer Review Organization



United States General Accounting Office
Washington, DC 20548

April 12, 2002

The Honorable Jim Greenwood
Chairman
Subcommittee on Oversight and Investigations
Committee on Energy and Commerce
House of Representatives

Dear Mr. Chairman:

Preventive health care services can extend lives and promote well-being among our nation's seniors. For example, immunizations against the flu can prevent thousands of hospitalizations and deaths each year among those age 65 and older. Screening for some types of cancer may extend and improve the quality of life through early detection and treatment. Such preventive services are a growing part of Medicare, the federal government's health insurance program for some 34 million Americans age 65 and older, as well as 6 million younger disabled persons. Medicare, administered by the Centers for Medicare and Medicaid Services (CMS), now covers 10 preventive services—3 types of immunizations and 7 types of screening.[1]

Although Medicare provides coverage for these preventive services, some beneficiaries do not receive them. These beneficiaries may, for example, face barriers in obtaining the services or simply choose not to use them. To help ensure that preventive services are being delivered to those beneficiaries who need them, CMS sponsors efforts—called "interventions"—aimed at increasing preventive service usage rates.

You asked us to examine two questions regarding preventive services for older Americans:

- To what extent are Medicare beneficiaries using covered preventive services?
- What action has CMS taken to increase use of preventive services among the Medicare population?

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[1]A recent bill proposes adding visual acuity, hearing impairment, cholesterol, and hypertension screenings as well as expanding the eligibility of individuals for bone density screenings. See H.R. 2058, 107th Cong. § 203 (2001).

To answer these questions, we estimated Medicare beneficiaries' use of services from a nationwide, state-based survey conducted by the Centers for Disease Control and Prevention (CDC).[2] We obtained information about effective techniques to increase use of preventive services from published reports and discussions with program officials at the federal and state levels[3] who are responsible for implementing projects intended to increase the use of preventive services. For both questions, we conducted interviews with officials from the Department of Health and Human Services, CDC, the National Institutes of Health, CMS, and the Agency for Health Care Research and Quality. We also spoke with representatives from the Partnership for Prevention, a nonprofit association involved in the research and promotion of preventive services. We conducted our work from August through February 2002 in accordance with generally accepted government auditing standards.

Results in Brief

While the use of preventive services offered under Medicare has increased over time, use of these services varies widely by service and state. It also varies by ethnic group, income, and education. From 1995 through 1999, the proportion of all Medicare beneficiaries immunized against flu and pneumonia, as well as the proportion of women who received screens for cervical and breast cancer, increased steadily. Nevertheless, in 1999, usage rates varied considerably among individual services. For example, the 75 percent usage rate for breast cancer screening was considerably higher than the 55 percent rate for pneumonia immunizations. However, even for widely used preventive services such as breast cancer screening, state-by-state usage rates ranged from 66 to 86 percent. Among ethnic groups, differences were greatest for immunizations. About 70 percent of whites reported receiving flu shots within the past year compared to 49 percent of African Americans. The disparities between income and educational groups were greatest for cancer screening. While most Medicare

[2]The Behavioral Risk Factor Surveillance System (BRFSS), the survey we used, is an ongoing, state-based, random-digit-dialed telephone survey of U.S. civilian, noninstitutionalized adults 18 years or older. We used data from 1995, 1997, and 1999. Data from this survey are self-reported.

[3]These included peer review organizations (PROs) under CMS contract to improve quality of Medicare services. We talked to the two lead PROs responsible for supporting PRO efforts to increase flu and pneumococcal immunizations and breast cancer screening services, as well as to the PRO leading efforts to reduce disparities in the use of preventive services among disadvantaged populations. We also talked to three PROs responsible for increasing use of services in states with the lowest, median, and highest utilization rates. These six PROs were geographically dispersed across the nation.

beneficiaries received at least one covered preventive service, a much smaller number received additional preventive services covered under Medicare. For example, 1999 data showed that while 91 percent of female Medicare beneficiaries received at least one preventive service, only 10 percent of these beneficiaries were screened for cervical, breast, and colon cancer, as well as immunized against flu and pneumonia.

CMS pays for interventions aimed at increasing the use of three services—breast cancer screening and immunizations against flu and pneumonia—in each state. CMS also pays for interventions that focus on increasing use of services by ethnic groups and income groups with low usage rates. The majority of techniques being used in these interventions, such as developing reminder systems medical offices can use to alert providers and patients when breast cancer screenings are needed, have been found effective in the past. CMS is evaluating what the current efforts are accomplishing and expects the results later in 2002.

In commenting on a draft of this report, CMS stated that the report did not consider many of CMS's publication and education campaigns that were either completed or underway to increase use of Medicare covered preventive services. We chose to focus mainly on those types of interventions that studies showed to be the most effective in ensuring that patients obtain services.

Background

When the Medicare program was established in 1965, it only covered health care services for the diagnosis or treatment of illness or injury. Preventive services did not fall into either of these categories and, consequently, were not covered. Since 1980, the Congress has amended Medicare law several times to add coverage for certain preventive services for different age and risk groups within the Medicare population. (See table 1.) For most of these services, Medicare requires some degree of cost-sharing by beneficiaries, although most beneficiaries have additional insurance, which may cover most, if not all, of these cost-sharing requirements.[4] Some services, such as pneumonia and flu shots and the fecal-occult blood test for colorectal cancer, have no cost-sharing requirements.

[4] U.S. General Accounting Office, *Medigap Insurance: Plans Are Widely Available but Have Limited Benefits and May Have High Costs*, GAO-01-941 (Washington, D.C.: July 31, 2001).

Table 1: Preventive Services Covered by the Medicare Program as of January 2002

Service	Year first covered	Groups covered	Frequency of service	Cost-sharing requirements[a]
Immunizations				
Pneumococcal	1981	All beneficiaries	As needed (probably once per lifetime)	None
Hepatitis B	1984	Beneficiaries at intermediate or high risk of contracting hepatitis B	As needed (probably once per lifetime)	Copayment after deductible
Influenza	1993	All beneficiaries	Every year	None
Screening services				
Cervical cancer—pap smear	1990	All female beneficiaries	Every 2 years	Copayment with no deductible[b]
Breast cancer—mammography	1991	Female beneficiaries 35 to 39 Female beneficiaries 40 and older	One baseline mammogram for this period Every year	Copayment with no deductible
Vaginal cancer—pelvic exam	1998	All female beneficiaries	Every 2 years[c]	Copayment with no deductible[b]
Colorectal cancer—fecal-occult blood test	1998	Beneficiaries 50 and older	Every year	No copayment or deductible
Colorectal cancer—sigmoidoscopy[d]	1998	Beneficiaries 50 and older	Every 4 years	Copayment after deductible[e]
Colorectal cancer—colonoscopy[d]	1998	All beneficiaries	Every 10 years[f]	Copayment after deductible[e]
Osteoporosis—bone mass measurement	1998	Estrogen-deficient female beneficiaries at clinical risk for osteoporosis as well as other qualified individuals[g]	Every 2 years[h]	Copayment after deductible
Prostate cancer—prostate-specific antigen test and/or digital rectal examination	2000	Men 50 and older	Every year	Copayment after deductible[b]
Glaucoma	2002	Beneficiaries medically determined to be at high risk for glaucoma	Every year	Copayment after deductible

[a]Applicable Medicare cost-sharing requirements generally include a 20 percent copayment after a $100 per year deductible. Each year, beneficiaries are responsible for 100 percent of the payment amount until those payments equal a specified deductible amount, $100 in 2002. Thereafter, beneficiaries are responsible for a copayment that is usually 20 percent of the Medicare approved amount. For certain tests, the copayment may be higher. See 42 U.S.C. § 1395(a)(1).

[b]The costs of the laboratory test portion of these services are not subject to copayment or deductible. The beneficiary is subject to a deductible and/or copayment for physician services only.

[c]The exam is covered once every 12 months if the beneficiary has had an abnormality within the prior 3 years or is otherwise determined to be a high-risk candidate for cervical cancer.

[d]The doctor can decide to use a barium enema instead of a sigmoidoscopy or colonoscopy for beneficiaries 50 and older. The frequency of service is the same as the sigmoidoscopy or colonoscopy it substitutes for.

[e]The copayment is increased from 20 to 25 percent for services rendered in an ambulatory surgical center.

[f]Beneficiaries medically determined to be at high risk may receive a colonoscopy every 2 years.

[g]The statute defines "other qualified individuals" as those who have vertebral abnormalities or primary hyperparathyroidism, or who are receiving long-term glucocorticoid steroid or osteoporosis drug therapy. See 42 U.S.C. § 1395x(rr)(2).

[h]CMS permits coverage of a bone mass measurement at any time—sooner than 2 years—if the service is medically necessary. See 42 CFR § 410.31(c).

Many other preventive services exist besides those specifically covered as preventive services under Medicare, such as blood pressure screening and cholesterol screening. Although Medicare does not explicitly provide coverage for these other services, Medicare beneficiaries may receive some of them during office visits for other medical problems. Data from surveys of Medicare beneficiaries indicate that the receipt of such services is common.[5] For example, in 1999, nearly 98 percent of seniors reported that they had had their blood pressure checked within the last 2 years, and more than 88 percent of seniors reported having their cholesterol checked within the prior 5 years. At least a portion of these services were likely ordered by physicians in order to diagnose the causes of medical problems, and were paid for by Medicare as such.

To identify how best to increase use of preventive services needed by the Medicare population, CMS sponsors reviews of studies that examine various kinds of interventions that have been used in the past for populations age 65 and older. CMS also takes action to implement interventions in each state through its Peer Review Organization (PRO) program.[6] Under this program, CMS contracts with 37 organizations responsible for each state, U.S. territory, and the District of Columbia. The PRO program, which is designed to monitor and improve quality of care for Medicare beneficiaries, currently includes the goal of increasing the use of flu and pneumonia immunizations, as well as breast cancer screening, in each state. These organizations collaborate with hospitals and health care professionals, suggesting systemic changes to improve

[5]Survey data are from the CDC's BRFSS 1999.

[6]During the course of our review CMS began referring to these entities as Quality Improvement Organizations. CMS officials told us that CMS plans to formalize the name change in a future Federal Register notice.

how preventive services are provided. CMS also conducts a variety of health promotion activities to educate beneficiaries about the benefits of preventive services and to encourage their use. These include the publication of brochures on certain covered services and media campaigns.

Use of Preventive Services Is Growing but Varies Widely

Use of preventive services offered under Medicare has increased over time. Some services are used more extensively than others, and use of individual services varies by state and, to a lesser extent, by demographic characteristics such as ethnicity, income, and education. Although opportunities remain to increase the use of preventive services within Medicare, there are limits to the extent some beneficiaries would be expected to use certain services.

The Use of Individual Preventive Services Has Increased over Time but a Minority Receive Multiple Services

Information on usage for 4 of the 10 preventive services covered under Medicare is available in the data we used[7]—immunizations against pneumonia and flu and screening for cervical and breast cancer.[8] This information shows that beneficiaries age 65 and older are increasing their use of all 4 services. (See table 2.) For example, 68 percent of beneficiaries received flu shots in 1999, compared with 60 percent in 1995.

[7]The data were from the CDC's BRFSS for 50 states and the District of Columbia. BRFSS does not contain data for colorectal cancer screening for 1995 and 1997.

[8]Although Medicare has covered immunizations for hepatitis B since 1984, usage data are not available.

Table 2: Percentage of Medicare Beneficiaries Age 65 and Older Using Preventive Services in 1995, 1997, and 1999

Service and frequency	Year first covered under Medicare	National usage rate 1995[a]	1997	1999
Immunizations				
Pneumococcal—ever	1981	38	46	55
Influenza—within previous year	1993	60	66	68
Screening services				
Cervical cancer—pap smear within previous 3 years	1990	70	71	72
Breast cancer—mammogram within previous 2 years	1991	66	72	75

[a]For 1995 only, values obtained from CDC's BRFSS web site data. These 1995 data includes Puerto Rico, and may include some survey respondents not enrolled in Medicare.

Source: CDC's BRFSS for 50 states and the District of Columbia.

In 1999, although each preventive service was used by the majority of Medicare beneficiaries, fewer receive multiple preventive services. For example, 1999 data show that while 91 percent of female Medicare beneficiaries received at least 1 preventive service, only 10 percent of these beneficiaries were screened for cervical,[9] breast, and colon cancer,[10] as well as immunized against flu and pneumonia. These data also show that 44 percent of male beneficiaries were immunized against both flu and pneumonia. When colorectal screening is included in this set of services, the proportion of men who had received all 3 services falls to less than 27 percent.

Use of Services Varies by State and Other Demographic Characteristics

While national rates provide an overall picture of current use, they mask substantial differences in how seniors living in different states use some services. For example, the national breast cancer screening rate for Medicare beneficiaries was 75 percent in 1999, but rates for individual states ranged from a low of 66 percent to a high of 86 percent. In table 3,

[9]We excluded women who reported having had hysterectomies before calculating the usage rate for the cervical cancer screen.

[10]Sigmoidoscopy or colonoscopy in past 5 years or fecal-occult blood test in past year.

we show the range over which state estimates of preventive service usage rates vary from lowest to highest for selected states.[11]

Table 3: Variation in State Usage Rates for Preventive Services by Medicare Beneficiaries 65 and Older, 1999

Preventive service[a]	National usage rate percentage[b]	Usage rate range among states percentage	Number of states included in range[c]
Immunizations			
Pneumococcal—ever	55	51 to 62	24
Influenza—within previous year	68	63 to 77	30
Screening services			
Breast cancer—mammogram within previous 2 years	75	66 to 86	21
Colorectal cancer—fecal-occult blood test in past year	25	14 to 37	34
Colorectal cancer—colonoscopy or sigmoidoscopy within previous 5 years	40	27 to 46	24

[a]Data were unavailable for Medicare population use of hepatitis B immunization and screening services for osteoporosis.

[b]National usage rate includes all states and the District of Columbia.

[c]This includes the number of states whose 95 percent confidence intervals for the respective preventive services were narrower than 10 percentage points. State specific data were not included for cervical cancer screening because none met this level of precision.

Source: CDC's BRFSS for 50 states and the District of Columbia.

While usage rates for each service varied from state to state, the services with the highest rates in each state were generally the same. For example, in most states, screening rates for breast and cervical cancer were higher than rates for colorectal screens.

Usage rates for Medicare beneficiaries also varied based on ethnicity, and on socioeconomic status, as defined by income and education. By ethnicity, the biggest differences occurred in use of immunization services. For example, 1999 data show that about 57 percent of whites and 54 percent of "other"[12] ethnic groups were immunized against pneumonia,

[11]We excluded states whose 95 percent confidence intervals for that service were wider than 10 percentage points.

[12]"Other" ethnic groups include survey respondents who reported an ethnicity other than African American, Hispanic, or white.

compared to about 37 percent of African Americans and Hispanics. Similarly, about 70 percent of whites and “other” ethnic groups received flu shots during the year compared to 49 percent of African Americans. The only other statistically significant difference between ethnic groups was for the fecal-occult blood test for colon cancer, for which 26 percent of whites received screenings within the past year compared to 16 percent of Hispanics and “other” ethnic groups.[13] For income and education, in general, as income and education rose, the rates at which individuals used preventive services also increased. (See table 4.)

Table 4: Percentages of Medicare Beneficiaries 65 and Older Using Preventive Services by Income and Education, 1999

	Income		Education		
Screening service[a]	Less than $25,000	$25,000 and over	Less than high school	High school and some college	College graduate and postgraduate
Immunizations					
Pneumococcal—ever	53.7	57.5	47.9	56.4	60.1
Influenza—within previous year	65.2	71.0	61.7	68.6	72.6
Preventive services					
Cervical cancer—pap smear within previous 3 years	66.1	81.5	62.0	74.8[b]	78.6[b]
Breast cancer—mammogram within previous 2 years	69.7	84.2	65.3	76.9	84.0
Colorectal cancer—fecal-occult blood test in previous year	21.3	28.1	19.7	25.3	29.7
Colorectal cancer—colonoscopy or sigmoidoscopy within previous 5 years	36.8	46.1	33.3	40.2	48.3

[a]Data were unavailable for Medicare population utilization of Hepatitis B immunization and screening services for osteoporosis.

[b]All differences between income and education groups are statistically significant except for cervical cancer screening services for high school graduates and above.

Source: CDC’s BRFSS for 50 states and the District of Columbia.

[13]There was no statistically significant difference between the rate at which the ethnic groups used cervical and breast cancer screening or the sigmoidoscopy/colonoscopy colorectal cancer screenings. Likewise, there was no statistically significant difference between the rates that African Americans and Hispanics were immunized against pneumonia or that whites and “other” ethnic groups were immunized for either pneumonia or the flu.

Opportunities and Limitations Exist to Increase the Use of Preventive Services

Various studies have identified a variety of factors affecting beneficiary decisions to seek preventive care, including low patient awareness of the benefits of the services as well as the need for service. Some factors, such as those involving patient awareness of the benefits, may represent opportunities to increase the use of preventive services. For example, see the following.

- In a 1997 report, the Agency for Healthcare Research and Quality found that, although patients may be unaware of the risks or symptoms of colorectal cancer, they are more likely to participate in screening once they understand the nature and risks of the disease.
- Data from CMS's 1999 Medicare Current Beneficiary Survey show that, while about one-fourth of beneficiaries who did not receive flu shots were unaware of the benefits of obtaining this immunization, about half of the people who were not immunized avoided getting the shot for reasons such as concerns about side effects and whether doing so would effectively prevent illness.

On the other hand, usage rates alone may not provide a clear picture of success, and may mask inherent limitations to increasing usage rates. For example, survey data show that 44 percent of women age 65 and over have had hysterectomies[14]—an operation that usually includes removing the cervix. For these women, researchers state that cervical cancer screening may not be necessary unless they have a prior history of cervical cancer.[15] Also, according to officials in charge of research on preventive services at the National Institutes of Health, it is reasonable for beneficiaries, their families, or their providers to decide to forgo services because of the limited benefits they would offer patients with terminal illnesses or of advanced age. These officials explained that research has shown, for example, that the benefits of cancer screening services, such as for prostate, breast, and colon cancer, can take 10 years or more to materialize, a time frame that could exceed the life expectancy of as much as half of the Medicare population.[16]

[14]Data are from the CDC's BRFSS, 2000.

[15]CDC researchers report that among the general population, over 80 percent of hysterectomies are performed for noncancerous conditions such as fibroids and endometriosis.

[16]One half of the Medicare population is age 75 and older, and in 1997, the life expectancy for 75 year olds was about 86.2 years.

CMS officials also pointed out that the controversy over the effectiveness of some services, such as mammography and prostate cancer screening, may add to the difficulty in further improving screening rates for these services. The benefit of mammography has recently been challenged by two Danish researchers and an independent group of experts on the National Cancer Institute's (NCI) advisory panel citing serious flaws in 6 of the 8 clinical trials that showed benefits. However, subsequent to the Danish report and the NCI panel's statement, both the NCI and the U.S. Preventive Services Task Force[17] reiterated their recommendation for regular mammography screening. While acknowledging the methodological limitations in these trials, the U.S. Preventive Services Task Force concluded that the flaws in these studies were unlikely to negate the reasonable, consistent, and significant mortality reductions observed in these trials. Routine screening for prostate cancer is also a matter of controversy. For example, the American Cancer Society and the American Urological Association support routine prostate cancer screening, while the U.S. Preventive Services Task Force and others[18] state that there is insufficient evidence to support it.

Efforts Under Way to Increase Use of Some Preventive Services

CMS has studied various types of interventions to increase the use of preventive services among seniors. These studies show that many types of interventions can potentially be effective, but also that interventions must be tailored to the circumstances of specific situations. CMS is funding efforts in every state to implement interventions for three preventive services that Medicare covers. CMS also has efforts under way aimed at increasing the use of preventive services among minority and low-income seniors.

Studies Identify Effective Methods to Increase Use of Services

CMS has sponsored reviews of studies looking at the effectiveness of interventions to increase use of preventive services among people age 65 and older. One of these reviews evaluated the effectiveness of interventions targeting people over age 65 for five services covered by

[17]The U.S. Preventive Services Task Force is a committee of medical experts convened by the Department of Health and Human Services to evaluate evidence and make recommendations for clinical preventive services such as mammography and prostate cancer screening.

[18]These organizations include the American College of Physicians, the National Cancer Institute, and the American College of Preventive Medicine.

Medicare—immunizations for flu and pneumonia and screenings for breast, cervical, and colon cancer.[19] The report evaluated 218 separate studies on interventions designed to increase use of preventive services. The studies were performed in both academic and nonacademic settings in various geographic areas, and in a mixture of reimbursement systems. Most of the interventions studied that involved pneumococcal and influenza immunizations were targeted toward persons over 65 years of age, while cancer screening interventions were targeted at adults, but not necessarily those 65 years of age.

This evaluation concluded that no specific intervention was consistently most effective for all services and settings, and that success depended on how closely the intervention addressed the unique circumstances in each state and for different populations within each state, while also taking into account the cost and difficulty of implementation. Obstacles to improved screening rates can differ across states thus requiring different approaches. For example, officials responsible for improving the use of preventive services in Idaho and Washington explained that while a significant barrier in Idaho was beneficiary access to Medicare providers, this was not a barrier in Washington. The CMS evaluation also showed that using multiple interventions generally provided greater success than using a single approach.

The types of interventions evaluated in the CMS-sponsored review[20] included a variety of efforts targeting health delivery systems, providers, and patients. The key conclusion the report drew from the literature was that organizational and system change, such as the use of standing orders[21] and the use of financial incentives, were the most consistent at producing the largest increase in the use of preventive services. These and other interventions found to be effective follow.

[19]Health Care Financing Administration, *Evidence Report and Evidence-Based Recommendations: Interventions that Increase the Utilization of Medicare-Funded Preventive Services for Persons Age 65 and Older*, Publication No. HCFA-02151 (Prepared by Southern California Evidence-based Practice Center/RAND, 1999).

[20]Health Care Financing Administration, *Evidence Report and Evidence-Based Recommendations: Interventions that Increase the Utilization of Medicare-Funded Preventive Services for Persons Age 65 and Older.*

[21]CMS is conducting a standing orders pilot through its PRO program in nine states (using five additional states as control states) to test organizational and system change in nursing homes.

- System Change. These interventions change the way a health system operates so that patients are more likely to receive services. For example, medical or administrative staff may be given responsibility to ensure that patients receive services, or standing orders may be implemented in nursing homes to allow nonphysician personnel to administer immunizations without a physician's order.
- Incentives. These interventions include gifts or vouchers to patients for free services. Medicare allows this type of approach only in limited circumstances.[22]
- Reminders. These interventions include computer-generated or other approaches by which medical offices (1) reminded physicians to provide the preventive service as part of services performed during a medical visit or (2) generated notices to patients that it was time to make an appointment for the service. Studies show that reminders to either patients or physicians can effectively improve rates for cancer screening. However, a computerized provider reminder is consistently more cost effective than notifying the patient directly when a computerized information system is already available in a physician's medical office. Patient reminders that are personalized or signed by the patient's physician are more effective than generic reminders.
- Education. These interventions include pamphlets, classes, or public events providing information for physicians or beneficiaries on coverage, benefits, and time frames for services. The study found that while the effect of patient education is significant, it is consistently less effective than system change, incentives, or reminders.

CMS Is Sponsoring Interventions to Increase Use of Three Services

CMS is implementing interventions in all states through its PRO program. Under this program, CMS contracts with 37 PROs, each responsible for monitoring and improving the quality of care for Medicare beneficiaries in one or more states, in U.S. territories, or in the District of Columbia. These efforts are currently aimed at three preventive services offered under Medicare—immunizations against flu and pneumonia and screening for breast cancer. CMS chose these topics based on their public health

[22]Under certain circumstances, Medicare providers may offer incentives for preventive services. Specifically, under regulations which became effective April 26, 2000, providers may forgo some compensation by waiving coinsurance and deductible payments for medical services, including Medicare preventive services. In addition, other types of incentives—such as free transportation or gift certificates—are also allowed so long as the incentive is not disproportionately large in relationship to the value of the preventive service. Under no circumstances may cash or instruments convertible to cash be used. See 42 CFR § 1003.101.

importance and other factors. CMS also contracts with select PROs to provide support and assistance to all PROs for each area of focus. For example, CMS has contracted with two of the existing PROs, one for flu and pneumonia immunizations and one for breast cancer screening, to provide support and share information among the PROs regarding their efforts to improve usage rates for these services. Our discussions with the officials from these two PROs indicate that, for immunizations, most PROs are focusing on ways to better educate patients and providers on the importance of getting flu and pneumonia shots. For breast cancer screening, efforts are focusing on developing integrated reminder systems, such as chart stickers or computer-based alerts that physicians' offices can use to contact patients on a timely basis.

Officials for the two PROs providing support indicated that most PROs were implementing multiple interventions. For example, in a newsletter intended to help PROs share information, officials at one PRO reported that they have developed concurrent breast cancer screening interventions for their state, which are targeted at physicians and their staffs, nurses, and beneficiaries. Officials for this PRO report the following.

- For physicians and their staffs, they (1) host seminars to teach them about reminder and billing systems, (2) provide toolkits that include reminder systems, checklists, and other materials, and (3) conduct on-site consultations to encourage providers to implement system changes.
- For nurses, they are conducting a campaign intended to increase awareness and encourage nurses and student nurses to identify female friends and family members who are overdue for mammograms. The campaign includes information packets, a newsletter, and information booths at nursing organization meetings.
- For beneficiaries, the PRO publishes a periodic newsletter on the subject of preventive medicine. This newsletter includes articles on the importance of mammography for early detection of breast cancer.

CMS has taken steps to evaluate the success of PRO efforts. CMS officials explained that the contracts with the PRO organizations are "performance based" and provide financial incentives as a reward for superior outcomes. The contracts include a methodology in which the performance of the PRO for each state, U.S. territory, and the District of Columbia is scored based on 22 indicators, including flu and pneumonia vaccination rates and mammography rates. The performance of the PRO in each state will then be ranked against all other states in order to identify the higher and lower performing PROs. CMS intends to automatically renew the contracts with the top 75 percent of the PROs for the next contract cycle, which begins in

2002. The PRO contracts also contain financial performance incentives allowing each PRO to receive up to an additional 2 percent payment based on the positive outcomes of their interventions. CMS officials expect information on the results by the summer of 2002. Consequently, we have not assessed the outcome of PRO efforts or CMS's methodology for measuring PRO performance.

While the current efforts include 3 of the 10 preventive services covered by Medicare, CMS is also developing indicators and performance measures necessary for interventions to increase use of screening services for osteoporosis and colorectal and prostate cancer. CMS officials stated that such interventions would be implemented in future contracts with PROs. CMS is not currently developing indicators for the remaining preventive services covered by Medicare—hepatitis B immunizations or screenings for glaucoma and vaginal cancer.

CMS Is Also Sponsoring Interventions to Increase Use of Services among Minorities and Low-Income Seniors

CMS is also sponsoring PRO interventions and projects in each state to increase use of preventive services by minorities and low-income Medicare beneficiaries. CMS-funded research on successful interventions for the general Medicare population 65 and older concluded that evidence was insufficient to determine how best to increase use of services by minorities and low-income seniors across various geographic settings. Differences in how populations use preventive services are sometimes found even when the populations have similar geographic settings or delivery systems. For example, a study showed that although use of flu shots among white and African American seniors is higher under managed care than fee-for-service, the significant disparities in levels of use between these ethnic groups persist in both these environments.[23]

To begin addressing these information gaps, CMS requires that each PRO conduct a project focusing on one of several specified Medicare populations. This population can be low-income seniors enrolled in both Medicare and Medicaid or one of several minority groups: American Indians, Alaska Natives, Asian Americans and Pacific Islanders, African Americans, or Hispanics. For the population chosen, the PRO is to target interventions for one service. The projects in most states are focusing on

[23] E.C. Schneider, MD, MSc, et al, "Racial Disparity in Influenza Vaccination: Does Managed Care Narrow the Gap Between African Americans and Whites?" *JAMA*, Volume 286, Number 12, (September 26, 2001).

increasing breast cancer screening or flu and pneumonia immunization among African American or low-income seniors. PROs are required to identify the barriers that exist for the selected population and service, and to implement interventions specifically designed to address these barriers for patients and providers. A summary of PRO efforts to increase services for minorities and low-income seniors is expected to be published sometime after the spring of 2002.

Other studies or projects under way by CMS also aim to identify barriers and increase use of services by certain Medicare populations. For example, the Congress directed CMS to conduct a demonstration project to, among other things, develop and evaluate methods to eliminate disparities in cancer prevention screening measures.[24] The law specifies a total of nine demonstration projects to include two state-level demonstrations for each of four minority groups (American Indians, including Alaska Natives, Eskimos, and Aleuts; Asian Americans and Pacific Islanders; African Americans; and Hispanics) and one project in the Pacific Islands. In addition, one of the projects must have a rural focus and one must have an urban focus for each group. CMS expects to produce a report by December 2002, after the project's first phase is completed, identifying best practices and models to be tested in demonstration projects. The second phase, which is to start around December 2002, is to test these models by implementing them in actual demonstration projects intended to determine which methods are most effective in reducing the incidence of cancer and improving minority health by overcoming barriers to the use of preventive services in the target populations. A report evaluating the cost effectiveness of the demonstration projects, the quality of preventive services provided, and beneficiary and health care provider satisfaction is due to the Congress in 2004.

Agency Comments and Our Evaluation

We obtained comments on our draft report from CMS. CMS commented that the draft report focused on the activities of its PROs and did not consider all of CMS's health promotion activities. CMS provided details on its publication and educational campaigns to inform Medicare

[24]See the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000, Public Law 106-554, Appendix F, § 122, 114 Stat. 2763, 2763A-476 *classified* to 42 U.S.C. § 1395b-1 nt.

beneficiaries about preventive service benefits and to encourage their use. CMS's comments are reproduced in appendix I.

We acknowledge that our report does not describe all of CMS's health promotion/education activities underway that relate to increasing the use of preventive services among the Medicare population. While beneficiary education activities are worthwhile, CMS studies have shown that other interventions, such as those that are directed at changing the way a health delivery system operates so that patients are more likely to receive services, are more effective. Because PROs and CMS demonstration projects are accountable for facilitating the implementation of these types of interventions, we focused our efforts in describing these activities and the status of their evaluations. We have revised the report to make it clear that PRO activities are in addition to other CMS beneficiary education efforts.

CMS also provided technical comments that we considered and incorporated where appropriate.

As arranged with your office, unless you release its contents earlier, we plan no further distribution of this report until 30 days after its issuance date. At that time we will send copies of this report to the secretary of health and human services, the administrator of the Centers for Medicare and Medicaid Services, the director of the Centers for Disease Control and Prevention, and others who are interested. We will also make copies available to others on request.

If you or your staff have any questions, please contact me at (202) 512-7119, or Frank Pasquier at (206) 287-4861. Other major contributors are included in appendix II.

Sincerely yours,

Janet Heinrich
Director, Health Care—Public Health Issues

Appendix I: Comments from the Centers for Medicare and Medicaid Services

DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

DATE: MAR 29 2002

TO: Janet Heinrich
Director
Health Care—Public Health Issues

FROM: Thomas A. Scully
Administrator

SUBJECTS: General Accounting Office (GAO) Draft Report, *Medicare Beneficiary Use of Clinical Preventive Services: Utilization Under Medicare* (GAO-02-422)

Thank you for sending the above-referenced report for comments. We appreciate GAO's examination of the utilization of preventive services under the Medicare program.

At the Centers for Medicare & Medicaid Services (CMS), we strive to use efficient and cost-effective approaches by partnering with other agencies and organizations, utilizing Medicare contractors to educate people with Medicare about covered preventive services, and encouraging beneficiaries to use these services. We include health promotion information as a part of other education campaigns that address different aspects of the Medicare program or Medicare+Choice options. We also incorporate health promotion messages with information that is communicated to beneficiaries on an everyday basis (e.g., services such as the 1-800-MEDICARE help-line, Medicare.gov., Medicare summary notices, and the *Medicare & You* handbook).

It is in this context that we are commenting on the draft report. We note at the outset that the draft focuses only on activities conducted by Quality Improvement Organizations (formerly referred to as Peer Review Organizations or PROs) and does not consider other CMS efforts to increase the use of Medicare-covered preventive services. We suggest that GAO expand the report to cover many significant CMS activities that have not been addressed.

The following list of activities highlights some of the measures CMS has undertaken in the areas of health promotion, quality measurement, and health assessment activities:

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Health Promotion Activities

Our goal is to inform Medicare beneficiaries about the preventive service benefits and to encourage their use, and we educate beneficiaries in a variety of ways:

The CMS has established partnerships with other Department of Health and Human Services' agencies such as the Centers for Disease Control and Prevention (CDC) and the National Cancer Institute (NCI) to carry out health promotion initiatives ranging from a limited distribution of outreach kits to full-blown national multi-media, multi-year campaigns involving numerous partners at the local and national level.

- In addition, we integrate communications about preventive services with other Medicare educational initiatives. For instance:
  - ✓ The *Medicare & You* handbook includes information on preventive services, and CMS publishes and distributes a brochure entitled, *Medicare Preventive Services. . To Help Keep You Healthy. Medicare and You* is distributed to all beneficiary households.
  - ✓ Medicare carriers and intermediaries include messages on preventive services when sending out Medicare Summary Notices (MSNs) during certain months of the year to correspond with health themes (e.g., March is Colorectal Cancer Awareness Month). They also discuss these services and give out materials when giving talks on other Medicare issues, and include articles on preventive services in their newsletters and on their Websites.
  - ✓ The CMS regional offices disseminate information on preventive services during other information campaigns (e.g., during *Regional Education About Choices in Health* (REACH) campaigns).
  - ✓ The 1-800-MEDICARE help line and Medicare.gov Internet site include information on preventive services that corresponds with particular calendar health themes.

We use opportunities such as these whenever possible to promote the use of preventive services covered by Medicare.

Our educational campaigns vary in their level of intensity and duration and use of resources, depending on factors such as opportunities to partner with other agencies, priorities established for Medicare contractors, available funding, and agreement within

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the medical community on appropriate screening practices. Campaigns may utilize radio and television public service announcements, Video News Release (VNRs), print materials and media kits, Websites, and articles in journals, newsletters, and other means. In addition, the campaigns target high-risk populations, which are generally minorities. They also target health care practitioners since they are some of the greatest influences on patient behavior.

The CMS has entered into numerous Intra-Agency agreements to carry out health promotion campaigns and other initiatives. The following activities are being carried out to educate Medicare beneficiaries about covered preventive services:

Covered Service: Bone Mass Measurement

Mission:
Raise awareness concerning the disease, osteoporosis and the available interventions, including Bone Mass Density (BMD) testing, as well as Medicare coverage of BMD tests.

Background:
Focus testing of Medicare beneficiaries indicates a need to raise public awareness about the disease and pertinent tests. In an effort to raise public awareness, we conducted formative research to determine Medicare beneficiaries' and providers' attitudes about the disease, as well as their knowledge of the disease and bone density tests. The CMS partners with CDC and the Agency for HealthCare Research and Quality (AHRQ) with whom CMS has an intra-agency agreement.

We have provided coverage and payment information on BMD tests in the publications, *Medicare Preventive Services* and *Medicare and You* handbook.

Covered Services: Diabetes Self-Management Benefits/Medical Nutrition Therapy

National Campaign *(The Power to Control Diabetes)*

Mission:
Help older adults understand the importance of routine self-monitoring of blood sugar levels to delay or prevent the complications of diabetes. Increase awareness of older adults about comprehensive diabetes care and Medicare benefits.

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Background:
The CMS has partnered with the National Diabetes Education Program (NDEP) since 1998. We chose to partner with this organization because NDEP is jointly sponsored by the National Institute of Diabetes and Digestive and Kidney Diseases and the Centers for Disease Control and Prevention. The goal of the NDEP is to reduce the morbidity and mortality associated with diabetes and its complications.

The beneficiary education campaign in 2001 encouraged beneficiaries to control their blood sugar and publicized the expanded Medicare benefit for blood sugar management. Over 3.2 million people were reached via print media and 2.2. million people via television campaigns. We will distribute *The Power to Control Diabetes* health care practitioner kits in spring 2002.

In order to strengthen grassroots efforts to increase awareness of older adults about comprehensive diabetes care and Medicare benefits, we plan to build a dissemination network of community-based organizations, community service organizations, ethnic minority organizations, and other NDEP partners. We also will establish a synchronized approach to increase awareness of older adults by educating NDEP work groups and partners that target their outreach efforts to audiences such as health care providers, African Americans, Native Americans, Asian -Americans, Alaskan and Pacific Islanders, Hispanics, business and labor organizations, interfaith communities, and others.

The new campaign message will be: "Be Smart About Your Heart: Know the ABC's of Diabetes--A1C, Blood Pressure and Cholesterol." The campaign target audience will be caregivers, health care providers, community organizations, adults age 65 and older who have diabetes, and family members of adults age 65 and older who have diabetes. The campaign message will be "Comprehensive care of diabetes is essential, and Medicare helps individuals ages 65 and older to manage their illness through comprehensive self-management and nutritional benefits that can help them stay healthier and be more independent."

An upcoming campaign in conjunction with the National Institutes of Health (NIH) National Eye Institute will promote the new Medicare benefit for glaucoma detection. The benefit provides coverage for an annual dilated eye examination for Medicare beneficiaries at high risk for glaucoma (including those with diabetes). See below for more details.

Covered Service: Glaucoma Screening

Mission:
To promote the new Medicare benefit for glaucoma detection. Prevent vision loss from glaucoma through early detection and treatment. Empower older adults to take charge of their visual health.

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Background:
We have formed a partnership with NIH's National Eye Institute to promote the new Medicare benefit for glaucoma detection, which was effective January 1, 2002.

Activities include a media campaign (January-February 2002), development of a community outreach kit including materials and strategies for local promotion, and a kit for health care professionals. A press release was issued on January 14, 2002, announcing that Medicare now covers glaucoma detection eye examinations. The target audience includes eligible Medicare beneficiaries who are defined as people with diabetes, people at high risk for developing the disease, and African-Americans over age 50. The secondary audience will be aging networks, primary care physicians and other health care providers.

Covered Service: Colorectal Cancer Screening

National Colorectal Cancer (CRC) Action Campaign *(Screen for Life)*

Mission:
Increase utilization of the Medicare benefit.

Background:
After enactment of the Balanced Budget Act of 1997, CMS began working in partnership with the CDC to develop the *Screen for Life (SFL)* campaign, which began in March 1999. The NCI has provided technical support to the campaign. The SFL campaign--a multiyear, multimedia, national CRC education campaign--informs men and women age 50 and older (the age at greatest risk of developing CRC) about the importance of regular CRC screening tests. The campaign's communication objectives are to: inform the public about the benefits of CRC screening; motivate the target audience to talk with their health care providers to establish a CRC screening program; and promote Medicare's CRC screening benefits.

Materials continue to be developed and distributed each year. Press releases and new materials are issued during March, National CRC Awareness Month. Materials target people aged 50 and older and people with Medicare. Many of the materials target African-Americans. Examples of materials include: four versions of a Medicare oriented "Good News" poster targeting African-American, Caucasian, Hispanic, and Asian-American populations; brochures (English and Spanish); print slicks; fact sheets; and articles.

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The CRC information and materials are widely distributed via the following channels: annual press releases and media kits; VNRs; televised public service announcements (PSAs); Internet articles; messages on beneficiary MSNs; the 1-800 MEDICARE help line; Medicare.gov; distribution of materials at meetings, health fairs, and presentations; newsletters; slicks in magazines; and radio play. The following organizations participate in distributing materials: Medicare contractors (carriers, intermediaries, Quality Improvement Organizations); State Health Departments; partners participating in the National CRC Awareness Month campaign; and CMS Central Office and Regional Office staff.

Covered Service: Flu and Pneumonia Vaccinations

National Flu/Pneumonia Campaign ***(Get the Flu Shot, Not the Flu)***

Mission:
Increase the utilization of Medicare's influenza and pneumococcal vaccination benefits.

Background:
As discussed in the GAO report, CMS's 53 Quality Improvement Organizations are contractually obligated to address increasing flu and pneumococcal vaccinations as one of their six clinical priority areas and are actively involved in the campaign.

During the past year, we worked with providers to realize their significant roles in motivating patients to get vaccinated, and to discuss and promote influenza and pneumococcal vaccinations with their patients. We encouraged physicians and their office personnel to promote influenza and pneumococcal vaccinations by hanging posters on their office or clinic walls to function as reminders for both providers and their patients, and by using wall charts to track immunizations. These activities will continue.

Postcards were produced with the key message to "Get the Flu Shot, Not the Flu." Messages were included on MSNs and Explanation of Medicare Benefits (EOMBs), advising beneficiaries that shots given in January were just as effective as those given during October. In addition, we added a message in the yearly provider enrollment package, encouraging providers to vaccinate their high-risk patients before mass vaccinations. We also prepared an article in the CMS Health Watch.

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Covered Service: Mammograms

National Mammography Campaign ***(Not Just Once, But For a Lifetime)***

Mission:
Increase utilization of the Medicare benefit of annual screening mammograms.

Background:
This national campaign which spreads the word about the importance of regularly-scheduled screening mammograms for early detection of breast cancer. The campaign also works to increase beneficiaries' and providers' awareness of the annual screening mammography benefit. As discussed in GAO's report, we also work with CMS's 53 Quality Improvement Organizations (QIOs) to increase screening mammograms, as breast cancer is one of the QIOs' six clinical priority areas.

Covered Service: Pap Tests/Pelvic Exams

Pap Tests/Cervical Cancer Awareness ***(A Healthy Habit for Life)***

Mission:
Raise awareness of women with Medicare about Medicare's preventive screening Pap test benefit as an effective means to screen for cervical cancer and to remind health care providers that Pap tests may be appropriate for their older patients.

Background:
Via an interagency agreement, we partner with the National Cancer Institute (NCI) to educate Medicare-aged women and their health care practitioners about the continued benefit of Pap tests and the Medicare benefit. We are working to correct myths about cervical cancer that serve as barriers to providers recommending Pap tests and Medicare-aged women getting them.

To coincide with Cervical Health Month, information has been placed on our provider Websites along with statistics about the impact of cervical cancer across age/race/ethnic groups. In addition, messages about cervical health have been printed on Medicare Summary Notices and Explanations of Medicare Benefits sent to beneficiaries. Also, information was included on Medicare.gov and cms.gov, and articles were placed in newsletters.

As specified in the intra-agency agreement with NCI, we developed and printed a brochure entitled "Pap Tests for Older Women: A Healthy Habit for Life." We also developed and distributed a provider kit that includes screening recommendations, a Pap

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test tear off-sheet with cervical health information for a general population, and screening recommendations for health care providers that discuss ethnic/racial disparities. The CMS and NCI's contractor have conducted surveys to learn the extent to which the materials were used and to garner information about preferred distribution channels. The contractor will provide CMS and NCI with a report of findings and recommendations for future development and distribution of materials.

Covered Service: Prostate Cancer Screening

Mission:
Raise awareness about the coverage of Prostate Cancer Screening.

Background:
In an effort to develop appropriate messages targeted at this group of Medicare beneficiaries, we entered into an intra-agency agreement with AHRQ to obtain appropriate promotional and awareness messages, based on its evidence report and the U.S. Preventive Services Task Force recommendations.

The CDC is developing various materials to address prostate cancer concerns and to raise awareness about screening. These materials will be distributed nationally and will be tailored for the Medicare beneficiary.

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact

Frank Pasquier (206) 287-4861

Acknowledgments

Other major contributors to this report include Lacinda Ayers, Matthew Byer, Jennifer Cohen, Jennifer Major, Behn Miller, and Stan Stenersen.

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