

The Medicare Program and Preventive Services

CURRENT STATUS OF MEDICARE FUNDING FOR PREVENTIVE SERVICES

Despite the statutory exclusion of preventive services from Medicare coverage, today Medicare pays for some preventive services that are not explicitly mandated by legislation, although the frequency and distribution of these reimbursed services in the elderly population have not been estimated.

First, a substantial number of procedures, particularly screening tests, may be reimbursed in part or in full as diagnostic rather than as screening procedures. Whether Medicare reimburses for a visit or procedure depends on how the visit is characterized on the Medicare claim. If a visit is initiated by a patient because of a medical complaint, the physician fee is covered. Similarly, a test is covered if it is performed because of a symptom or suspected diagnosis.

Anecdotal examples suggest that some procedures done for screening purposes may be paid for by Medicare as diagnostic procedures. A recent review of over 200 medical records of lower GI endoscopies (sigmoidoscopy and colonoscopy) performed on Medicare patients and reimbursed by Medicare found that at least 13 percent were performed for cancer *screening* purposes, not for diagnostic reasons (94).

Second, many tertiary preventive services (e.g., hypertension control or treatment of hypercholesterolemia) are reimbursable expenses under Medicare, because they are defined as therapeutic. Visits made for monitoring, counseling, or prescribing of treatment would be reimbursable by Medicare.

Finally, an unknown percentage of the almost 1 million Medicare beneficiaries currently enrolled in health maintenance organizations (HMOs) or other competitive medical plans (CMPs) may receive additional preventive care. Since 1982, Medicare has provided cavitation payments on a risk-contracting basis to HMOs and CMPs who enroll Medicare beneficiaries (Public Law 97-248). Such Medicare plans receive a fixed price per capita for

Medicare enrollees, based on age, sex, whether or not the enrollee resides in a nursing home or other institution, and whether or not the enrollee is Medicaid eligible. In exchange, the HMOs and CMPs are required to cover all part A and part B benefits, and they may also offer additional benefits such as preventive services. One large HMO reported to OTA that over one-half of its elderly enrollees had a complete check-up within the previous year and 71 percent of its elderly female enrollees had had a Pap smear within the previous 3 years (37). In some Medicare HMOs, particularly those organized as independent practice associations (IPAs), the decision regarding provision of specific services may be made by the individual physician, not by plan administrators (44). Thus, even within specific HMOs, some beneficiaries may be offered such services while others are not.

When a preventive service is legislated as a new Medicare covered benefit, beneficiaries enrolled in Medicare risk-contracting plans are automatically entitled to it. Thus, a legislative decision to add a preventive service as a covered benefit not only provides access to beneficiaries under a fee-for-service payment but also reduces the variation in the scope of services available to Medicare beneficiaries enrolled in cavitation plans.

STRENGTHS AND WEAKNESSES OF MEDICARE AS A SOURCE OF FUNDING FOR PREVENTIVE SERVICES

Paying for preventive services through Medicare is, in many respects, an efficient and simple way to provide financial access to such services for the elderly. To the extent that a service can be defined and assigned a procedure code,¹ it can be incorporated very easily into the existing payment system. It is also a relatively simple administrative task to exempt such services from the deductible and coinsurance requirements that apply to other Medicare services. For a number of reasons, however, covering a preventive service as a Medicare benefit may be insufficient to bring about appropriate patterns of use.

¹ All reimbursable Medicare procedures and visits are assigned a unique five-digit code and published as the Health Care Procedural Coding System (HCPCS), which is an expansion of the American Medical Association's *Current Procedural Terminology* (19).

The decision to use a preventive service may depend more on the information available to the consumer or physician, and the attitudes of each, than on its out-of-pocket cost. OTA's study suggests that the use of preventive services by the elderly may depend more on characteristics of the consumer, physician, and service than on the out-of-pocket costs (37). Although adding a preventive service to the list of covered Medicare benefits would certainly not reduce its utilization, it is questionable whether, in the absence of concerted efforts to educate physicians and Medicare beneficiaries about the value of such services and to encourage their use, overall rates of use would increase substantially (63,80,101).² Moreover, to the extent that people who would benefit most are the least likely to use such services, as appears to be the case with cervical cancer screening (61), the real medical benefits deriving from coverage could be minimal in some cases.

Some services are beneficial only to people with conditions or circumstances that render them particularly "at-risk" for the preventable condition, but it can be difficult and costly to limit payment for a preventive service to an at-risk population. For example, the health benefits of cervical cancer screening appear to be great for women at or near the poverty level who have never been previously screened (61), but it might be impractical to restrict Medicare coverage of cervical cancer screening to high-risk women defined in this way. Medicare is not designed as a means-tested program of benefits. A Medicare cervical cancer screening benefit may have to be offered to all women, including those who stand to gain little from repeated screening. Other approaches such as direct grant programs, or coverage of such services through Medicaid, might allow targeting of services to elderly groups most in need, but these alternatives also have limitations.³

Some preventive services (particularly screening tests) are highly effective if offered at infrequent intervals, but as the frequency of use increases, the added effectiveness declines. A Medicare benefit

can be limited to a maximum frequency, such as every 2 years, but under the existing claims payment structure of the Medicare program, it is difficult for Medicare carriers to monitor compliance with and enforce such limitations on use (42). As the technology of claims payment improves, this problem may disappear.

Like most "cognitive" medical services, counseling and education are inherently difficult to standardize or audit. Because such services would be delivered in outpatient or office settings, they could not easily be incorporated in quality assurance programs focusing on content. Hence, providers could deliver services of low quality (and low effectiveness) and still receive payment from Medicare.

Some preventive services, particularly education and counseling, may be most efficiently and effectively delivered by nonphysician personnel. The Medicare program, however, requires nonphysician services such as those of physical or occupational therapists, nurse practitioners, and clinical psychologists to be provided under the supervision of a physician.⁴ This requirement adds to the cost of providing services that may not require such supervision. In addition, most physician practices are not organized to supervise a wide variety of nonphysician personnel, and their Medicare patient loads are not large enough to justify hiring staff trained in multiple disciplines for the purpose of delivering an array of preventive services to the elderly (56).

POLICY ISSUES IN DEVELOPING A MEDICARE STRATEGY FOR PREVENTIVE SERVICES

Despite the problems with Medicare as a mechanism for implementing preventive services for the elderly, it is nevertheless a potential vehicle for enhancing access to these services. The current strategy for adding preventive services to Medicare is ad hoc and procedure specific. It is worth considering approaches to developing a more com-

²The case of pneumococcal vaccine may be instructive. Despite Medicare coverage of this vaccine in 1982 for all beneficiaries, rates of use did not increase in the United States between 1982 and 1986. In 1985, only about 11 percent of all elderly people were immunized with the pneumococcal vaccine (27).

³Direct grants to providers of services to elderly women in poverty would superimpose a separate service delivery system on the existing system of care and might interfere with the continuity of care for these women.

⁴This is largely, but not strictly, true. Since 1988 the services of clinical psychologists can be directly reimbursed if they are delivered in a Community Mental Health Clinic or a Rural Health Clinic as defined by the Public Health Service. Otherwise, clinical psychologists can be separately reimbursed for services only when the services are delivered under the supervision of a physician.

plete strategy for incorporating preventive services into the Medicare benefit package. The formulation of such a policy requires choices in the following areas:

The Unit of Payment: Individual Procedures v. Service Package

Up to now, newly covered preventive procedures have been added to the list of billable payment codes, giving physicians the power to bill for these services as they do for other medical procedures. Payment is made only for the procedure itself (e.g., the cost of administering a vaccine) and not for the physician's visit in which the procedure is administered. Implicit in this policy is the assumption that the preventive procedure will be delivered as part of a visit made for a nonpreventive purpose. This approach to adding new services is both simple and consistent with existing Medicare billing systems.

This incremental procedure-specific approach ignores the potential benefits of offering services in a package that may economize on the total cost of providing any given set of such services. If a periodic Pap smear were added to the list of covered services, for example, the additional cost of a clinical breast examination or a digital rectal examination during the same visit would be minimal. Counseling sessions on smoking cessation or appropriate medication use could be easily and inexpensively expanded to include information on nutrition. The fixed costs associated with patient scheduling and preparation, medical recordkeeping, and billing could be spread across a number of specific interventions.

Paying for a package of preventive procedures or activities in a defined visit schedule provides the physician or other provider with the opportunity to integrate related services with one another. It is also compatible with the introduction of educational materials and encounter forms for physicians as a guide for providing such services (60). This very integration also has disadvantages, however. One is that the package approach can force the patient into a rather inflexible mode of service delivery that could ultimately lower his or her use of such services. Paying by the procedure allows any physi-

cian to provide a specific preventive service, such as a vaccination, as part of a visit for another purpose. About 85 percent of elderly people made at least one ambulatory health care visit in 1980 (34). Some elderly people might accept a single quick intervention as part of another visit but might not be willing to make a special trip to the doctor each year to receive a more comprehensive package of services.

Two major preventive services demonstration projects have adopted the package approach to payment for preventive services. The frost, Project INSURE, was begun in 1980 by a consortium of public and private sources (60). An age-specific schedule of preventive visits containing a defined set of preventive services was specified for the study population. (See app. D for the package of services provided under Project INSURE for people 65 years of age and older.) Participants were eligible for and encouraged to receive the package of services at no cost; providers were paid on a fee-for-service basis for services rendered as part of the package.

A more recent set of federally funded studies currently underway at six sites is testing the feasibility and effects of offering different defined packages of preventive care to elderly Medicare beneficiaries and paying providers for the package of services delivered during the visit or over a period of time. These projects should provide information on how Medicare recipients respond to service offered in packages. (See app. C for a description of these Medicare demonstration projects.)

Standards of Evidence

Because they have traditionally been excluded from insurance benefit packages, preventive services have been held to a burden of proof of effectiveness or cost-effectiveness that is not typically required of diagnostic and therapeutic procedures. For the most part, third-party payers, including Medicare, accept diagnostic or therapeutic services as "reasonable and necessary" unless obvious abuse is encountered.⁵ In contrast, for preventive services to be included in a benefit package, evidence must exist that they are at least effective, and sometimes that their medical benefits are worth their costs. This standard may seem unduly harsh, and proponents of preventive services

⁵The situation is changing. Diagnostic and therapeutic procedures are increasingly scrutinized through utilization review and quality assurance activities undertaken by insurers or providers such as hospitals or health maintenance organizations. Medicare's process for covering new medical procedures has also recently been strengthened and revised; proposed regulations issued in January 1989 would change the criterion for coverage from effectiveness to cost-effectiveness (91).

often argue that it is unfair to hold prevention to a higher standard than that required for other medical services (48,96). Two powerful arguments favor a tough standard for preventive services, however. First, like all services, preventive services involve potential risks as well as potential benefits. However, unlike diagnostic and therapeutic services, which are rendered in response to patient complaints or symptoms, preventive services are offered to ostensibly healthy individuals and therefore involve an implied promise that they will improve the patient's health (74). Second, the more appropriate response to the double standard may be to raise the level of evidence required for diagnostic and therapeutic services, not to lower those for preventive services. That one genie is out of the bottle is no justification for letting others out, too.

Even accepting that the decision to include preventive services as an insured benefit requires explicit evidence, choices exist about the criteria that will be used to govern the coverage decision and the standards of validity required of the evidence that does exist. Possible criteria include:

- *Effectiveness (impact on health status)*---Evidence would be required that the expected length or quality of life would be increased for the person receiving a preventive service. This criterion also requires the assessment of medical risks associated with the use of the service. X-ray screening procedures, for example, may subject the user to a small cancer risk associated with ionizing radiation; these risks would be weighed against the potential beneficial effects of the screening procedure on longevity or quality of life.
- *Cost-effectiveness*—The health effects of a preventive service would be arrayed against the net health care costs of achieving those effects. Whether the health effects are worth their costs is a policy judgment. If the health effects can be reduced to a single dimension (through the use of a health status index or a quality-adjusted life-years scale), the ratio of health care costs to effectiveness can be computed and used as the basis for judgments about whether the service is worth its costs. If a preventive service both improves health (i.e., lengthens life or improves the quality of a person's remaining

years) and reduces health care costs (by averting costly therapy), then it is not only cost-effective but also cost-saving to the health care system, and unequivocally desirable under this criterion.

- *Impact on Medicare outlays*—The net effect of the preventive service on Medicare expenditures would be the basis for a coverage decision.⁶ A preventive service would be covered if it can be expected to reduce net Medicare outlays by averting expenditures for covered diagnostic and therapeutic services. If expected net Medicare outlays are positive, policy makers would have to decide whether the health outcomes are worth the net outlay, thus implicitly returning to the cost-effectiveness criterion. Highly effective preventive services could fail the test of being cost-saving to Medicare, because in prolonging life, they could induce future Medicare expenditures for unrelated illnesses.
- *Net economic benefits*—This criterion combines all consequences of a preventive strategy (health effects and health care costs) into monetary values. The economic value of health benefits is compared to the cost of the strategy. If the net economic benefits are positive, then the service is worth its costs; if negative, it is not. This benefit-cost framework is attractive in principle but almost impossible to implement. Major conceptual, methodological, and social problems exist in placing dollar values on the health effects of specific strategies (99).

The notion that a preventive health service should be effective is widely accepted by health care providers and policymakers. There is less agreement about whether the cost of such services should be considered in either coverage or clinical decisions. The U.S. Preventive Services Task Force, convened in 1984 to develop guidelines for preventive services, adopted stringent standards of effectiveness but explicitly rejected cost-effectiveness as a criterion for their task in judging these services. (See app. D for a description of the Task Force and its recommendations for the elderly.) In fact, no professional group in the United States making recommendations on preventive services for the elderly has explicitly

⁶Alternatively, the decision could be based on a preventive service's net impact on total Federal expenditures, including Medicare, Medicaid, and income transfer programs.

accepted cost-effectiveness as a criterion for making such judgments.⁷

Still, expert groups making recommendations differ widely on specific preventive services. Appendix D contains a summary of such recommendations pertaining to the elderly. Recommendations for colorectal cancer screening, for example, vary widely. The U.S. Preventive Services Task Force and the Canadian Task Force on the Periodic Health Examination have concluded that the evidence does not support a recommendation for routine screening of older Americans for colorectal cancer; in contrast, the Working Guidelines adopted by the National Cancer Institute include a relatively aggressive screening schedule.

Why do such differences remain even when the criterion for judging the service---effectiveness-is the same across recommending groups? The answer seems to lie in how different groups interpret the available evidence. At one end of the spectrum is the requirement that any recommendation be buttressed by well-designed controlled trials documenting the effectiveness of an intervention; at the other is the acceptance of either anecdotes or professional opinions about the effectiveness of a procedure as sufficient to justify recommending it. For many (perhaps most) preventive services, unequivocal evidence about positive or negative health benefits does not exist; the evidence may be weak or conflicting. Even when there is general agreement about the standards of scientific validity, the application of those standards to interpretation of specific studies may differ. Studies are conducted in different populations, measure different outcomes, and apply different protocols and measurement techniques. Judgments about the importance of one study versus another are made continually, and methods for synthesizing the results of many studies are currently unstandardized.⁸

Locus of Responsibility for Coverage Decisions

Responsibility for expanding Medicare to cover preventive services presently resides with Congress. To date, such expansions have been limited to specific procedures, but Congress could authorize the Health Care Financing Administration (HCFA) to offer an “appropriate” package of preventive services to elderly Medicare beneficiaries. Authorizing legislation could include criteria for assessing the “appropriateness” of such services. For example, Congress could direct HCFA to consider the cost-effectiveness of alternative packages in its implementing regulations.

Vesting HCFA with the authority to decide about specific packages of services would probably increase the flexibility of the Medicare program to respond to new evidence on effectiveness or cost-effectiveness as it arises. By removing specific coverage decisions from the legislative process, preventive services would not have to compete for approval directly with other uses of the Federal health budget. However, if the authority for coverage decisions is vested in HCFA, the resulting package of services offered to the elderly would be unpredictable. As was noted just above, conclusions about the health and cost consequences of specific preventive services depend, in poorly understood ways, on the composition of the recommending groups and the criteria and standards used to judge the evidence. Even directing HCFA to use cost-effectiveness as a criterion for coverage decisions would leave a great deal of uncertainty about how the available evidence would be assessed. A process administered by HCFA, however, might be no more unpredictable than the current legislative process and would still be subject to oversight by Congress.

⁷**Evidence that** a preventive service is **actually** cost saving is often used as secondary supporting information to buttress a recommendation **made** on effectiveness grounds alone, but, to our knowledge, an effective service has never been denied a recommendation by such a group on the argument that it is too costly.

⁸**Over the past decade**, a new approach, referred to as “meta-analysis of research” has been developed to provide rules for integrating the results of many studies of the same intervention into an overall finding (36). Even with comparatively standardized **methods** for pooling the results of individual studies, however, the criteria governing inclusion or exclusion of specific studies and the comprehensiveness of the search for relevant studies can influence the outcomes of **meta-analysis** (35,36). **For example**, a **meta-analysis** of a preventive intervention that includes only studies whose results are published in peer-reviewed journals will ignore many studies in the so-called “phantom literature,” and may be biased in favor of finding that the intervention is successful (36).