

In 1984, personal health care expenditures for the 28 million Americans over the age of 65 totaled \$120 billion, nearly all of which went toward the treatment of existing conditions rather than to screening for or preventing health problems (85). Recently, however, policy makers, health advocates, and medical practitioners have begun to focus greater attention upon the potential of preventive medicine for the elderly. As the elderly population has grown, physicians and decisionmakers have looked to preventive services as a possible means of extending life, reducing morbidity and disability, and controlling health care costs (67,50). Congress has recently mandated studies of community-based preventive health service programs for the elderly and expanded Medicare coverage of certain services, including screening mammography and some immunizations (34).

This paper has three purposes:

- to summarize existing professional recommendations for older adults' use of preventive health services,
- to estimate the percentage of elderly who currently use such services, and
- to identify the factors related to elderly individuals' use of preventive care with particular attention to the potential effects of Medicare coverage.

The information brought together in this paper has two major policy implications. First, in order to estimate the impact of Medicare coverage of preventive services on Medicare program expenditures, one must know the number of potential users. While current rates of use alone may not adequately predict use under expanded third-party financing of preventive services, examination of existing literature and data provides insight into factors associated with use. In particular, such analysis reveals the relative importance of Medicare coverage in removing

barriers to use for elderly Americans.

Planners and administrators of disease prevention for the elderly also benefit from an analysis of current use. By understanding those factors that affect whether older people accept and receive preventive services, Congress may be able to target initiatives where they will be most effective or most needed. Where supported by the evidence, this paper points out such implications for public policy.

Types of Preventive Services

The traditional taxonomy of prevention distinguishes among primary, secondary, and tertiary prevention (38,56). *Primary prevention* refers to activities designed to avoid disease or other conditions that adversely affect health. Immunizations are one example of primary prevention. *Secondary prevention* includes efforts to identify existing conditions that could cause illness and disability before the appearance of clinical symptoms, or to minimize the progression of disease. Disease screening is one form of secondary prevention. *Tertiary prevention* refers to efforts to control irreversible chronic conditions in order to avoid disability or death. Kane, et al., have suggested that this typology does not adequately distinguish among preventive services, especially those targeted toward the chronic conditions common among the elderly. For example, while diet change can be a means of primary prevention of hypertension, treatment of existing hypertension is also primary prevention of stroke.

To avoid such ambiguities, this paper simply distinguishes among *immunizations*, *disease screening*, and *educational or counseling services*. Table 1 lists specific examples of each category of prevention. While the list of services in table 1 is not exhaustive of all preventive services applicable, it does include the procedures examined in this paper.

Table 1.--Selected Potential Clinical Preventive Services for the Elderly

Immunizations

- Influenza
- Tetanus
- Pneumococcal^a
- Hepatitis B^b

Screening

- Cancer screening:
 - Breast cancer (clinical examination; mammography)
 - Colorectal cancer (occult blood stool; sigmoidoscopy)
 - Cervical and uterine cancer (clinical examination; Pap smear; endometrial biopsy)
 - Prostate cancer (clinical examination; ultrasound)
 - Skin cancer (clinical examination)
- Blood pressure measurement
- Vision examination
- Glaucoma screening
- Hearing test
- Cholesterol measurement
- Mental status/dementia
- Osteoporosis (standard x-ray; quantitative CT; other radiological techniques)
- Diabetes screening
- Asymptomatic coronary artery disease (exercise stress test)
- Dental health assessment
- Multiple health risks appraisal/assessment
- Functional status assessment
- Depression screening
- Screening for hyperthyroidism

Education and Counseling

- Nutrition
- Weight control
- Smoking cessation
- Home safety/injury prevention
- Stress management
- Appropriate use of medications
- Alcohol use
- Exercise

Abbreviation: CT =computed tomography.

^aCurrently covered by Medicare.

^bCurrently covered by Medicare for high risk patients.

SOURCE: Office of Technology Assessment, 1989.

Preventive Services and Medicare

In defining preventive services and measuring their use, this paper focuses on the implications for their potential coverage under Medicare.

This perspective limits the preventive interventions analyzed to personal health services offered to individuals. This review does not examine mass media education programs targeted toward the elderly.

As enacted in 1965, Medicare covered no preventive services. It paid for procedures on a "diagnostic" basis only--that is, when the patient has a symptom or a previous diagnosis for a condition. However, because treatment of most diagnosed conditions is covered, Medicare does pay for much tertiary prevention designed to control existing chronic conditions. In addition, some physicians probably receive payment for screening services they incorrectly label as "diagnostic." The extent of this *de facto* coverage of prevention has gone unmeasured.

In recent years, however, Congress has incrementally added coverage of some immunizations and screening services. These include hepatitis B immunizations for beneficiaries at high risk of contracting the disease and pneumococcal pneumonia vaccinations for all beneficiaries. The Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360) includes coverage of up to \$50 for biannual screening mammographies beginning in 1990. In addition, Congress has mandated that the Health Care Financing Administration (HCFA) fund demonstrations of influenza immunization coverage, and of therapeutic shoes for diabetics, and several community-based demonstration projects to analyze health outcomes and costs associated with the provision of screening, health risk appraisals, education, and counseling to Medicare beneficiaries,

Additional proposals brought before the 100th Congress included coverage of Pap smear screening for cervical cancer and a physical examination with medical history upon enrollment in Medicare or on a periodic basis.