Medicare Payment for Physician Services

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NCREASING ATTENTION is being given by public policymakers to alternative ways by which Medicare might pay for physician services. (1-13). Among the many approaches under consideration are modifying the existing fee-for-service system; establishing prospectively set rates for bundles of services, such as payment based on diagnosis-related groups; developing uniform fee schedules; paying fixed indemnity amounts; linking payments to relative value scales; paying on a capitation basis; or implementing a voucher system.

This position paper first reviews the historical background of Medicare payment of physicians, then identifies fundamental principles and objectives that the American College of Physicians believes should apply. These basic principles—assurance of access to care, assurance of high-quality care, and reasonable cost to ensure the affordability of care—serve as criteria by which any physician payment system may be assessed. The alternative payment approaches being considered for Medicare are evaluated in light of these criteria, and the advantages and disadvantages of each are discussed. Although the focus is on Medicare, the principles and objectives identified in this paper could have broader applications for evaluation of other medical care payment systems and other public policy options.

Background

Amendments to the Social Security Act passed in 1965 (Public Law [P.L.]89-97), which established Medicare and Medicaid, reflected a national commitment "to assure comprehensive health services of high quality for every person" (14). The Older Americans Act of 1965 (P.L. 89-73), also enacted in July 1965, declared that, among other things, elderly persons were entitled to "the best possible physical and mental health which science can make available without regard to economic status" (15). Medicare ("Health Insurance for the Aged" [Title XVIII]) was seen as a means to help elderly persons who generally could not obtain private health insurance to overcome financial barriers to access to health care. The plan, modeled on private insurance plans, consisted of 100% coverage for limited hospital services (Part A) after completion of an initial deductible amount, and separate, supplemental insurance, with coinsurance requirements, for physician services (Part B).

As originally enacted, Medicare reimbursed hospitals on a cost basis and paid for physician services based on determinations of "usual, customary, and reasonable" charges. Part A was financed from Social Security payroll taxes, and Part B, from a combination of participant premiums, general federal tax revenues, and beneficiary cost-sharing. Patients retained freedom of choice among providers, and physicians could decide on a case-by-case basis whether to accept Medicare payments (less deductibles and copayments) as payment-in-full (accept assignment) or to bill and collect from patients for full charges. Private insurers, acting as fiscal intermediaries for the federal government, administered the program. Policies established during the early years of the program (1965 to 1971) were designed to increase the accessibility of health care to elderly persons by encouraging providers to participate. Payments to physicians were intended to be comparable to, but no greater than, those paid by the general population. The statute provided specific guidance for calculating reasonable charges, but most physician charges were accepted as reasonable. Methods for determining customary and prevailing charges differed among carriers; most carriers interpreted prevailing charges to be those that were less than the 90th percentile of customary charges (16).

Governmental attempts to control rising costs during this period were generally directed at finding administrative ways to improve the organization of the program. Rapid increases in costs and consequent underfunding of the Hospital Insurance program (Part A) were addressed primarily by raising payroll taxes and increasing the earnings base to which the rates applied. This remedy has been applied repeatedly since 1966, when employers and employees each contributed 0.35% of their annual payroll earnings up to \$6600. By 1986, the contribution rate had risen to 1.45%, and the wage base subject to the payroll tax of the Hospital Insurance program was \$42 000 (17). In 1969, fiscal intermediaries were advised to calculate prevailing charges at 1 SD greater than the mean of customary charges (83rd percentile). In 1971,

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the standard was further reduced to the 75th percentile of customary charges (18).

The Social Security Act Amendments of 1972 extended Medicare coverage to disabled persons and those with end-stage renal disease. However, this legislation also marked the beginning of an era of cost controls, with some increased emphasis on quality assurance. Limits on reasonable charges were authorized, an economic index that limited future increases in prevailing charges was created, restrictions were authorized for payment of physician services in teaching hospitals, and limits were imposed on hospital routine-operating costs. Professional standards review organizations (PSROs) were created to monitor the quality, appropriateness, and necessity of care.

Medicare rules gradually tightened between 1972 and 1981 to contain rising Medicare costs. Health maintenance organizations (HMOs) were viewed as a possible means for improving the cost-effectiveness of health care and were consequently encouraged by federal policies that gave them incentives such as exemption from health planning certificate of need requirements. However, except for a brief and temporary period of wage and price controls set forth during the Nixon Administration, Medicare costs continued to escalate. Part A costs grew from \$5 billion in 1970 to \$29.2 billion in 1981, and Part B costs correspondingly rose from \$2.2 billion to \$13.2 billion (19). These increases of nearly 500% far exceeded the 133% increase in the Consumer Price Index that occurred during the same period for all items other than medical care (17).

The 1980s marked the beginning of an era of greater federal budgetary restraints and more restrictive Medicare policies. Fears of impending insolvency for the Hospital Insurance Trust Fund (Part A) and projections of greatly expanded needs for infusions of general revenues to support the Supplemental Insurance Trust Fund (Part B) further fueled pressures on Congress to reduce Medicare costs.

Congress acted by passing the Omnibus Budget Reconciliation Acts of 1980 (P.L. 96-499) and 1981 (P.L. 97-35) and the Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248) (TEFRA). These acts established maximum reasonable charges that physicians could bill for laboratory services, lowered payment limits on inpatient routine operating costs, penalized hospitals for inappropriate services, increased the amount of patient deductibles, and established limits on reasonable charges for physician services provided in hospital outpatient departments. Professional standards review organizations were phased out and subsequently replaced by peer review organizations that had responsibilities for cost containment as well as utilization review. Medicare payments were also authorized to HMOs and other competitive medical plans that involved prospective payment for risk-sharing contracts.

In 1983, Congress revised Medicare's method of paying for inpatient hospital services (P.L. 98-21). The costbased system was replaced with a prospective payment system in which hospital payment rates were predetermined based on patient discharge classification among 470 diagnosis-related groups. This legislation also directed the Secretary of the Department of Health and Human Services to prepare a report to Congress with recommendations on the "advisability and feasibility" of basing payments for physician services to hospital inpatients on a diagnosis-related-group-type system.

In 1984, Congress further responded to growing budgetary pressures by enacting the Omnibus Deficit Reduction Act (P.L. 98-369 or DEFRA), which imposed a freeze on customary and prevailing charges for physician inpatient and outpatient services and established a "participating physician" program. Physicians who chose to be participating physicians (those who would accept assignment for all Medicare patients) could increase their billed charges, but these increases would not result in higher Medicare payments during the freeze. The fee increases would, however, be recognized by Medicare in updating future charge profiles after the freeze ended. Nonparticipating physicians could continue to determine on a case-by-case basis whether or not to accept assignment, but were prohibited from raising fees to Medicare beneficiaries during the freeze.

Other changes engendered by this act included establishment of maximum limits for all clinical laboratory services whether rendered in a physician's office, independent laboratory, or hospital outpatient department, and prohibition of physicians from billing for any laboratory tests that they did not actually administer or personally supervise. In adopting this legislation Congress expressed its intention that

... the burden of effectively constraining the growth of costs in the Medicare Part B program be borne by providers and physicians and not be transferred (in whole or in part) so as to become an additional burden on Part B beneficiaries in the form of increased out-of-pocket costs, reduced services, or reduced access to needed physician care.

The freeze on Medicare payments was maintained for all physicians from 1 July 1984 through 30 April 1986, and for nonparticipating physicians, through 31 December 1986.

In summary, Medicare physician payment policies appear to be evolving through a series of stages. In the first stage (1965 to 1971), the emphasis was on expanding access to health care with some efforts to obtain greater uniformity in administration. Stage 2 (1972 to 1981) consisted of various regulatory efforts to control rising expenditures through the tightening of rules, restraining of rates of increase, and revisions in health planning. In stage 3 (1981 to present) budgetary constraints are dominating policy, and legislative and regulatory actions are limiting payments for physician services.

Principles and Objectives of Physician Payment Systems

Current initiatives for Medicare cost reform offer an opportunity to reassess the nation's health care priorities and to use Medicare's payment system to help achieve national goals. If, as expected, public health care financing continues to be restricted, then choices will need to be made among priorities, and public spending will need to be targeted carefully. The following is a summary of principles and objectives that we believe should be fundamental to Medicare and that could also apply to other health insurance programs.

ACCESS

a. Beneficiaries should have access to needed health care services. The costs of major illness (including long-term care) or the beneficiary's share of payment should not prevent access to needed care.

b. Beneficiaries should be able to choose among physicians or various health care delivery mechanisms, or both, within a pluralistic health care system.

c. Effective disease prevention and health promotion should be encouraged.

d. All health care payers should share both the responsibility and the costs for ensuring access to health care for indigent persons.

QUALITY

a. There must be standards of quality and mechanisms to ensure that they are maintained.

b. The payment system should not undermine the physician-patient relationship and should not adversely influence clinical decision making.

c. Geographic differences in the use of health care services should reflect actual differences in health care needs.

COST

a. Cost must be controllable, and the program must be financially sound.

b. Cost-effectiveness should be encouraged, and patients should be involved in decisions that affect their health care.

c. Administrative costs should be appropriate for the efficient achievement of the program's objectives.

Discussion of Principles

ACCESS

a. Beneficiaries should have access to needed health care services. The costs of major illness (including longterm care) or the beneficiary's share of payment should not prevent access to needed care.

Access to needed health care services for aged, blind, and disabled persons has been a primary objective of the Medicare program. This objective subsumes the principles that equal access be obtainable without discrimination, that the health care system be accessible to serve the needs of all citizens, and that no Medicare beneficiary be denied needed care for lack of financial resources.

Differences in the receipt of health services should be based solely on differences in health care needs. Access to health care under Medicare should not mean that all beneficiaries should receive every treatment that is technically possible, but that each beneficiary be able to obtain whatever care is medically necessary and appropriate.

As an insurance program, Medicare should provide protection against the costs of major illness. Financial risk to individual participants should be limited, and copayment and deductible amounts should not create undue barriers that impede access to needed care. Patients and their families should not be made destitute or forced to liquidate their life savings to pay health care expenses. Consequently, Medicare coverage should include hospital and physician services as well as home health care, prescription drugs, and catastrophic expenses such as those that involve long-term health care. Beneficiaries who require continuous skilled nursing care should not have to wait until their nursing home bills reduce their financial assets to below the income eligibility levels of Medicaid before they receive public financial assistance.

b. Beneficiaries should be able to choose among physicians or various health care delivery mechanisms, or both, within a pluralistic health care system.

Rapport with one's physician is an essential element of effectiveness of medical care. Consequently, patients should have the ability to select a physician or health care delivery system with which they are satisfied. Several approaches to health care delivery currently exist. In the absence of evidence that any one approach is clearly superior to the others, this pluralistic system, which encourages innovation, experimentation, and personal choice, should be maintained.

c. Effective disease prevention and health promotion should be encouraged.

The payment system could and should be used as a mechanism to promote health and should not be concerned solely with payment for the treatment of disease. Payments should encourage the use of preventive health care initiatives such as influenza vaccinations and colorectal examinations. In addition, the payment system should include an inherent recognition of the value of periodic diagnostic assessments for continuing health care.

d. All health care payers should share both the responsibility and the costs for ensuring access to health care for indigent persons.

The responsibility for ensuring access to health care for those who are indigent and not covered by Medicaid or any other health insurance program must be borne by those, including the federal government, who pay for health care services. Thus, payments from Medicare, Medicaid, private insurance policies, HMOs, and selfpaying patients should include the cost of caring for those who are indigent.

QUALITY

a. There must be standards of quality and mechanisms to ensure that they are maintained.

All patients should receive health care that is of an acceptable standard of quality. Medicare should pay only for services that are necessary, safe, and effective, and that meet appropriate standards of quality. The payment system should not encourage the use of procedures proved to have little likelihood of success that either constitute poor treatment for a specific illness or are unnecessary. Likewise, the payment system should also discourage service that does not meet appropriate standards.

Quality assurance mechanisms, including peer review, can be an effective means for ensuring the quality of care. As pressures to control health care costs intensify, it is essential that such mechanisms exist. Quality assurance programs should involve a systematic process that involves health care professionals in a coordinated system of reviewing, monitoring, and assessing care. Deficiencies in the quality and delivery of health care services, such as the provision of unnecessary or inappropriate care, should be corrected through education and administrative change, and performance should be reassessed periodically. The American College of Physicians believes that quality assurance programs should include standards, collection of reliable and valid data, peer review, and the means by which to effect behavioral change (Health and Public Policy Committee, American College of Physicians. Quality Assurance and Utilization Review. Position paper approved 13 September 1984).

b. The payment system should not undermine the physician-patient relationship and should not adversely influence clinical decision making.

Traditionally, the physician-patient relationship has been based on the premise that the fundamental responsibility of the physician is to treat patients according to the patient's best interests. In fulfilling this responsibility, physicians have earned the trust and confidence of their patients that is considered essential for good medical care. Payment mechanisms that provide financial incentives for physicians that are in conflict with the needs of patients, such as capitated health plans with profit-sharing incentives to enroll only healthy persons, could undermine this critical relationship.

Decisions to provide or withhold health care services should be tempered by ethical considerations as well as good medical judgment. Pressures to maintain hospital occupancy levels and payment incentives should not adversely influence treatment decisions.

Data are needed on the efficacy of specific medical and surgical procedures so that physicians and their patients can make well-informed treatment decisions. These data should be considered essential by Medicare for determinations of whether or not to fund new medical technologies or to continue paying for procedures no longer considered efficacious. Compensation for physician services should reflect the degree of training and experience of the physician, the amount of time and effort spent with the patient, the cost of providing the service, and the value of the service. Outcome data on probabilities of success, possible side effects, chances of recurrence, adverse risks, and mortality rates should be collected and made readily available to assist in clinical decision making.

c. Geographic differences in the use of health care services should reflect actual differences in health care needs.

Research has shown substantial variations in the use of medical and surgical procedures among Medicare populations in different geographic areas with no apparent differences in health (20-26). Hospitalization rates and rates for the use of medical and surgical procedures differ most in the treatment of illnesses for which there is a large degree of physician discretion. Conversely, these rates are much more uniform when applied to the treatment of conditions for which a general consensus exists concerning the effectiveness and appropriateness of care. More research is needed to explain these differences, to measure the effectiveness of medical services and their actual cost, to determine long-term effects on health status, and to understand better what rates of use are appropriate.

COST

a. Costs must be controllable, and the program must be financially sound.

Federal budgetary constraints and concerns about the future solvency of the Medicare trust funds have increased pressures to reduce Medicare costs. The solvency of the trust funds must be secured on a long-term basis to meet the health care needs of current and future beneficiaries.

Commitments to elderly and disabled persons should not be jeopardized by inadequate financing or by annual changes in the federal budget. Cost containment must, therefore, remain a fundamental goal of the Medicare program.

b. Cost-effectiveness should be encouraged, and patients should be involved in decisions that affect their health care.

The Medicare program should continue to use its market power as a major purchaser of health care services to improve the quality, accessibility, and cost-effectiveness of the nation's health care system. The payment system should not encourage the provision of care in a hospital or skilled nursing home when noninstitutional care would be more appropriate. Hospital outpatient, physician office, and home health care should be paid at levels that adequately recognize both the value of the service and actual differences in the cost of providing the service.

Payments should reflect periodic increases in costs to the provider and changes in medical practice and technology. The payment mechanism should allow adjustments in prices to reflect market conditions so that the payment system neither encourages cost escalation nor depresses prices below the point where access to care is reduced.

Patients and providers must be cost-conscious in the use of health care services. Requiring patients to bear some responsibility for the cost of services that they use is one means by which to enhance patient cost-consciousness that may also deter an excessive demand for services. Cost-sharing in the form of copayments and deductibles may be an effective means for reducing the demand for unnecessary medical services. One study of insured groups whose members were less than 65 years of age has shown that cost-sharing requirements can be effective without having adverse effects on health (27). However, cost-sharing requirements for aged, disabled, and indigent persons should not be so high as to discourage needed care and should not penalize those who are severely ill. Copayments and deductibles should be tempered by considerations of the patient's ability to pay.

Patient involvement in decisions among choices of treatment is particularly important, because these decisions depend on individual views, values, and beliefs. To make informed decisions, adequate information must be available. Patients should be informed of differences among alternative forms of treatment about expected outcomes, effectiveness, and costs. More research is needed in this area to provide better data for decision making.

The role of family and other volunteers in patient care should also be enhanced. Active involvement of the family may also serve to ensure that good quality care is obtained and may help to reduce costs by reducing the need for more costly professional or institutional care. Payment systems should encourage efforts of informal caregivers by providing needed supportive services such as home health care, homemaker services, respite care, and community health and social services.

Although the payment system should not dictate medical practice, physicians should not provide services without any consideration as to their costs. The payment system must be flexible enough to permit physician discretion in the diagnosis and treatment of illnesses in patients, but it should not encourage nor sanction clinical decisions that cannot be justified within a broad range of medically acceptable care.

Referrals and consultations must also be obtainable as needed. Payment for similar services provided by physicians of similar training and expertise should be relatively equal across the country after adjustments have been made for geographical cost differences in wages, office expenses, and other items that affect the cost of living.

Medicare policy should permit and encourage efforts to develop cost-effective alternatives that can meet the program's objectives. Thus, Medicare should sponsor rigorous scientific evaluations to test and develop alternative health care delivery and financing systems and should monitor experimental projects to ensure that beneficiaries receive appropriate services. Among the alternatives that should be explored are experiments with payment mechanisms that involve HMOs, social HMOs in which social services are provided in addition to health care, congregate living arrangements in which housing is also provided, and other capitated payment approaches such as those that involve independent practice associations. Research should also be encouraged regarding payments by episode of care; modifications to the fee-for-service system, such as the implementation of relative value scales; and the use of private insurance plans to provide coverage equivalent or superior to that provided by Medicare. Research might also focus on ways to restructure the feefor-service system to encourage cost-effectiveness.

c. Administrative costs should be appropriate for the efficient achievement of the program's objectives.

The cost of administering the payment system should be kept to a minimum without compromising objectives of ensuring access to high-quality health care. Cost reporting and billing requirements should be in accord with generally accepted accounting standards but should not impose administrative burdens that discourage providers from participation.

Analysis of Alternative Methods of Physician Payment

In the sections that follow, we examine current Medicare payment policy and alternative payment approaches and evaluate each according to the fundamental principles and objectives just described.

CURRENT MEDICARE PHYSICIAN PAYMENT POLICY

Medicare has been largely successful in meeting many of the above fundamental principles concerning access and quality. Before Medicare, half of those who were 65 or older had no health insurance protection. Now nearly all elderly persons are covered by Medicare hospital insurance and over 90% (25.5 million elderly persons and 2.7 million disabled persons) are enrolled in the voluntary Supplemental Medical Insurance Program (Part B). In 1963, 68% of the elderly population saw a physician at least once a year, compared with the current 83%. Mortality rates for elderly persons, which had remained relatively constant for 12 years before the institution of Medicare, decreased rapidly and steadily after 1965 (19).

The current system has provided access to mainstream health care for elderly and disabled persons. The entire health care system has benefited from the infusion of federal financing to the Medicare and Medicaid programs. Along with these improvements in access and quality, the costs of the Medicare program have increased dramatically.

Medicare generally pays 80% of "reasonable" charges for covered physician services after the beneficiary has met a \$75 annual deductible amount. Reasonable charges are the lowest of the physician's "customary" charge for a given service (that is, the median amount charged by the physician for a specific procedure in the previous year); the "prevailing" charge (that is, an upper limit set by each Medicare carrier at the 75th percentile of charges for that service among all local physicians); or the physician's actual charge. Increases in prevailing charges are further limited to rates of increase according to the national Medicare Economic Index, which is calculated using weighted averages of changes in workers' earnings and changes in physicians' office practice expenses. Customary and prevailing charge screens normally are updated annually effective 1 July, but as noted previously, since 1 July 1984, Medicare physician fee levels have been affected by fee freezes.

In 1985, more than 80% of all Medicare claims were reduced in accord with Medicare reasonable charge determinations; the average reduction was about 26%. Table 1 shows the difference between billed charges and the total amount that a physician might receive for a typical Medicare claim. The following is an evaluation of current Medicare physician payment policy based on access, quality, and cost.

Table 1. Medicare Reasonable Charge Reductions per Part B Claim for January to March 1985*

	Type of Claim [†]	
	Assigned	Unassigned
Average billed charge, \$	122.35	128.93
Claims reduced, %	81.6	84.7
Reduction, %	26.5	25.5
Average customary, prevailing, and reasonable (CPR) reduction, \$	$32.48 (\$122.35 \times 26.5\%)$	$32.84 (\$128.93 \times 25.5\%)$
Average approved charge, \$	89.87 (\$122.35 - 32.48)	96.09 (\$128.93 - 32.84)
Medicare payment, \$	71.90 (\$89.87 $ imes$ 80%)	76.87 ($\$96.09 \times 80\%$)
Beneficiary coinsurance, \$	17.97~(\$89.87 imes 20%)	$19.22~(\$96.09 \times 20\%)$
Nonassigned beneficiary liability, \$	0.00	32.84
Total beneficiary liability, \$	17.97	52.06(\$19.22 + 32.84)
Provider receivable, \$	89.87 (\$71.90 + 17.97)	128.93 (\$76.87 + 52.06)
Receivable, %	78.8 (\$89.87/\$122.35)	100.0 (128.93/\$128.93)

* Data from the U.S. Health and Human Services, Health Care Financing Administration, Department of Bureau of Quality Control. Carrier Reasonable Charge and Denial Activity Report, Jan-Mar 1985. In: Office of Technology Assessment (12). † Figures in parentheses represent equations used to derive values.

Access: Vast improvements have occurred since the establishment of Medicare.

Unrestricted beneficiary liability for copayments under Part B and lack of coverage for certain services, such as long-term care and the provision of eyeglasses, can be financial barriers to access to care, particularly for elderly persons with low incomes who do not qualify for Medicaid.

Patients have the freedom to choose among providers.

Recent changes allow beneficiaries to enroll in qualified HMOs, but not in other alternative delivery systems requiring prepayment such as Preferred Provider Organizations and privately insured plans.

Disease prevention and health promotion are not encouraged. Payments are primarily for the treatment of disease, with more generous payments for care requiring high technology and less for more time-consuming personal patient care. Copayments and deductibles may be disincentives to obtaining preventive care.

Nonmandatory assignment has allowed physicians to bill full charges to some patients and accept Medicare payments for others; thus, care for indigent patients and those with low incomes could be indirectly subsidized.

Quality: Beneficiaries receive care of the same level of quality as the general population.

Payments for in-hospital services are linked to peer review by peer review organizations, but no reviews of quality exist for services delivered outside hospitals. A lack of uniform standards and effective mechanisms for the evaluation of quality permits payments for services that are inappropriate or unnecessary.

Patient freedom to change physicians serves as a check on quality.

Traditional physician-patient relationships are maintained with the physician acting as advocate for the patient.

The payment system has a drawback, however, in that it supports geographic differences in use rates of health care service that do not appear justified.

Cost: The program has been underfunded, requiring repeated increases in payroll taxes, enrollee premiums, and federal tax revenues.

Cost containment efforts have been largely unsuccessful and the physician payment freeze is only a temporary solution.

Payment inequities exist among specialties and between established and new physicians.

The payment system encourages inpatient care as opposed to outpatient or home care.

Wide disparities exist in payments across the country that do not appear to be justified by geographic cost differences.

Acceptance of assignment and Medicare payments of 80% of reasonable charges generally results in physicians providing care at less than their usual charges.

Copayments and deductibles are the only incentives provided to encourage patients to be involved in health care decisions. Little support is provided for informal caregivers, and no support is allowed for respite care, homemaker services, or custodial care.

The enrollment of all beneficiaries under one plan and the use of fiscal intermediaries has served to keep administrative costs relatively low.

Physicians bear the burden of collecting enrollee deductibles and copayments.

Medicare has provided funding for research and demonstration projects to encourage the development of alternative methods of health care delivery.

PAYMENT BASED ON PREDETERMINED PRICES FOR BUNDLES OF SERVICES

Adoption of the prospective payment system using diagnosis-related groups as the basis for payment of inpatient hospital services has also prompted interest in payment approaches that involve prospectively set prices for predetermined bundles of physician services. Physician services in ambulatory and outpatient settings could conceivably be paid on a grouped-service basis, but attention currently is focused primarily on applying this approach only to physician services in the hospital inpatient setting. Payments could be for an all-inclusive package of services, covering all treatment incident to an initial diagnosis (as with hospital diagnosis-related groups), or could be limited to selective procedures. Packages could also be structured to involve different needs due to variations in severity of illness; different types of care, including laboratory testing, diagnostic evaluation, medical treatment, and patient counseling; the specialty of the provider or whether or not consultative assistance is required; or payment for services per episode, per visit, or per unit of time. Uniform prices would be paid for treatment regardless of the packaging and actual volume or intensity of services provided.

The success or failure of payment based on predetermined prices for bundles of services in achieving Medicare principles and objectives will differ considerably depending on the setting to which it is applied; whether acceptance of assignment is made mandatory; and to whom payment is made. The following analysis assumes that such payments would be applied only for physician services for hospital inpatients and that acceptance of assignment would be mandatory.

Access: Financial incentives would exist to minimize the provision of services.

Patients with illnesses requiring more costly services than those covered by the predetermined price might be denied care or might receive inadequate care.

Costs to previously unassigned patients and the financial risk to all beneficiaries would be reduced.

Patients would retain freedom of choice among providers who agree to accept Medicare patients.

The policy concerning referrals and to whom payment is made (for example, the hospital, medical staff, attending physician, or consulting physician) could influence specialization among physicians and hospitals (28).

Scarcely any incentive would exist to encourage health promotion or patient education.

There would be no incentive to treat indigent patients who were not receiving Medicare or Medicaid benefits.

Quality: There would be an enhanced need for standards and mechanisms to review the use of procedures and otherwise monitor physicians to ensure that patient care was not insufficient or of lower quality.

Financial disincentives to providing inappropriate or unnecessary care would be instituted; thus, overuse of services might be discouraged.

Applying this approach only to inpatient settings might result in the treatment of some patients as outpatients when they should be hospitalized, and the reverse could also apply.

If payments were made to hospitals, then physicians might tend more to be agents of the hospital as opposed to advocates for the patient, thus endangering physicianpatient relationships.

Paying uniform national rates could reduce geographic disparities in the use of health care services.

Cost: Medicare might be able to use its market power to restrain or shift costs, thus enhancing the program's solvency.

The payment system could be structured so that total costs are budgeted to remain constant or be reduced.

Paying for bundles of services, as opposed to the specialty of the provider, might be a more economic way for Medicare to pay for treatment. Surgical services could be grouped more easily into uniform packages compared with medical services, because medical services can involve substantial differences in complexity of treatment and severity of illness and there are wide ranges in what is considered acceptable treatment (28, 29).

Financial incentives to provide care efficiently could keep overall costs from rising. If applied universally, this approach could create incentives to provide care in costeffective settings and could encourage the development of more cost-effective delivery systems.

Unless beneficiary cost-sharing existed, there would be little incentive for beneficiaries and their families to be cost-conscious or involved in treatment decisions.

Physicians who provided care most efficiently could receive financial benefits, particularly those with relatively low fees and those providing services that previously would have been undervalued.

National rates could be adjusted for geographic cost differences.

Payment based on a compilation of services could be easier for the Health Care Financing Administration to administer than the existing customary, prevailing, and reasonable (CPR) payment system, especially now that payment based on diagnosis-related groups has been implemented for hospital services. Paying for a bundle of services as opposed to each one separately should decrease Medicare's administrative costs. However, there is a danger that hospitals and physicians might "game" the system by coding bills and selecting patients to maximize revenue. Physicians might also encounter cash flow problems for Medicare payments that were delayed among other providers.

UNIFORM FEE SCHEDULES WITH MANDATORY ASSIGNMENT

Medicare could simply establish its own uniform schedule of physician fees. Participating physicians could be required to accept Medicare's prices (mandatory assignment), or the fee schedule could serve as an indemnity, with the physician billing patients for total charges. The indemnity approach is analyzed separately.

Uniform fee schedules with mandatory assignment would mean that Medicare, as opposed to the physician, would determine fees. Prices could be set competitively for specific procedures and services at levels that ideally would entice sufficient numbers of physicians to participate. Many contend that the limits on increases in prevailing charges have already resulted in de-facto Medicare fee schedules.

According to this alternative, participating physicians would have to agree to accept the Medicare fees as full payment for all Medicare patients, billing patients only for deductible and copayment amounts. Medicare would make use of its market power as a major purchaser and "prudent buyer" to reduce prices. Adjustments could be made for specialty and geographic differences among providers. The following is an evaluation listing possible advantages and disadvantages to the use of uniform fee schedules with mandatory assignment.

Access: If fees were high enough to induce sufficient physician participation, then access to services might in-

crease, especially for previously unassigned patients. The demand for services might increase as costs and financial risks associated with serious illness decrease for patients.

Patients would retain the freedom to choose among participating physicians, but there could be reduced access if fees were low and widespread nonparticipation resulted.

Legitimate differences in physician fees that reflected differences in skill or practice expenses might not be recognized; thus, some Medicare beneficiaries might be forced to obtain care only from providers who charge low fees. Access to specialist care might also be reduced.

Fee schedules could be structured to encourage health promotion and preventive health care.

Low fee schedules would not provide any incentives for the care of indigent patients who were not receiving Medicare or Medicaid benefits.

Quality: Differences in the quality of services among physicians would not be reflected in Medicare prices.

Payments could readily be limited to only procedures that were safe and effective.

Traditional physician-patient relationships would be retained.

If fee schedules were set too high, overuse of services might be encouraged.

Cost: Medicare could use its market power to reduce prices, but patient demand for services and lack of incentives for providers to limit volume could result in greater overall costs.

Incentives for "unbundling" services (billing separately) could also increase total costs.

It would be difficult to establish and update fees that reflect marketplace differences in prices.

The provision of care in cost-effective settings and the development of cost-effective delivery systems might be encouraged, but differences in overhead costs, insurance, and other practice expenses might not be recognized.

Fee schedules could be devised to create greater equity in physician payments, or they could be based on previous charge experience.

Fee schedules could be structured to encourage some types of care or to influence geographic and specialty choices of physicians. National fees could be adjusted for geographic cost differences.

Patients who previously would have had unassigned claims will have less incentive to be cost-conscious, and overuse of services could result.

Administrative costs might be lower than they are under the present system, because it would not be necessary to calculate data on customary, prevailing, and reasonable charges for each physician.

INDEMNITY METHOD

Medicare could also establish its own uniform fee schedules but without requiring mandatory assignment. The Medicare schedule of payments would indicate the amounts that Medicare would pay for specific services but would not set maximum fees. Physicians could still bill patients on a fee-for-service basis and patients would be partially reimbursed by Medicare according to a schedule of allowances. This indemnity concept applies to many workmen's compensation and commercial insurance programs. The following evaluation lists advantages and disadvantages to the use of fee schedules without mandatory assignment.

Access: If fee schedules were set too low, patients might have high out-of-pocket expenses. Financial barriers would also increase because patients would have to pay for services before receiving reimbursement. Consequently, some patients might be discouraged from seeking needed care.

Unless some form of insurance covering catastrophic health care expenses was established, or limits were set on the amounts that patients would have to pay, beneficiaries would bear the financial risks for major illness.

Freedom of choice among physicians would be maintained, beneficiaries (particularly those with low incomes) might be severely restricted in their choices.

Cost-sharing aspects of an indemnity approach might discourage patients from seeking preventive care unless generous indemnity amounts were allowed for activities designed toward health promotion and disease prevention.

Low fee schedules would not provide any incentive to care for indigent patients, but permitting higher charges to more affluent patients could subsidize such care.

Quality: The influence of Medicare on quality might decrease if the indemnified amount became a lower percentage of total charges.

Medicare could refuse to pay for ineffective or unsafe procedures.

Differences in the quality of services among physicians would not be recognized by Medicare. Beneficiaries who could afford to pay charges that were greater than the indemnified amounts might not be adversely affected, but others might be financially restricted to receiving only low-cost care.

A uniform policy involving national indemnity payments might reduce geographic differences in health care use.

Cost: Medicare could reduce its costs by setting low fee schedules.

Indemnity payment amounts could be adjusted for geographic cost differences.

Indemnity schedules based on average or historical costs might tend to perpetuate disparities in the current payment system, but schedules could also be designed to reduce such inequities.

Because financial incentives would arise for providers to increase volume and bill separately for each service, greater use of services might result.

Patients and physicians might increase their awareness of costs because they would know in advance the amounts that Medicare would pay.

Patients would have financial responsibility for differences between indemnified amounts and actual charges, including cost increases not matched by changes in indemnified payments. Incentives for patients to shop for care might increase competition among providers and encourage alternative mechanisms for health care delivery as well.

Physicians would continue to exercise control in determining fees and would be able to bill patients for full charges. These charges would be determined primarily by competitive market prices.

The financial incentive for physicians to be cost-effective in providing health care would almost disappear.

Patients and their families would have financial interests in being cost-conscious and therefore might be more involved in decisions about patient care.

Administrative costs to Medicare of determining customary, prevailing, and reasonable charges for each physician could be eliminated.

Administrative costs to physicians might be reduced because all billings would be directly to patients, who then would be responsible for obtaining Medicare indemnification.

RELATIVE VALUE SCALES

Another variation in establishing uniform fee schedules would be for Medicare to base its fee schedules on a relative value scale. Development of such a scale involves identification and selection of criteria by which all covered medical and surgical procedures would be evaluated relative to each other. Factors that might be considered include time, complexity, resource costs, extent of medical training required, patient risk, and patient benefit. The relative importance of each selected factor would be quantified and each procedure would then be assigned a weighted value based on the extent that it typically involves each criterion. Medicare could then set one national price, or separate prices by region or area, that could be multiplied by the values on the relative value scale to produce Medicare physician fee schedules. The scale could be applied with or without requirements for mandatory acceptance of assignment, and could also be used in determining amounts to pay for packages or bundles of services. The advantages and disadvantages to using the relative value scale depend to a large extent on the criteria chosen for evaluation and the relative weights they are assigned. The following is an evaluation of some of those advantages and disadvantages.

Access: The adoption of a relative value scale for Medicare physician payments would probably have little effect on patient access to care. Access might be influenced by the way the system is applied, whether or not it is coupled with mandatory assignment, and by the level of fees.

Beneficiaries would continue to be able to choose among providers.

Referrals to specialists, particularly patient self-referrals, might be influenced depending on the relative payment for specialist services.

The scale could be used to encourage health promotion and preventive health care by giving high weights to these activities.

The use of a relative value scale only would not greatly affect the availability of services to indigent persons.

Quality: An equitable system based on this scale should have little effect on quality.

Financial disincentives could be provided to discourage inappropriate services or services of questionable quality.

An economically neutral scale based on resource costs might not encourage or discourage clinical decision making. Such a system would also have little influence in determining the setting in which services would be received.

Geographical differences in the use of health care services might be diminished.

Cost: Relative value scales could be applied to achieve cost savings or they could be budget neutral. However, lack of control over volume of services could result in net increases in costs to Medicare.

The scales could be used to encourage cost-effectiveness and could be adjusted to encourage or discourage certain activities (for example, to encourage the use of immunizations) or to help achieve social goals (such as to encourage physicians to practice in underserved areas or in specialties not widely represented).

Disparities in current payment methods might be reduced. Physicians with relatively low fees or those providing services now undervalued might receive greater income.

Justifiable geographic cost differences could be recognized.

Physicians would know in advance the amount that Medicare would pay for specific procedures.

Physician payment based on a relative value scale would have little impact on the involvement of patients and their families in decisions concerning the use of health care services.

A scale applied to a uniform fee schedule might be less complex than the present system, and costs might be reduced if calculations based on customary, prevailing, and reasonable charges were eliminated.

CAPITATION

Medicare could pay participating physicians a fixed amount per year for providing covered services to Medicare beneficiaries. Using this approach, Medicare could contract in advance with individual physicians, medical groups, hospitals, HMOs, or others to provide all or certain kinds of physician services for groups of Medicare enrollees. Various capitation arrangements are possible. Capitated contracts could be negotiated for specific numbers of covered beneficiaries, for all beneficiaries in a geographic service area, or simply for all Medicare patients who receive treatment during a specified period. Capitation could also be applied to all Medicare covered services, only to physician services for hospital inpatients, or only to physician services for outpatients. The structure of a capitation program will significantly affect its complexity, ability to control costs, and the extent of physician participation. The following is an evaluation of such a program's potential.

Access: Beneficiaries could have a designated provider or case manager who would control access to care. The danger would exist that access might be too restricted. On the other hand, access could be facilitated by a good case manager.

There would be financial incentives for providers to accept only healthy patients selectively.

Services would be available only from approved providers. Enrollees therefore might lose the freedom to selfselect providers, particularly for specialty care.

Medicare beneficiaries might receive less priority or lesser attention than patients in noncapitated programs.

Medicare beneficiaries could be protected from the costs of major illness and their out-of-pocket expenses could be reduced.

Physicians would bear greater financial risks for the costs of medical care, and unless a physician belonged to a very large group, the risk might prove too great for participation.

Economic incentives to keep patients healthy could encourage preventive health care.

Although there would be no economic incentive to care for indigent patients, a capitated approach could be used to arrange for such care.

Quality: Conditions of participation could require provision of certain minimum benefits or adherence to certain standards.

Case managers usually determine what services are appropriate and screen patients so that they do not receive unnecessary care.

Professional standards and competition among providers might serve as safeguards of quality.

Financial incentives to provide the least costly care could diminish the quality of services and increase the potential for underservice.

Financial disincentives would exist for referrals and consultations.

Geographic differences in the use of health care services might more closely reflect actual differences in health care needs.

Cost: Total costs to Medicare could be predictable and controllable, and these costs would not be affected by the volume of services.

The financial solvency of the Medicare program would be improved.

Medicare could shop as a prudent buyer in the competitive marketplace. However, adjustments would need to be made for differences in patient mix based on identification of key patient characteristics, such as age or sex, that might indicate differences in severity of illness or complexity of care required. Otherwise, lowest-cost providers would have unfair competitive advantages.

The risks of cost increases and financial losses would be borne by providers and not by Medicare. Reasonable periodic adjustments in capitated payments would be necessary for the system to work. Advantages for physicians would include assurance of revenues per Medicare patient.

Efficiency and the development of cost-effective means for health care delivery would be encouraged.

Adjustments could be made to reflect geographic cost differences, or capitated amounts could be determined by competitive bidding within geographic regions.

Involvement of the patient and family in decisions about the use of services might be limited but could be influenced by cost-sharing requirements.

Administrative costs to Medicare might be reduced because there would be less need for Medicare billing and no need to maintain charge profiles or to set prices for participating providers.

VOUCHERS

Vouchers have been considered as another alternative to Medicare's current method of paying physicians. Vouchers could take the form of annual stipends or credits to be used directly by beneficiaries to pay for medical care. However, the use of vouchers would place beneficiaries at financial risk for the costs of care that exceeded amounts represented by the vouchers, might result in inadequate coverage for major medical expenses, and could create financial barriers to care for beneficiaries with low incomes. More typically, vouchers have been considered in the form that would provide each participating beneficiary with an annual stipend that could be used only for the purchase of health insurance.

Qualified insurance plans would have to offer coverage that met certain minimum standards: coverage, for example, would have to be equivalent to that provided by current Medicare health care benefits. Advantages to using these plans include the possibility that Medicare could profit from a competitive marketplace to reduce its costs and that beneficiaries might be able to shop for health insurance that better met their individual health care needs. Vouchers could be mandatory for all beneficiaries or could be made available as a voluntary option.

Medicare vouchers could be used with all of the payment approaches discussed in this paper. The effects of their use would depend primarily on the payment mechanism with which they were used and whether they were voluntary or mandatory for beneficiaries. Vouchers might work well under a capitated system of physician payment in which beneficiaries pay a fixed amount for annual health care. Under the fee-for-service or indemnity approaches, they might appeal only to the more affluent or healthier beneficiaries. Vouchers are not considered here as a separate alternative because of their overwhelming dependence on the physician payment approach with which they are coupled.

Summary

This position paper has identified 12 principles and objectives that we believe are fundamental to achieving the Medicare program's goals of assuring that elderly and disabled persons have access to health care services of an acceptable level of quality. Restraint of costs is an important and necessary principle of the program, but it should be recognized as a constraint, not a goal in itself. The American College of Physicians believes that access to health care services and maintenance of standards of quality are the most important goals of Medicare. In this light, we examined alternative methods, currently being considered by public policy makers, by which Medicare could pay for physician services. Each approach was assessed according to the fundamental principles and objectives of access, quality, and cost that we believe should be considered in any major revision of Medicare payment policy. These criteria are often conflicting, and trade-offs must be made among them. No single method of physician payment was found to be distinctly superior or inferior to the others. Advantages and disadvantages have been predicted for each method with the recognition that each may be altered significantly by individual modifications.

Our evaluations of the different payment approaches are not intended to foretell future events, but to identify possible results that could occur. In the absence of scientific findings derived from both short-term and long-term research studies, conclusive statements cannot be made as to the specific consequences of different physician payment approaches. Consequently, although based on analysis of the best available information, our conclusions, as well as those of others, must be recognized as general. Nevertheless, we believe that considerable value exists in scrutinizing the various physician payment alternatives according to the fundamental principles and objectives of the Medicare program. We further believe that such evaluations (and reevaluations as better research data becomes available) should play an important role in shaping Medicare payment policies.

Our analysis found that the current Medicare method of physician payment under the fee-for-service system provides beneficiaries with access to health care, allows beneficiaries choices among providers, and maintains traditional physician-patient relationships. Disadvantages include unlimited cost-sharing liability for Part B services from nonparticipating physicians; inadequate protection from catastrophic medical expenses; lack of effective mechanisms to prevent provision of unnecessary and inappropriate services; ineffectiveness in controlling costs; inequities in payments among physicians; and some disincentives to the provision of cost-effective care.

Paying predetermined prices for bundles of services, such as the use of diagnosis-related groups, offers financial incentives for providing care efficiently and could reduce some disparities in physician payment. The strongest advantages to this approach are the potential for containing costs and discouraging overuse of services. Drawbacks include incentives for underservice; the potential for undermining the physician-patient relationship; lack of incentives for health promotion; and financial disincentives to care for very sick and indigent patients. Particular problems include referrals; administrative obstacles concerning to whom payments would be made and how dollars would be distributed among physicians; increased needs for quality assurance; and the potential for unduly influencing whether care is provided on an inpatient or outpatient basis.

Advantages to the use of uniform fee schedules with mandatory assignment include the retaining of patient freedom of choice among participating providers and the

preservation of traditional physician-patient relationships. Costs to beneficiaries might be reduced, but costs to Medicare could increase due to greater patient demand for services and incentives for physicians to bill separately for each service. Uniform fee schedules could be devised to reduce current disparities in physician payments and could be structured to influence physicians' choices of geographic location and specialty. However, the greatest problem would be the difficulty in establishing and updating fees that accurately reflect marketplace differences. High fee schedules might result in greater access to services but could prompt their overuse as well. Low fee schedules could discourage physician participation, result in the provision of lower quality care to beneficiaries, or restrict access to only those providers who charged low fees.

The indemnity method incorporates the same features of uniform fee schedules without requiring mandatory assignment. According to the indemnity approach, however, physician charges would continue to be determined by the marketplace and the burden of financial responsibility for differences between actual charges and indemnity payments would be shifted to beneficiaries. Patient cost-consciousness might be heightened, but major problems are foreseen for patients' access to care, particularly for those with low incomes.

Development of a relative value scale would be a means of restructuring Medicare physician payment and could be used in conjunction with the current fee-forservice system or any of the other approaches. The scale could be applied to correct physician payment inequities, to encourage cost-effectiveness, and to influence physicians' practice patterns and choices among specialties and geographic locations. Application of the scale also has the potential to provide positive incentives to improve the quality and delivery of health care.

Advantages to using the capitation approach include improved cost control for Medicare, protection for beneficiaries from catastrophic expenses, encouragement of cost-effective use of services, and incentives to keep beneficiaries healthy. Disadvantages include the bearing by physicians of the financial risks for the costs of medical care, the restriction of patient access to care, and financial disincentives for referrals and consultations. In addition, potential dangers exist for underservice, selective enrollment, and distinctions in treatment of patients in capitated systems compared with other patients. Other problems include difficulty in recognizing and compensating for differences in patient mix and the need for physicians to belong to groups that are large enough to absorb the risks of participation.

Vouchers are primarily a mechanism by which payment would be made to purchase health insurance under any of the other approaches, and are not considered as a separate alternative.

Conclusions

Our analysis indicates that different problems may arise depending on which financial incentives are used to influence physician behavior. Alternative payment approaches, including the current Medicare payment method, have differing strengths and weaknesses when evaluated according to the fundamental principles and objectives of the Medicare program. Difficult choices in public policy will need to be made as to how to best achieve Medicare goals. Cost containment restraints should not be the overriding criterion dictating these choices. Each approach needs to be subjected to further research and thoroughly evaluated through testing in projects that have a rigorous research design such as randomized control trials.

In the meantime, action must be taken promptly to begin to reform the payment system so that it promotes access to high-quality, efficacious, and cost-effective comprehensive care. Utilization review and quality control are essential to maintain and improve quality, regardless of the payment mechanism. These key ingredients also should be incorporated into any payment approach for effective expenditure control.

The negative incentives and payment inequities that exist in the current fee-for-service system, with payments based on determinations of customary, prevailing, and reasonable charges, should not continue without major change. Adjustments are needed to reduce payment disparities that distort clinical decision making. Geographic differences in use of services and payment should be justified to reflect differences in the health of populations and in operating costs. Beneficiaries should not be subjected to unnecessary, ineffective, or unsafe care, and Medicare, as well as other health care payers, should pay only for services that are appropriate. Unless significant adjustments are adopted, the fee-for-service system may soon disappear.

Although extensive research efforts are needed for long-term Medicare reform, steps should be taken promptly to revise the current Medicare physician payment system. Consequently, the American College of Physicians offers the following recommendations for immediate action.

1. Attention should be given to revising the current fee-for-service system to enhance its strengths and reduce its weaknesses. Improvement and maintenance of quality should be emphasized. Payments should be closely linked to determinations of appropriateness. Accordingly, high priority should be given both to research that evaluates the effectiveness of various medical treatments, tests, and procedures, and to the rapid development of mechanisms that differentiate between appropriate and inappropriate health care services.

2. Adjustments should be made to the current Medicare payment system to correct for historical payment inequities that may induce physicians to provide technologic and procedural services as opposed to cognitive and interpersonal services such as history taking, preventive health care, or patient education and counseling.

Mechanisms also need to be developed to assess more accurately the cost of providing health care services. Payments should be reduced for certain technologic services for which costs per unit of service may decline once the procedure becomes widely used. Relative value scales could provide the means for implementing all of these adjustments; therefore, research on the development and testing of these scales should also be given high priority.

3. A pluralistic system should be maintained in which development and testing of alternative physician payment mechanisms is encouraged. Experimentation should focus on programs in which payment is based on packages or bundles of services and on various approaches that involve capitated payments. Impacts from different payment alternatives should be evaluated according to criteria similar to those we have identified before any approach is adopted nationwide.

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