

Findings and Policy Options

Nobody can really guarantee the future. The best we can do is size up the chances, calculate the risks involved, estimate our ability to deal with them, and then make our plans with confidence.

—Henry Ford II

Contents

	<i>Page</i>
Introduction	151
Coverage of Specific Medical Technologies.	151
Broader Incentives Toward Technology	156
Hospital Payment	156
Physician Payment	164
Alternative Approaches to Changing Incentives	168

Findings and Policy Options

INTRODUCTION

The dual relationship between medical technology and the Medicare program has been explored in previous chapters: Medicare policies affect the adoption and use of medical technologies, and patterns of use of medical technologies significantly affect the types and levels of Medicare costs. This chapter identifies several options for changes in Medicare policy that could be used to influence medical technology adoption and use and to restrain Medicare program costs.

Medicare policy can influence the adoption and use of medical technologies in order to cut program costs both through policies directed specifically toward individual technologies and through policies that provide broad incentives for rational adoption and appropriate use of medical technologies. This chapter presents findings and policy options by issue area within each of these two broad policy areas. The first section of this chapter focuses on policies directed at individual technologies and contains options pertaining to Medicare coverage policy. The second section focuses on policies that provide broader incentives toward technology and contains options directly concerning Medicare hospital and physician payment and approaches encompassing interactions between Parts A and B of Medicare as well as interactions between Medicare and the general health care system.

The options identified in this chapter generally fall into the following categories:

- changes in Medicare's coverage policy for specific technologies;
- changes in the methods of Medicare payment to hospitals;
- changes in the methods of Medicare payment to physicians; and
- approaches to changing the incentives for the adoption and use of technology that do not directly involve, but may be related to, Medicare payment mechanisms (e.g., encouraging the development of alternative cost-effective health care delivery systems).

Some of the options involve direct legislative action. Others are oriented to the actions of the executive branch but would involve congressional oversight or encouragement.

The order in which the options are presented is not meant to imply priorities among them. Furthermore, the options are not, for the most part, mutually exclusive. Adopting one option in any category does not necessarily imply that others are inapplicable within that category or within any other category. More often, a careful combination of options can better produce the intended effects. In some cases, an option may suggest improvements for more than one aspect of Medicare policy. It is important to keep in mind that changes made in one area have repercussions in other areas.

COVERAGE OF SPECIFIC MEDICAL TECHNOLOGIES

ISSUE:

How can Medicare's coverage process for specific technologies be improved?

It is generally agreed that third-party coverage policy has influenced decisions about the purchase

of some expensive, visible medical technologies. Thus, the coverage of specific technologies is a potential method of containing Medicare costs through control of the diffusion (i. e., adoption and use) of medical technologies. In the present cost-conscious environment, the attention of policymakers may become focused on expensive

technologies, i.e., both technologies with a high capital purchase price and technologies with lower capital purchase prices but high utilization. Long-term effects of other technologies, however, should be considered in Medicare coverage decisions. The precise relationship between coverage policy and purchase of other kinds of medical technologies or the *use* of any technologies remains speculative.

The benefits for which Medicare will pay are designated in broad general categories such as inpatient services, outpatient services, and physicians' services. With few exceptions, therefore, Medicare coverage policy is determined at the local or national level on a technology-by-technology basis. Coverage decisions by Medicare contractors or by the Health Care Financing Administration (HCFA) follow the statutory mandate which excluded Medicare payment for items and services that are not "reasonable and necessary" for diagnosis, treatment, or improved functioning of a malformed body member. "Reasonable and necessary" items and services are interpreted as those that meet four criteria: general acceptance as safe and effective; not experimental; medically necessary; and provided according to accepted standards of medical practice in an appropriate setting. **Evaluation of the nonmedical effects, for example, economic and social effects, of a technology is usually not part of a technology assessment for coverage purposes.**

HCFA officials and individual Medicare contractors have had considerable latitude in determining which technologies are to be covered for reimbursement. Furthermore, there is considerable variation in the implementation of national coverage decisions by Medicare contractors.

Uniform implementation of HCFA's coverage decisions might foster equal treatment of Medicare beneficiaries throughout the country. However, although traditional local variations in the practice of medicine do mean that Medicare beneficiaries effectively receive somewhat different benefit packages, there is no evidence that local differences in standards of care affect patients' health. Uniform implementation of coverage deci-

sions may discourage local differences, and some observers believe that it may interfere in the practice of medicine. The strength of such interference would depend on the influence coverage policy has on the adoption and use of medical technology in the first place.

The lack of necessary information on which to base assessments and coverage decisions is a serious problem. Although the guidelines used by the Office of Health Technology Assessment (OHTA) to evaluate the safety and efficacy of medical technologies stress the value of basing coverage recommendations to HCFA on data from controlled clinical trials or other well-designed clinical studies, in many cases, such data are unavailable.

Furthermore, **timeliness of identification of new or outmoded technologies is important to Medicare, because the assessment process is itself time-consuming.** Some technologies, such as heart transplantation, are so expensive and visible that they have been identified, but a coverage decision has been delayed. In the case of the artificial heart, the ostensible reason for the delay is to allow a thorough assessment of the technology's safety, efficacy, and other aspects. Some analysts have noted that the true reason behind the delay is cost containment (22,258). Such delays in coverage decisions may save Medicare program costs for a time. Sometimes the coverage decisions are slowed by the backlog of technology assessments faced by OHTA. In other cases, new techniques, such as coronary artery bypass graft (CABG), have been paid for by Medicare under existing procedure codes. By the time payment issues were raised, CABG was considered generally accepted medical practice.

A new issue for the Medicare program is the role of coverage policy with respect to the new Diagnosis Related Group (DRG) prospective payment system for hospitals. Although the coverage process and the DRG-rate adjustment process share a similar "approval for payment" function, they differ in that a coverage determination focuses on a specific technology, while adjusting DRG payment rates focuses on the larger entity of a diagnostic group, which includes particular technologies. Moreover, the DRG-rate adjustment process must include issues of cost as an integral issue, while the coverage process at pres-

¹It should be noted, however, that current national coverage policy is considered an interpretive rule and does not have the force of law.

ent does not consider cost issues. Despite their differences, the technology assessments performed for the coverage and DRG rate adjustment processes no doubt will have similarities, and their coordination should be encouraged.

An idea related to the coverage process that may be worth exploring is the use of Medicare conditions of participation to influence the adoption and use of individual medical technologies. A new condition of participation for hospitals, for example, could require that hospitals have technology assessment committees. The process of explicitly discussing safety, efficacy, and cost questions before a hospital purchases, and physicians use, a particular technology may be worthwhile. A major finding of OTA's 1980 assessment of cost-effectiveness analysis (CEA) in health care was that the process of identifying and considering costs and benefits in CEA might be more valuable in decisionmaking than the rigid and formal application of CEA results in health care program decisions (353).

There is no process of identifying and considering costs and benefits in CEA for a hospital that is yet acceptable to all concerned, however, nor is there evidence of effectiveness of such processes in making technology adoption or use more rational. In part, this is because a **decision that is rational from a hospital's perspective may not be rational from society's perspective**. Furthermore, Medicare conditions of participation are being simplified under the current Administration to reduce the burden of administering detailed nonstatutory requirements. Adding a new condition of participation would be counter to that objective. In addition, hospitals may decide to use technology assessment committees under the DRG payment system even without the requirement because of the complexity of the incentives. Many hospitals already have purchasing departments or committees that perform the function of assessment with variable rigor.

²Conditions of participation are requirements that must be met by providers in order to be allowed to receive payment for Medicare patients. An example is the requirement that hospitals conduct utilization review.

Option 1: Amend the Medicare law to allow coverage for emerging technologies on an interim basis in exchange for data on their safety, efficacy, and costs.

Implementing this option could improve the availability of data necessary for good coverage decisions and, ultimately, for the rational adoption and use of medical technologies.

Defining "emerging" technology is difficult. The movement of any technology from the research phases into common clinical practice represents a continuum, and there is no specific point at which a particular device or technique would stop being "experimental." Developing criteria would be necessary to ensure that interim coverage was not allowed too early in a technology's development in order to minimize the risks to patients involved in clinical trials.

Coverage of emerging technologies in return for data would yield new information on elderly patients—few previous clinical trials have collected data on such patients. Involving elderly patients in clinical trials would have positive and negative aspects. A disadvantage would be the inherent risks to patients involved in clinical trials of emerging technologies, although subjecting Medicare beneficiaries to technologies tested only on younger patients also involves risk. Designing clinical trials involving elderly patients is very difficult, because such patients usually have more than one medical condition.

Important decisions would have to be made. One such decision would be about how long to provide interim coverage. Time limits would have to be explicit from the beginning, if interim coverage were implemented. Another important decision would be where and to whom the interim coverage would apply. Sites and providers to conduct clinical trials would be selected as part of the research peer review process. Although the selection of specific sites and investigators for interim coverage might be regarded as favoritism, limiting Medicare coverage only to sites and investigators with very specific protocols would seem to be a more prudent approach than paying for the use of emerging technologies on a more widespread basis. Once an emerging technology's safety and

efficacy had been established, coverage could be extended, or, if Option 2 were implemented, other appropriate sites and providers could be identified for permanent coverage.

The collection of cost data is a key element of this option. Thus, this option is closely related to Option 3 below. If Medicare payment rates, particularly for Part B services, are ever to be based on technologies' costs instead of past charges, the Medicare program will need better cost data on which to set these rates. In the past, costs have often been unknown until technologies were already in widespread use.

Coverage of emerging technologies in exchange for data would initially add costs to the Medicare program, but the information gained could very well be worth the investment. The availability and interpretation of better data on the safety, efficacy, and especially costs of new technologies would provide a good mechanism for Medicare policy makers to decide how best to expand or contract benefits in a rational manner. Such coverage would shorten the usual delay involved in getting data from clinical trials on which to base coverage decisions. Although long delays may save Medicare costs in the short run, such delays may sometimes mean that some patients are denied efficacious technologies.

Option 2: Amend the Medicare law to limit coverage of complex technologies to their provision in selected sites by selected providers.

Certain medical technologies involve highly complex equipment and supplies and require a skilled team of providers. Limiting Medicare coverage for specified complex technologies to their provision in particular sites could help control Medicare costs and might also improve quality of care.

Theoretically, implementing this option would help control costs by reducing excess capacity. There would be a reduction in unused technologies in a number of sites along with economies of scale produced by having larger capacities at only a few sites. Certain surgical procedures performed in high-volume hospitals have better patient outcomes than the same procedures done in low-volume hospitals (124a). And for high vol-

umes of complicated surgical procedures, the teams of surgeons, nurses, anesthesiologists, and medical technologists who work together would learn to work together more efficiently and effectively.

While limiting sites and providers could help control costs by limiting the adoption and use of complex technologies, it might also limit the numbers of patients who could be treated. If need exceeded capacity, a method for rationing care would be necessary.

Currently, private insurance companies cover exceptional technologies in selected sites: Blue Cross will pay for the heart-lung transplantation done at Stanford University. And Medicare itself has set some precedent by limiting payment for therapeutic apheresis to its use in specific settings and by specified providers (26).

A potential problem with selective coverage by Medicare is that such coverage could lead to two-class medicine. Nonselected hospitals, for example, could purchase major medical equipment that might not be covered by Medicare. Physicians in the hospitals might then use the equipment only for their non-Medicare patients. The probability of the occurrence of this situation would depend on the cost of the technologies and the availability of trained staff, as well as on the proportion of the hospital's patients who are Medicare beneficiaries.

The specification of providers and sites for certain technologies might be regarded as unequal treatment of providers. Yet in this option, as in the previous one, sites and providers could be selected on a peer reviewed basis to assure quality and to maintain acceptability within the medical profession. Peer review such as that undertaken by the National Institutes of Health (NIH) study groups would be one possibility.

The DRGs encompassing the specified technologies would have to be treated differently in selected hospitals (sites other than hospitals are not yet under the DRG payment system). Assuming that these complex technologies would be very expensive, Medicare hospital payment would somehow have to support their rational adoption

and use (see Option 6). Otherwise, all cases using such technologies would be outliers.

Option 3: Mandate that Medicare coverage decisions include cost considerations when appropriate,

Because cost containment is so crucial in the Medicare program and in the health care system, it may be necessary to explicitly include cost considerations in coverage decisions. At present, the adoption and use of medical technologies involves *implicit* rationing of scarce dollars. In today's economically constrained environment, perhaps the tradeoffs among coverage decisions should be more explicit. Especially if Medicare covers high-cost technologies that yield few benefits, other services must be eliminated in order to decrease program expenditures,

Because Congress provided little guidance on how it intended the statutory "reasonable and necessary" tests to be applied, the question of the appropriateness of using cost information in Medicare coverage decisions has been raised by the U.S. Department of Health and Human Services (DHHS) several times. DHHS has asked its legal counsel to investigate the definition of "reasonable and necessary" in the Medicare law. No clear decision has yet been provided,

If quality of medical care for Medicare beneficiaries is to be maintained, a method of determining the most cost-effective technologies in health care is highly desirable. CEAs and cost-benefit analyses (CBAs) represent a possible group of methods. One strength of using cost considerations in general, or CEA/CBA specifically, in Medicare coverage decisions would be that the implicit rationing would become explicit. CEA/CBA methods still need to be enhanced and refined, but the process of analysis itself can help make assumptions explicit and can help identify as many costs and benefits as are feasible for consideration in decisionmaking in the health field. It is important to note that the availability of cost data is essential for this option.

A previous OTA study (353) found the use of formal, well-conducted, sophisticated CEAs or CBAs in decisionmaking in the health field is the exception rather than the rule. Adding it to the

Medicare coverage decisionmaking process might be a helpful step.

Although on the surface it would appear that technology evaluations including cost criteria would be more effective in allocating resources than those without, the relative effectiveness of the two types of evaluations has yet to be demonstrated. At this time, though, it appears that CEA/CBA can at least aid decisionmaking when used in conjunction with other kinds of information (353).

Option 4: Conduct oversight hearings to improve the Medicare coverage process.

Several administrative problems pertaining to the Medicare coverage process have been identified in this report. Problems that need attention include the following:

1. the inadequate identification of emerging and outmoded technologies for coverage decisions;
2. the lack of uniformity in the implementation of national coverage decisions;
3. the timelag involved in the coverage process, including technology assessment;
4. the complex coding system and proliferation of codes; and
5. the incomplete dissemination of information.

These problems all potentially raise Medicare's costs. Their solutions may save some money and reduce the disparity in Medicare beneficiaries' coverage across the country. Numbers 2, 3, and 5, however, could actually decrease Medicare expenditures, so a detailed analysis of these problems may be warranted. The timelag, for example, could save Medicare program costs but have negative consequences on patients' health. If patients use more services in the long run because of the adverse effects of coverage delays, costs to Medicare could increase.

There are several ways of improving the identification process. Contractors have recently reported that they are receiving inquiries concerning the coverage status of new technologies from manufacturers and providers. HCFA could monitor the Food and Drug Administration's (FDA's) processes to anticipate new medical devices and

NIH's registries where new applications of procedures (e.g., percutaneous transluminal coronary angioplasty) are followed. Similar efforts in the private sector could be scrutinized.

Oversight hearings could be used by Congress to focus the attention of DHHS on problems in the coverage process. However, the law provides DHHS with the authority to make, but not to implement, coverage decisions. The coverage index

appendix, other manual instructions, and intermediary lessons are usually considered interpretive rules, and as such do not have the force of law.

DHHS may need additional funds to improve its administration of Medicare coverage. Whether the savings to the program would justify the extra cost of the administrative changes that might be necessary is speculative without further study.

BROADER INCENTIVES TOWARD TECHNOLOGY

Hospital Payment

ISSUE:

How can Medicare's hospital payment system incorporate appropriate incentives for generating effective and efficient adoption and use of medical technology?

The retrospective, cost-based hospital reimbursement system under which Medicare operated from 1966 until fiscal year 1983 was significantly altered first by the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) (Public Law 97-248) and then by the Social Security Amendments of 1983 (Public Law 98-21). The latter mandated the phasing in of a prospective, per case, hospital payment system based on DRGs.

Prior to the implementation of Medicare's DRG per case payment system, hospital payment was based on utilization of medical technologies or on days of hospital care. Such payment may provide incentives for the inappropriate use of medical technologies in hospital settings (e.g., requiring chest X-rays upon admission to the hospital and admitting patients to the hospital on Friday before Monday surgery). Per case payment is an improvement over per diem payment but still provides rewards for certain types of inefficient behavior (e.g., unnecessarily increasing admissions). Another possible method of hospital payment is cavitation payment. Unlike per case payment, cavitation payment offers incentives to decrease admissions. Paying by cavitation would

require data systems other than those currently available.

Although it is too early to evaluate the effects of DRG hospital payment, Medicare's new hospital payment system gives financial incentives to hospitals to increase admissions and reduce lengths of stay. Under DRG payment, therefore, some patients may be admitted to the hospital unnecessarily, others may be discharged too early, and some may not get all their elective care in one hospital stay. In addition, under DRG payment, hospitals have a financial incentive to decrease length of stay as a way of both opening beds for new admissions and decreasing the hospital's cost per stay. To the extent that a hospital's occupancy rates are low, the incentive to shorten length of stay is weakened, because the hospital will have difficulty in filling the opened beds and covering its fixed costs.

Medicare's DRG hospital payment system also provides incentives for hospitals to reduce the number and cost of ancillary services. Prior to the implementation of the DRG system, hospital administrators had financial reasons to encourage physicians to use available technologies. Under DRG payment, hospital administrators are likely to discourage physicians from using many high-cost technologies, particularly diagnostic tests that add only marginal information and may not change the course of treatment. In some cases, the substitution of low-cost technologies for high-cost technologies may result in a decline in quality of care. Thus, quality of care remains an important issue under DRG payment.

DRG prospective payment has changed the incentives provided under cost-based reimbursement for the adoption and use of medical technologies in hospitals. In general, hospitals now have greater incentives to adopt new medical technologies that reduce their costs and lower incentives to adopt technologies that increase their costs, even when the latter are worth their added costs to society. **But the incentives for the adoption of medical technology depend on the way capital costs are treated. Thus far, capital costs are not covered by the DRG hospital payment system and are treated as pass-throughs. Treatment of capital costs as pass-throughs does not alter the direction of the incentives governing technology adoption under DRG payment** as long as the effect of a new technology on total cost per case is in the same direction as its effect on operating costs. However, **for certain medical technologies, namely, those which reduce operating costs but raise total costs per case, capital cost pass-through reverses the incentives for adoption inherent in DRG payment.** Congress has recognized that capital costs are still a problem for Medicare, and the law requires DHHS to study how capital costs should be paid in connection with the DRG hospital payment system.

Innovations in medical devices, drugs, and medical techniques that improve the quality of care for the Medicare population but also increase hospital per case costs may not be as readily adopted under DRG payment as they were before. Quality is a difficult concept to define and its measurement is equally complex. Technology assessments may offer some assistance in comparisons of the quality of care afforded by different technologies. Comparisons of different measures of quality are important for national policy makers who must decide whether a particular quality-raising technology is worth its cost to society and, thus, whether it should be adopted.

Congress has provided some control over quality of care by mandating the utilization and quality control peer review organizations (PROS). Hospitals must have signed agreements with these PROS in order to receive Medicare payments. Funding for the PRO reviews will come from the Part A Medicare trust funds. The PROS will be evaluated on the basis of their individual contracts

with HCFA. One of the responsibilities of the PROS will be to monitor the potential admission/discharge/readmission problem.

The development of DRGs originally was not related to payment, but DRGs were refined once they were used for payment purposes. **Although Congress has adopted DRGs for the Medicare hospital payment system, improvements of DRGs and of the payment system are still needed.** Such refinements are anticipated in light of the series of congressionally mandated studies and the Prospective Payment Assessment Commission's responsibility for recommendations on changes in DRG relative weights and categories.

The success of the DRG payment system in containing Medicare's hospital costs remains to be seen, as does its impact on the adoption and use of medical technologies. Thus, experience with other approaches to hospital cost containment is still necessary. Furthermore, the effect of a Medicare-only payment system on health care delivery is unknown. **Whether a Medicare-only DRG payment system operating in the context of a largely pass-through system for other payment can bring about the desired changes in hospital and physician behavior on which ultimate cost savings depend is largely unknown.** Thus, it would be useful to examine how all-payer systems perform.

Option 5: Encourage DHHS to support further refinement and development of case-mix measures other than DRGs.³

Congress has recognized the need to refine the DRGs as the case-mix measure for hospital payment by mandating several studies. Severity-of-illness measures, for example, will be studied for their applicability within the DRG system. Even with refinements, however, a DRG-based system may not be optimal, and case-mix measures that account for resource use more accurately than DRGs might be found. Examples of potential alternatives to DRGs are Disease Staging, the Severity-of-Illness Index, and Patient Management Categories (PMCs).

³The background information on this option was discussed in detail in the OTA technical memorandum entitled *Diagnosis Related Groups (DRGs) and the Medicare Program: Implications for Medical Technology* (343)

Disease Staging and the Severity-of-Illness Index were both designed to provide a framework for classifying diseases according to the relative severity of the patient's condition. Both have required extensive developmental work and testing, which are still underway. Use of either measure would require more data than are generally available on Medicare claims at the present time, though the staging approach can be employed by using data that are normally included in hospitals' computerized records. Neither measure has reached the point where it is suitable for widespread implementation in a reimbursement context. However, the existence of such measures, at a minimum, serves as a reminder that the present set of DRGs ultimately may not be the best system for classifying patients.

PMCs are also in the developmental stage and are being tested now. This case-mix measure differs from others, including DRGs, in that PMCs are normative. Physicians specify an optimal set of clinical care components based on a patient's clinical characteristics. This set is the basis for the relative cost weights of PMCs. The system appears unique in that it recognizes that optimal patient management should be the focus of a system that seeks to encourage efficiency.

Development of alternatives to DRGs will require continued interest and funding from DHHS. Research and demonstration projects in which these and other alternative case-mix measures can be studied and refined may need additional funding. Other studies could be mandated if necessary.

Option 6: Encourage DHHS to develop DRG price adjustment methods that result in higher DRG payment rates for those hospitals that purchase and use certain socially desirable but costly new medical technologies.

Medicare's DRG hospital payment system provides financial incentives to hospitals to purchase and use those technologies that reduce costs per case. Thus, specific policy might be required to encourage the adoption of socially desirable technologies that raise costs. Making extra payment for a DRG conditional on a hospital's adoption and use of a new technology would encourage the technology's diffusion.

Two possible mechanisms for making adjustments in DRG prices that would be conditional on the adoption of technology are reliance on hospital-initiated appeals of DRG prices and creation of new technology-specific DRGs. Either of these mechanisms could stimulate adoption of desirable but cost-raising technologies. If a new DRG with a higher rate were created specifically to pay hospitals only if they actually adopt and use a technology, the adjustment in price would clearly be an incentive to adopt.

Both of these mechanisms have drawbacks. First, reliance on case-by-case hospital appeals of DRG prices is likely to be administratively costly and cumbersome in comparison to other adjustment methods. Second, both the appeals mechanism and the creation of new DRGs would result in an effective increase in the number of DRG categories, or DRG inflation. Eventually, if the number of categories increased to significant levels, DRG payment would develop into a system resembling a fee-for-service system, because more and more categories would exist for specific procedures or services. Such a system, in turn, would destroy the incentives inherent in per case payment to minimize the utilization of services.

Conditional DRG payment adjustments would work best if limited to a few very high-cost technologies whose introduction would be strongly discouraged in the absence of such an adjustment. The majority of cost-raising technologies probably would be adequately handled through periodic reestimation of the costs of DRGs. The timeliness of reestimation is considered in Option 7.

Option 7: Amend the Medicare law to require annual reestimation of the relative costs of DRGs.

Congress has recognized the need for periodic adjustment of DRG prices. The law currently calls for recalibration (assigning new relative weights to DRGs or establishing new DRGs) at least every 4 years. This option offers a refinement of that mandate and differs from it in two ways: 1) it defines reestimation as a type of recalibration based on the estimation of historical relative costs of technology; and 2) it suggests adjusting the relative rates every year.

From year to year, some DRGs will experience cost-saving technological innovations; others will experience cost-raising ones. The relative prices of personnel, supplies, and other inputs will also change, with consequences for relative DRG costs. Relative DRG rates should reflect the relative costs of efficient and clinically optimal care, including appropriate use of technologies. The purpose of annual reestimation would be to keep DRG rates reasonably in line with the cost of efficient care. Annual reestimation of relative DRG rates would also encourage the rational adoption and appropriate use of medical technologies. Under the current statutory requirement, up to 4 years may elapse after the emergence of a new, fast-developing technology before the relative DRG rates would even begin to reflect the change, and the gradual adoption of new technologies would further delay the full capture of their effects in DRG prices. Implementation of annual reestimation would provide a quicker mechanism for adjusting prices to the efficient production of care.

Financial incentives for hospitals to increase their efficiency would not be weakened by frequent reestimation of relative costs of DRGs. This option focuses on *relative* prices, so it would still be in a hospital's best interest to perform efficiently. Since the reestimation would be based on average prices across hospitals, the inclusion of a large number of hospitals' cost reports in the reestimation is important so that there is a large sample size within each DRG.

The potential gains from DRG creep, or deliberately assigning a patient to a higher priced DRG to receive more payment, would diminish if DRG prices were reestimated frequently. New DRG prices or weights would reflect the new distribution of patients among DRGs and the new average costs per DRG. Over time, reestimation of prices would cause the more profitable DRGs to become less profitable, and the less profitable ones more profitable. Thus, one could expect a gradual decline in the potential for "gaming" via DRG creep with periodic reestimation of DRG prices.

One advantage of frequent updates of DRG prices would be the alleviation of the lag that is

already built into the current system because fiscal year 1984 prices are based on fiscal year 1981 data. The 1981 data reflect accepted modes of practice in 1981 and do not account for new technologies currently in practice. Furthermore, Medicare cost reports are available on an annual basis, so annual reestimation would require no additional data collection (at least until fiscal year 1988, when cost reports will no longer be required). Frequent reestimation of DRG prices would capture gradual changes in hospitals' costs which should result as hospitals seek technological efficiency.

If the reestimation were too frequent, however, hospitals would not be able to plan their moves toward efficiency as well as they could if they were certain of particular payments for a segment of time. Because the year-to-year changes in relative prices are likely to be small and gradual, an annual (or at most biannual) reestimation would seem to provide the optimal mix of certainty for hospital planning with the adjustment of prices for efficient production of care.

Administering annual reestimations would be slightly more expensive for Medicare than reestimation every 4 years. Not only would the process be more frequent, but the data requirements for reestimation—cost reports and patient charges—would continue indefinitely. The requirements for data collection would increase administrative costs to the hospitals, although many hospitals are likely to use the same data for internal management functions under DRG payment.

Option 8: Amend the Medicare law to strengthen controls over hospital admission rates.

Under Medicare's DRG prospective payment system, hospitals are paid by Medicare on the basis of the number of Medicare cases treated in each DRG. Thus, the DRG hospital payment system provides a strong financial incentive for hospitals to increase the number of Medicare patients they admit. One of the responsibilities of the PRO program is to monitor hospital admissions. The following suboptions are presented as possible support for the PRO regulations.

Option 8a: Amend the Medicare law to require a second deductible for rehospitalization within 60 days of the first admission.

Implementation of this option could save the Medicare program money in two ways. Currently, Medicare beneficiaries do not have to pay a second deductible for rehospitalization within 60 days of the first day of the initial admission. By increasing beneficiary cost-sharing, adopting this option would save Medicare program costs. Imposing a second deductible could also save costs by encouraging cost consciousness in physicians. Physicians would be aware of the financial burden of readmission on their patients, and such patients might take a more active role in decision-making about readmissions.

Identifying unnecessary discharges and readmission is a PRO responsibility. It is important to recognize that some readmission are necessary. Often, elective procedures are postponed until patients are stronger and more able to withstand surgery or invasive procedures. Sometimes unrelated diseases may strike patients in short periods of time.

A drawback to the second deductible is that Medicare beneficiaries already carry a heavy financial burden for their health care. Furthermore, the amount of control patients actually can have in making decisions about hospitalization is questionable. Thus, a second deductible might decrease access to inpatient hospital care for some elderly and disabled patients. On the other hand, its effect on admissions may be low because a high proportion of the elderly have supplemental ("Medigap") medical insurance. (Of course, Medigap insurance premiums are likely to rise in response to cover the increased costs.) The strength of the incentives is unknown, because there are no empirical studies on how the elderly would respond to additional cost-sharing.

Finally, implementation of this option might actually *increase* Medicare's costs. Physicians and patients might decide to keep patients in the hospital if there is a chance that a readmission might be possible in 2 or 3 weeks.

Option 8b: Amend the Medicare law to provide a short-term outlier policy for DRG payments.

With a short-term outlier policy, Medicare would not pay the full DRG payment if a length of stay were less than a particular number of days for each DRG. Such a policy would counteract the incentive under DRG payment for hospitals to admit patients for very short stays instead of treating them on an outpatient basis. A potential benefit could be that marginally ill patients who might not require the intensive services of an inpatient hospital stay would not be admitted. A potential problem would be that such patients might be kept beyond the outlier threshold length of stay to avoid the short-term outlier payments. The strength of the incentives under this kind of policy would depend on the marginal costs of admitting a patient compared to the outlier price, as well as the hospital's influence with its admitting physicians. The effect of a short-term outlier policy on the volume of patients in each hospital or in hospitals in the aggregate is unknown.

Option 8c: Amend the Medicare law to adjust DRG payments for patient volume changes.

DRG prices are based on the assumption that hospitals' annual volumes are predictable and vary only slightly from year to year. Adjusting DRG payments to hospitals for volume changes could directly balance the financial incentive that DRG payment gives hospitals to admit more and more patients. Unusual increases in the annual number of hospital admissions could trigger a penalty charge against the hospital's total Medicare payment, or each DRG payment could be decreased by a certain amount. Thus, for example, if a hospital's volume increased 10 percent, DRG payments could be decreased by an amount reflecting the marginal costs of those additional admissions. While this payment reduction would discourage hospitals from unnecessarily increasing their admissions, the net decrease in a hospital's revenues would be relatively small.

A two-way volume adjustment imposing a penalty for unusual increases in admissions and giving a bonus for unusual decreases could be instituted. A penalty for unusual increases in patient volume could weaken the incentives for hospitals to overadmit patients. A bonus for unusual decreases in admissions could protect hospitals from the financial problems caused by population

migrations. It should be noted, however, that some hospitals are inefficient or provide a lower quality of care and may experience decreased admissions for these reasons; the low-end volume adjustment might allow them to remain open when they actually should close.

Another important consideration for deciding whether to adopt a volume adjustment is the fixed-cost-to-variable-cost ratio for various hospitals. Although low-occupancy hospitals may need to increase their patient volumes in order to cover their fixed costs, large volume increases may trigger high variable costs. Thus, even without volume adjustments, the fixed-cost-to-variable-cost ratio and its relationship to the DRG payment and penalty are important.

Volume adjustment also discourages the potential for specialization of services within hospitals for the purposes of efficiency. Payment based on DRGs gives hospitals financial incentives to treat patients in those DRGs in which the hospitals are efficient and to avoid treating patients in those DRGs which lose money. Thus, consolidation of services is a potential result of the DRG payment system. Again, high- and low-occupancy hospitals would be affected differently, with fixed and variable costs important to their decisions about which patients to treat.

Option 8d: Amend the Medicare law to establish financial incentives for physicians' decisions about hospital admissions that are consistent with the incentives of DRG payment.

Decisions to admit and discharge patients and to use medical technologies during hospital stays are primarily made by physicians, although patients' decisions are certainly important. Under DRG hospital payment, physicians will probably be pressured by hospital administrators to discharge patients earlier than they previously have and to readmit patients for elective procedures. While quality assurance and utilization review programs will reinforce physicians' own inclinations to provide adequate care for their patients, financial incentives could be established to mitigate any potentially harmful pressure from hospitals. One possibility would be to pay physicians only half their fees for rehospitalization within 60 days.

A potential administrative and policy problem might arise when more than one physician is involved in a patient's care. In a case, for example, in which one physician admits a patient to a hospital for diagnosis and then, after discharge, refers that patient to a specialist for long-term treatment, it remains questionable whether a hospitalization should be counted against the patient (if Option 8a were implemented), the physician (in the case of this option), or the hospital.

Identifying readmission would be a fairly simple task, and monitoring their appropriateness is a PRO responsibility. Difficult judgments will have to be made about which ones are unnecessary and what caused the readmission—not all complications can be predicted, nor can they necessarily be averted by additional hospital days during an initial admission. The difficulty in making such judgments could be compounded by administrative difficulties of combining Part A data on hospital admissions with Part B data on physician payment.

Option 9: Amend the Medicare law to control capital expenditures by hospitals by removing capital cost pass-throughs.

Historically, capital expenditures by hospitals have been reimbursed under Medicare on the basis of depreciation and incurred interest expenses. Under the DRG hospital payment system, at least during the 3-year transition period, capital costs will continue to be treated as pass-throughs. The pass-through method of payment for capital, which directly links the level of payment to the amount of capital investment undertaken by a hospital, does not discourage inefficient capital purchases. However, its feasibility has been demonstrated, it is fair in the sense of treating hospitals alike, and it poses no barriers to equal access to medical services,

The Social Security Amendments of 1983 (Public Law 98-21) mandated a DHHS study of alternative methods of handling capital under Medicare's DRG hospital payment system. Three methods of limiting capital payment to contain costs for Medicare were discussed in chapter 6: 1) uniform payment (flat rate) approaches; 2) hospital-specific controlled rates; and 3) if the

pass-through is continued, direct regulation of capital expenditures.

If the capital pass-through is continued, capital expenditures could be regulated on a project-by-project basis. Such regulation could be implemented through certificate-of-need (CON) programs or other agencies. The political process involved in CON programs might, but would not necessarily, provide equity of access to medical technologies. Studies of the effectiveness of CON regulations in containing costs are inconclusive, and the efficiency of a process such as this is questionable. Administrative costs would be very high, and some hospitals might be unable to afford the costs associated with the application process and, thus, be impeded from making capital investments. New hospitals might not be considered because of the high cost of application and the possibility of denial.

The following two suboptions are presented as possible alternatives to capital pass-through payments under DRG payment. They are not intended to represent the entire range of methods of handling capital,

Option 9a: Incorporate a flat rate for hospital capital into the DRG rates.

The uniform payment approach would treat all hospitals or all those in a class alike, regardless of their level of capital expenditures. A flat rate for capital, whether calculated either as a fixed percentage of the DRG price or as a flat rate per bed, would encourage hospitals to provide care at the least possible total cost to the hospital. Since new technologies would be judged in terms of their impact on total costs, not just on operating costs, a flat rate would give hospitals more incentives to be efficient than the current capital cost pass-through. Hospitals would be further encouraged to specialize and join in plans for regionalization of health services.

Despite the increased efficiency of a uniform rate for capital built into the DRG rates, it would be difficult to ensure that this type of system would be fair to all hospitals. Hospitals that in the past have had lower ratios of capital to operating cost would receive more than before, while those with historically high ratios would receive

less. Thus, public hospitals would probably fare better with a flat-rate system than they have in the past, at least in the short term. Multihospital systems, whose affiliated hospitals could pool capital payments and smooth out fluctuations in capital expenditures across affiliated hospitals, would also be favored. Implementing the uniform payment approach might require a difficult and costly transition period if those hospitals that have made major investments in recent years or that face them in the near future are not to be unduly penalized.

A uniform capital payment method such as a flat rate within the DRG payment would not discourage equal access to medical technologies and might help redress some current inequities because of the possibility of increased capital payments to public hospitals and others that serve low-income patients. It might, however, have a negative impact on the regionalization and specialization of services among hospitals because of the difficulty some hospitals would have in accumulating enough capital to specialize. If the population shifts, moreover, new inequities for opening and closing hospitals might appear. The question of separating capital expenditures for equipment from those for buildings should be addressed.

Making the transition from the cost-based reimbursement system to a flat rate capital payment could be difficult for hospitals. Phasing in the flat rate by reducing the proportion of capital payment that would be a pass-through over a period of time could alleviate some of the financial difficulties but would not necessarily reduce the amount of paperwork or data collection costs.

Option 9b: Build hospital-specific capital allowances into the DRG system.

To implement this option, hospital-specific cost information would be taken into account to establish a base period level of capital payment, and the payment level would be increased by an index over time. One approach would be to use the hospital's capital costs in a base year and then add a percentage for inflation. Another would be to limit capital payments to a percentage of a hospital's operating costs in each year.

Tying capital payment to a hospital's level of capital costs in a base year or to the hospital's operating costs would be efficient but might be unfair. Hospitals that were most highly capitalized in the past would be rewarded, while those with low levels of capital would forever receive low payments.

An increased administrative burden would be put on the hospitals, especially in the transition period from pass-through to hospital-specific controls. In the early years of implementation, this system would not work well for hospitals that require major capital expenditures. Perhaps for these reasons, it might be better to limit this approach to the movable equipment portion of capital, which typically has shorter lifetimes and lower variations in asset values among hospitals.

Option 10: Provide adequate resources or incentives for States to experiment with alternative hospital payment systems, especially those involving all payers.

In States where Medicare is the only third-party payer using prospective payment, hospitals will have incentives at best to shift costs to other payers and at worst to treat patients differently depending on their insurance. Savings to the Medicare program may not offset these other social costs. Furthermore, a Medicare-only hospital payment system such as the current one may not provide sufficient leverage to lower the annual rate of increase in hospital costs. Further experimentation with hospital payment systems would be desirable to learn which methods of cost containment save the most money to Medicare and society as a whole.

The Social Security Amendments of 1983 (Public Law 98-21) encourage States to experiment with payment systems that cover multiple third-party payers and differ from DRG payment by requiring the Medicare program to participate in any State-legislated prospective payment program that covers at least 75 percent of the State's population; makes provisions for competitive health plans; assures the Federal Government that access to hospital care for Medicare and Medicaid beneficiaries will not decline; and assures the Federal Government that hospital costs will not be higher under the State program. Four States

—Maryland, Massachusetts, New Jersey, and New York—already regulate all payers in their hospital prospective payment systems and have Medicare waivers. Other States will be examining the effectiveness of the payment systems in these four States with Medicare waivers and others experienced in containing hospital cost increases. The goal of this option would be to encourage the efforts of several State legislatures that are working on this issue.

While all-payer systems would increase the payment system's leverage over the hospital industry and reduce hospitals' tendencies to shift costs among payers, such systems have been criticized for their potential to inhibit competition. According to this viewpoint, regulation precludes market forces from exhibiting their desired effects and thwarts innovation. How much health care delivery systems *should* respond to market forces is debatable.

Changes in hospital behavior in response to the all-payer system incentives are predicted to range from increasing efficiency through specialization and interhospital cooperation to closing their doors (6). The viability of particular hospitals can be guaranteed *or* threatened, depending on the goals of the particular State payment system. For example, in New York, the capital pooling system was established to save a number of inner-city hospitals; and in New Jersey, several small hospitals have closed or *merged* at least in part because they could not earn enough money through DRG payment (47).

There is empirical evidence from New Jersey that vertical integration has been encouraged by the DRG all-payer system there (75). As long as only hospitals are under the all-payer system, there will be incentives for them to branch out and open separate home health agencies, nursing homes, and satellite outpatient clinics. They will have to continue to compete with each other for physicians and patients.

All-payer prospective payment systems are not the only approaches that may be attempted by the States. Other approaches to the control of hospital costs, however, have significant limitations. Two of these methods, increasing the patient's responsibility for cost-sharing and limiting pro-

viders through contracts between Medicare and hospitals, were examined in chapter 6. Factors such as the patient's relative lack of power and information to make informed decisions about the use of technologies in hospitals and the apparently strong preference of the elderly for supplemental medical insurance regardless of its cost imply that beneficiary cost-sharing for hospital services is not likely to be as effective in altering the patterns of use of hospital technologies as desired. And although contracting might save Medicare dollars, such contracting would represent an abandonment of the principle of beneficiary freedom of choice of provider on which Medicare was built and would force subsidies of hospital care from other payers,

Option 11: Consider ways to extend the DRG prospective payment system to payers other than Medicare (e.g., Medicaid) without relying on State waivers.

This option differs from the previous one because this option addresses the current DRG prospective payment system, whereas the previous option sought alternative systems. The desirability of this option depends on the effectiveness of DRG payment in encouraging the appropriate adoption and use of medical technology and in containing Medicare costs. The effectiveness of DRG payment is currently unknown.

As discussed in the previous option, a multi-payer system would increase the payment system's leverage over the hospital industry. A multipayer system would also diminish hospitals' opportunities to shift costs from one payer to another, although multipayer systems need not pay all payers the same price.

The clearest technical problem with extending the current DRG-based hospital payment system beyond the Medicare program is that DRG prices have been based almost exclusively on Medicare data. Comparable Medicaid data bases are not available, and the Medicare and Medicaid populations are so different that the use of Medicare-generated DRG prices for the Medicaid population would be unfair. Even if both data bases were available for recalculation of DRG prices, the problem of within-DRG variation in costs per pa-

tient would be exacerbated because of the diversity of populations.

It should also be noted that many State Medicaid agencies are experimenting with methods of prospective payment. Potential refinements for the Medicare system could come from these experiments,

Physician Payment

ISSUE:

How can Medicare's physician payment method be used to improve the incentives for appropriate technology adoption and use?

Physicians can influence both the number of patient visits and the use of a variety of technologies, especially diagnostic tests. Furthermore, **the ways in which physicians are paid can influence physicians' adoption and use of medical technologies.** Physicians who are paid on a fee-for-service basis have incentives to see more patients more often and to provide more technologies. Physicians (or practice plans in which they participate) paid on a capitation basis would want to increase the number of their patients but would have incentives to keep the number of visits low (or nonexistent) and to use particularly cost-effective technologies. Physicians' incentives under a fee schedule system would depend on the particular type of schedule adopted. Under fee schedules based on patient visits, physicians would have an incentive to schedule more visits but would have a disincentive to use a large number of technologies (particularly those whose costs are high in relation to the fee per visit received). If the fee schedule were based on episodes of illness, physicians would have incentives to treat for more episodes but would want to keep patient visits for each episode and the use of costly technologies at a minimum.

Excessive adoption and use of medical technologies are sometimes incorporated into medical practice through habitual behavior of physicians and because the health care system contains few disincentives for these practices. Excessive use occurs within the norms of medical practice and is

evident across the spectrum of technologies available to physicians.

Physicians are motivated by their training to do all they can for their patients, and generally they have not—in the past—had to be concerned about the costs of the care they provide. Indeed, there have been economic incentives for physicians to increase demand for health care services. These factors, singly and combined, often result in overuse of medical technologies.

Two types of changes in Medicare’s physician payment method could contain costs for the Medicare program and help rationalize the adoption and use of medical technologies: 1) requiring beneficiaries to assume more responsibility for their health care costs, either through increases in patient cost-sharing or reductions in the types of services covered; and 2) imposing restraints on the amount and type of payment to physicians. The options presented below are grouped according to these two categories—cost-sharing by Medicare beneficiaries and changes in physician payment methods. **Either type of change could result in cost savings for the Medicare program, but each type would have different effects on the adoption and use of medical technologies and on access to medical care by Medicare beneficiaries.** The options presented do not always relate directly to medical technology, but they are important because of their indirect effects on technology. Changing Medicare’s voluntary physician assignment policy could strengthen the effect of implementing some of these options.

Option 12: Amend the Medicare law to increase beneficiary cost-sharing for Part B services.

Several methods of cost-sharing were explored in chapter 7. Increasing the premium for Part B benefits would increase revenues for the Medicare program, but the evidence suggests that premium cost is too far removed from the use of medical services to alter patterns of use. This change would spread the burden of costs among many beneficiaries without regard to their use of the medical care system, and demand for medical technologies probably would not be affected. Increasing the deductible for Part B, again, might not reduce the use of services. Medicare benefi-

ciaries often have chronic diseases and require multiple physician visits.

Coinsurance raises financial barriers each time medical services are sought. Increasing Medicare’s Part B coinsurance requirements would have a more significant effect on the demand for medical technologies than would a deductible. Part B beneficiaries are already responsible for a 20-percent coinsurance payment for assigned care and even more for nonassigned care. Modest increases in coinsurance requirements would probably have little effect, beyond the incentives already accompanying current coinsurance requirements, on patient behavior. Large increases, on the other hand, would probably result in fewer visits to physicians but might also result in a reduction in access to necessary medical care, especially for the lower income elderly who are not eligible for Medicaid.

In summary, greater cost-sharing by Medicare beneficiaries under Part B could help contain Medicare program costs, in part by a shifting of costs to beneficiaries and in part through some resulting decrease in patient visits. It is unclear that all appropriate technologies would be provided with greater cost-sharing, however, because Part B beneficiaries might have to forgo some necessary medical care.

Option 13: Discourage Medicare beneficiaries’ purchase of private supplemental (“Medigap”) insurance.

Private insurance companies have offered, and many Medicare beneficiaries have purchased, supplemental (“Medigap”) insurance policies to cover, at least partially, patients’ out-of-pocket medical expenses. Noting that the type of extra first-dollar coverage that Medigap policies provide partially nullifies the intended effects of Medicare’s deductible and coinsurance requirements on use of medical services, some observers have suggested taxing Medigap policies to make their purchase less attractive. A principal objection against taxing Medigap insurance is fairness, because the general population’s health insurance policies retain their tax advantages. If this option were adopted, the constitutionality of selective taxation would most likely be challenged.

Because elderly people already pay about one-third of their medical expenses out-of-pocket and need more medical care than younger people, this option raises two broad issues: 1) whether Medicare should become the sole medical insurer for the elderly rather than providing a floor of insurance coverage as it does now, and 2) whether the Medicare program will provide adequate insurance coverage, especially in view of present cost-containment efforts.

Option 14: Place further limits on payment to physicians under Part B of Medicare.

Methods of limiting payments to physicians fall into two categories: 1) limits on allowable physician fees, and 2) the use of fee schedules. Both methods raise the issues of assignment of claims and changes in coding of procedures.

Option 14a: Amend the Medicare law to place a ceiling on allowable physician fees under Medicare.

The Medicare Economic Index currently limits the rate of physicians' fee increases to the rate of their cost increases. Other types of caps that could be imposed include freezes on physician payment levels for a specified period of time and percent limitations on the annual rate of allowable fee increases.

A cap on physician payment levels by Medicare is unlikely to change overall reimbursement to physicians, because physicians could increase patient visits, increase the number of technologies provided to each patient, and shift to a higher priced mix of technologies. Because it is unlikely that physicians would charge less than the cap, such a cap would be effective in containing program costs only if it were set low. A **low fee cap**, however, would result in widening the gap between fees paid by Medicare (allowed charges) and those paid by private patients (billed charges). Thus, fewer physicians would be likely to accept assignment. With less assignment, Medicare beneficiaries would have to pay an even greater share of their total health costs. Program savings would accrue at the expense of patients, and increased cost-sharing might result in decreased access to needed medical care.

Option 14b: Move to fee schedules for physician payments under Medicare.

Current limitations on increases in allowable charges are slowly turning Part B physician payments into de facto fee schedules, but historical specialty and geographic differences in fee levels that have developed under the fee-for-service system of payment remain. Cost-based fee levels could be developed, but they would require a data base that relates costs to charges in some rational fashion. The difficulty in developing such a data base should not be taken lightly.

Payment through fee schedules would necessitate a reformulation of the diagnostic and procedural codes for physician services that are currently used by the Medicare program. The number of procedural and diagnostic categories in these codes has increased by the thousands since the onset of Medicare and Medicaid. The large number of categories increases the likelihood of incorrect coding, and the availability of numerous categories to choose from in the billing process makes it possible for physicians to bill for higher priced services than those actually provided.

Furthermore, since the existing fee and price system provides financial incentives for the use of "technology-intensive" medical care, one long-range objective in developing fee schedules might be an overall review of the relative values of all procedures. The fee system could then be revised in such a way that technology-oriented services, such as performing diagnostic tests and surgical procedures, might be valued neutrally with cognitive services, such as taking medical histories and providing patient counseling. Current fees and payment methods favor the technological patient services over the cognitive.

Before fee schedules are developed, packages of physician services, possibly designed to complement existing DRGs for hospital care, could be developed. Inpatient surgical services would be one logical starting point. Other physician services could also be included. For example, DRG-based payment to physicians might be applied initially only to acute inpatient care, then extended to include physician services in skilled nursing fa-

cilities, and then to ambulatory care for those diagnostic categories where such an inclusion was found to be appropriate and feasible. Coordinating physician and hospital payments is important, because there is an incentive under DRG hospital payment to move services out of the hospital settings. An advantage of a fee schedule for physicians would be a probable reduction in inpatient hospital physician consultations and possibly even reduced length of stay. A disadvantage is that it would depend on inpatient care as the starting point, leaving other ambulatory visits outside the system, at least at first.

Option 15: Change Medicare's claim-by-claim voluntary physician assignment policy.

Medicare's current policy of allowing physicians to decide whether or not to accept assignment on a claim-by-claim basis allows costs to be shifted from the physician to Medicare beneficiaries. Although such cost shifting may decrease demand for medical technologies, it may also decrease access to necessary medical care. Changing assignment policy would strengthen Option 14 and suboptions.

One type of change in assignment policy is to make assignment mandatory, so that physicians are not paid at all by Medicare if they refuse to accept assignment. Under mandatory assignment, beneficiaries would have greater incentives to seek out physicians who accept assignment, because they would assume all of the costs of nonassigned care (except for any portions covered by a Medigap policy). Physicians would also have to weigh the financial impact of losing their Medicare income altogether versus accepting the payment levels set by Medicare.

Thus, mandatory assignment provides an incentive for cost-conscious behavior in both patients and their physicians, whereas under present assignment policy, most of the burden of cost savings falls on Medicare patients. Mandatory assignment could reduce access to medical care for Medicare's beneficiaries, however, because they would be responsible for payment of charges for nonassigned care. At least under current

assignment policy, Medicare pays 80 percent of allowed charges for nonassigned care.

An alternative to establishing a mandatory "all-or-nothing" assignment policy or maintaining current assignment policy is for Medicare to pay less for nonassigned than for assigned care. This might spread the burden of cost-sharing more equitably between patients and their physicians and provide significant incentives to both groups to be more conscious of costs. Reduced payment could be implemented either by further reducing allowable charges for nonassigned versus assigned services, or by increasing the coinsurance requirement for nonassigned care (e. g., from 20 to 50 percent). Either approach could be designed to achieve similar savings for the Medicare program, but reducing allowable charges would be directed at physicians, while increasing the coinsurance requirement would be directed at patients.

Patients may ultimately bear most of this shift in costs in either approach, however, because of their liability for the difference between billed and allowed charges for nonassigned care. An additional adjustment under this alternative could be to prohibit billing by physicians for the difference for nonassigned care, and payment could be made directly to the physician for allowed charges (minus the patient's coinsurance share). Under current payment for nonassigned care, allowed charges are computed and 80 percent paid to the patient, not to the physician, who must then collect from the patient.

Most, if not all, payment changes in the Part B program are likely to place additional financial burdens on patients. Some observers suggest that the additional burden (which Medigap insurance moderates) is desirable, because it gives patients incentives to behave in a cost-conscious manner when seeking medical care. Patients must have the information on which to make such informed decisions. Thus, even if none of the financing and assignment options is undertaken, it would be desirable for patients to have more information. Medicare beneficiaries could be given information on their payment responsibilities, what assign-

ment means, the relative charges of physicians in their areas, and names of physicians who accept assignment.

Option 16: Require review of *physicians' services*.

Option 16a: Encourage the development of a review program for physicians' services.

Professional Standards Review Organizations (PSROs), which concentrated their review on the appropriateness of hospital admissions and lengths of stay, were statutorily replaced by PROS in 1982 (Public Law 97-248). Under Medicare's DRG hospital payment system, PROS will have the added responsibilities of reviewing the validity of diagnostic information provided by hospitals (DRG verification) and the appropriateness of moving patients from hospitals to less intensive care settings such as nursing facilities and home health care.

DRG payment provides financial incentives to reduce the unnecessary use of ancillary services in hospitals. This option would address the fact that similar disincentives for the excessive use of medical services in physicians' offices and other ambulatory care settings are lacking. While there is evidence that physicians do respond to restraints on physician payment levels by increasing the number of services they provide and shifting to a higher priced mix of services (153,275), however, one problem in identifying excessive use on a procedure-by-procedure and physician-by-physician basis is in differentiating between normal and excessive provision of medical care.

Under Public Law 98-21, HCFA is required to study the possibility of extending DRG payment to physicians' services. The resulting information will, in essence, reflect norms of care on which DRG-based prices could be computed. Such norms of care might also be used to extend PRO activities to inpatient physicians' services. Similarly, information for extending DRG payment to ambulatory care might be used to develop review systems for office-based care. The costs of conducting such an extensive review program, however, would be substantial.

Option 16b: Require or pay for second opinions in elective surgery.

Voluntary second surgical opinion programs generally have had low participation rates. In HCFA's two demonstration programs, for example, only 1.2 and 0.3 percent of Medicare beneficiaries who had surgery participated in the programs and sought second opinions, despite waiver of deductibles and coinsurance for the second opinion (127). Because of low participation rates, the potential savings from voluntary programs are not great.

On the other hand, there is growing, though not comprehensive, evidence that mandatory second surgical opinion programs reduce the amount of elective surgery. The reduction takes place in part because the first surgeon is aware that the patient will need a second opinion and in part because patients tend to follow the second surgeon's recommendation.

As an alternative to an across-the-board, mandatory program, a mandatory program could be initiated for a few elective surgical procedures. The procedures included could be slowly expanded if the original program leads to cost savings. Monitoring the impact of this option, if implemented, would thus be very important.

Alternative Approaches to Changing Incentives

ISSUE:

What broad approaches, other than those directly involving Medicare's payment mechanism, could be used by Medicare to encourage the appropriate adoption and use of technology?

Most cost-containment strategies that rely on the existing Medicare program structure emphasize restraints on payments made to hospitals, physicians, and other providers, augmented by utilization and other types of review programs. Such approaches are complemented by efforts

to increase beneficiary cost-sharing. Other approaches that may be more feasible or desirable include changes that must involve the general health care system but that Medicare could embrace and changes in the structure of the Medicare program itself.

Long-range cost containment in the Medicare program is limited by the kinds of health care delivery systems available and the influence that Medicare financing can have on the settings and kinds of technologies provided. In recent years, the Medicare program has granted exceptions to specific alternative types of care (e. g., freestanding ambulatory surgical centers) and encouraged the development and evaluation of alternative delivery methods (e.g., preferred provider organizations) through demonstration programs. Thus, Medicare's efforts in developing competition with the types of care predominantly available have been to identify and encourage other types of provider practices and modes of delivery. **In the long run, it is hoped, the use of alternative sites and organizations will lead to cost-effective health care by encouraging competitive behavior among providers.**

A complementary approach to increasing competition among providers involves moving from the current Medicare program structure to a system in which a variety of types of health insurance coverage would be made available to Medicare beneficiaries. The most discussed possibility is the use of vouchers, wherein persons eligible for Medicare would receive a specified amount of money to purchase health insurance from the marketplace. The assumption is that beneficiaries would be encouraged to select delivery systems that offer the best benefits for the least amount of money. To the extent that health maintenance organizations (HMOs) or preferred provider organizations (PPOs) can achieve this goal, these organizations would be selected.

Competition can occur both at the point of insurance and at the point of service delivery. In both cases, payment by cavitation is believed to increase competition. A voucher, with its fixed dollar subsidy, is actually a cavitation method of Payment for total medical care (both inpatient and outpatient). The beneficiary who receives the

voucher may benefit from competition among plans. The beneficiary could purchase traditional fee-for-service insurance or could select a plan such as an HMO that accepts a capitated payment per enrollee. Important decisions regarding competition for policy makers in the Medicare program include: 1) the relative emphases to be placed on the insurance versus the alternative delivery system approach, and 2) the pace of adopting the various competitive approaches into Medicare. To increase the capability of Medicare to embrace the various competitive approaches, however, the program could undergo an administrative change—merging Parts A and B.

Option 17: Move toward a cavitation payment system for Medicare.

The extent and pace of changing the Medicare program to cavitation payment depend on the capacity of the health care system to provide alternative sites and organizations of medical care and on Medicare's leverage in promoting alternative delivery methods or requiring that they be substantially available. In one sense, there is a chicken-or-egg question —i.e., must substantial changes in the health delivery system come first, or is it the financing leverage of programs such as Medicare (and its effects on the general health care system) that will lead to the desired health system changes?

Under current Medicare policy, the implicit assumption is that health care system changes must come first. This assumption is reflected in Medicare-supported demonstrations of alternative delivery methods and Medicare's service-by-service adoption of alternative methods (e.g., ambulatory surgery centers, special provisions for HMO participation). This assumption is also present in discussions among policy makers on Medicare vouchers. A voucher program may involve mandatory or voluntary participation. A voucher could be completely voluntary and allow beneficiaries to reenroll in Medicare, it could require that the decision to opt out of Medicare be permanent, or it could trigger mandatory participation if and when more than half of the beneficiaries choose vouchers. It is believed, however, that the implementation of mandatory vouchers

for Medicare is not politically feasible (336). In other words, there is reluctance to end the current Medicare program per se and place the burden on beneficiaries tc) see if the market will respond.

Under voluntary voucher proposals, the policy is to provide enrollees with incentives to seek more cost-effective care, such as through HMO- or PPO-type organizations. If voluntary vouchers succeed in stimulating alternative systems, then the current Medicare program would slowly be replaced.

A voluntary voucher system for Medicare could be implemented without fundamental changes in the basic Medicare program. Replacement of the current Medicare program would depend on the amount of use of the vouchers, which in turn would depend on the capacity of the health care system to provide cost-effective alternatives to present Medicare benefits.

In sum, encouraging competitive approaches into the Medicare program can proceed by providing enrollees with the opportunity to opt out of the basic program, or by transforming the basic payment program itself into a competitive mode. A Medicare program with cavitation as the insurance mechanism might be initially implemented in urban areas, particularly urban areas with competition for patients and with substantial availability of prepaid services. The pace at which a voucher-only approach might be implemented has already been explored by the several bills introduced in Congress. A cautious pace would be to implement voluntary vouchers as a first step with periodic opportunities for reenrollment in Medicare.

Option 18: Merge Parts A and B of Medicare.

The separation of the Hospital Insurance portion of Medicare (Part A) from the Supplementary Medical Insurance portion (Part B) is inefficient and allows incentives for the inappropriate provision of technologies to persist. Because of duplication of administration in the two parts, administrative costs to Medicare are probably higher than necessary. In addition, the fiscal separation, wherein Part A is financed through

a payroll tax and Part B through premiums and general revenues, also seems wasteful.

Merging Parts A and B could ameliorate the current revenue problems faced by Medicare. One proposal (84) would substitute a comprehensive, integrated set of benefits for current separate sets under Parts A and B. The benefits would be paid from a single trust fund formed from the Hospital Insurance (HI) Trust Fund and the Supplementary Medical Insurance (SMI) Trust Fund. Revenues would come from a combination of the current HI contributions, the general revenues projected for SMI expenditures, and new income-related beneficiary premiums.

Currently, parallel data systems and administrative mechanisms for Parts A and B do not allow easy cross-referencing by patient or provider. This problem is important because of providers' efforts to shift costs from one part to the other (usually A to B). Some medical technologies have been covered under both parts, but because of differences in which part paid for their use at which time, facilities covered under one part or the other have duplicated equipment unnecessarily. Such duplication results in facilities and equipment that remain idle and raise prices in order to cover fixed costs. If there were one type of coverage and one payment source, at least some of this duplication and subsequent cost shifting could be avoided.

A merger of Parts A and B would allow Medicare beneficiaries to participate more easily in alternative organizations of care. A merger would also facilitate expansion of the DRG payment system beyond the inpatient hospital setting. For example, in the future, the DRG could be defined on the basis of an "episode" of care under the joint purview of Parts A and B. The definitional difficulties could be substantial, but so could be the payoffs in efficiency, cost control, and appropriate medical technology adoption and use (201),

The transition from Part A and Part B to an integrated system would be complex. Data systems would have to be merged, and intermediaries and carriers would have to negotiate to be single Medicare contractors. Once integrated, however, the system could be more efficient, less administratively burdensome to hospitals, and less costly to society.