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REGULATORY AND NONREGULATORY STRATEGIES
FOR CONTROLLING HEALTH CARE COSTS

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Health care is one of the most rapidly growing parts of the American economy. Real age-adjusted per capita spending on health care rose 55 percent from 1965 to 1975.[1] The largest single part of this increase is accounted for by hospitals. Between 1965 and 1975, real age-adjusted per capita spending on hospitals increased 80 percent. By 1976, spending on hospital care reached $55.4 billion or 40 percent of total health spending.[2] Consequently, the principal focus of public discussion of health care costs has been on hospital services. Recently, the debate has centered on the use of new medical technologies by hospitals and excessive use of hospitalization, especially for surgery and diagnostic testing.

The rise in hospital spending has several possible explanations. One might be that consumers can now buy better health than they could in the past. Higher incomes enable consumers to purchase more medical care, just as higher incomes lead to increased consumption of other goods and services.[3] Technical developments that make health care services more effective in treating illness also increase the demand for medical services. If these factors were the primary force driving

up medical expenditures, a rise in medical expenditures should be associated with improved health. One cause for concern is that the large spending increases of the past decade do not appear to have produced a corresponding improvement in the overall health status of the population, at least as measured by aggregate indicators of morbidity and mortality. Bunker,[4] Lembke,[5] Wennberg,[6] and others have noted wide variations in the per capita consumption of certain health care services among similar populations without any apparent difference in medical need or health status. Gaus found a large and significant difference in hospital and surgical utilization rates between Medicaid beneficiaries who are served by group practice Health Maintenance Organizations (HMOs) and control groups served by fee-for-service physicians, with no significant difference between the study groups and their controls in terms of perceived health status, number of chronic conditions, or disability days per month.[7]

Another cause of rising expenditures could be that medical care improves the quality of life in ways not measured by aggregate statistics on health status. While this may be important, it is not readily measurable, and, in any event, the rising public concern about increases in medical expenditures suggests that at least some of these gains in the quality of life are probably not worth the costs.

A third, probably most important cause of rising medical care expenditures appears to lie in the incentives that have been created by changes in the way services are paid for. The share of hospital costs paid directly by consumers declined from 49.6 percent in 1950 to 8.9 percent in 1976.[8] In 1965, government paid 24.5 percent of total health care costs; by 1976, the share was up to 42.2 percent.[9]

The main purpose of the government programs was to increase the amount of services consumed by target groups such as the elderly and the poor. The source of increased care for target groups was intented to be a net increase in real resources devoted to health care, rather than reduced care for the remainder of the population. So it is not surprising that health care spending has increased faster than total income; indeed, had the results been otherwise, such programs as Medicare and Medicaid could only be deemed as failures. But government has succeeded in increasing substantially the amount of medical services provided to these target groups. In 1976, Medicaid, for example, made per capita expenditures on medical care for the 23.2 million Medicaid recipients that nearly equalled average per capita spending by the rest of the population.[10]

The insulation of the patient from the direct financial consequences of hospital treatment eliminates most of the incentive that a doctor or patient might have to make sure that treatments are worth their cost. To the extent that providers and patients respond to financial incentives, treatments of low or uncertain value will be applied more frequently if neither the patient nor the doctor is financially responsible for the costs.

In theory, government or private insurers could try to prevent spending on medical care of low value by carefully monitoring the diagnosis and treatment of each patient and reimbursing only expenditures for treatments of significant medical value. Such close monitoring would require substantial administrative expenditures and much second guessing of professional decisions. Even if the costs of such an endeavor were worthwhile, private carriers would have little to

gain from undertaking them. In most cases, insurance premiums are experience rated, so, in effect, the cost of additional claims paid are passed on to the group paying the premiums. Moreover, government and employers tend to evaluate the efficiency of claims processors by the percentage of premium revenue that is absorbed by administrative cost, not by success in overall cost control, and monitoring treatment increases administrative cost. In any case, if one company were to attempt such a procedure, medical professionals might refuse to cooperate, or indeed even decline to accept patients with policies from that company. Without the cooperation of physicians, assessing the necessity of medical treatments is an impossible task.

The position of the government in trying to monitor the care of patients is in some respects stronger and in other respects weaker than the position of insurance companies. Since patients aided by government are generally poor, providers have little chance of extracting payment from the patient should the government refuse to allow a particular cost. Moreover, government is a much larger purchaser of medical care than any private insurer, and its decisions, therefore, can have a greater impact on the economic viability of a provider. Nevertheless, government, too, must depend on voluntary cooperation among providers in order to obtain service, and cannot tolerate massive refusals to serve patients whose bills it has promised to pay. Moreover, government is bound by procurement rules, designed to prevent favoritism and fraud that constrain the use of individual judgment. These rules are influenced by political pressure from well-focused provider interests.

Because of the difficulties of effectively monitoring treatment, both government and private insurers rely on physicians to determine treatments and to establish peer review as the mechanism to curb spending on treatments of no value. Because all doctors and patients face essentially the same pattern of weakened incentives to consider the costs of alternative treatments, standard medical practice can be expected to include an ever growing array of accepted procedures that have a low or uncertain marginal value. Thus, reimbursement of the costs of standard treatment will lead to ever increasing expenditures on medical services yielding little benefit.

To date, three generic types of policy responses to the problem of rising health expenditures have been proposed. One is to increase greatly the share of medical costs that is paid by the patient so that consumers will have much more incentive to economize on medical services.[12] A second is to leave intact the incentives for increasing expenditures in the fee-for-service, cost reimbursement, third-party intermediary system, but to impose economic and technical regulation on providers in an attempt to prevent the incentives from producing their natural effect. The third is to restructure the delivery and payments system in a manner that alters the basic financial incentives facing providers so that they find it in their interest to provide good quality but cost-effective care. The main thesis of this paper is that spending on health services cannot be effectively controlled in the present political context without the use of a policy of the third type.

RELIANCE ON CONSUMER COST-SHARING

The first alternative, placing the whole burden of economizing

on patients by greatly increasing the extent of consumer cost-sharing, is not practical because it is incompatible with the objectives of both private insurance and public policy towards medical care. A large increase in deductibles and coinsurance rates would increase the risk that a family would suffer serious financial loss in the event of major illness. When applied to government programs that are aimed at lower income groups, it would also reduce the access of the target population to medical care. Of course, the purpose of insurance is to prevent serious financial loss, and the purpose of the government programs, besides providing additional protection against serious financial loss, is to guarantee all citizens access to needed care, regardless of ability to pay.

To adopt a system in which patients must pay directly a much greater share of medical care expenditures is to conclude that society has picked an overly generous point along an immutable trade-off between an equitable and an efficient health care delivery system. The evidence suggests that Americans are not yet ready to accept this conclusion. A good indicator of the political acceptability of this approach to cost control is the fact that recent proposals by the Nixon and Ford Administrations to increase cost sharing by Medicare beneficiaries failed to attract a single Congressional sponsor. In the current political climate, any policy emphasizing more coinsurance inevitably will include an upper limit on a family's health care spending above which all or practically all will be paid by insurance. At that point, the incentives in the fee-for-service, cost-reimbursement, third-party intermediary system would continue to work as before. The effect

would be to pull medical care resources out of primary care and into catastrophic care to an even greater extent than is the case today. This means even less emphasis on activities that can help prevent disease and add significantly to the quality of life, and more emphasis on care that offers small net marginal benefits at very great cost. Thus, a shift to a system of catastrophic insurance would not merely be a financial device for reassigning risks; it would also mean a further reallocation of health care resources towards categories of care (such as long-term hospitalization) that probably are already accounting for too high a share of health care expenditures.

REGULATIONS AS A SUBSTITUTE FOR APPROPRIATE ECONOMIC INCENTIVES

A great deal of regulation is inevitable in health care. The debate over regulation is not a matter of all or none. The key issue regarding medical care costs is this: is the purpose of regulation to stop or reverse the forces determined by the basic financial incentives in the system, or is it to channel those forces into socially desirable forms of competition? Will it attempt to overcome grossly inappropriate financial incentives, or will it merely modify the direction of financial incentives that are already close to being appropriate? Will regulators attempt "to make water run uphill," or merely attempt to channel the stream in its downhill course?

The significance of the distinction is this. The managers of regulated firms will make judgments about the benefits and costs of attempts either to change regulatory rules to their benefit or to evade them. If a regulator attempts to make the regulated behave in a

way that is directly opposed to their financial interests, regulated entities will have a strong incentive to attempt to bend, fight or evade regulations. This will force regulators to deal with many individual cases and subject them to continuing pressure to grant exceptions to their general policies. If, on the other hand, the regulators attempt merely to modify the behavior of the regulated at the margin in such a way that the financial benefit to the regulated of changing or evading the rules is small, then one can expect fewer, less ferociously battled attempts to change the rules and fewer skillful attempts to evade regulation, for the simple reason that there will be less potential gain if these strategies succeed. In this case, regulators are rarely if ever directly threatening to the financial survival of firms, and can manage these cases by exception. This section focuses on the consequences of attempting to use regulation as a substitute for appropriate financial incentives.

As used here, regulation refers to a type of social control of transactions that is characterized by its procedures as well as by the substantive purpose of the regulation. The two key characteristics of regulation are as follows. First, the regulatory authority is not a party to the transactions it regulates. Instead, it acts as the referee of transactions between other parties. By contrast, eligibility requirements and cost reimbursement formulas for Medicare or Medicaid recipients are not, in this sense, regulations because they are written by the purchaser of the service. These controls are more properly regarded as terms of a contract between a purchaser and a vendor. While these controls are likely to be subject to the same

kinds of political and legal problems that plague regulation, their development and promulgation is by an agency with a direct budgetary stake in the outcome. Consequently, the agency is directly accountable for the financial implications of its decisions, whereas a regulatory agency is not. Second, regulation is operated according to procedural rules that were developed from case law and formalized after the fact in the Administrative Procedures Act of 1946. The most important features of these rules are that decisions must be based on evidence that is presented in formal proceedings, that substantial evidence must be submitted in support of each decision, and that the courts may review a decision if it is appealed by a participant in the regulatory proceeding. By contrast, conditions on government purchases and subsidies do not have such elaborate procedural requirements.

The formal procedures make the regulatory process expensive and time consuming. Moreover, the expense is greater as the number of regulated entities grows, making the wisdom of regulatory intervention in part dependent on the structure of the regulated industry.

An agency can regulate an industry either by dealing separately with each firm or each market (the case approach), or by writing general rules to simplify cases or to apply directly to all firms in the industry without using individual proceedings for each firm (the rule-making approach). In an industry with numerous firms, both approaches have important weaknesses.

The case approach to regulating numerous entities produces a situation in which many proceedings are underway simultaneously, all with different participants, evidence and proposed decisions.

Because participation is costly, groups whose welfare is affected by many pending cases may not be able to afford to be represented in all proceedings. Yet, because policy is developed by precedent, each case can have important effects on cases involving completely different sets of producers and consumers. Moreover, the case approach undermines the development of consistent policy. Each decision depends on evidence presented in that case, and evidence is bound to vary from proceeding to proceeding. Evidence and policies developed in one forum will diffuse slowly into other proceedings because of the informational problems that participants face in attempting to track the progress of many simultaneous cases.

The rule-making approach also presents problems. A rule-making proceeding, because it directly affects the welfare of many groups, normally will have many participants. Consequently, a rule-making proceeding usually takes several years before a decision is rendered -- not counting the additional years normally lost in inevitable appeals through the federal court system. Moreover, general rules, based upon average conditions in an industry, will produce specific instances of inefficiency and inequity whenever firms and markets are heterogeneous. If the industry displays this heterogeneity, some firms will not find regulatory rules binding, while others will be threatened with extreme financial pressures, perhaps even bankruptcy, if they are forced to comply. While the former are likely to remain unaffected by regulation, the latter are likely to be provided with exceptions procedures. The escape valve of an exceptions process and the procedural safeguards of administrative law serve the same

equity objectives. The former saves the regulator from the embarrassment of protecting consumers so well that some are denied needed service! But it also blunts the effectiveness of the agency by instituting a mechanism which insures firms against failure and, in any case, serves to drag out the regulatory process by extending it by one more phase. In addition, exceptions are always decided on a case-by-case basis, so that the extent to which an agency can rely on rule making as its main policy weapon depends on the degree of homogenity among the regulated entities and the direct effect of the regulations on their financial health. Protracted proceedings with numerous pleas for exceptions are more likely to result from the regulation of price or product quality in a heterogenous industry than from the imposition of informational requirements on the same industry or the regulation of prices or product quality in an industry in which all firms produce identical products at identical costs.

The cost and effectiveness of regulation also depend upon the complexity of the required information. The more complicated is the regulated activity, the more technical and detailed is the evidence that is submitted into the regulatory process. Complex information requires a more time-consuming process as well as greater costs for preparing, interpreting, and evaluating the data.

The problem is compounded if the objectives of regulation are themselves complex and lacking in concreteness. For example, "truth-in-packaging" regulations that require honest and complete revelation of the components of a product are easier to develop than are minimum standards of product quality. The latter are less

susceptible to objective determination and as a result require more careful and complete evidentiary proceedings in order to withstand judicial appeal. Similarly, while regulation of public utility monopolies is always difficult because the technology of public utilities is sophisticated, the most difficult issue is determining the quality of service and the redundancy of capacity that the firm will provide. Once these are determined, the easier tasks are to calculate allowable costs and to develop a structure of prices that limits the ability of the firm to capture monopoly profits. Or, in broadcasting, it is comparatively easy to determine whether a firm engages in fraudulent billing practices or broadcasts at the assigned frequency and power, but far more difficult to ascertain, as the Communications Act demands, whether the service provided by a broadcaster serves the needs and interest of the community.

Even in the absence of the complexities discussed above, regulation has proved to be of limited effectiveness as a mechanism for the social control of industry.[13] The procedural requirements of regulation give relatively well-represented groups with high stakes in the outcome a distinct advantage in influencing regulatory decisions, and the political obscurity of regulatory agencies tends to make them vulnerable to requests for special favors from politically active groups.

As a result, regulation is normally, on balance, beneficial to the regulated industry and harmful to its customers because the former tend to be better organized that the latter. The exceptions generally occur when the interests of consumers and businesses coincide,

when the industry itself is divided, or when the agency is at the center of the issues of concern to a mass political movement, such as environmentalists or organized labor. For example, product safety regulatory agencies are generally relatively effective in dealing with "bad actors" whose products are atypically dangerous compared to their competitors, but relatively ineffective -- indeed, often pernicious -- when setting standards for an entire industry. The successes of industry-wide safety regulation tend to be regulations that are both inexpensive and noncontroversial, but that deal with problems that somehow escaped the notice of an industry, usually due to some informational problem such as a very low frequency of harmful consequences from the industry's products or insufficient incentives for any particular firm to engage in the research necessary to solve the problem.[14]

When regulation is complicated by sophisticated data requirements, heterogeneous firms and vague objectives, regulators are especially prone to be protective of regulated entities that are on the verge of financial failure. When these complexities are present, the cause of a firm's financial difficulties is difficult to determine, so that a plausible case probably can be made that the regulator contributed to the problem. A political leader who helps to determine the fate of the agency through budgetary actions, legislative decisions and informal nonstatutory oversight activities, constitutes an informal route for a financially troubled entity to appeal agency actions. Politicians can be expected to be concerned if a firm in the home constituency appears threatened with extinction

by regulatory actions. Thus, an agency may be punished by Congress or the Executive if it forces a truly inefficient operation into bankruptcy whenever the rectitude of its position is less than certain, but it faces no concommitant penalty if it offers protection to the failing enterprise.

For all of these reasons, effective, comprehensive regulation is likely to be especially difficult to apply to the medical care sector. First, medical care is provided by numerous independent actors -- physicians, hospitals, specialized care centers, other independent medical professionals. Second, a unit of medical care service is difficult to define and measure. The number of health problems is large, and the choice of treatment for each depends on individual physiological and psychological characteristics. Moreover, providers differ in the kinds and amounts of care they provide and in the treatment they believe to be best for a particular case. Thus, any regulatory intervention that promises to have a significant effect on the revenues or costs of providers -- and thereby to threaten financial loss to some -- will take the form of extensive case-by-case decisions (perhaps in the form of exceptions), with all the costs and deflection of policy that the case approach necessarily entails. In particular, attempts to control prices, capacity and the quality of service by direct intervention are more likely to exacerbate these problems than to ameliorate them.

In the medical care sector to date, the only economic regulation that has been thoroughly tested is the regulation of hospital capacity, and the results bear out the pessimistic conclusions of

the preceding analysis. The federal government has attempted to control the number of hospital beds since the 1950s, when federal subsidies for hospital construction were made available to hospitals only if proposals to expand capacity were approved by area planning authorities.[15] In the 1970s, community planning has been giving way to certificate-of-need regulation by states in which a regulatory authority must issue a permit, based upon an assessment of community needs, before an increase in hospital capacity can take place. The available evidence indicates that certificate-of-need regulation has not succeeded in controlling the problem of overbedding. For example, a recent study[16] found that thirty of forty-one states and areas which have such controls and for which complete data could be obtained approved hospital beds in excess of 105 percent of their published need projection for five years hence. Fourteen of these began the period overbedded and approved additional beds, while five others became overbedded during the period studied as a result of the projects they approved. Other studies, using multiple regression techniques, have reached similar conclusions.[17]

The apparent ineffectiveness of certificate-of-need regulation is consistent with the preceding general description of the problems of regulating an industry as complicated as the health care sector. Regulators can be expected to have great difficulty in defining the appropriate number of beds for a community. Since providers can control occupancy rates, regulators cannot simply rely on observing whether beds remain unused. Instead, regulators must attempt to assess what bed use would be if all patients were given optimal medical care. Since optimal medical care depends on the particular

characteristics of a patient, can be defined only by representatives of the regulated sector, and, in any event, is subject to wide variations in judgment among medical professionals, reaching a decision on this issue that varies much from existing standard practice is all but impossible. This was illustrated by the experience of the Committee on Controlling the Supply of Short-Term General Hospital Beds of the Institute of Medicine, a collegium of health care experts that, after five years of study, was unable to reach agreement on a standard for community bed needs. The committee was able to set an upper bound -- four beds per thousand population -- which they all could agree substantially exceeded the desirable standard. Because the United States currently has 4.4 short-term beds per thousand population, the Committee could agree that the nation was overbedded, but could not agree on a standard that would have any measureable effect on hospitalization.[18] Considering that Kaiser Permanente of Northern California, a large prepaid group practice, operates at about 1.5 beds per thousand, the inability of the Committee to find a standard below 4.0 leaves much room for disagreement and uncertainty -- and improvement in performance by the industry as a whole.[19]

Even if a target for the overall bed rate could be established, other issues are bound to be raised when a particular hospital applies for permission to expand capacity. Among these are the responsibility to expand service for a particular subset of the population, the desirability of letting a hospital of particularly high quality provide service to a larger proportion of the population, the possibility of bringing an exciting new treatment to an area, and

the certainty of employing more local residents in building and staffing a new facility. Since the relationship of all of these issues to the desirability of expanding a hospital is bound to be fuzzy, regulators are understandably reluctant to appear to be some peculiar form of ogre by preventing the performance of an important public service and the creation of jobs.

The third-party payment system contributes to the problem facing regulators. Since most of the cost of operating unnecessary facilities is likely to be paid by the federal or state government (Medicare and Medicaid) or by insurance policies that are experience rated over an area wider than a Health Service Area, the communities which regulators seek to protect against rising costs (and hence, for political reasons, the regulators themselves) face weakened incentives to tip hard decisions in favor of cost control. This could be attacked by federalizing regulation of hospital capacity. But the result would be an enormously complex regulatory agency, undertaking to decide literally hundreds of certificate-of-need cases simultaneously. The agency would be forced to grant permits by formula (thereby overlooking legitimate special cases and community problems, unless the formula were overly generous) or to engage in so many independent decisions that coherent policy would be unlikely to develop.

Even if capacity regulation were to succeed in controlling the number of beds, it would still be unlikely to have much of an effect on costs. A hospital does not add beds for the single ultimate purpose of having beds, but as an instrument in achieving other objectives such as attracting more doctors, increasing the status of

the hospital, or improving its ability to provide what the staff perceives to be good care. Because beds are not the only means for achieving these objectives, controlling beds is likely to lead primarily to an increase in other activities that also raise costs and demand further regulation. This is the familiar regulatory tar-baby effect.[20] Regulatory agencies, because of the way they are designed, must confine their activities to reacting to symptoms rather than attacking causes of a problem. If regulation is severely binding to a firm, the imagination of entrepreneurial managers generates continuing strategic actions that fall between the cracks of regulatory rules and defeat the purpose of regulation. The problem is most pronounced in a regulated industry with numerous firms, for then the regulator faces a substantial problem just in detecting the latest innovative response to existing regulations. The detection lag, when combined with the time involved in issuing effective regulations, produces regulatory activity that primarily affects the form and pace of innovation, but does not effectively achieve regulatory objectives.

Regulation to control the adoption of new technologies is not likely to be effective because it is even more susceptible to the same problems that make capacity regulation ineffective. Most new hospital services do not involve the use of expensive new capital equipment; instead they are new combinations and more intensive uses of services already provided.[21] Thus the opportunity abounds for an infinite variety of new technologies that represent changes in the way service is delivered, perhaps including new wrinkles that do not

constitute a main part of the costs of the entire package of services.

The first job of the regulator in this milieu will be simply to detect the existence of new technologies. In principle, regulators can demand prior approval of technologies, but in practice, because many are rearrangements of existing treatment methods, the definition of a new technology will be fuzzy and, as a legal matter, debatable, so that the detection of new technologies will be an important activity. Because hospitals are so numerous -- even large hospitals that are likely candidates for innovation number in the hundreds -- detection will be difficult.

The problems of the regulator are compounded by the speed of diffusion of new technologies among large hospitals.[22] CT scanners are a good case in point. The first two CT scanning units in the United States were installed in mid-1973. Three years later (August 1976) 652 CT scanners were known to be in operation, had been approved or were on order.[23] The rate of installation, averaging twenty per month from June 1975 to September 1976, is apparently accelerating as new companies enter the market. With such rapid diffusion, if more than a couple of years are lost in detecting a new technology and sustaining through appeal a regulatory finding that a treatment constitues a new technology and therefore should be regulated, hundreds of hospitals already will have adopted the new technology before regulation of it begins. This places regulators in especially difficult straits. Will they impose financial losses on innovative hospitals that adopted a new technology before the service was legally defined as being one? Or, if use of

the new technology is "grandfathered" but prevented from spreading, how will regulators cope with the incentive this creates for substantially more rapid rates of adoption of new technologies (in order to be grandfathered) and with the competitive advantage that grandfathered hospitals will have because they offer a wider array of services? Grandfathering is probably inevitable, but it rewards providers who move quickly to buy a new device before proof of efficacy and evaluation of cost effectiveness, and punishes those who take a more deliberate approach.

Most likely, regulators will in fact allow nearly all new medical technologies. In part, this is the easy solution to the issues raised above. But in part, it is the natural consequence of the burden of proof on regulators if a new technology is to be denied -- that it be found to have no medical value. The problem of new medical technologies is typically one of overutilization, not of total ineffectiveness. Because providers and patients face weakened incentives to economize on medical care, treatments are encouraged to a point at which they have very low or no marginal value. Proponents of a new medical technology will provide long lists of examples in which it provided great benefit to a patient. The important economic issue is not whether the technology should ever be used, but how extensively. This is inevitably a tricky issue of medical judgment that regulators are unlikely to be willing to second guess. And once one hospital in a community is allowed to adopt a technology, the incentives will still be present to use it to full capacity. This will provide the evidence needed for other hospitals

to gain approval to adopt it rather than to refer patients. No regulator will deny patients access to a new technology that is known to have effective uses because of arguments in principle that no community should really have to have more than a single hospital with that treatment capacity, and that the hospital having the technology should be convinced that it is being overutilized.

At the heart of the problem of attempting to regulate the costs of medical care directly are two difficulties: the tenuous nature of the connection between expenditures on medical care and health status, and the incentives that regulators inevitably face to resolve uncertainties in favor of the regulated entity. The latter arise from the nature of the regulatory process and the political pressures applied to agencies. When the issue is extra expenditures on possibly unnecessary care versus denial of access to life-saving treatment, doubts will be resolved in favor of the former, regardless of theoretical explanations about perverse incentives or after-the-fact cost-effectiveness studies of past regulatory decisions. Recent legislative actions to legalize laetrile in several states illustrate the essence of the problem facing any politically responsible person who would attempt to control the technology of medical care.

The significance of these lessons from regulatory experience will be illustrated once again if the recent proposal of the Carter Administration to put a cap on hospital revenues is enacted. While such a law might retard the rate of increase in spending for a while, it is likely to encounter severe problems in the long run. Indeed, even its short run effectiveness can be doubted. The Administration

accurately characterized the program as "transitional." The apparently temporary nature of the proposal must further weaken whatever incentive hospital administrations might have had to respond to the controls with fundamental, cost-reducing changes in management. In fact, for a year or two, ingenious hospital administrators may be able to appear to comply merely with bookkeeping changes. For the longer run, an exceptions procedure must accompany the program, and when the cap really starts to bind, all the incentives to grant exceptions will be at work. In fact, this particular proposal was already emasculated at birth by the largest possible exception, the wage pass-through that was needed to get labor's approval of the measure. Moreover, hospitals will seek to avoid the impact of the regulation by "unbundling" services, such as by switching the billing, if not the provision, of many services from the hospital to the doctor. Regulatory counter-measures will be met by counter-counter measures, further distracting the attention of all from the cost-effective provision of needed and valuable services. Furthermore, under an across-the-board rule, such as a 9 percent limit on the annual increase in spending, some hospitals will find the rule more generous than their needs while others will find that it causes extreme financial pressure. The former can be expected to take the full 9 percent, lest they lose the right to a future increase based on present costs. (Note how this kind of regulation rewards those who were especially fat and punishes those who were especially frugal in the base year.) The latter can be expected to appeal for exceptions based on their particular circumstances. The courts, if not the regulators, will

have to consider these appeals in detail on their merits. While tying up 1000 hospitals in court might not daunt some would-be regulators, temporary restraining orders may by allowing the hospitals to raise their rates while the case is being litigated. Even if the proposal were ultimately successful at controlling total hospital spending at the stated growth rate, there would be no force in the system to motivate efficiency or equity in the allocation or production of services. At best, the hospital industry would simply add only 9 percent annually to its present wasteful and inequitable activities.

As pointed out above, the essence of the economic problem is care of very low or no marginal value. One element of eliminating such treatments is, of course, to identify them and to make patients and providers aware of the fact. Regulation could be used to serve this purpose. Regulators could be given the responsibility to evaluate treatments and to define and enforce informational requirements on providers and third-party payers. By itself, informational regulation is not likely to have much of an effect on medical care expenditures since it would not alter the structure of incentives facing patients, providers and third-party payers. Nevertheless, information requirements are an important component of the reforms to be proposed in the next section.

In general, effective information regulation is easier to accomplish than is regulation of prices, costs and technology because the former does not have to be burdensome to providers and is less directly related to the financial health of regulated firms --

and to the physical well-being of patients -- than is the latter. The main problem with informational regulation is that government officials do not particularly like it. For example, although the act establishing the Consumer Product Safety Commission gives equal status to informational requirements and product standards as instruments for reducing injuries related to hazardous products, during the budgetary process Congressional committees have persistently cut back even meager requests for funds to pursue informational strategies. Usually these cuts are accompanied by remarks indicating the lack of faith Congress has in the ability of consumers to absorb and profit from better information on product safety.[24]

Part of the reason for dissatisfaction with informational strategies in safety regulation is the observation that some consumers continue to buy models and brands that are less safe than competing products after better information is provided. An obvious illustration is the survival of cigarette smoking despite the publicity on the relationship between smoking and health. One reason for this behavior, of course, is that people do not single-mindedly pursue the avoidance of risks; another is that safety usually is costly, so that consumers may judge that, after a point, added safety is not worth a higher price.

In the area of health care, the role of informational strategies will be quite different, at least initially, than it has been in consumer protection policies. As proposed here, informational requirements in health would be tied to an expansion of the number of options available to consumers for purchasing health care services. Institutional arrangements that provide care at lower costs by

eliminating unnecessary services would be attractive to consumers because of their lower cost if the care provided could be shown to be as effective as more costly alternatives. In the beginning, informational requirements would serve to assure consumers that options with lower cost could be medically effective. In the longer run, informational requirements would provide additional protection, beyond existing accreditation and professional review procedures, against an erosion in the quality of care because of excessive competitive focus on costs. The specific form of informational standards in health must remain for medical experts to detail, but the general nature of the information would be data on patient outcomes. Examples might be case fatality rates from heart attacks, adjusted surgical mortality rates, rates and disposition of medical injury claims, etc.

Informational standards can affect medical expenditures only in conjunction with other changes in the health care delivery system. In particular, consumers must be given a variety of health care programs from which to choose, and some of these must be tied to new institutional arrangements between providers and payers that create incentives for cost control. The burden of the next section is to outline the form these other changes could take.

CHANGING THE STRUCTURE OF THE MEDICAL CARE SYSTEM

The main alternatives to fee-for-service, cost-reimbursement, third-party financing are, first, services provided directly by government with spending determined in the budgetary process, and second,

services provided by cost-effective organized systems (e.g., health maintenance organizations and other systems that create incentives to economize), with total per capita spending determined in a competitive market.

Top-down budgeting may indeed bring total spending under control, but by itself, it has no built-in means for assuring that much useful output is produced. This is especially true of a medical care program whose "output" cannot be measured in any simple and adequate way. For example, at least by civilian standards, the Department of Defense operates and fills far too many beds. In Fiscal 1974, hospital days of care for active duty military personnel, 95 percent of whom are males 18-44, were 1,887 per thousand personnel. The Military Health Care Study compared this to 611.5 days for noninstitutionalized U.S. males age 15-44, 204.8 days for Kaiser Northern California, and 559.4 days for nonactive duty beneficiaries of the Military Health Services System. Some of this may be explained by the particular conditions of military life; the military and civilian utilization data may not refer to exactly the same thing. But much of the difference is explained by longer stays for the same diagnosis. As the Military Health Care Study tactfully phrased it, "the incentives in workload-based programming may encourage relatively heavy use of in-patient care."

A recent National Academy of Sciences study of the Veterans Administration system concluded that hospital beds were not located in accord with the geographic variation in demand for hospital care. The study found that about half the patients in acute medical beds, one-third of the patients in surgical beds, and over half the patients

in psychiatric beds did not require or receive services for the specialized medical facilities that were associated with these types of beds.[25] The Veterans Administration experience reflects a pervasive problem that government encounters when it tries to provide services directly to citizens. In the bureaucratic budgeting process, cutting back service to a subsidized group is politically hazardous, so that an agency can strengthen its case for more by doing a poor job with the budget it has. Moreover, because budgeting is based on workload rather than capitation, government physicians face incentives with respect to utilization that are similar to the incentives that are present in the fee-for-service system.[26] In our view, the problem of rapid and unproductive increases in spending for health care cannot be solved without altering these incentives through a fundamental change in the structure of the medical care system.

In considering proposals to restructure the medical care system, one must bear in mind that government seems unable to impose involuntary changes in the prevailing arrangements between patients and providers. The key features of the existing system, in addition to third-party financing, are the fee-for-service payment method and the use of a personal physician, selected by the patient, as a gatekeeper to the other elements of the health care delivery system. Any restructuring of the medical care delivery system probably must preserve the option for patients and providers to continue to operate under these arrangements. In part, this resistance to change emanates from providers, since the existing system operates to their financial benefit. Rising medical expenditures are,

after all, the source of rising income for providers. Moreover, the combination of the fee-for-service, cost-reimbursement, third-party payment system and the use of the physician as gatekeeper reduces the risks faced by providers by eliminating the incentives of their clients to consider costs and by guaranteeing within broad limits that costs will be covered.

Patients, also, can be expected to resist mandated changes in their relationships with providers, especially physicians. Information about the quality and effectiveness of health care providers and services is difficult for a patient to obtain and is gathered in part over years of experience. Moreover, the success of medical treatment may depend on the confidence that the patient has in the provider. For both reasons, patients will value relationships with providers that have developed over the years and will be reluctant to sacrifice them for the conjectural superiority of alternative arrangements. This is not to say that patients will not accept changes in the medical care system; indeed, if the efficiency of the medical care sector is to be significantly improved, changes are necessary, so that any reform depends upon flexibility on the part of consumers. If an alternative set of relationships is developed, the superior performance of the alternative can be expected to induce patients to switch, since switching physicians occurs periodically in any event in response to residential changes, unsatisfactory services, changes in age or the retirement of providers. The point is that changes are acceptable if voluntary, but likely to be resisted if involuntary. Thus, the best hope

for restructuring the industry is to facilitate competition between the fee-for-service system and alternative plans that are based upon capitation payments.

A competing, capitation-financed plan has two defining characteristics: (1) a group of physicians accepts responsibility to provide members of a defined population with substantially all necessary health services for a fixed per capita payment (based on age, sex, and other factors) that is set in advance; and (2) consumers exercise free choice from among competing systems of care, but if they elect a more costly system, they pay the extra costs themselves. Physicians control nearly all health care expenditures. They are by far the best qualified to make the difficult judgments about need and cost-effectiveness. So it makes sense to give them the main responsibility for controlling health care costs, provided that they make these decisions in an environment that generates incentives to use resources efficiently.

In such a system, the physicians as a group would not receive more money for providing more or more costly services. The competitive market holds them responsible for total spending via the capitation; informational requirements and the freedom of consumers to switch to an alternative system hold them responsible for giving good service. Wide variations in organizational form and physician practice style can be compatible with operation within these principles; it need not be hospital-based, prepaid group practice. Among the competing types of organization, one might find Individual Practice Association HMOs, Variable Cost Insurance (VCI) plans, and what

Paul Elwood has called Health Care Alliances (HCA).[27] An HCA would be organized by an insurer, and would be associated with a limited set of hospitals and doctors that have been designated by the insurer to deliver comprehensive medical care to the insurer's customers. Like an HMO, the premium for an HCA or a VCI plan would reflect the economic efficiency of the providers. Such organizational arrangements would not need to entail any sudden or drastic change in the practice styles of many providers. But, to be economically competitive over the long run, these organizations would have to develop cost controls that are effective and acceptable to consumers and providers. Health Maintenance Organizations now serve about six million people at total costs (premium and out-of-pocket) that are ten to forty percent lower than the costs of serving comparable people with third-party insurance. Most of the cost savings are attributable to hospitalization rates that are about 30 percent lower than the rates for similar insured groups.[28]

As argued above, physicians and consumers are accustomed to the fee-for-service, third-party intermediary system and would reject an attempt to change it suddenly and drastically. Nevertheless, if HMOs and other new arrangements are more efficient, they will gradually win out in competition with the fee-for-service, third-party intermediary system if given an opportunity to compete on equal terms. A fair market test for HMOs is hardly a new idea,[29] but it still has not been seriously tried.

To begin to ameliorate (solve being too strong a word) the problems of open-ended government spending and the inflationary

incentives of third-party financing, the federal government should replace its present commitment to fee-for-service, cost-reimbursement, third-party financing, reflected in Medicare, Medicaid, and tax subsidies for health insurance, with a system of fixed prospective capitation payments, related to predicted medical need and ability to pay, which beneficiaries are free to have paid to the private plan of their choice. In that way, the government would not be paying more on behalf of people who choose a more costly system of care.[30] People who prefer a more costly system would be free to elect it, and to pay the difference out of their own net, after-tax income.

Financial aid to individuals in such a system would be based on actuarial categories. A simple, familiar example is categorization by household size -- individuals, couples, and families -- for other than Medicare eligibles. A more complex system might be based on age groups, perhaps divided into ten or twenty year age intervals. Actuarial categories would be chosen to capture most of the predictable variation in medical need. Premiums would be determined by individual health benefits plans in a competitive marketplace. The government would base its subsidies on actuarial cost, or the average cost per person or per family for covered benefits.

For people who are not poor, the Government would eliminate the open-ended tax exclusion of employer contributions and tax deductibility of individual premium contributions. These would be replaced by a refundable tax credit set equal to some

fraction (somewhere between one-third and two-thirds) of actuarial cost, and usable only for premium payments to a qualified health plan (defined below). This would produce gains in both efficiency and equity. It would replace today's marginal tax subsidy of 30 percent or more to health insurance, with a 100 percent subsidy up to a predetermined amount and no subsidy beyond that. Tax deductions that now provide the greatest subsidy to the best covered would be eliminated, and the resulting revenue would be used to put a floor under the least covered. By raising the after-tax cost of additional health benefits, it would motivate people to shop for more cost-effective health plans.

For the poor, the Government would replace Medicaid with "health plan premium vouchers" that could be used only to pay premiums to qualified plans. The value of the vouchers given to a family would depend upon income, reaching 100 percent of actuarial cost for the very poor. The plan would be means-tested, integrated and administered through a reformed welfare system. The amount given a poor family would be calculated to be sufficient to give them enough purchasing power to pay for a good health benefits plan. Plans would be allowed to compete for the business of the poor by offering additional benefits beyond those required of a qualified plan.

For Medicare beneficiaries, the concept could be implemented by changing Section 1876 of the Social Security Act (which governs payments to Health Maintenance Organizations) to permit each beneficiary to direct that the adjusted average per capita cost for

his actuarial category be paid to a qualified health plan in the form of a fixed prospective periodic payment. A beneficiary could augment this plan by purchasing more comprehensive benefits, but without additional financial assistance, just as today roughly half the Medicare beneficiares buy supplemental insurance. Medicaid supplements to Medicare beneficiaries would be replaced by means-tested vouchers.

The object of these changes would be to make it possible for everyone to benefit from economizing choices by obtaining lower premiums, more favorable cost sharing arrangements, or better benefits from a more cost-effective system of care. That possibility is denied to most people today.

A broad regulatory framework of devices designed to enhance competition should be coupled with the proposed financing system. The purpose of the regulatory framework would not be to stop or reverse the forces created by the basic financial incentives. Instead, the idea is to do as much as possible to create financial incentives that motivate socially desirable behavior and to leave to regulation only an irreducible, unthreatening minimum.

The following regulatory proposals, while not a complete pro-competitive regulatory framework, are advanced to stimulate debate and to indicate in general terms the lines that ought to be examined more thoroughly. The following are suggested requirements for a program to be qualified to receive the tax credits, vouchers, and Medicare capitation payments.

1. Open Enrollment.

Each qualified plan would be required to participate in a

periodic (e.g., annual) open enrollment, patterned after the Federal Employees' Health Benefits Plan (FEHBP), and to accept all enrollees without regard to age, sex, race, religion, income, employemnt status, or prior health condition. This would give everybody something few have today, a choice from among several competing plans. Nondiscriminatory enrollment is designed to insure that plans succeed by offering better services at lower cost, not by selecting preferred risks. If the government can do a good job of selecting actuarial categories and base its capitation payments upon them, and if competing health plans base their premiums on the same actuarial categories, much of the profit from selecting preferred risks can be removed. But it cannot all be removed because there will always be other sources of variation in individual health risks. At some point, health plans will have to take their chances with risk selection. Otherwise, poor risks would be uninsurable. An open enrollment requirement applied equally to all competing plans would help to spread the poor risks.

2. Community Rating.

Competing plans should be required to offer the same rates for the same benefits to all those in a given actuarial category anywhere in a market area. This requirement attacks the incentive to seek out preferred risks and combats other forms of discrimination.

3. Catastrophic Limit.

The amount of out-of-pocket payments that a family must make in a year would be limited. The ceiling might be related to

income, and it might be high, e.g., $2,000. But a uniform, clearly stated limit would be required of all qualified plans. The reason for the limit is to assure that the purposes of health insurance will not be defeated and that people with serious illnesses will not become additional burdens on the public sector for lack of adequate insurance. In a capitation-based system, little is lost in terms of consumer incentives from having such a ceiling. While consumer cost-sharing may be one useful tool in motivating economy in the use of resources, it is primarily useful and probably politically acceptable when applied to consumer-initiated primary care and to the overall cost of a complete insurance package, and much less effective and desirable, if at all, when applied to the costs of caring for very sick people. The federal government might reinsure qualified plans for catastrophic costs.

4. Information Disclosure.

To help consumers judge the merits of alternative plans, and to help assure public confidence in qualified health plans, disclosure of certain information should be required. Uniform financial disclosure should be required, comparable to what the SEC required of public companies. Data on patterns of utilization and availability and accessibility of services should be required, as is now required of HMOs. Each plan should be required to publish the total per capita cost of care by actuarial category, including premiums and out-of-pocket costs. The agency that is designated to determine whether a plan is qualified would have authority to review and approve (for accuracy and

balance) promotional materials, including presentations to be included in the booklet available to all during the period of open enrollment, just as the Civil Service Commission now oversees the FEHBP. The administrative agency would have authority to review and approve the nature and contract description of options for additional coverage beyond the basic plan, with the purpose being to assure that options either conform to a standard contract or are described in a standard contract with a manageable number of clearly worded additions and exclusions. This would force plans to publish their terms in a format that is understandable to consumers and that facilitates direct comparison among plans without the consumer having to master a lot of fine print. Finally, the government should gather and publish information on the medical qualifications and, as it becomes available, the performance of providers. To the extent that it is possible, these information requirements should be the same for all health benefits plans.

5. Premium Setting by Market Area.

As mentioned earlier, one factor that weakens the incentive of a local regulator to make decisions that will reduce health care costs is the knowledge that the premiums of many (probably most) of the citizens in the regulator's jurisdiction are based on experience over a much wider area. For example, plans like the Aetna and Blue Cross - Blue Shield options of the Federal Employees Health Benefits Program are experience-rated nationally. So higher costs in, say, Sacramento do not appreciably raise premiums in Sacramento. This practice creates a serious barrier to competition. The ability of

Aetna and Blue Cross-Blue Shield to compete against HMOs for federal employees in Washington, D.C., a high-cost area, is enhanced by the favorable experience of those carriers in low-cost areas, while HMOs have a competitive advantage in low-cost areas. The HMOs, being local, must set premiums that are based solely on local costs. Competition would be enhanced if each carrier were required to set separate premiums that are based on local experience for each market area. One or several contiguous Health Service Areas would constitute a single market area for this purpose. This device illustrates that appropriate regulation can both enhance competition and improve the balance of incentives bearing on regulators.

Other regulatory policies that now apply to insurers and providers could be incorporated into the new scheme of regulation. Safeguards against fraud and abuse, conflict-of-interest and all forms of discrimination could be a part of the program. In addition, a qualified plan could require that participating providers limit charges to approved fee schedules.

The goal of the preceeding program is to reorganize the delivery system into competing organized systems. It could be defeated if health-care financing continued to be provided exclusively by third-party intermediaries, each paying fees and charges to all providers. Open panel insurance programs do not foster competition among providers to control costs. Rather, they continue to reward providers for cost-increasing behavior. For the competitive approach to succeed, a large fraction of physicians must be allied with one or another competing health plan. The design of an appropriate set of rules to assure this must be complex because, for example, it might be

desirable for some specialists to work on referral for several plans. But some rules to prevent a noncompetitive outcome would be needed. A beginning along these lines is to guarantee all consumers access to several plans that differ from conventional insurance. Currently employers who arrange and contribute to group insurance plans for their employees are required to offer membership in one or two qualified HMOs, if available, as well as normal health insurance. While this is helpful, it does not go far enough, for a choice between two or three plans does not allow the forces of competition to work to full effect. Instead, employer contributions should be applicable to membership in any qualified plan of an employee's choosing. Moreover, employers should be required to provide standarized information about all qualified plans that seek access to their employees.

The adoption of a program of competing health care plans would free consumers to choose the plan that, in their judgment, serves them best. Consumers and providers who prefer to stay with the third-party intermediary system would be free to do so, but their decision would not continue to be subsidized by the government.

This proposal is not a finished plan. But neither is a proposal to create a regulatory authority upon which will be dumped a general mandate to control medical care expenditures. To our knowledge, no proponent of regulation of health care technology has yet described the mechanisms regulators are supposed to use to deal with "grandfathering," providing exceptions, or even defining what constitutes a new technology. Anyone who advertises a regulatory

scheme as the final word on cost control without addressing these issues is violating the rules of truth in advertising.

FOOTNOTES

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