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Skewed incentives in our healthcare delivery system

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Policymakers agree that costcontainment in healthcare delivery cannot be attained unless the incentives for providers, patients, and payers can be changed. The authors review the existing incentives that have led to escalating costs and conflicting interests for providers, patients, employers, third-party payers and taxpayers. They examine the current incentives for each group and explore the changing incentives that the new integrated healthcare systems and managed care present. They conclude that the new systems are not a simplistic solution to the "healthcare crisis" in cost, access, and quality, but they emphasize that these new systems have already introduced new incentives for provider collaboration and cooperation. The traditional ties of the osteopathic medical profession allow a quick response to creating new integrated systems, but require collaboration to add tertiary care to the profession's strong primary care and community hospital base.

(Key words: Incentives in healthcare, managed care, integrated healthcare systems, competition in healthcare, innovation, medical technology, Medicaid)

Although cost, access, and quality are partners in the healthcare reform debate, there is no question that cost-control is the senior partner. Given the urgency of containing the cost of healthcare, it is surprising that funding agen-

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cies or third-party payers have tolerated this runaway system for so long. Incentives in the current fee-for-service reimbursement system create pressures resulting in overutilization of medical services, ever-increasing costs for those services, and cost-shifting among stakeholders in the healthcare equation. More astounding, given the persistent cost-control rhetoric, incentives in the system continue to inhibit attempts to control the escalating costs of medical technology and to control the specialty mix of the physician workforce. The regulatory attempts to contain costs have been piecemeal, uncoordinated, and often conflicting.

Retrospective payment introduced by private health insurance companies and government public health entitlement programs served as a basic concept for the fee-for-service system under which physicians were paid for treating their patients. But, it has been diluted by cost-control strategies. Providers increasingly render medical service uncertain that they will be reimbursed adequately, or at all; patients seek treatment uncertain what coverage their payer will approve; and payers rely on averages like "usual, customary, and reasonable charges," diagnosisrelated groups (DRGs), prior approval, and costsharing to control their outlays. When a medical service is rendered, each of the stakeholders under retrospective payment has an incentive to shift payment to one or both of the other stakeholders. The resulting manipulations have evolved into an incredibly complex reimbursement bureaucracy—both public and private. Providers have found themselves treading treacherous waters muddied by the strategies of different stakeholders—patients, providers, employers, third-party payers, and the taxpayer—to control costs.

The crucial question facing policymakers is how to achieve dramatic and sustained cost reductions over time. 1 What will it take to foster entirely new ways to deliver services, to shift the site of care to more cost-effective settings, to integrate new philosophies of disease prevention and health promotion, and to integrate new approaches to treatment of disease? The prevailing opinion among policymakers at this time is that to achieve true cost-savings through reform, the incentives of the past, which have led to cost escalation, and the attitudes that perpetuate them must be identified and addressed. It has been repeatedly shown that in the face of ever-spiralling costs, incentives to maintain the status quo have been tenaciously protected by stakeholders within the healthcare delivery system.

The context in which the physician functions is changing; patterns of demography, morbidity, and mortality have shifted; physicians have frequently seemed unable to monitor the cost implications of their clinical decisions; health services have failed to reach those in greatest need; costs have risen with no end in sight; market forces at work in healthcare have distorted medicine toward commerce; specialists are produced beyond requirements while generalists are needed but not available; prevention of illness is minimized and not reimbursed by third-party payers; and the perception has grown that the revered role of the physician as guardian of health and companion during suffering now seems to be a vestige of the past.2 These situations have perpetuated the problem of, and complicated the solution for, access to care and quality of care.

In healthcare, the purchasing decision, payment, and receipt of services are all separated. As a result, multiple healthcare stakeholders respond to different incentives in fragmented, disjointed, self-serving ways: employers purchase healthcare coverage for their employees; thirdparty payers, such as insurance companies and health maintenance organizations (HMOs), collect premiums and then pay providers for services rendered to their subscribers; patients, the subscribers, ultimately receive the healthcare services; and physicians determine or advise on the tests and treatments for patients. 1 None of the stakeholders within this structure has accountability for the impact of their actions on the cost of the whole system.

This fragmented system has established

markedly different objectives based on the selfinterests of the stakeholders. The employer negotiates to pay the lowest possible premiums while providing a broad enough insurance package to attract and retain employees or meet contractual obligations. The third-party payer benefits by spending less on patient care than was received in premiums or budgeted by the government. The insured patient is concerned with receiving the most comprehensive service regardless of cost. And, the physician in the current feefor-service system often faces incentives to order more services—either to increase revenues. respond to patient demands, or as a defensive measure to guard against malpractice litigation.1 In addition, Medicare, Medicaid, and other subsidized healthcare coverage are all open-ended with no spending caps and therefore encourage decisions in favor of more costly care, ultimately at the expense of the taxpayer.3

In most industries, the consumer makes the purchasing decision, using comparative measures between quality and price, and pays for the product or service. In an effective competitive atmosphere, supply and demand intersect at the optimum price for a product or service, similar products and services are judged side by side on the basis of cost and quality, and firms producing inferior products or services are forced from the marketplace by the normal laws of competition. Within the present configuration of the healthcare delivery system, prices remain high even when capacity is excessive, technologies remain expensive even when they are widely used and available, and hospitals and physicians remain in business even when they charge higher prices for equal quality or fail to provide high-quality service. In healthcare, stakeholder incentives have combined to produce a system that defies the normal rules of competition. The commercial incentives are skewed by the conflicting objectives of the stakeholders.

Current incentives Patients

The structure of the current healthcare delivery system does not place patients in a position to have an impact on quality of care or access to care. The cost of care then remains the only place where patients could contribute to improving the healthcare delivery system through their purchasing decisions. However, their ability to affect the cost of healthcare, either directly or indirectly, has been left out of the reimbursement equa-

tion. Under ideal competitive circumstances, demanding consumers push for improved quality, while at the same time insisting on the lowest possible price among competing producers. In the healthcare industry, consumers (the patients) receive services on such an individualized basis that their ability as a group to push providers is greatly reduced. Even the process of contracting with an insurer, whether personally or through their employers, does not greatly enhance their influence.

Most patients have little incentive to seek cost-effective healthcare under either managed care or fee-for-service care, unless they are one of the nearly 37 million uninsured who must often pay for healthcare out of their pockets. Even insured patients do not feel the need to be empowered to have an impact on the cost of care. In fact, they seek what they perceive to be the highest quality care regardless of price. Copayments or deductibles at the point of service have had minimal and unsustained effects on spending for healthcare.³

Patients, as consumers, are rarely able to influence the construct of healthcare options between competing plans or individual providers. When patients do have a choice between plans or providers, they often lack relevant information about quality measures or the relationship between quality and price for a given procedure. hospital, physician, or course of treatment. They cannot draw on past experience to help them make decisions because each healthcare contact tends to be based on a different medical need. Thus, consumers are generally in the dark about many significant resource requirements of their healthcare experience, and they assume that any care received is complete, necessary and appropriate.

Providers

Many of the incentives that healthcare providers encounter are weighted in favor of increasing the costs of care.

■ Physicians are affected by incentives that tend to increase the utilization of services, even if these added services do not lower costs or improve medical outcomes. Under traditional fee-for-service payment, physicians can increase their revenues by ordering more tests and procedures. One must be reminded that the fee-for-service reimbursement, which creates so many adverse incentives to cost-control, was not invented by patients and physicians—it

arose out of the third-party-payer strategies to finance expanded access. The expansion of access to healthcare and the open-ended nature of the fee-for-service reimbursement scheme created an incentive to increase utilization of services in a manner often contrary to the philosophic underpinnings of medical practice. Physicians in good conscience should perform or order all the services that are appropriate for a given patient. Physicians should not pursue less costly treatment without evidence that the health outcomes or the quality of life will be at least equal to those achieved with more costly treatment. However, it has been clearly documented that when physicians add a service or new technology to their mix of procedures, they can create or increase demand for the service without clear evidence of need or improved outcomes. This tendency to create a demand for procedures or technologic interventions—without any evidence that health outcomes will be improved—may be one reason the US healthcare system has a deficit in primary care physicians compared with the number of specialists.

Medical specialties tend to rely on innovative high-tech equipment and procedures, with the resultant tendency to drive up the cost of healthcare in an open-ended financing system. Although the recently instituted resource-based relative-value system does lower reimbursement rates for some technical procedures like surgery, relative to cognitive services like office visits, the lower pay per procedure actually creates incentives for physicians to perform more procedures in order to maintain their current levels of income.¹

■ No incentives exist for physicians to consider cost when making referrals. Physicians act as purchasing agents without knowledge of, or regard for, cost when ordering additional tests and procedures for their patients outside their own offices. On the contrary, convenience, established relationships with other physicians, perceived quality—in the absence of outcomes data—or direct financial rewards from equity interests in laboratories or facilities have generally been the oft-quoted rationale for the referral patterns of independent physicians.¹

Obviously, the incentive to perform more tests and procedures is strongest when the physician has a financial interest in the facility or equipment. The recent Stark bill, however, has forbidden physicians from billing Medicare patients for services performed in clinical laboratories in which the physician has equity interest, and other legislation to further limit selfreferral is pending.

 Physicians face incentives to increase their fees even in the presence of an increase in supply, in counterdistinction to a competitive marketplace, where an increase in supply usually has the effect of driving down costs. Fees generally do not decline in healthcare because patients are not price-sensitive and insurance payments to physicians have been based on customary charges rather than on true costs. Although market forces and the laws of supply and demand dictate equitable prices in most industries, high prices of the healthcare industry are rooted in the "usual, customary, and reasonable charges" on which insurance companies traditionally based their payments to physicians. Customary charges were set by physicians in a competitive era when insurance coverage was not yet widespread and physicians still faced powerful incentives to keep costs low. However, as insurance coverage became the norm and price competition faded, physicians were able to boost their incomes by regularly increasing their fees so that future calculations would be based on higher charges.1

During the past decade, changes in physician reimbursement have limited the ability of physicians to increase fees. But piecemeal regulations to cap physician fees have been circumvented by so-called balanced billing and by setting artificially high fees for new physicians within a group practice. Balanced billing allows physicians to bill patients for the difference between their "list charges" and the "fixed charges" set by third-party payers. And, as a response to the Medicare fee freeze in 1984, physician group practices began setting artificially high rates for incoming physicians to counteract the cap and boost fees after the 2-year freeze.¹

This tendency to perpetually drive the cost of healthcare ever-higher coincides with societal expectations of perceived quality. The higher the cost for a product or service, the greater the perception of its inherent quality. Because of the inferred quality of healthcare, in the absence of relevant data concerning the relationship of quality to price, physicians have been able to manufacture a perception of high-quality care by setting fees at the higher end of the physician fee

continuum. Patients are drawn, as many consumers in other markets are drawn, to higher prices under the assumption that "you get what you pay for," while often shunning lower-cost care believing it to be inferior.

■ The concerns about malpractice and the insistence of demanding patients create incentives to overutilize services, pushing many physicians to practice defensive medicine by ordering more tests and procedures than might be necessary. Although recent measures indicate that the direct cost of defensive medicine accounts for no more than 1% of total healthcare expenditures, the threat of malpractice may indirectly affect costs by coloring physicians' judgments.⁴

American medicine's dramatic breakthroughs in diagnostic and surgical technologies have created a demanding public with a high expectation that any illness can be cured. The patients' belief that "more is better and high-tech is best" pressures physicians to use expensive technology in cases where it may not be warranted.

Hospitals

Both hospitals and outpatient facilities are influenced by incentives to maximize reimbursement.

After World War II, hospitals were reimbursed on a cost-plus basis, which in turn produced rapidly escalating hospital costs. The Medicare prospective payment system, implemented in 1983 in an attempt to control the rapid rise in costs, granted hospitals a fixed fee based on the diagnosis that resulted in the patient's admission to the hospital. This DRG reimbursement system created incentives to reduce hospital stays and treatment costs. In the decade after its introduction, DRG reimbursement rules reduced the average length of stay for an inpatient by half a day, and the number of inpatient hospital stays dropped by 20%.¹

The cost-plus system of an earlier day created incentives for providers to overtreat. However, the correction, in the form of the DRG reimbursement system established incentives in the opposite direction. The DRG reimbursement system pressures providers to discharge patients sooner—in some cases prematurely. This discharge pattern has resulted in an incentive to increase the use of ambulatory healthcare services.¹

With DRG reimbursement creating incentives for earlier discharge of hospital patients and the fact that DRG rules did not—and still do not—apply to outpatient reimbursement, hos-

pitals and other providers have decided to open many new outpatient facilities. Although effective outpatient treatment and surgery are helping to reduce some costs, the open-ended ambulatory care financing system still creates incentives to overtreat in these settings.¹

Employers and third-party payers

Employers are concerned with expending the least amount of money to provide healthcare for their employers. These payments are made to third-party payers who profit from paying out less money in fees and claims than has been collected as premiums. The incentives of these two customers to maximize profit, while controlling service utilization, often places them in direct conflict with the wants and needs of the patient in the healthcare equation. The incentives to not pay claims also sets the payer in direct opposition to the provider, because the provider delivers the service prospectively and must assume the cost when neither the paver nor patient has paid. The conflict between payers, providers, and patients works to create a dysfunctional system. Although payers should be able to profit only from improving the quality of outcomes or lowering costs by negotiating lower prices for quality care, incentives exist that allow third-party payers to shift payment responsibilities to patients or providers. In fact, they can deny coverage for specific procedures outright, or they can refuse to honor covered procedures through decisions made by utilization review boards.

Because third-party payers do not have the final legal obligation for insured patients' bills, patients become the payers of last resort. This conflict of objectives between payers who want to control utilization and patients who are requesting service creates incentives for payers to construct creative and complicated methods for denying coverage. Utilization review in the insurance industry functions to either allow or disallow payment for treatment. Utilization review arrived in the healthcare system as a quality-control and cost-containment strategy. However, allowing this function to exist as the creation of, or off-shoot to, the insurance industry compromises its quality-of-care intent and realigns its incentive to specifically promote cost-savings for the industry that it serves. There are more than 300 utilization review firms across the United States exercising decision-making power in the patient-physician relationship, and each varies in its approach

to healthcare utilization decisions and the criteria used to arrive at a particular verdict.⁵

Taxpayers

Taxpayer dollars in the form of Medicaid and Medicare payments and government subsidies to employer-provided healthcare coverage written into the payroll and tax laws create incentives to encourage decisions in favor of more costly care—a cost ultimately borne by the American public.

In 1967, a year after the program actually began, Medicaid served 9.5 million people. After 10 years of operation (1976), it was serving 23.2 million people. The increase in expenditures rose at a yearly rate of around 25% through the early 1970s. Expenditures rose at the rate of only around 10% yearly through the mid-1980s, but have begun to accelerate at an unbridled pace within the past 5 years, increasing by 13% in 1989, 19% in 1990, 32% in 1991, an estimated 31% in 1992, and 24% in 1993 for an all-time high of \$140 billion. Tates have addressed these escalating costs by reducing benefits to existing recipients and restricting the number of beneficiaries through stricter requirements that have a negative impact on access. A sustained policy of Medicaid rate reductions and benefit restrictions shifts low-income, acute-care patients out of Medicaid and into charity care that other pavers must subsidize.

All healthcare reform proposals limit the spending for Medicaid in one way or another, through market competition, regulation, or caps on spending. The dilemma of providing access to needy populations, while controlling the increase in costs, remains at the heart of the debate, and Medicaid's future depends on the resolution. In a nation that has historically rationed healthcare services by insurance or categoric entitlements, it is not surprising that Medicaid is the program of last resort and has been most frequently used as the public mechanism to address compromised access to healthcare services.

Medical technology

For years, the healthcare delivery system in the United States has facilitated the unbridled use of medical technology establishing the axiom: more is better. The traditional fee-for-service system of reimbursement created the incentive to do more, because more services lead to more payment and complements the patient's perspective that more is better.

At this point in history, medical products both drugs and devices—have become an integral part of healthcare. Device technology includes such disparate examples as lasers, computer systems, and implanted materials. The costs associated with purchasing and using the technologies vary much more widely than with drugs. Medical technology has been named a key culprit in the rising costs of healthcare, with one study estimating that 50% of hospital cost increases could be attributed to the introduction of new technologies.8 Cost-containment strategies have been tried. Behavioral strategies that would modify the behavior of decision-makers, such as the state-based certificate-of-need programs, have been tried. Budgetary strategies, such as regulations setting rates of reimbursement, have been tried.9 And, information strategies, such as outcomes research, are being tried. Pressure to factor cost-effectiveness into technology assessment is increasing. In fact, Food and Drug Administration panels have recently voted against approval of devices when direct clinical proof that product use has reduced morbidity and mortality is absent.8

Yet, the incentives to reduce costs that have had an impact on other hospital services have failed to halt the increase in technology costs, largely because capital costs have not yet been included in the Medicare prospective reimbursement reforms. As a society, we wish to encourage the innovation that has made medical devices critical weapons in the war on disease. However, rapid uncontrolled infusion of new technologies into the delivery system has provided an incentive for overuse and waste of valuable resources, which may have a negative rather than positive impact on overall health.

Physician specialty mix

To accomplish the task of comprehensive health-care reform, all policymakers seem to agree that the mix of generalist and specialist physicians must be reversed. Yet, the incentives influencing medical students clearly work against an increase in generalist training. Powerful incentives toward specialized training—prestige, autonomy, earning potential, debt load—blunt many market forces that may induce medical students to pursue primary care careers. The immediate reality within the medical education environment focuses on the service needs of teaching hospitals and the federal Medicare graduate medical education (GME) payment system, both of which

provide powerful incentives for hospitals to add residents. Because the service need exceeds the number of annual graduates from allopathic medical schools, this imbalance has resulted in an increase in the numbers of international medical graduates in allopathic residency programs.

At a time when the prevalent opinion is that the United States has too many physicians, the mix of residency training specialty slots is determined by individual program directors and administrators and does not respond to broader societal needs. The current fee-for-service reimbursement system continues to value procedural services over generalist practice, influencing many students to choose the more highly paid procedural specialties.¹⁰

The Council on Graduate Medical Education (COGME) considered several alternatives in making their recommendations on how to overcome the current incentives that draw students into specialty practice. Its members concluded that just allowing healthcare market forces to operate in conjunction with the increased demand for generalists would not create a rapid enough change in physician mix. They also concluded that the increased demand for generalists at the national level could divert energy away from the development of reform and could draw urgently needed generalists away from rural areas, exacerbating existing problems of access. Members of COGME also considered the impact of loan forgiveness and tuition reduction, increased reimbursement to hospitals for primary care residencies, and restructuring undergraduate medical education as possible ways to influence physician mix. However, they again came to the conclusion that such incentives will not be strong enough to promote change, and they also argue that even the community-based medical schools charged specifically with the task of training generalists have not been able to meet the minimal target of having a third of their graduates in primary care residencies. 10

Finally, COGME makes the point that the practice income of generalists would have to exceed that of specialists to reverse the incentives drawing students away from primary care. After discarding the proposal that accrediting agencies voluntarily limit their specialties, the Council came to the conclusion that the only workable solution is to fund the desired physician mix. Its recommendation that the number of GME positions be capped, that an all-payers pool fund GME, and that a national workforce plan-

ning body control the number of funded residency positions in each specialty has been endorsed by the Physician Payment Review Commission, the American Association of Medical Colleges, the Pew Health Professions Commission Staff, the Josiah Macy, Jr Foundation, and many other policymaking bodies.¹⁰

Changing incentives

Most proposals for healthcare reform focus on measures that will produce one-time savings by eliminating waste and inefficiency. The question remains whether these savings will be large enough to pay for the added costs of universal coverage and whether they will be strong enough to change the incentives for patients, providers,

and payers.

Although the final shape of comprehensive healthcare reform remains an illusive unknown just out of our sight and grasp, one thing remains fairly certain: managed care organizations are growing and represent a major facet of the healthcare delivery system of the future. Managed care—whether through an HMO, preferred provider organization (PPO), independent practice association (IPA), or some other form of delivery network—is an organized effort to provide a higher quality of healthcare in a more costefficient manner to a greater number of people than the traditional fee-for-service system of healthcare delivery. Managed care organizations focus on economic incentives with such strategies as capitated fees to challenge hospitals and physicians to provide high-quality care to defined populations at a set price. In an integrated healthcare system with a set budget, the wellness of the subscriber community is the philosophic ideal, if not the reality. Within these settings, physicians have incentives to promote and improve health rather than to increase the use of healthcare services.

As employers look to managed care plans to help to curtail the constantly rising costs of healthcare, and as more and more people are enrolled in managed care plans by their employers, physicians are forced to join plans to maintain and, as a result, often increase the number of their patients. Thus, to survive, physicians are increasingly abandoning solo practice for partnerships within provider groups and memberships within the major HMOs and PPOs of their area. The attractiveness of managed care systems is increasing, especially to physicians who have had experience in them.

Under capitation, payments at the beginning of the month are complete, not partially paid like the bills sent to many current payers, such as Medicare. As a result, capitated payments mean that there are no claims or bills to be followed up, which reduces paperwork and frees up physician time. Also, physicians working in capitated environments often have the potential to earn more than their fee-for-service counterparts because their revenue is in excess of fees; fee-for-service revenues often amount to only 65% to 75% of actual charges. 11

In traditional fee-for-service, key decisionmakers have little or no incentive to seek the greatest value for the money spent on healthcare purchases. The system is based on openended, cost-unconscious demand, and the reimbursement mechanism contains more incentives

to spend than to not spend.3

Managed care systems review utilization and health plans to determine whether physicians are using the proper protocols in the course of treatment, to control utilization of services, and to check and record outcomes data. These reviews will allow plans to evaluate physicians on their compliance with the practice guidelines set by the plan and on the quality of the care rendered to the patient by means of outcome measures. In this way, meaningful information will begin to be compiled which will aid in future decisions as to whether to continue contracting with a particular physician or to drop that physician from the plan.

Unless the reformed healthcare system provides for relevant outcomes data to be at the disposal of patients as well as to hospitals and physicians, decisions about healthcare choices will continue to be made based on price negotiations between insurers and managed care administrators and not on outcomes and meaningful quality measures by patients and providers. Incentives in the United States healthcare system will dramatically improve when payers, patients, providers, and referring physicians can base decisions on comparisons of relevant outcome measures and prices, even though patients will not be in the position to choose the providers that serve their particular plan.¹

Managed care, a concept that has been tried and discarded in past decades, has returned to the healthcare market in the struggle to address the proverbial "health crisis" in access, cost, and quality. It is not a panacea or simplistic solution, but will require ongoing evolution, modification, and system adjustment. Physicians need to look beyond the immediate impact and anticipate the long-term consequences of managed care's return. Although managed care systems are limited in their ability to address all the problems facing our ailing healthcare system, they may help to align some of the dramatically skewed incentives that pervade the system.

The importance of encouragement for innovations—both in new forms of healthcare systems and new technologies for delivery—should not be overlooked in a discussion of incentives. Powerful examples of innovative modes of therapy that yield dramatic reductions in cost while improving patients' lives testify to the importance of innovation in the healthcare market. Stifling the power of innovation by instituting price controls or ignoring the importance of research—both basic and applied—will not restructure the incentives needed to control the cost of care while improving quality and access. 12

Comment

No uniquely osteopathic medical profession strategy exists for redressing the contradictory incentives that have led to the call for changes in the healthcare system. However, the profession must avoid denial of the changes that are at hand. Our traditional professional bonds and relationships are being—and will continue to be—dismantled by reform strategies proposed to counter the historical stakeholder incentives. Characteristics of osteopathic medical provider practices (such as predominance of solo office-based practices and small independent community hospitals) will not survive in their present form.

The changes that are brought by managed care and the creation of large integrated health-care delivery systems, even in the absence of federal and state reforms, are creating new incentives for physicians. These incentives are for collaboration and cooperation in more efficient delivery systems and networks. Many osteopathic hospitals will need to—and indeed already are—affiliating with other more ter-

tiary care institutions. Responding proactively to the new incentives can shape networks for the mutual interest of all stakeholders and establish common incentives for cost-effective, high-quality care for our patient population. The advantage the osteopathic medical profession holds in this evolving "systems environment" is the strength of the historical bonds. Because of these ties, we can move ahead rapidly together.

The construct of the profession with its 60-to-40 balance of generalists to specialists and the absence of large tertiary care networks will require that we reach outside the profession in building systems that retain and rely on our distinctive strengths.

References

- 1. Teisberg EO, Porter ME, Brown GB: Making competition in health care work. *Harvard Business Review* July-August 1994;72(4):131-141.
- 2. Walton HJ (ed): World Federation for Medical Education: Proceedings of the World Summit on Medical Education. *Medical Education* 1993;28(suppl.1):140-149.
- 3. Enthoven AC, Kronick R; Universal health insurance through incentives reform. *JAMA* 1994;265(19):2532-2536.
- 4. United States Congress, Office of Technology Assessment: Impact of Legal Reforms on Medical Malpractice Costs. Washington, DC, US Government Printing Office, Publication OTA-BP-H-119, October 1993.
- Ross-Lee B, Weiser MA; Healthcare regulation: Past, present, and future. JAOA 1994;94(1);74-84.
- **6.** Davis K: Achievements and Problems of Medicaid. Washington DC, The Brookings Institution, 1976, p 318.
- 7. Iglehart JK: Health policy report: Medicaid. N $Engl\ J\ Med$ 1993;328(12):896-900.
- 8. Foote SB: Managing the Medical Arms Race. Los Angeles, Calif, University of California Press, 1992, pp 1-10.
- 9. Garrison LP, Wilensky GR: Cost containment and incentives for technology. *Health Affairs* 1986;5(2);46-58.
- 10. Council on Graduate Medical Education: Fourth Report: Recommendations to Improve Access to Health Care Through Physician Workforce Reform. Rockville, Md, US Department of Health and Human Services, January 1994.
- 11. Montague J: Capitation & physicians. Hospitals & Health Networks. April 5, 1994;31-35.
- 12. Finding a lasting cure for U.S. health care. *Harvard Business Review* September-October 1994;72(5):45-63.