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Transforming U.S. Health Care: Policy Challenges Affecting the Integration and Improvement of Care

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Because of advances in medical knowledge, the sickest and most costly patients usually receive care from multiple physicians who are often based at multiple institutions. We argue that organization of providers into integrated delivery networks is an important tactic for promoting coordination among physicians. However, the development of such provider organizations is discouraged by antitrust policies, which reflect greater concern for protecting consumers from price increases than optimism that organized providers might deliver better and more efficient care.

Broad consensus exists that the challenges facing U.S. healthcare require implementation of information systems and other programs to improve quality and efficiency. However, the development of provider organizations that can implement such systems is being slowed by obstacles including (1) a culture of physician autonomy; (2) laws and regulations that restrict development of integrated delivery networks; (3) lack of consensus on how to measure quality and value; and (4) uncertainty about the design of financial incentives to improve care for providers and for consumers.

In fact, evidence to date is mixed on the impact of provider organizations on cost and quality. However, these data do not reflect the benefits of effective use of electronic medical records and other systems that are increasingly available within provider organizations. Demonstration of the contribution of provider organizations is further complicated by lack of consensus on how quality and efficiency should be measured, and which national or regional organizations should do that measuring.

Perhaps the most difficult policy choice is whether incentives to improve care should be aimed at providers through pay-for-performance programs; or at consumers through high-deductible insurance products. Serious concerns exist about the potential impact of consumer-oriented incentives on quality. To mitigate this risk, we believe that providers should be encouraged to organize themselves to respond to pay-for-performance incentives. However, policy decisions at federal and state levels will greatly influence the extent to which this occurs.



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Health care delivery in the United States has failed to keep up with medical science (see our companion brief). Most health services are still delivered through a fragmented system of independent practitioners. Most institutions focus primarily on treating acute illness. But most money is spent on the chronically ill who require services of many providers who too seldom communicate well with one another to coordinate care. Unlike many other sectors of the economy, the health care system has been slow to harness advances in information technology to improve the daily delivery of complex and interrelated medical care interventions. Health care organizations, paid primarily on a fee-for-service basis, have few incentives to reduce potentially unnecessary services. The result too often is health care that is duplicative, poorly coordinated, and not sufficiently proactive in managing those patients with chronic illness who account for approximately three-quarters of U.S. health care spending.

There is broad consensus on the need to improve safety, quality, reliability, effectiveness, and efficiency of health care. Much of this change depends on fundamental transformation of the processes, organization, and infrastructure of the delivery system. The pace of these changes will be influenced by factors internal to the culture of medicine. Physicians who now put preeminent value on individual professional autonomy need to learn the value of working as part of medical teams. Public policies that now hamper private actions to promote such collaboration need to be critically examined. With such policy changes a new structure of competitive markets in health care can emerge.

These issues become explicit when considering the feasibility of one of the most promising strategies for transforming health care delivery—the development of integrated health care systems with sufficient scale to implement information technology and other systems to improve quality and efficiency. A companion issue brief illustrates one such program that aims to achieve five broadly accepted goals for the health care system: implementation of clinical information systems that can be used by physicians, hospitals, and others; improvement of patient safety; ensuring uniform high quality; effective management of high risk patients with chronic illness; and reduction of health care spending growth.

Support for these goals *in principle* is universal. In practice, their achievement must surmount major obstacles. The first is cultural. A strong culture of physician autonomy slows the adoption of systems and processes designed to improve teamwork and coordination of care. Second, laws and regulations restrict development of integrated delivery systems and limit the ability of systems to defray the costs of information technology for non-employed physician practices. A third obstacle is the lack of consensus about the definitions of quality and value and about the design of appropriate performance measures, which hinders quality improvement initiatives and development of financial incentives. Finally, few reimbursement systems reward health care providers for high quality or efficient chronic care management.

Without appropriate performance measurement, pay-for-performance and other incentive systems for providers are difficult to implement. In addition, the

failure to develop effective incentive systems directed at providers carries a threat—that policies may be implemented which increase reliance on insurance strategies that shift financial risk onto consumers, an approach that could create a price driven system with inadequate emphasis on quality. These obstacles can be overcome, but doing so requires changes in private management and can be facilitated by changes in public policy.

OVERCOMING CULTURAL BARRIERS TO INTEGRATED CARE

The traditional role of physicians evolved when scientific knowledge and options to treat patients were a fraction of those available today. The ratio of art to science in medicine was high. The ideal physician was expected to know everything necessary to care for his patients. Smart, hardworking physicians could actually come very close to achieving this ideal.

The explosion of medical knowledge has made it impossible for any single physician to master more than a small fraction of that knowledge. Such conditions as hepatitis and HIV that were formerly untreatable can now be controlled or even cured, but the therapies usually warrant referral of patients to practitioners who specialize in those conditions. Management of such common diseases as atrial fibrillation and heartburn, the treatment of which was routine in general practice a generation ago, has become much more complex. Accordingly, both patients and primary care physicians increasingly seek the involvement of specialists, adding to complexity and costs of care.

Thus, caring for patients with significant

illness has become a “team sport.” The culture of medicine, however, still celebrates individual “healers” tirelessly devoted to their patients. Systems such as electronic medical records and disease management programs can help physicians and other clinicians communicate with each other and coordinate their efforts. Unfortunately, their use remains optional except in tightly organized delivery systems. Indeed, physicians and their professional societies tend to resist programs that might impose “rules” that are seen as compromising the autonomy of individual physicians or that allow any decision regarding a patient’s care to be made by nonphysicians not under the direct supervision of physicians.

Most American medicine is delivered by physicians in one- to four-member practices. Adoption of information systems and disease management programs is a formidable financial and cultural challenge for these groups. Organization of physicians into integrated delivery systems can help physicians to embrace systems that enhance the reliability, safety, and efficiency of care. Indeed, the sacrifice of some individual physician autonomy can facilitate provider organizations’ efforts to preserve “group autonomy.” How quickly and effectively provider organizations can hasten this evolution will be influenced by external factors.

REDUCING BARRIERS TO INTEGRATED HEALTH SYSTEM DEVELOPMENT

Health system analyst, Stephen Shortell, observed that the “largest limiting factor [to health system improvement] is not lack of money, technology, information, or even people but rather lack of an organizing principle that can link money, people,

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technology, and ideas into a system that delivers more cost-effective care than current arrangements (Stephen Shortell and Julie Schmittiel, "Prepaid Groups and Organized Delivery Systems: Promise, Performance and Potential" in *Towards A 21st Century Health System*, ed. A Enthoven and L Tollen (San Francisco: Jossey-Bass, 2004). This comment expresses a view similar to that endorsed in the Institute of Medicine's report *Crossing the Quality Chasm*. Organization of health care providers into integrated delivery systems is now widely recognized as one of the most promising strategies for transforming the culture of medicine from the 'craft-guild' mentality of the past to the 'science-based, team' approach of the future.

Certain government policies stand in the way of this transformation. Traditional government policies focus on the risks that provider consolidation will enable suppliers of services to dictate prices. For entirely understandable reasons, purchasers share this concern. A fragmented delivery system makes it easier for consolidated purchasers to limit increases in hospital rates and physician fees. Yet a large enough base of physicians is necessary to spread the cost of investment in systems that improve care and reduce inefficiency.

Federal anti-trust policy has emphasized the preeminent importance of maintaining markets in which no entity is dominant enough to dictate prices or expunge competition. Consequently, federal anti-trust policy stands in the way of creating integrated health systems. In the past, hospital mergers were challenged when proposed. In 2002, the Federal Trade Commission (FTC) announced that it would begin to review

and potentially challenge hospital and physician group mergers retrospectively. The FTC has indicated particular concern about mergers that would enable participants to raise prices. Mergers that improve quality of care or support efficiency improvements are not of concern. Nevertheless, the risk of "after the fact" review substantially increases the legal and financial risk for organizations considering consolidation.

Evidence on the impact on costs and quality of integrated delivery systems compared with other arrangements is varied. One study found that price increases following hospital consolidations equaled or exceeded the median among other hospitals in the same market. Another study found that costs in more centralized delivery systems and networks were lower than in more decentralized and independent networks. As far as quality and efficiency are concerned, large integrated multi-specialty physician practices have been found to be more likely to use recommended evidence-based care management processes and to have implemented advanced clinical information systems than other types of physician groups.

Although spread of electronic medical records (EMRs) is widely endorsed, federal regulations limit the ability of hospitals to subsidize EMR implementation by non-employed physicians. Cost is a major barrier to EMR adoption, especially in small physician groups. The initial cost of EMR in solo and small practices was found by one study to be \$44,000 per physician; ongoing annual costs averaged \$8,500. Recent changes in regulations allow hospitals to assist physicians with some of these costs. The cost of expanding

EMR penetration from the current level to 90 percent would be an estimated \$1.1 billion annually for physician offices and \$6.5 billion annually for hospitals over the next 15 years.(Richard Hillestad, et al. “Can Electronic Medical Systems? Potential Health Benefits, Savings, and Costs,” *Health Affairs*, 24:5, September/October 2005)

Because federal funding for health IT investment is scant, the private sector must bear most of the financial responsibility. However, the Government Accountability Office concluded that current federal laws “present barriers by impeding the establishment of arrangements between providers—such as the provision of IT resources—that would otherwise promote the adoption of health IT.” Because the laws frequently do not address health IT arrangements directly, health care providers are uncertain about what would constitute violations of the laws or create a risk of litigation. To the extent there are uncertainties and ambiguity in predicting legal consequences, health care providers are reluctant to take action and make significant investments in health IT.” (Government Accountability Office. *HHS’s Efforts to Promote Health Information Technology and Legal Barriers to Its Adoption*. GAO-04 3 -991R August 13, 2004)

Thus, federal policy must confront a central dilemma. Should policy insist on keeping units small, thereby maintaining the environment for price competition but retarding the introduction of health IT and other quality improving investments? Or should policy accept integrated hospital systems that can afford costly quality-improving investments but may also have

the power to raise prices? We believe that the risks to patients from deterring quality improvements far outweigh the risk of price increases, particularly since public policy has diverse means to prevent abusive pricing practices.

ENHANCING HEALTH CARE PERFORMANCE MEASUREMENT

Data on the cost and quality of providers is critical to efforts to improve health care. Customers for such information include providers themselves, purchasers of care (health plans and employers), and patients. In theory, informed patients can drive improvement in the healthcare system. While controversy persists about the true impact of consumer information, some studies indicate that public reporting of hospital quality has done much to accelerate improvement. (Judith H. Hibbard, Jean Stockard, and Martin Tusler, “Hospital Performance Reports: Impact On Quality, Market Share, And Reputation,” *Health Affairs*, July/August 2005; 24(4): 1150-1160; Scott Williams et al., “Quality of Care in U.S. Hospitals as Reflected by Standardized Measures, 2002–2004,” *New England Journal of Medicine*, 353(3), 21 July 2005, 255-264.

Many hospital and physician organizations have resisted efforts to expand price and quality transparency. They point out that administrative data frequently lack the accuracy or detail needed to adjust for severity of illness and for patients’ socioeconomic status. Improved evaluations can be made through manual review of patients’ charts but such analyses are prohibitively time-consuming and expensive because most charts are still on paper. Access to accurate clinical data from electronic medical records may one day be feasible, but that day is far in the future.

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Although improvements in data will be costly, they are widely recognized as vital. Consequently, initiatives to implement systems for reporting data on quality of providers—and, in some cases cost—are underway in virtually every U.S. marketplace. As efforts to collect and distribute useful data intensify, important issues have emerged. Which data should be reported? What organizations should have responsibility and authority for the process? Numerous organizations are developing quality indicators, including the Joint Commission on Accreditation of Healthcare Organizations, the National Quality Forum, the Agency for Healthcare Research and Quality, the Centers for Medicare and Medicaid Services, the National Committee for Quality Assurance, and the Ambulatory Care Quality Alliance. It is difficult for health care providers to focus their efforts if every agency and payer has a different series of measurement priorities.

Another major problem is the fragmentation of data used for health care performance measurement. With the exception of Medicare, most third party payers have data that represents only a small fraction of any physician's practice. Developing statistically valid quality measures is therefore difficult for most payers, particularly for low volume services or conditions.

This fragmentation raises an important policy question: should the government invest in a single organization that could become a trusted source of information on comparative health care performance? Such an organization would set priorities for performance measurement, integrate available quality and cost measures into comprehensible reports focused on

priority areas, establish a process for defining new quality measures, conduct analysis using Medicare and other publicly available data, and prepare strategic plans for reporting data on clinical quality.

The Institute of Medicine recently recommended that Congress spend \$100-200 million to establish a National Quality Coordination Board (NQCB) to coordinate the development of standardized performance measures and to monitor the nation's progress toward improving the health care system. Given that federal health spending on health care services and research will soon exceed \$1 trillion dollars, the rationale for a comparatively modest outlay to measure health care performance is compelling. Nevertheless, Congressional support for the NQCB has not emerged. Without an expanded national investment, progress will have to come principally from state or regional initiatives like Pennsylvania's Health Care Cost Containment Council, the Pacific Business Group on Health, or Massachusetts' newly formed Health Care Quality and Cost Council. In regions where no such initiatives occur, health plans will be forced to rely on limited databases that are likely to fall far short of the trusted source sought by advocates of transparency.

CREATING FINANCIAL INCENTIVES FOR HEALTH CARE QUALITY AND VALUE

A frequent criticism of the American health system is that providers lack a compelling business case for investing in quality and efficiency improvements. To address this problem, some purchasers of care are instituting pay for performance (P4P) reimbursement to increase the payoff to

investments in quality improvement. These P4P programs vary substantially in their structure, extent of financial incentives, and performance measures.

Major obstacles must be overcome if P4P is to fulfill its supporters' hopes. First, most health plans constitute only a small percentage of any provider's total revenue. Available research does not show what proportion of payments must be at risk to catalyze significant changes in provider performance. Few individual health plans have sufficient scale to drive change through payment incentives. Second, it is very hard to define what measures of provider performance to reward and how large the rewards should be. If incentives are large enough to influence physician behavior, it is vital that the incentives promote the right behaviors and equally important that they not discourage activities that may be hard to measure, but are conducive to patient health.

One payer clearly does have that power. The Centers for Medicare and Medicaid Services (CMS) provides a greater share of total hospital and physician revenue than any individual private insurer for most providers. For example, Medicare and Medicaid cover 50% or more hospital admissions for many U.S. hospitals. Medicare recently implemented a program to pay a 2 percent bonus to hospitals in the top 10 percent of performers and a 1 percent bonus to the next 10 percent, as measured by 34 quality measures on five clinical conditions. In the third year of the demonstration, CMS will also reduce payments by 2 percent to hospitals based on diagnoses at the time patients are admitted for targeted clinical conditions if the hospitals fall in the bottom 10 percent

of performers. Although CMS payment policy can clearly effect change, the importance of Medicare payments for most health care providers means that CMS must proceed gradually in order to limit the severity of unintended consequences, such as discouraging important aspects of care that are not included in P4P because they are hard to measure. Well-designed programs are likely to improve care, but whether they will also cut spending remains uncertain.

The problems posed by rising expenditures will intensify if provider incentives do not work. The major alternative targets for incentives are patients/consumers. They are already the focus of high-deductible (HD) insurance, often called "consumer-directed health plans." These high-deductible plans may be combined with tax-advantaged health savings accounts, and tiered co-payments where cost sharing for enrollees depends on which hospital or doctor they use. In 2005, HD plans enrolled 2.4 million people. Supporters of this approach believe that increasing deductibles will encourage patients to make more cost-effective choices and providers to become more efficient. Opponents counter that because most healthcare expenditures are incurred by a small percentage of patients, high deductible plans will have little impact on overall spending. They are further concerned that high deductible plans will encourage patients to forego necessary care and choose inexpensive but not necessarily superior providers because most people do not understand data on provider quality but are sensitive to price. Careful and detached evaluations of HD health plans do not yet exist.

Federal policy will influence how P4P and



HD plans affect local health care markets. How CMS behaves is critical. Will it be a major force in defining and driving quality improvement through financial incentives? Or will it “protect” vulnerable providers such as rural providers and small physician practices for whom adoption of information systems is more challenging? Another question is whether federal policy will continue to provide strong tax incentives for adoption of HD health plans, despite concern about their impact on quality of care. Finally, will federal policy support development of consistent and validated quality measures?

CONCLUSION

At one time, an individual physician could master most of medical science and deliver near optimal medical care, given the constraints imposed by limited information. The proliferation of medical

knowledge means that is no longer possible. To meet the challenges for healthcare delivery created by progress in medical sciences, healthcare providers will need to address the limitations of a culture that emphasizes individual physician autonomy. They should support the development and speedy implementation of systems that improve efficiency and quality. Policy decisions on issues of public reporting and the financing and organization of care will heavily influence the success of healthcare organizations in this effort.

The challenges we have described are linked. They should not be considered in isolation. Policies of the federal and state governments will determine whether quality improvements that are within reach are implemented promptly and universally. **B**

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