Chronic sleep deprivation degrades one’s ability to recognize the impairments induced by sleep loss. Sleep-deprived clinicians are therefore not likely to assess accurately the risks posed when they perform procedures in such a state, and they should not be permitted to decide whether or not to proceed with elective surgery without obtaining the patient’s informed consent. In keeping with the ethical and legal standards of informed consent, patients awaiting a scheduled elective surgery should be explicitly informed about possible impairments induced by sleep deprivation and the increased risk of complications. They should then be given the choice of proceeding with the surgery, rescheduling it, or proceeding with a different physician. If patients decide to proceed, they should explicitly consent to do so — in writing, on the day of the procedure, in front of a witness, and ideally on a standardized form designed for this purpose.

This approach would represent a fundamental shift in the responsibility patients are asked to assume in making decisions about their own care and might prove burdensome to patients and physicians and damaging to the patient–physician relationship. Yet this shift may be necessary until institutions take responsibility for ensuring that patients rarely face such dilemmas. Although it may be challenging to assess sleep deprivation, estimate the risk of resulting harm, and enforce a formal sleep policy that necessitates the disclosure of clinicians’ personal information, we believe that the benefit of creating such a policy outweighs the burden. To implement such policies, institutions will need to absorb the financial and administrative consequences of canceling and rescheduling elective surgeries in a timely manner. But these steps might ultimately reduce institutional costs if outcomes are improved and complications reduced.

The problem of sleep deprivation vexes medical practice. Public debate and creative solutions are needed to ensure that patients’ interests are protected. We believe that elective surgeries provide an opportunity to create and evaluate a policy designed to avert the adverse effects of sleep deprivation on patient outcomes. Strategies learned from applying such policies can then inform other areas of practice.

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be profound for hospitals’ dominant role in the health care system and for physicians’ income, autonomy, and work environments.

The ACA aims to simultaneously improve the quality of care and reduce costs. Doing so will require focused efforts to improve care for the 10% of patients who account for 64% of all U.S. health care costs.2 Much of this cost derives from high rates of unnecessary hospitalizations and potentially avoidable complications,3 and these, in turn, are partially driven by fee-for-service incentives that fail to adequately reward coordinated care that effectively prevents illness. The ACA includes numerous provisions designed to catalyze transformation of the delivery system, moving it away from fee for service and toward coordinated care (see table).

These provisions will result in incentives for the development of the information systems and infrastructure necessary for better and more efficient management of chronic conditions. Such outpatient changes will be reinforced by hospital readmissions policies that improve handoffs and by initiatives to reduce the occurrence of hospital-acquired infections and “never events.”

The desired consequence of these changes is enhanced tertiary prevention, leading to substantial reductions in unnecessarily expensive specialty referrals and tests and avoidable complications. And the ultimate consequences should be significant improvements in health and fewer exacerbations of chronic illnesses.

Achievement of this level of care coordination will require the development of larger integrated delivery organizations — preferably, accountable care organizations (ACOs) that incorporate primary care practices structured as patient-centered medical homes and that can support new investments in information systems and care teams and can maintain service hours resembling those of retailers.4 A move toward ACOs will mean major changes in the structure of physicians’ practices, since even physician-group–based ACOs may include one or more hospitals, though they may instead contract with hospitals for specific services chosen on the basis of their relative value.

Larger ACOs are likely to be contracted directly by payers to manage the continuum of care. They are also likely to bear financial risk, receiving greater payments for the care of chronically ill patients and accepting at least partial responsibility for the costs of specialists’ visits, tests, emergency room visits, and hospitalizations. Memories of the inflexible managed-care gatekeepers of the 1990s could lead to theoretically permissive, if practically narrow, networks of providers, although these organizations will need to work closely with a small group of efficient specialists and facilities to achieve their quality and efficiency goals.

A crucial question is who will control these ACOs. We can envision two possible futures: one of physician-controlled ACOs, with physicians affiliating and contracting with hospitals, controlling the flow of funds through the marketplace; and one of hospital-controlled ACOs that will employ physicians. Whoever controls the ACOs will capture the largest share of any savings.

For physicians to control ACOs, they would have to overcome several hurdles. The first is collaboration: ACOs will require clinical, administrative, and fiscal cooperation, and physicians have seldom demonstrated the ability to effectively organize themselves into groups, agree on clinical guidelines, and devise ways to equitably distribute money. Nearly three quarters of office-based physicians, representing nearly 95% of all U.S. practices, work in groups of five or fewer physicians.5 Since much of the savings from coordinating care will come from successfully avoiding tests, procedures, and hospitalizations, the question of how to divide profits among primary care physicians and specialists will be contentious. Proceduralists who would end up losing income are likely to resist key structural changes.

In addition, ACOs will require sophisticated information technology (IT) systems and skilled managers in order to hold clinicians accountable. Historically, doctors have not shown the willingness to assume more capital risk or to invest in overhead. Finally, memories of the failed capitation models of the 1990s may make some physicians hesitant to participate.

If hospitals are to control ACOs, they, too, will need to overcome barriers. First, they will need to trade near-term revenue for long-term savings. Hospitals are typically at the center of current health care markets, and by focusing on procedures and severely ill patients, most have been fairly profitable. Building an ACO will require hospitals to shift to a more outpatient-focused, coor-

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ACO models will dominate throughout the country; local market conditions will influence which one prevails in each community. In geographic areas where the physician base is fragmented and physicians are unlikely to collaborate or where there are already well-established hospital-based health systems, hospitals are likely to dominate. In areas that have well-functioning physician groups, with working IT systems and effective management systems, physician dominance seems more likely. In many other markets, the future is open.

In these places, hospitals have the advantage, since they traditionally have more management talent, accounting capability, IT systems, and cheaper access to capital than do physician groups.

Holding off on creating ACOs is likely to be a bad long-term strategy for physicians. First, health care reform has passed, bringing extensive changes, and it would be very difficult to repeal or modify the ACA so as to delay reforms. Congress's pay-as-you-go rules would require lawmakers to find equivalent savings if they discarded ACA provisions.
that were expected to save health care dollars — especially at a time when there is tremendous pressure to use any available savings to reduce the deficit. Moreover, policies pursued by the new Independent Payment Advisory Board will probably increase the pressure on providers to coordinate care and form ACOs. Finally, private health plans are facing even more pressure from employers and state insurance commissioners to control premiums.

Established institutional relationships tend to persist because of “path dependence”: decisions about the future are constrained by decisions made in the past, even though circumstances may change. Although it is unequivocally inefficient, inequitable, and otherwise problematic to finance health care with a combination of employer-based coverage, Medicare, and Medicaid, it has proved impossible to change this structure. Similarly, once the new payment system and other changes included in the ACA transform the relationship between hospitals and physicians, the new order will become entrenched and persist until the next period of creative destruction.

If physicians come to dominate hospitals’ census will decline, and their revenue will fall, with little compensatory growth in outpatient services, since physicians are likely to self-refer. This decline will, in turn, lower hospitals’ bond ratings, making it harder for them to borrow money and expand. As hospitals’ financial activity and employment decline, their influence in their local communities will also wane. And it will be hard for them to recover from this diminished role.

Conversely, if hospitals come to dominate ACOs, they will accrue more of the savings from the new delivery system, and physicians’ incomes and status as independent professionals will decline. Once relegated to the position of employees and contractors, physicians will have difficulty regaining income, status, the ability to raise capital, and the influence necessary to control health care institutions.

Therefore, the actor who moves first effectively is likely to assume the momentum and dominate the local market. A wait-and-see approach could succeed if the first mover executes poorly, failing to coordinate care and manage risk. But rather than controlling destiny, cautious actors will be hanging their fate on the mistakes of others.

In the early 20th century, the health care system changed dramatically with the introduction of antisepsis and the increasing safety and success of surgery; hospitals gained power as they became associated with hope and health rather than fear and death. Now, after decades of hospital hegemony, we stand at another crossroads; physicians may be able to gain market leadership if they move first. How the development of ACOs plays out over the next few years is likely to have lasting implications for the practice of medicine, patients’ experience of health care, and health care costs in the United States. The next decade will be critical for developing an effective model and making historic changes in the structure of our health care system.

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