One of managed competition’s greatest challenges is to safeguard quality of care without robbing the system of free-market efficiencies. At the level of the doctor/patient relationship, managed competition relies on managed care, including health maintenance organizations (HMOs), preferred provider organizations (PPOs), and point-of-service plans. With managed care, the traditional financial incentives in American health care (the more a physician does, the more he or she gets paid) are at least constrained and often reversed. This helps to contain costs, allowing managed care plans to offer more comprehensive coverage, innovative services, or other desirable products at a competitive price. However, critics argue that managed care incentives and controls such as utilization review will elicit undertreatment and discrimination against consumers with costly medical problems.

Effectively safeguarding against this outcome requires that a system of quality assurance (QA) be implemented to encourage at some levels and require at others that providers maintain a high standard of care. The risk of such safeguards, however, is that an overly regulatory or prescriptive quality management program could increase administrative costs and prevent effective competition between health care plans. In addition, physicians, who are responsible for directing most spending for health care, would oppose an overly regulatory system. Instead of establishing an adversarial relationship, those who favor managed care should secure physicians’ cooperation and intellectual investment in promoting a culture of cost-effective quality.

How can managed competition carve out an effective middle ground? Although the bulk of QA activities must be performed at the level of the

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individual managed care plans, these efforts must be monitored and, in part, directed by health insurance purchasing cooperatives (HIPCs) (and other purchasers), who in turn may be monitored and partially directed by an oversight board. Here we describe a set of complementary and interdependent activities to safeguard quality in managed competition.

Quality Assurance Within Plans

The definition of quality is complex. Although there is philosophical agreement regarding some fundamental ingredients, there is less agreement about the relative importance and interaction of those ingredients and the extent to which valid, reliable, and systematic information can be produced to distinguish high-quality plans from the rest. In brief, Avedis Donabedian has defined three components of health care quality: structure measures, which address the “tools and mortar” of a health care plan (for example, whether the plan has the appropriate number of properly equipped exam rooms); process measures, which address the appropriateness of the steps taken during a physician/patient interaction (for example, whether a child received immunizations on schedule); and outcome measures, which address whether medical interventions led to desirable patient outcomes (for example, whether a surgical procedure led to improved functional status or longevity). Some researchers separate patient satisfaction as a fourth category, while others include this in outcome measures. 2

In the past decade several agencies, including the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the National Committee for Quality Assurance (NCQA), and the Health Care Financing Administration (HCFA) through its Quality Assurance Reform Initiative, have developed quality standards for managed care plans. 3 The structural requirements delineated by the standards include identifying personnel for overseeing the QA effort; developing and implementing written QA plans; establishing reporting lines; and specifying structures that encourage accountability. The QA standards go on to mandate methods for specifying the scope of QA, identifying key areas for quality measurement and improvement, collecting and evaluating data in a systematic manner, judging the effectiveness of corrective actions, and monitoring quality indicators. These standards are readily adaptable and appropriate to managed competition, in which HIPCs and other purchasers must choose which plans in their competitive market area to offer to consumers. Here we focus on some of the more innovative activities to improve quality.

It should be emphasized that published standards and the following discussion describe a complementary set of interdependent checks and balances to safeguard quality in a managed competition system that is based
on managed care. No single element can be effective (nor should any be adopted) by itself. For example, a recent report describing “exemplary” QA programs in HMOs stresses that such programs pervade the organizational culture of HMOs. QA activities are difficult to isolate because they are complex, intertwined, ubiquitous, and entrenched in the organization, starting with complete commitment to quality at the very top levels and continuing through how providers are organized and paid.4

Provider participation. In managed competition, the representation of physicians and their contribution to the quality improvement process are crucial. Health care reformers may be tempted to discount the interests of physicians, treating them as technicians rather than professionals. However, to foster a culture of quality, physicians need to be enlisted in a partnership. Failing to do so costs not only their cooperation in providing cost-effective, high-quality care, but also their intellectual contribution in designing innovative solutions to problems.

One of physicians’ greatest fears about managed care is the imposition of outside managerial control over individual clinical decisions, whether to contain costs or ensure quality. Physicians who are collaborating in the design and implementation of quality assurance programs are more likely to adhere to them than physicians who feel such programs are thrust upon them, enforced with sanctions through adversarial interactions.

Because of their comprehensive responsibilities to patients, HMOs, in particular, have taken innovative approaches to promoting such collaboration. These approaches necessarily differ depending on whether the managed care plan is an individual practice association (IPA) model or not. In the former, physicians are more independent (whether in group or solo practice), and they see patients outside the HMO. In non-IPA models, physicians are in closer proximity to each other and the HMO, and they see only HMO patients. Consequently, their financial outcome and allegiance to the HMO is more direct. Effective quality assurance can be undertaken in both types of plans as long as differences in the physician/HMO relationship are recognized.5

For example, non-IPA HMO physicians see each other frequently and are organizationally “in the same boat.” This facilitates their evaluation regarding quality of care, patient satisfaction, and other aspects of their group identity. In the looser structure of IPA-model HMOs, care must be taken to achieve this same “buy-in” and avoid adversarial styles of management. IPAs achieve this in three ways: by changing the locus of managerial control, by focusing on and experimenting with new forms of “positive” financial incentives based on quality of care, and by creating risk pools.

Locus of managerial control. One innovative initiative used to involve IPA physicians in the management of their HMO practice, and one that
seems particularly relevant to assessing QA innovations in managed competition, has been to adjust the locus of financial risk and managerial control by creating two- or three-tier HMOs. Two-tier HMOs contract directly with physicians, paying them directly and offering financial incentives through bonuses, withhold accounts, and other mechanisms to contain costs through reducing hospital, specialist, or other service use. Three-tier HMOs differ in that they contract with an intermediary organization-a middle tier-that in turn contracts with physicians. Examples of such intermediaries are hospital medical staffs, physician groups, and physicians in geographic areas that receive capitation payment from the contracting HMO but then are free to negotiate different contractual arrangements and incentives with individual physicians.

Traditional two-tier systems, in which HMOs contract directly with physicians and often pay them by capitation, put the financial risk of treatment more directly on the individual physician, while the managerial control of the patient (for example, the extent of utilization management and other nonfinancial constraints) often remains with the HMO. However, such arrangements may produce physician resentment, as the control but not the financial risk remains remote and adversarial.

In a three-tier system, the financial risk of under- or overtreatment can be retained by the middle tier and removed from the individual physician. A middle-tier contracting organization may choose, for example, to replace financial incentives with other types of influences on individual physicians, such as utilization management, intense information feedback, or some other change in the culture in which the physician practices. In this way physicians have more flexibility to collaborate to manage their own behavior, independent of financial concerns. Decision making is removed from remote third parties.

Such arrangements simulate the proximity and peer-group influences that occur in non-IPA HMOs and, although not yet fully evaluated in scientific studies, hold promise for improving competition’s ability to constructively enlist physicians in QA programs. On the other hand, three-tier arrangements also may facilitate organized physician resistance to plan innovation. At the very least, purchasers such as HIPC’s must understand the incentives and organization of the HMO at the level at which the physician practices, so that they can monitor and intervene effectively.

Positive financial incentives. To date, managed care plans have encouraged physicians to practice efficiently through capitation payment, bonus distributions for efficient use of resources, withhold accounts (in which physicians are budgeted a fixed amount to allocate on patient care and penalized or rewarded based on whether they spend more or less than the budget), and other financial mechanisms. Although the goal is to reduce
only unnecessary care, the inevitable accusations of undertreatment have been leveled at managed care. However, no systematic detrimental effect on quality of care has been documented.

As a result of both governmental intervention in the late 1980s and innovation in private health care management, HMOs and other managed care organizations have sought a better balance of rules and incentives to provide high-quality, cost-effective care. Several HMOs have experimented with systems of positive financial incentives, paying physicians based partly on assessments of the quality of care they provide. In these systems, quality is determined through reviews of physicians’ charts for adherence to clinical protocols and predetermined administrative standards, through patient satisfaction surveys, and through other more subjective measures of quality such as contribution of physicians to the managed care philosophy (such as participation on committees). The importance of physician productivity—as measured by keeping within a budget set by the managed care plan—is reduced, as are “negative” financial incentives in which physicians are subject to financial sanctions for poor productivity.

Although several HMOs are experimenting with this innovative form of quality enhancement, the effectiveness of these systems has never been systematically or scientifically evaluated. In addition, very little is known about how financial incentives might be targeted to improve specific aspects of care such as preventive services that have been underused in traditional financing arrangements. Nonetheless, as managed competition pursues innovative and effective measures of quality in managed care, these and other new systems of managing physician behavior should be implemented and evaluated.

Risk pooling. This organizational tool is similar in effect to the division of managed care plans into multiple levels, but risk pools are different from the intermediary organizations seen in a three-tier HMO. Pooling risk reduces the incentive to undertreat patients by eliminating the “one-to-one” relationship between resources used and the physician’s financial remuneration, thus safeguarding quality. The group of physicians providing care shares the risk or reward of the withhold and bonuses. Such risk pools may have the effect of creating a peer-group culture of physicians who self-regulate to safeguard quality as well as their own financial interests.

Total quality management (TQM). This approach to quality assurance was adapted from industry and recently has gained use in health care. Some experts doubt its usefulness outside of refining the administrative or structured clinical processes of health care delivery, because the vagaries and “art” inherent to the individual physician/patient interaction will be difficult to improve using industrial methods. Nonetheless, hospitals, HMOs, and other managed care organizations have begun putting the
concept into practice, and it seems well suited to a market-driven health

care system such as managed competition, for a number of reasons.

Instead of believing that the system is being corrupted by “bad apples,”
TQM assumes that the work force is competent and intends to provide
high-quality services. The role of quality assurance is to improve the proc-
esses to achieve quality, not react to poor outcomes, and it relies on
self-motivated improvements in quality and the use of incentives rather
than on inspections and sanctions. Such an approach decreases the reliance
of a health care system on regulation, which poses the risk of stifling
innovation in managed competition, and allows for more decentralized
quality assurance. Because purchasers in managed competition will choose
plans based on quality and cost, improvements in quality and efficacy that
may be achieved through reduction in practice variation—whether in-
duced through a TQM program or not—will be important.

The overriding philosophy of TQM is that quality is everyone’s business
and is not the function of a small traditional QA department that operates
in isolation. Indeed, “exemplary” HMO QA systems were found to be fully
engaged in TQM processes or applying major pieces of the TQM philoso-
phy in their daily operation.

**Credentialing and recruitment.** Effective QA requires that peer groups
of physicians evaluate the qualifications of physicians to practice in the
plan. Reviews should include practitioner’s licensure, academic and work
history, and any history of censure or sanction. Renewal of a practitioner’s
credentials should depend on feedback from patients as well as from utiliza-
tion management, quality reviews, and peers.

Since managed competition is based on managed care plans that com-
pete for consumer/employer/HIPC business based on quality and price, the
validity of credentialing must be assured. This calls into question some
current forms of credentialing, for example, release of government informa-
tion about the litigation history of individual physicians. While the legal
system ideally should serve as a guardian of consumer interest, it is unclear
whether legal settlements in our litigious society actually reflect physician
quality.

Central to the success of a system of managed competition is the ability
of the managers in managed care plans to influence the cost-effectiveness of
physicians’ decisions without altering the appropriateness of their medical
judgment. An indirect solution to this problem is to recruit physicians who
are predisposed to (or at least open to) this mentality; in addition to
determining that a prospective physician meets the necessary standards of
professional licensure, training, and practice experience, more and more
managers are seeking only practitioners willing to accept management
philosophy. The difficulty is identifying such physicians.\(^{11}\)
Enrollee rights and satisfaction. Enrollee satisfaction is critical in managed competition, where competition for enrollees is expected to produce efficient and high-quality health care. Plans should have written policies that assure enrollees such rights as access to regular, after-hours, and emergency care; referrals for specialty care; information about qualifications of practitioners; and financial responsibilities for copayments. It is crucial that enrollees understand how they can appeal "adverse" decisions affecting coverage, switch physicians, and register complaints.

In managed competition specific policies must be developed to describe how insurers would maintain the confidentiality of patient information. Such policies are especially important in a managed competition model because of individual managed care plans' role in providing data for purchasers or the oversight board to monitor patient outcomes and other quality indicators. The plans must maintain the delicate balance between supplying enough patient information so that the data are useful, while at the same time protecting the confidentiality of patients.

For managed competition to be successful, enrollees must be able to switch among competing plans. It is extremely important for plans to be able to assess and improve enrollee satisfaction as they compete with other plans seeking to woo away enrollees. Although current quality assurance research has established methods, such as member surveys, to address this area, innovation by plans in assessing and maintaining enrollee satisfaction should facilitate managed competition.

Utilization management. Utilization management should be designed to evaluate and improve the appropriateness of medical activities by focusing on activities that improve quality and control costs. Appropriate utilization management specifies criteria to allow reviewers to identify both underuse and overuse of services. Safeguarding quality in managed competition requires that qualified medical professionals supervise preauthorization or concurrent review programs, consult with the treating professional, hear appeals, make timely decisions, and evaluate the effects of their decisions on member satisfaction, physician satisfaction, and outcomes.

The importance of physician satisfaction cannot be overemphasized. Historically the relationship between utilization reviewers and physicians has been adversarial, and improvement in overall quality through this approach of identifying outliers has been slight. If managed competition is to improve upon past quality activities, utilization management programs need to balance their regulatory function, moving away from focusing only on cost-saving micromanagement activities and toward streamlining medical care to reduce only unnecessary procedures and treatments. Such an approach will mandate an increased degree of physician input in the review process, as well as increased flexibility in acceptance of variation in physi-
cian practice when there is no clearly superior treatment.

**Continuity of care/case management.** Systems have been developed in managed care to assure that individual patients are followed by physicians who take responsibility for orchestrating their health care. In case management, primary care physicians refer patients to specialists when needed, confer with those specialists, and especially when multiple specialists are involved—prevent redundant therapies and medications. Especially for enrollees with multiple complex medical problems or chronic illnesses, the loss of continuity could compromise the quality of care. At the same time, managed competition relies on the portability of enrollees’ insurance coverage and enrollees’ ability to switch plans based on cost and quality (as well as job location), not whether they have established a long-term relationship. Case management, which has played a key role in managed care, should help managed competition meet the challenges of portability and continuity. When patients change employers or primary care physicians, there is a single, concise, comprehensive set of medical records to transfer.

In managed competition, the role of case manager will put primary care physicians in positions of greater authority than specialists, in contrast to the traditional system. Gatekeeper/case manager activities are often tied to financial incentives to encourage efficient care. To avoid overzealous attention to these “negative” financial incentives, managed competition must assure that managed care plans balance the use of financial incentives with other quality assurance activities.

**Standards and protocols versus outcomes analysis.** Also called practice guidelines, standards and protocols are increasingly used by managed care plans. A frequent objection to such standards from physicians is that when they are too stringently applied and enforced, they risk robbing an already inexact science of its art. The result may compromise the quality of care that the standards are designed to protect. The goal of physician practice guidelines should not be “to remove the decision-making power from physicians, but to improve the capacity of physicians to make better decisions.”

Another objection is that rather than determining quality through traditional measures of death and complications of medical procedures, managed competition should develop systems to monitor the overall health status (or outcomes) of the members served by various plans. However, outcomes analysis is in its infancy, as the medical community has just begun to focus on defining good outcomes. This is an extremely complex and expensive undertaking. Determining a patient’s functional status is difficult enough, but defining how it should be applied to assessments of quality is even more difficult.

In addition, with rapid change in the science of medicine, practice
guidelines (and target outcomes) can quickly become outdated. In managed competition, mechanisms must be included to encourage individual managed care plans to allow physicians to deviate from protocols when appropriate. Frequent review of these standards by physician-directed evaluation committees will help to keep them current and flexible.

**HIPCs And The Oversight Board**

To what extent can strategies developed in managed care settings be applied to managed competition? Given that very little is known about the impact these mechanisms may have on quality, regulation should focus initially not on mandating or prohibiting specific mechanisms, but rather on evaluating the effect of these mechanisms and improving quality. HIPCs and the oversight board should play an important role.

The function of collecting uniform data from health plans and sponsoring research into health outcomes and practice guidelines should also be the responsibility of the HIPC or oversight board, which would distribute information to consumers so that they could make an informed choice of health plan. (In areas that are too small or isolated for competition, the HIPC would necessarily play a greater role in organizing the direct delivery of care.)

Several major challenges confront HIPCs and oversight boards as they seek to adequately safeguard against the free-market pitfalls of managed competition. We describe some here. Although solutions to these challenges will require substantial thought and planning (and are thus beyond the scope of this paper), we believe that none of these challenges is insurmountable; none represents a sufficient obstacle to prevent enactment of a managed competition model of health system reform.

**Standard setting.** If all Americans or all residents of a defined region are to be provided with a minimum standard of care, who will set that standard? Should standards primarily be set at the local/plan level, or should there be substantial integration of HIPC/oversight board efforts using regional or national measures? Whereas some standards could be set at both levels, sometimes national standards will be too detailed to incorporate important regional variations in disease patterns and appropriate care. Standards that are equally applicable across broad regions of the country could be set and revised by a national oversight board, using databases created through managed competition.

Whether at the national level or the plan level, such standards must be timely as well as scientific, because of the “moving target” of health care technology. They must, necessarily, respond to the concerns of physicians and incorporate sufficient flexibility to allow the art of medicine to con-
continue to survive within a flexible structure. Whether such standards should be enforced (that is, regulated) or created only as guidelines to which HIPCs, plans, or individual practice groups could choose to subscribe is a critical issue in the design of managed competition.

Data collection. Managed competition, with its potential for more systematic data collection and analysis, may have the ability to improve both the efficacy of treatment protocols and the speed with which they can be revised to incorporate new information. However, data collection to compare health care delivery systems poses some challenges. First, the data must be collected in a uniform manner so that comparative studies of health care delivery can be conducted not only among one individual market area’s managed care plans, but also among HIPCs and states. Yet there is a trade-off between gathering comparable data and imposing possibly expensive data requirements on individual plans. Plans that use capitation or salary payment to physicians do not require the same level of administrative detail that fee-for-service based plans require. The challenge is to assure that improved patient outcomes justify the cost of any additional data collection requirements.

Second, to undertake such comparisons, mechanisms are needed to adjust adequately for risk of adverse selection of patients, in which certain managed competition plans attract sicker patients than others. Such risk adjustments have been refined by HCFA after its attempt at comparing mortality rates between hospitals, but many critics believe the process requires further extensive research. Adjustments must adequately and reliably account for severity of illness and case-mix yet stop short of sacrificing important potential quality measures that may appear to be only population differences requiring adjustment. For example, adjusting for racial disparities may cost a plan the opportunity to identify failures in treatment that are due to inadequate access of certain ethnic groups, inadequate preventive care, or discriminatory treatment based on prejudice.14

Third, databases must monitor all significant outcomes—not just the survival rate for a procedure or illness, for example, but quality of life and functional status. Such a complicated surveillance effort will necessarily make use of improvements in electronic data gathering and processing. Administrative simplification through a single claim form for all providers and “smart cards,” for example, could allow not only easy tracking of information, but also the transfer of patient records in a system of managed competition to improve continuity of care for patients who choose to change health care plans.

Fourth, managed competition is seeking to improve access to care as well as its quality. Population-based studies of health status have been used for years to monitor rates of communicable diseases. These same types of
studies can be used in a system of managed competition to identify underserved populations, especially high-risk groups with poor access to care, and detect small differences in physician practice.

**Data analysis.** Once data sources and collection are improved, their analysis must become more sophisticated. But before the data reach a form in which they can be disseminated, how should they be aggregated? Who should do it, and at what level of the managed competition hierarchy? Would a health care delivery plan, for example, report raw data to the HIPCs or oversight boards, or would it aggregate data before reporting? Although there are clear benefits from the opportunity to work with a national data set to evaluate rare events, poor outcomes, or treatments with marginal benefit, a national clearinghouse for private medical information raises the specter of breaches in confidentiality. In addition, regional variation in disease and population argue for smaller data sets that are more applicable to smaller population groups.

**Litigation.** A potential risk of performance evaluations conducted by HIPCs arises when they identify substandard care or a particular physician who consistently fails to meet quality standards in an otherwise high-quality system. How can HIPCs balance the challenge of protecting both the system from litigation and the enrollees from potentially dangerous care? How much can a HIPC intervene in the daily affairs of the plans (for instance, by sanctioning individual physicians) without casting the shadow of adversarial oversight over its collegial relationship with the plans and the member physicians?

**Protecting special interests.** Managed competition carries an inherent risk of discrimination against enrollees who incur high health care costs. Most managed care plans are paid per enrollee, not per service rendered. Therefore, they have the incentive to seek those enrollees who cost the least and to avoid high-risk groups, such as the aged, the chronically ill, and people with acquired immunodeficiency syndrome (AIDS). In managed competition, the protection of the special interests of such groups should naturally fall to the HIPCs and oversight boards.

Initially, plans should receive adjustments in the capitation rate based on identification of risk categories and the relative value of each category for high-risk groups to more accurately reflect their costs. However, HIPCs and oversight boards will have to go further to ensure that these groups receive equal access to high-quality care. They may undertake more extensive monitoring of the treatment of such groups. If disparities are found, what steps might a HIPC take to evaluate the cause and intervene, if necessary? The HIPC may best serve the interests of high-risk groups by allowing plans to exclude certain groups if, for example, the plans are shown not to be able to care for these patients properly.
Information dissemination. A final challenge of managed competition is how to inform consumers sufficiently so that they can choose among health care plans. The plans themselves hold the largest stake in this process of information dissemination. Their profit stems from their ability to accrue enrollment. Herein lies an important conflict of interest that HICPs and oversight boards will have to reconcile. Through their efforts in data collection, data analysis, and outcomes research, HICPs will acquire important information that can be used to compare health care plans. As became clear when HCFA released hospital mortality rates, such data are difficult to interpret without extensive analysis. When simplified in newspaper articles or the evening news, they become frankly misleading. HICPs and oversight boards will have to devise simple, uniform formats that compare a region’s health care plans based on their structure, process, and outcomes.

Conclusion

When a physician closes the office door to confer privately with a patient, can the influences of a competitive health care marketplace, of managed care’s cost controls, or of diverse health care plans jockeying for position in managed competition coexist with high-quality care? The reality is that such influences are necessary if millions of other patients are to have the same opportunity to confer with their physicians. The vitality of health care under managed competition depends on vigorous competition between innovative plans in the free market. But such a system carries with it the risk that attempts to cut costs could lead to undertreatment or discrimination against certain patients. A system of rules and incentives, like checks and balances in a democracy, must be built into managed competition to preserve the quality of health care and to develop a constructive partnership between physicians and management.

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NOTES

16. See M. Schlesinger and D. Mechanic, “Challenges for Managed Competition from Chronic Illness,” in this volume of *Health Affairs*.
17. See S. Sofaer, “Informing and Protecting Consumers under Managed Competition,” in this volume of *Health Affairs*. 