

The Third Generation of Managed Care

David R. Smith, MD; Herbert Y. Wong, PhD; and John H. Eichert

Abstract

Managed care systems have evolved through two generations, both focused primarily on containing costs by reducing the utilization of healthcare services and steering the delivery of services to less costly settings. While managed care organizations have offered financial incentives for healthcare providers to accomplish these cost-containment objectives, they have not developed similar incentives for providers or patients to encourage the prevention and effective management of disease. A third generation of managed care would involve health plan administrators, healthcare providers, patients, and payers of healthcare services as partners in developing incentives and risk-sharing arrangements designed to achieve established healthcare outcomes and objectives. This strategy requires that managed care companies and payers reinvest the savings gained from utilization management in activities designed to improve the overall health of all enrolled patients and contain healthcare costs over the long term.

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The debate over healthcare reform in the 103rd session of Congress did not resolve the myriad issues facing our healthcare system. Members of Congress focused largely on the financing of sickness care and the concerns of major stakeholders in the healthcare system (ie, hospitals, physicians, small and large businesses, and the insurance industry). Little time was spent discussing the merits of proposed methods for transforming the current healthcare system into one that seeks to prevent disease and improve the overall health of all citizens.

From the Texas Department of Health (D.R.S.), Columbia Healthcare Corporation, Nashville, TN (H.Y.W.), and Hastings Healthcare Group, Pennington, NJ (J.H.E.).

Address correspondence to: John Eichert, President and CEO, Hastings Healthcare Group, 112 Titus Mill Road, Pennington, NJ 08534-4399.

The philosophic underpinnings of healthcare reform were generally ignored and poorly defined during the debate. Also ignored was the need to increase accountability and ensure quality healthcare by measuring the effects of various treatments or services on patient health. Healthcare system customers (ie, patients) often were conspicuously absent from the deliberations. Yet representatives of large and small businesses actively participated in the health reform debate. However, they rarely voiced the traditional business perspective, namely, a concern for the long-term performance of the healthcare system. Medical and public health representatives could and should have contributed their knowledge of preventive medicine and epidemiology to the debate over healthcare reform. This would have taken the debate beyond the reform of a sickness care system toward the development of an accountable healthcare system dedicated to improving patient health over the long term. The existing healthcare system often sacrifices opportunities to prevent or reduce disease and disability and contain long-term healthcare costs. Currently, managed care companies and payers have little incentive to invest dollars saved through short-term interventions in long-term preventive medicine programs. This pattern is apparent in both public and private financing of healthcare services.

Compounding the failure of health reform to build an accountable system of healthcare has been the insufficient discussion of the type of information needed to monitor health status and measure improvements over time. Ideally, sufficient data should be collected to enable communities and employers to track progress and determine whether rates of certain preventable diseases or complications are reduced as a result of specific treatments.

Despite the federal government's failure to devise a national strategy for improving the health of its citizens, the issue remains timely and relevant to all Americans, especially to the increasing number of persons who find healthcare services out of reach. Although

national reform was stymied, state governments cannot avoid addressing the growing crisis in their Medicaid programs as costs continue to soar. There remains a sense of urgency, sometimes without purpose, to do something to reform healthcare in the United States.

... EVOLUTION OF MANAGED CARE:
THE FIRST TWO GENERATIONS ...

The concept of managed care has evolved through two generations. The first generation was defined by a desire to control costs by limiting the delivery of healthcare services in inappropriately costly settings. Managed care plans accomplished this goal by using cost-containment strategies—primarily utilization review and unstructured or “loose” agreements with physicians. The relationship between physicians and managed care plans was largely limited to financial arrangements and focused on achieving savings by redirecting care from emergency rooms and hospitals to the physician’s office.

In the 1990s, cost-containment strategies became more sophisticated as the need to ensure the quality of managed care services continued to grow. Thus a second generation of managed care began when health plan administrators broadened their review activities to encompass more comprehensive utilization management techniques. These techniques included retrospective and concurrent reviews in addition to prospective reviews of healthcare service use. Under this more comprehensive approach, physicians were central players in achieving the goal of optimum management of healthcare resources, and they became more fully integrated into the structure of managed care plans. At the same time, managed care companies became increasingly interested in measuring the outcomes of healthcare services to assess their appropriateness and cost-effectiveness.

In these first two generations of managed care, the emphasis was on managing the utilization of healthcare services, not managing the care itself. Managed care companies primarily monitored healthcare procedures and, to a lesser extent, the health of the individual patient. Neither model focused primarily on the health of enrolled patients, much less that of the population at large or groups of patients at risk for specific health problems. The managed care model has not yet fully evolved to realize its potential of achieving long-term healthcare savings and improving the health of the population.

Effects of Managed Care

Given the rapid shift toward managed care in the United States, we need to assess its effects on the

quality and continuity of patient care, healthcare costs, and the soundness of the entire healthcare system. The overriding question is whether cost-containment incentives result in underservice and rationing or withholding of appropriate healthcare services. Also of concern is how financial incentives for healthcare providers affect the quality of care, the relative effectiveness of different managed care models, and the overall savings potential of managed care versus fee-for-service arrangements. We also need to determine the impact of managed care on vulnerable patient populations and existing safety-net providers, such as community-based health centers, academic health centers, and public hospitals. The ultimate question is whether managed care systems can improve the health of the U.S. population.

In a 1993 comparison of the performance of a staff model health maintenance organization (HMO) with traditional fee-for-service care,¹ the RAND Health Insurance Experiment showed that patients in the HMO had 39% fewer hospital admissions and 28% lower estimated expenditures. This study also indicated that the poorest patients were hospitalized longer and had more serious symptoms than their counterparts in the fee-for-service system. The HMO enrollees were less satisfied than the fee-for-service patients with several aspects of care, including waits for appointments, availability of hospitals, access to specialists, and continuity of care. Satisfaction was higher, however, among HMO enrollees for waits at the office and cost of care.

The Medical Outcomes Study,² designed to compare patient outcomes in different prepaid and fee-for-service systems, found that patient satisfaction decreased as employees were increasingly required by employers to enroll in managed care plans. In this study of five different practice type and payment method combinations, patients in HMOs rated their outpatient visits as “worst” and patients in fee-for-service plans (those treated by a solo practitioner or single-specialty small group practice) rated their care as “best.”

In a comprehensive review of the findings of several studies from 1980 and later, Miller and Luft³ found that while HMO members generally had somewhat lower hospital admission rates, shorter lengths of stay, less use of expensive procedures and tests, and more use of preventive procedures and examinations than enrollees in indemnity plans, the HMOs provided a roughly comparable quality of care based on outcomes and process measures. This survey also indicated that HMO members were somewhat less satisfied with their care but more satisfied with the

financial aspects of their health plan than were indemnity plan enrollees.

According to the Congressional Budget Office, HMOs provide a comparable quality of healthcare service at a lower cost than fee-for-service plans. However, data do not confirm the claim that HMOs reduce the rate of growth in healthcare costs.⁴ The Congressional Budget Office also noted that the cost advantages of HMOs have decreased since fee-for-service plans have adopted some elements of managed care. The Congressional Budget Office estimated that current managed care systems reduce the use of services by 7% compared with unmanaged care and 4% compared with fee for service. Individual practice associations were estimated to reduce the use of services by 3% compared with unmanaged care and by 1% compared with fee for service.

Potential of Managed Care

The current (second) generation of managed care focuses more on the use of services than the quality and type of care provided. Any cost savings achieved through this process results primarily from providing care in less costly settings or rationing services. Taken to the extreme, this approach might reduce appropriate as well as inappropriate care.

Currently, managed care organizations control costs by provided incentives to providers to limit healthcare utilization. Although this strategy decreases costs in the short run, it does not reduce future growth in healthcare expenditures, even when compared with indemnity insurance plans.⁴ Without a long-term strategy of reinvesting the savings accrued through utilization management, the full potential of managed care to improve patient health will not be realized.

Existing managed care contracts seldom provide a means for proposing and implementing innovative strategies of designing and delivering healthcare services. A frequently cited problem in the current healthcare system is the lack of incentives for discouraging patient behaviors that cause or significantly contribute to preventable morbidity and mortality.^{5,6} Current managed care plans also do little to promote early intervention for patients with chronic disease. The treatment of patients with diabetes, for example, often degenerates into complication management that involves the use of costly medical procedures, such as retinal surgery or amputation. Financial incentives for preventive and early intervention services might significantly reduce long-term healthcare costs and decrease morbidity and mortality by interrupting the progression of chronic disease. Such risk-sharing

arrangements might ultimately be tied to the ability of a health plan to achieve a specific outcome or goal.

A potentially valuable opportunity to improve patient compliance and promote preventive health behaviors is missed because, unlike healthcare providers, patients neither share the financial risk nor enjoy the financial rewards of risk-sharing incentives. Health insurance contracts should have incentives for patients to enter into a therapeutic partnership with their physician. Managed care organizations also should offer innovative benefit packages that allow them to develop, test, and evaluate methods of preventing patient behaviors that increase the risk of death, disease, or disability.

The increasing number of persons enrolled in HMOs allows us to measure the effects of managed care on overall patient health. As comprehensive, integrated, and coordinated systems of delivering healthcare services, managed care plans are well positioned to monitor, collect, and interpret data on the health of their enrolled patients. Indicators such as the age-adjusted mortality rate for cervical cancer and the guidelines developed⁷ for measuring progress toward meeting the nation's disease prevention and health promotion objectives for the year 2000 are important and appropriate measures for data collection. Such information is necessary to determine the full effect of managed care on patient health.

Several factors may impede the transformation of the existing managed care system into one that emphasizes prevention and ensures accountability through measurement and evaluation of treatment outcomes. First, the magnitude of such reform requires reeducating healthcare professionals and health plan administrators. Second, many persons are enrolled in managed care plans for a fairly short period of time. This is especially true of Medicaid recipients and may not only disrupt the continuity of care but also decrease the chances of implementing a preventive or early intervention strategy. Finally, frequent changes in benefit packages and cost-sharing requirements hinder the ability of health plan administrators to implement and evaluate preventive care.

... DEVELOPING THE THIRD GENERATION OF MANAGED CARE ...

If the goal of healthcare reform is to improve or stabilize the current system through cost containment, we can rely mostly on utilization management. However, if the goal is to shift the emphasis from medical care to healthcare, we must devise a new system. In this new system, managed care companies

would reinvest the short-term savings realized through utilization management into a long-range strategy that promotes health, lowers disability, reduces morbidity and mortality, and ultimately achieves long-term savings. Another aim is to promote the attainment of specific healthcare goals (such as higher rates of preventive immunization and diagnostic Pap smears). Seven steps for achieving this new health paradigm are outlined in the table.⁸

Utilization management can help in this transformation if it is paired with treatment outcomes assessment and if the results are used to continually revise treatment procedures. This feedback loop could incorporate incentives to modify provider behavior, improve treatment outcomes, and achieve cost containment.^{9,10} This approach is in contrast to the current managed care model, which focuses primarily on intervention rather than prevention and offers incentives to increase the efficiency of the intervention system.

As currently structured, managed care plans reward providers for decreasing inappropriate care but do not encourage preventive care or early intervention for chronic diseases. In a redesigned healthcare system, utilization management must be applied across the entire spectrum of healthcare services, beginning with prevention and early intervention and progressing through the stages of acute and tertiary healthcare services to long-term care. To advance this healthcare agenda, managed care companies must no longer seek to decrease the utilization of all healthcare services. At the same time, appropriate management of high-cost, low-yield services can achieve significant savings.

The Congressional Budget Office estimates that well-structured managed care plans can achieve a 9% savings in healthcare costs compared with the typical fee-for-service plan.¹¹ This savings may be offset, however, by costs incurred when certain vulnerable populations who have historically underutilized

healthcare services release their pent-up demand for medical care. This pattern has been observed in some Medicaid managed care plans.¹²⁻¹⁴

Moving from the second to the third generation of managed care requires a balancing of forces. To improve outcomes, managed care organizations must provide financial and risk-sharing incentives not only for physicians and other healthcare providers but also, for the first time, for patients.

Physician-Health Plan Risk-Sharing

To counter the incentives for decreasing utilization of healthcare services inherent in the first two generations of managed care, the physician-health plan relationship must be fundamentally redefined. The short-term savings achieved through utilization management should be used to establish incentive funds, or risk pools, for provider-health plan risk-sharing based on health outcomes. Payments from these funds would be made to providers who achieve a predetermined set of health outcomes or outputs as measured by immunization levels, Pap smear rates, colorectal cancer screening, mammography, prostate screening, and so on. Incentive programs established in England to improve immunization levels in children seen by private physicians, for example, have substantially raised the immunization rates over the past 20 years.¹⁵

Another innovative program involves contracts between providers and managed care plans to meet or exceed baseline levels of specific preventive measures or more aggressively intervene early in the course of chronic diseases, such as diabetes. The aim is to promote prevention, reduce long-term costs associated with preventable disease, and reduce morbidity associated with poorly managed chronic disease. Such incentives could relieve some of the pressures placed on traditional managed care systems to reduce the use of all healthcare services, including those that are appropriate and cost-effective.¹⁶

Table. Means of Achieving the Third Generation of Managed Care

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| <ol style="list-style-type: none"> 1. Expand the scope of health insurance benefits to incorporate effective preventive services.⁸ 2. Establish outcomes-based risk-sharing incentives for health plan administrators and healthcare providers 3. Establish output- and outcomes-based risk-sharing incentives for health plan administrators and patients 4. Establish outcomes-based risk-sharing incentives for health plan administrators and payers. 5. Reduce the current emphasis on complication management and establish a proactive disease management system. 6. Shift the risk orientation of managed care from the individual patient to the entire enrolled patient population. 7. Establish a mechanism to track outcomes and costs longitudinally. |
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Patient-Health Plan Risk-Sharing

A healthcare system that focuses on long-range cost savings and improved health must include patients as active participants. Many of the leading causes of death, disease, and disability are directly related to individual behaviors, such as smoking, eating high-fat foods, and not exercising.⁶

By providing incentives for patients to change their behavior, managed care companies may improve both compliance with treatment regimens and the health of their patient population. Under this strategy, payers would invest savings from utilization management into an incentive fund to finance patient-health plan risk-sharing arrangements. Primary prevention would be the priority. Health plans could offer discounts or award premiums to patients who complete predetermined health maintenance goals. Outcomes or process measures to be promoted with this incentive program could be developed from the work of the U.S. Clinical Preventive Services Task Force.⁸ This panel, a 20-member, non-Federal, multidisciplinary group of prevention experts appointed by the US Public Health Service, is charged with developing scientifically sound recommendations for clinical preventive services based on age, gender, and other risk factors.⁷ For patients with a chronic disease, such as diabetes, process measures—such as tracking levels of hemoglobin A_{1C} or fasting blood glucose—would be appropriate indicators of compliance.¹⁷

In the third generation of managed care, disease management will overtake complications management, the predominant mode of care in both indemnity and earlier generations of managed care. Disease management is a proactive process of patient care that is customized to fit market conditions and patient-physician characteristics and optimizes the quality and cost of care associated with a specific disease state. This optimization is possible when patients are encouraged to actively participate in their care in a system that has clear process and outcomes measures and procedures for continuous process improvement.

Disease management is not a new concept. In England and other European countries, an aggressive diabetes disease management program has improved the quality of life of patients and decreased complications and resource utilization.^{18,19} Disease management strategies also are effective for patients with conditions such as hypertension, cancer, ischemic heart disease, and back pain. However, comprehensive disease management programs do not fit into the traditional healthcare reimbursement system of the United States. Under a capitated reimbursement system, disease management becomes critical.

An important issue in aggressive disease management is the incentive for patient participation. Most patients do not actively participate in managing their disease, nor have managed care or indemnity plans encouraged them to do so. In contrast, other types of insurance plans offer incentives for appropriate behaviors. Automobile insurers, for example, provide discounts to drivers with a good driving record. Those who do receive citations are encouraged to attend traffic safety courses to clear their record or reduce surcharges on premiums. Under a capitated reimbursement system, managed care and provider networks must adopt similar incentive systems to increase patient participation.

Payer-Health Plan Risk-Sharing

Payers of healthcare services also must be provided incentives to participate in outcomes-oriented risk-sharing arrangements with health plans. This effort could be advanced by establishing local coalitions designed to reinforce and encourage attainment of the health promotion and disease prevention objectives for the year 2000 and building an infrastructure for addressing community health issues.

Payer-health plan risk-sharing incentives should promote wellness and focus on broad outcomes applicable to the entire enrolled patient population. Businesses and other healthcare payers could negotiate contracts with managed care plans that would reward certain predetermined health outcomes measured across a payer's entire enrolled population. Such outcomes might include increased school attendance, fewer worker's compensation claims, improved job performance, fewer work site injuries, or fewer teenage pregnancies. This model would expand the concept of risk sharing to the broader community.

... EFFECTS OF THE THIRD GENERATION OF MANAGED CARE ON MEDICAID ...

With its impact on state budgets, Medicaid has become the proving ground for the next generation of managed care. Because of the failure of national healthcare reform, state governments themselves must address the problem of controlling Medicaid costs. Most state-based models for Medicaid build on the first two generations of managed care, focusing on cost savings associated with reducing utilization of services. Few state programs have evolved into a population-based strategy designed to improve health status or constrain the long-term costs of chronic disease or illness related to high-risk behaviors.

The Medicaid program poses several problems for establishing a new healthcare paradigm. Considerable churning of Medicaid enrollment occurs, as individuals gain and lose eligibility. With many patients eligible for Medicaid for only a few weeks or months at a time, not enough time is available to implement preventive care strategies. Many physicians and patients are unwilling to begin a long-term relationship without a guarantee of coverage under the plan. This problem can be corrected in part by expanding Medicaid eligibility for up to 1 year. Some states have moved in this direction under certain waiver programs.

Because of previous lack of access to healthcare, Medicaid patients often have a pent-up demand for such services. Therefore, the initial visit to a physician usually is devoted to treating an underlying illness rather than beginning a preventive intervention program. Again, extending the period of Medicaid eligibility would allow patients and physicians to establish longer-term relationships and focus on disease prevention.

Once eligible for healthcare services, Medicaid recipients often cannot find primary care practitioners that accept Medicaid payments. In some cases, managed care companies have been able to improve access by linking Medicaid patients with providers and provider networks contractually obligated to provide services.

As states move forward with their health reform plans, Medicaid may provide an opportunity to redefine healthcare. Unfortunately, the need for massive cost savings may become the driving goal of Medicaid managed care initiatives. Utilization management will provide modest savings, but real gains will come from improved access, better continuity of care, and improved health status—if states are willing to reinvest the dollars saved through utilization management to achieve greater long-term savings and improved health status.

... MOVING TOWARD THE THIRD GENERATION OF
MANAGED CARE ...

To move beyond utilization management to a more balanced healthcare system, we must expand our ability to collect healthcare data and track outcomes. Current computerized systems primarily collect data on procedures, utilization, and costs. Designing and implementing a system that can track individual patients rather than procedures and monitor changes over time in disease rates will require a major capital investment by managed care organizations.

The measurement of some healthcare outcomes may be specific to a given community and reflect the needs of a particular employer or purchaser of healthcare. Theoretically, a well-designed system of outcomes measurement would also monitor community-wide outcomes or performance, such as attendance on the job or at school and worker's compensation claims. Functionality scales could be used to determine the effect of improved health on the economic viability of a community.

In a new healthcare system, managed care administrators and providers will need new skills and a deeper understanding of the dynamics and determinants of health and disease. The business and clinical aspects of medicine must be combined into a curriculum that can be used to train the next generation of healthcare leaders.

Economic Development

Managed care organizations with a sufficient number of enrollees may be able to offer healthcare services that improve the health and economic well-being of the community at large. As an example, iron deficiency without anemia can substantially reduce a child's functional intelligence quotient. Prevention or early treatment of iron deficiency could improve school performance or reduce the frustration felt by marginal performers who might otherwise drop out of school.

Health System Trends

Healthcare payers have embraced managed care because of the lack of incentives in traditional fee-for-service reimbursement systems to contain costs and control the provision of unnecessary and inappropriate services. However, while payers are beginning to recognize the value of prevention, they have not provided the incentives necessary to transform the current system of sickness care to one that invests in preventing and controlling disease and disability. Managed care companies remain focused on individual patients, episodes of illness, and medical procedures rather than an overall improvement in the health of the entire enrolled patient population. Even though the Congressional Budget Office has reported a gradual shift from fee for service to preferred provider organizations (ie, discounted fee for service with cost reduction and controlled utilization), this shift has not fundamentally moved the healthcare industry from sickness care to wellness and preventive care.

The growth of HMOs, the most tightly managed of the managed care systems and the ones that offer better incentives for preventive care services, should

theoretically help the transition from sickness care to wellness care. Nevertheless, significant obstacles remain. First, the fastest growth in managed care is not in staff and group model HMOs, but in newer open-handed forms of managed care, such as individual practice associations, that provide less incentive for providers to focus on preventive care. Second, the two key elements an HMO or other managed care organization needs to complete the shift in emphasis from sickness to wellness—stable enrollment and a sufficient number of patients—are difficult to attain in the current healthcare market. Health promotion programs and disease prevention and management activities represent a long-term investment strategy. Frequently, these activities do not have immediate or even short-term payoffs in reduced healthcare costs. A shifting or unstable enrollment also reduces the profitability of preventive care because the eventual profit or payoff in reduced healthcare costs may not accrue to the plan that provided the services. Indeed, as patients become healthier, they may move to a less expensive plan.

Using managed care to decrease inappropriate utilization is a worthwhile goal. However, this strategy by itself can lead to unintended underutilization of appropriate healthcare services. This tendency toward underutilization was noted in several early analyses of managed care. These analyses revealed that managed care plans can earn larger profits by enrolling healthier persons who use few healthcare services or those that seek care outside the plan. In the extreme, a strategy focused solely on utilization management might discourage enrollees from seeking preventive services such as immunizations, Pap smears, blood pressure screenings, or early treatment for chronic conditions.

Pursuing enrollees who use few healthcare services might also discourage managed care companies from reaching out to vulnerable populations. Such an unbalanced managed care system could result in increased costs over time as preventable or controllable health problems progress to true health emergencies that require costly treatment.

Much is said about the need to change high-risk behaviors and lifestyles that lead to increased rates of death, disease, and disability. Nevertheless, in the United States, we do not yet have programs in place that encourage providers and patients to develop a long-term relationship that focuses on preventive care.

... CONCLUSION ...

As the nation struggles with healthcare reform, we have an opportunity to refine the concept of managed

care and bring into balance the incentives provided by the system for providers and patients. Moving toward the third generation of managed care requires a shift from a healthcare system that emphasizes utilization management to one that focuses on prevention and wellness care. The ultimate goal is to redesign the managed care system to improve the health of all enrollees. To accomplish this goal, managed care companies must provide incentives to providers and patients to encourage appropriate utilization of care and achieve desired healthcare objectives. Managed care organizations must also take a longer-term perspective, by investing their short-term profits from utilization management in preventive programs that could yield greater savings in the long run. The third generation of managed care also requires the active participation of businesses, which should provide employee incentives for enrolling in managed care plans. Patients themselves must take a more active role in their own health as we move toward preventive care.

Through the Medicaid program, state governments have a valuable opportunity for promoting a shift toward a new healthcare system. By expanding the period of eligibility for Medicaid, states can encourage the development of longer-term relationships between Medicaid recipients and providers, with the ultimate goal of preventing disease and implementing early intervention strategies. This strategy may result in greater cost savings than the current system, in which Medicaid patients seek treatment only when disease is well established and the opportunity for early intervention has passed.

To complete the transition to a new healthcare system, we need a new generation of health information systems. Utilization data must be linked to process and outcomes measures to provide performance information to patients and providers. We must also be able to track the achievement of specific healthcare goals, which would trigger incentives for providers or patients. Additionally, patient data must be aggregated into rates and ratios that can be tracked over time so we can determine long-term trends in morbidity and mortality.

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