

## Health Outcomes and Managed Care: Discussing the Hidden Issues

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### Abstract

Too often the debate over health outcomes and managed care has glossed over a series of complex social, political, and ethical issues. Exciting advances in outcomes research have raised hopes for logical medical reform. However, science alone will not optimize our patients' health, since value judgments are necessary and integral parts of attempts to improve health outcomes within managed care organizations. Therefore, to form healthcare policy that is both fair and efficient, we must examine the fundamental values and ethical concerns that are imbedded in our efforts to shape care. We must openly discuss the hidden issues including: (1) trade-offs between standardization of care and provider-patient autonomy; (2) effects of financial incentives on physicians' professionalism; (3) opportunity costs inherent in the design of insurance plans; (4) responsibilities of managed care plans for the health of the public; (5) judicious and valid uses of data systems; and (6) the politics of uncertainty.

(*Am J Man Care* 1997;3:756-762)

With the demise of President Clinton's health plan in 1994, the rise of managed care organizations in the private marketplace has become, de facto, the form that American national healthcare reform has taken.<sup>1</sup> Through financial incentives and utilization management, the managed care industry proclaims that it alters physician behavior, leading to improved outcomes at lower costs. Increasingly, however, both health providers and the public are questioning the effect that managed care has on health outcomes and the doctor-patient relationship. (*Time*, January 22, 1996:44-52)<sup>2</sup>

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This research was supported by National Institutes of Health/National Institute on Aging Geriatric Academic Program Award 5-K12-AG-00488.

Unfortunately, business and political imperatives have encouraged simplistic statements about health outcomes and glossed over a series of complicated issues. Managed care companies must claim that they deliver high-quality care if they are to succeed in the marketplace, decrease regulatory oversight, and justify restrictions placed on the choices of physicians and patients. In contrast, opponents of managed care argue that patients and physicians must be protected from these health plans because bureaucratic interference in the sacrosanct doctor-patient relationship results in worse health outcomes.

Thus, the public dialogue over managed care and health outcomes has resulted in a nonconstructive polarization of forces into two unrealistic camps. On a macro (ie, systems) level, the tension is between the free market and regulation. On a micro (ie, clinical) level, the conflict is between standardized care and individualized care. The problem is that the debate has generally avoided explicit discussion of the value-laden political and social factors involved in making difficult decisions with limited scientific data. We must strive to improve the data and methods used to assess health outcomes, but we must also realize that we would face complex choices even if we had perfect information.

Therefore, to form policy that optimizes health outcomes within managed care systems, we must discuss the hidden issues. We must combine scientific data with social and ethical values in a public decision-making process. Specifically, I will argue that policy analysis of managed care and health outcomes should courageously (1) discuss the trade-offs between standardization of care and provider-patient autonomy; (2) consider how physicians' professionalism may be impacted by financial incentives; (3) incorporate the public's preferences and scientific data into the design of insurance coverage; (4) resurrect concern for access to care, underutilization of services, and the health of the public; (5) ensure the integrity and validity of data measurement systems; and (6) acknowledge the "politics of uncertainty" and the subsequent need for ethical leadership.

### Standardization of Care Versus Provider-Patient Autonomy

Evidence-based medicine, practice guidelines, and critical pathways have attracted increasing interest from physicians and managed care administrators in recent years.<sup>3,4</sup> Many physicians do not practice evidence-based medicine, so guidelines would establish minimum standards of care. Wennberg and Gittelsohn<sup>5</sup> have amply documented the variations phenomenon, in which utilization of different surgical and medical procedures varies widely depending on factors such as geographic region and physician specialty. Many of these practice patterns are not optimal. For example, many physicians do not use medications proven to improve mortality, such as beta blockers in the post-myocardial infarction setting or angiotensin converting enzyme inhibitors for patients with left ventricular systolic dysfunction.<sup>6,7</sup> In addition, it is difficult to improve physician behavior.<sup>8</sup> Physicians can be stubborn and may cling to erroneous ideas or practice styles.

Conversely, the argument for provider-patient autonomy is that medicine will always be an art of which science is only one component. First, patients are individuals who may not fit a guideline. Square pegs hammered through round holes may suffer. Second, patient preferences are important and should be respected. One can make a strong case for respecting patient preferences in areas in which the scientific evidence is unclear and costs are relatively low, such as whether or not to do prostate-specific antigen screening for prostate cancer. However, when the evidence for a treatment is equivocal and the costs are high, such as autologous bone marrow transplantation for metastatic breast cancer, respecting patient preferences becomes problematic in an era of limited resources.

A third argument for provider-patient autonomy is that the scientific data on which to establish standards are often lacking. For example, consider the Agency for Health Care Policy and Research (AHCPR) practice guidelines for two common, frequently studied conditions: unstable angina and congestive heart failure.<sup>9,10</sup> AHCPR grades the underlying basis for each of its recommendations with the following approximate criteria: A = randomized controlled trials; B = well-designed clinical studies; C = expert panel consensus. Among all the recommendations for treatment of unstable angina, 11 are graded A, 30 are graded B, and 55 are graded C; for congestive heart failure, 5 guidelines are graded A, 11 are graded B, and 29 are graded C. Thus, relatively few of the recommendations have "A"

quality evidence, and about 60% of the recommendations are based on expert opinion.

What is the potential problem with relying on expert opinion? While randomized controlled trials often have limited generalizability because their patient populations are highly selected,<sup>11</sup> expert opinion is prone to more bias. Although a variety of consensus methods such as the Delphi process and nominal group technique have been developed in an attempt to optimize the products of expert panels,<sup>12</sup> different groups of physicians reviewing the same data often devise different guidelines.<sup>13,14</sup> In fact, variation in local resources and patient populations may make individualized expert community guidelines preferable.

A fourth argument for provider-patient autonomy is that the managed care industry has significant incentives to build denial of services into its practice guidelines. How do we counteract the incentive to deny services? One can imagine managed care companies arguing, "No definitive evidence exists so we will not fund this treatment or test." However, in AHCPR's guidelines on unstable angina and congestive heart failure, 60% of the recommendations that the panels thought were so important that they should be disseminated nationally were based on expert opinion. The reality is that we will have to make guidelines and practice medicine with incomplete evidence. Just because the definitive trial has not been conducted does not mean that we should disregard the treatment or medicine. The challenge is preserving the physician's ability to exercise clinical judgment under conditions of imperfect information when managed care plans have powerful incentives to fund only "proven" treatments.

To improve health outcomes and maximize chances of successful program implementation, I personally favor locally developed practice guidelines using evidence-based national guidelines and empirical studies as starting points. Regularly scheduled updates need to be built into the guideline development process so that the recommendations remain current. Also, physicians must have the prerogative to exempt a patient from the guideline as long as he or she explains why. Although this exemption also allows the rogue physician to practice unscientific medicine or, conceivably, a style of care that is financially rewarding but harmful to the patient, hopefully local standards and peer pressure will make this a rare event.

### The Ethical Physician and Financial Gain

Thus far I have assumed that physicians usually recommend the clinical approach that they believe will bring maximum benefit to their patients. But we

know that physicians sometimes act for their own financial gain. For example, some physicians refer patients to their own treatment facilities or increase the number of laboratory tests they perform if monetarily beneficial.<sup>15,16</sup> However, the marketplace and its tools for manipulating behavior have changed. It is troubling, though, that little is known about how physicians respond to the policies that managed care companies use to influence behavior.

Most of these mechanisms for altering the behavior of physicians can be divided into two broad categories: (1) rules governing utilization management and (2) financial incentives.<sup>17</sup> A recent survey of physician groups in the Southern California region found that all groups used primary care gatekeeping and preauthorization as utilization management techniques.<sup>18</sup> In addition, approximately 70% to 80% of these groups implemented practice guidelines, profiled individual physicians by their resource utilization and outcomes, and educated physicians on cost-effective medicine and the care of capitated patients.

Concurrent with these regulatory utilization management efforts, many managed care plans are introducing financial incentives and risks. Representative tactics include penalties for ordering tests and referrals, risk pooling in which the compensation of an individual doctor depends on the behavior of an aggregate group of physicians, and bonus payments for reaching productivity goals. The key questions are how much money is necessary to influence physician behavior, what type and magnitude of incentives adversely affect patient care,<sup>19</sup> and whether financial conflicts of interest harm the doctor-patient relationship.<sup>2</sup> Relatively few empiric data exist on the effect of these tools on health outcomes in the current medical marketplace,<sup>20-22</sup> perhaps the major research void in the policy debate over managed care.

### **The Public's Preferences, Scientific Data, and Insurance Coverage**

Given the great range of uncertainty about the appropriateness of much medical practice, I have argued that medical care should be provided through a process of shared decision making between doctor and patient, within the context of nonbinding, evidence-based guidelines and local policing of the quality of care. However, the macro environment of insurance coverage will affect these individual decisions. What standard of evidence should be necessary for insurance coverage of a particular treatment or procedure? The important corollary is what the cost-effectiveness/cost-benefit criteria should be for insurance coverage of a treatment or procedure.

The challenge is designing a decision-making process for insurance coverage that effectively combines scientific data with legitimate political, social, legal, and ethical concerns. The clinical issue that has highlighted this challenge is the "drive-through delivery," the practice of discharging a mother from the hospital less than 24 hours after delivering her child. A groundswell of public support arose to allow women to stay in the hospital longer. Despite lack of any firm evidence showing deleterious effects from short hospital stays,<sup>23,24</sup> many state legislatures and ultimately Congress enacted laws requiring insurance companies to cover longer hospital stays for new mothers. Although studies in progress may eventually show patient distress from early discharge,<sup>25</sup> politics rather than outcomes data was the key factor behind changing the reimbursement policy for uncomplicated obstetrical deliveries.

Regardless of what one thinks of the outcome of the drive-through delivery debate, the case is a good example of how not to form healthcare policy. Out of the hundreds of possible clinical conditions, one was chosen in a vacuum, and proponents successfully argued for funding without any evidence. Shall we now legislate a minimum 5-day stay after coronary artery bypass graft surgery or a minimum 72-hour observation period for a patient with pneumonia?

A preferable route is to consider multiple medical conditions simultaneously, along with cost-effectiveness data and values assessment, as the State of Oregon did when it determined what treatments and benefits its Medicaid program would cover.<sup>26</sup> Subsequent differences in insurance coverage among competing health plans should be publicized. Ultimately, the extent of insurance coverage becomes a social and political decision,<sup>27,28</sup> but this approach would make trade-offs explicit. It would also allow ideas of classical liberalism, such as respecting the autonomy of the individual, to be incorporated systematically within a utilitarian cost-effective framework, because the ultimate ranking of conditions for insurance coverage and the consumer's choice of health plans need not follow an exclusive utilitarian calculus.

### **Access to Care, Underutilization of Services, and Public Health**

Poor access to care and potential underutilization of services will be particularly important concerns as managed care further sorts the fortunate from the less privileged. Managed care has little to say about the uninsured and poor. Few incentives exist to provide care for much of these populations. However,

even some patients covered by managed care plans may be at risk for underutilization of services. Some policy analysts have argued that managed care will improve outcomes and lower costs for many people, but worsen outcomes for selected others.<sup>29</sup> Chronically ill patients, older persons, people with unusual diseases, and low-income workers not represented by large purchasing cooperatives may be at especially high risk for entering health organizations that may not be able to meet their often-complex needs. As a society concerned with the care of all of our citizens, we need to improve our ability to measure and protect the population's health, both people enrolled in managed care plans and those left outside the system.

Managed care, in fact, may be conducive to improving some aspects of population health. Managed care and capitation are changing Americans' view of the healthcare system from a hospital-dominated market focused on treating illness and individuals to one of integrated delivery systems promoting wellness in populations across a continuum of settings.<sup>30</sup> In adopting this wider systems perspective, managed care companies should be concerned with population rates of wellness and illness. Examples of such measures include rates of immunization and previously undetected hypertension or diabetes. The financial incentive is to prevent morbidity, such as hospitalization for ambulatory care-sensitive conditions including asthma, diabetes, and heart failure, diseases for which good outpatient care should eliminate many admissions.<sup>31</sup>

However, to what extent does the incentive to adopt the population view truly exist? In the Minneapolis/St. Paul area of Minnesota, where the vast majority of the population is enrolled in managed care plans, the incentive is present.<sup>32</sup> Short of that degree of market capture, though, the need arises for a regulatory watchdog. With up to 25% of a health plan's membership switching enrollment each year, the true captive population for whom preventive medicine and community screening efforts will save money in the long term may not exist for an individual managed care organization. The solution, therefore, lies outside the managed care marketplace. A governmental agency should be charged to prevent underutilization of services within health plans, protect the interests of the uninsured, establish minimum standards for insurance coverage and the quality of health care plans, and encourage public health programs in areas such as smoking cessation and drunk driving. To inform the agency's actions, we need to collect population-level health outcomes data on a regular basis.

### The Quality and Integrity of Data Measurement Systems

The private market of managed care theoretically depends on the free flow of valid outcome information with which employers and other consumers may select health plans. For internal use, many hospitals and health systems collect simple outcomes data that are not adjusted rigorously for case-mix severity.<sup>33</sup> Often these centers utilize this information to identify departments and clinics who are outliers in terms of poor outcomes, and then ask them informally, "What is going on?" Punishment is not the objective.<sup>34</sup> For these nonpunitive, quality improvement efforts, the use of crude outcome measures that are not risk adjusted may be adequate.

However, what happens if these systems decide to profile physicians and then reward and punish them based on these comparisons? Or, as competition intensifies and different health systems start claiming that they have the best outcomes in the region, who is to ensure that there is accurate risk adjustment and standardization of measurements?

On a statewide basis, these issues have been most thoroughly analyzed in New York for coronary artery bypass graft surgery.<sup>35</sup> The Department of Health published the risk-adjusted mortality rates of individual hospitals and surgeons. Initially, many of the media reports were superficial and misleading. For example, the media highlighted the importance of the mortality rankings, even when the death rate at hospital A was only a few tenths of a percentage point different from that at hospital B. However, the New York State Department of Health took the time to educate the media as well as ensure data integrity. For example, the department checked to make sure that hospitals did not falsely upcode their severity indicators for the risk adjustment instrument.

Although rigorous systems for the collection and analysis of data are crucial for valid outcomes assessment, the goals of the administrators who use this information are equally important for the delivery of quality healthcare. Economic survival dictates the necessity of increasing market share and the number of capitated lives. Under such constraints, the danger is that we will gear our health system to optimizing marketing goals, which may be different from patient health in at least the short term. For example, it is unclear whether hospital administrators are using patient satisfaction appropriately as an outcome measure. Patients may be able to assess interpersonal care such as the quality of doctor-patient communication, but it is doubtful whether patients can measure the technical quality of care accurately.

ly. (*Boston Globe*, April 2, 1996:37,49) Why are administrators particularly interested in patients' ratings of factors such as the courtesy of transport staff and the ease of parking? Clearly many of these elements of patient satisfaction are important both inherently and also because of their link to other health outcomes.<sup>36</sup> However, satisfaction is just one component of quality healthcare. We must incorporate patient satisfaction into our scorecards and institutional priorities in a way that preserves what is valuable about patient measurements of the care experience, while not overlooking elements of quality care that are not captured by patient survey.

Thus, it is necessary to invest in quality information systems as well as gather the support of top private and public leadership to ensure that managed care companies generate, report, and use outcomes data ethically. Rather than viewing outcomes measurement as purely a marketing tool or a system to be gamed, top management must identify outcomes assessment as a powerful method to improve care. The development and refinement of the Health Plan Employer Data and Information Set (HEDIS), a common report card on the quality of care and outcomes of managed care plans devised by the National Committee for Quality Assurance, is the start of nationwide efforts to influence this process.<sup>37</sup> Although the initial versions of HEDIS relied primarily on process measures of quality, newer iterations have integrated outcome and patient satisfaction data more fully.

### The Politics of Uncertainty

Because outcomes data are limited in many clinical fields and powerful special interest groups exist, healthcare policy decisions are often particularly susceptible to political and social forces. Consider the recent opposition to funding of AHCPR. The AHCPR practice guideline on low back pain declared that most back pain improves with conservative treatment; thus, surgery is rarely indicated.<sup>38</sup> Many people believe that the displeasure of some orthopedic surgeons with this guideline led to intensive lobbying of Congress and subsequent cuts in AHCPR's funding.<sup>39</sup>

However, for most decisions, the politics of uncertainty are more likely to apply.<sup>40</sup> How can we make wise decisions with incomplete information? Although attempts to standardize care to an ideal of quality have often been frustrating,<sup>41</sup> it is also clear that strict reliance on the free market is likely to lead to suboptimal results, for example, regarding vulnerable, poor populations and the continued practice of unscientific medicine.

In spite of the problems associated with the current medical marketplace, managed care could lead to better health outcomes as we are forced to reassess our practice patterns, integrate our systems, and combine our individual and population perspectives. Governmental and industry organizations can prevent major inequities and quality problems through regulation, but medicine will always be an inexact field with much uncertainty. Because medicine combines science with the art of caring for individuals, physicians will always have to exercise judgment; thus, they will have the ultimate responsibility for ensuring quality outcomes. In addition, regardless of the mix of free market and regulatory principles governing our healthcare system, physicians can always find ways to optimize their behavior, whether it be for improving their patients' health or maximizing their economic gain. Therefore, the challenge for us is to preserve and build on our proud ethical traditions of caring and beneficence, while learning how to design, promote, and implement systems of care that are most likely to lead to enhanced provider performance and patient outcomes.

### Conclusion

Analysis of these topics (which relatively few people have been eager to discuss) forces us to acknowledge grim truths: clinical medicine is complex, current care is often suboptimal, altruism is important but not always dominant, all resource allocation choices have difficult opportunity costs, vulnerable populations are suffering, and money must be spent on unglamorous information systems. Perhaps most vexing is the conclusion that no matter how much we improve our current knowledge base and data management systems, many clinical and policy decisions will still have to be made under conditions of great uncertainty. So, how do we proceed from here?

Clearly, major breakthroughs have occurred in outcomes research, information technology, and healthcare management in the past two decades. We must continue to advance our knowledge in these areas to further diminish the realm of uncertainty in which clinical, managerial, and policy decisions are made.<sup>42</sup> The recent surge of conferences on outcomes assessment, disease management, and continuous quality improvement reflects this emphasis, albeit with cost as the driving force.

What has been underemphasized, however, is the need for local and national moral leadership in a field where uncertainty and value judgments are inherent.

On a national level, the key void is that policymakers are neither creating adequate incentives for local leaders to grapple with these issues, nor the political environment that would allow more serious exploration of the topics. For example, the limited access to care of vulnerable populations is an instance of market failure where clear incentives or else regulation may be necessary to ensure adequate health outcomes. Furthermore, if discussions of insurance coverage options are to be conducted in a rational manner, then opportunity costs need to be acknowledged as essential and prominent parts of the debate. Widespread agreement that the hidden issues are complex but nonetheless crucial to address is perhaps the first step, and national policymakers must courageously initiate thoughtful public discussion.

No easy solutions exist, and ultimately the important health issues are decided on a local level. Therefore, all of us have essential leadership roles to play in our institutions and communities. Simplistic slogans may be expedient in the managed care debate, but they are unlikely to guide us to wise policies. We must balance fairness with efficiency and explicitly discuss the values that underlie our resource allocation decisions.

#### Acknowledgments

I would like to thank Jason Karlawish, MD, Mark Siegler, MD, and Peter D. Friedmann, MD, MPH, for their helpful reviews of the manuscript.

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