

A Prescription for Protecting the Doctor-Patient Relationship

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The relationship between patients and their physicians is fundamental to high-quality care, yet this relationship is under stress in the current healthcare environment. Health plans have instituted a variety of policies to contain costs, not fully appreciating the adverse effect these decisions have on the doctor-patient interaction. Legislators have responded to the public's concern about managed care with "patient protection" bills that fail to address the fundamental causes of tension between doctors and patients. This paper presents a model describing how the need to contain costs affects the doctor-patient interaction and proposes a prescription for protecting the relationship. The model highlights how the healthcare environment affects patients' and physicians' expectations before a medical visit, the nature of their interaction during a visit, and patients' health outcomes. This prescription for protecting the doctor-patient relationship contains 4 key ingredients: (1) definition and promulgation of evidence-based standards for the doctor-patient relationship; (2) joint doctor-patient advocacy on behalf of the relationship; (3) positive incentives for exemplary doctor-patient relationships; and (4) expanded training and assessment of physicians' communication skills, both in general and related to discussing cost containment with patients. These measures will help restore the essential element of superb healthcare: a strong doctor-patient relationship.

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Despite all the changes in the healthcare system, the relationship between patients and physicians remains fundamental to the delivery of care. However, this interaction does not occur in a vacuum. It is embedded in the broader context of our society, which shapes peoples' views about medicine and about the organizations in which physicians and patients interact.

Although economic forces have always been part of medicine, the current healthcare environment is dominated by pressure to contain healthcare costs. Ninety-three percent of individuals with employer-sponsored health insurance are enrolled in some form of managed care.¹ These managed care health plans have adopted a variety of restrictive policies and financial incentives to control costs, despite the potentially negative impact of these policies on the doctor-patient relationship.²⁻⁶ As

health plans struggle to contain medical spending, direct-to-consumer advertising and ready access to medical information spur patient demand for expensive tests and medication. The economic pressures physicians face are further complicated by steadily declining reimbursements for patient care. State and federal legislators have crafted a variety of "patient protection" bills to ensure that cost-containment programs do not endanger patients' health.⁷ Yet these bills, which focus mostly on giving patients the right to external review of utilization decisions and to sue their health plan, will do little to protect the doctor-patient relationship.

A central problem is the gradual but pervasive devaluation of the doctor-patient relationship. In part, this devaluation has occurred because health plans and policymakers have not recognized how their decisions threaten the doctor-patient relationship and in turn impair the quality of healthcare and other valued outcomes. Furthermore, the doctor-patient relationship has suffered from the absence of an effective advocacy group lobbying on the relationship's behalf. Inside the examination room, the doctor-patient relationship is negatively affected because physicians have been unwilling or unable to respond to patients' concerns about cost containment. As healthcare costs resume their upward spiral, the need to contain costs will exert even more intense pressure on the doctor-patient relationship.⁸

In this paper, we propose a conceptual model of how the current healthcare environment is affecting the doctor-patient interaction and propose steps to strengthen the doctor-patient relationship.

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PATIENT-PHYSICIAN RELATIONSHIP MODEL

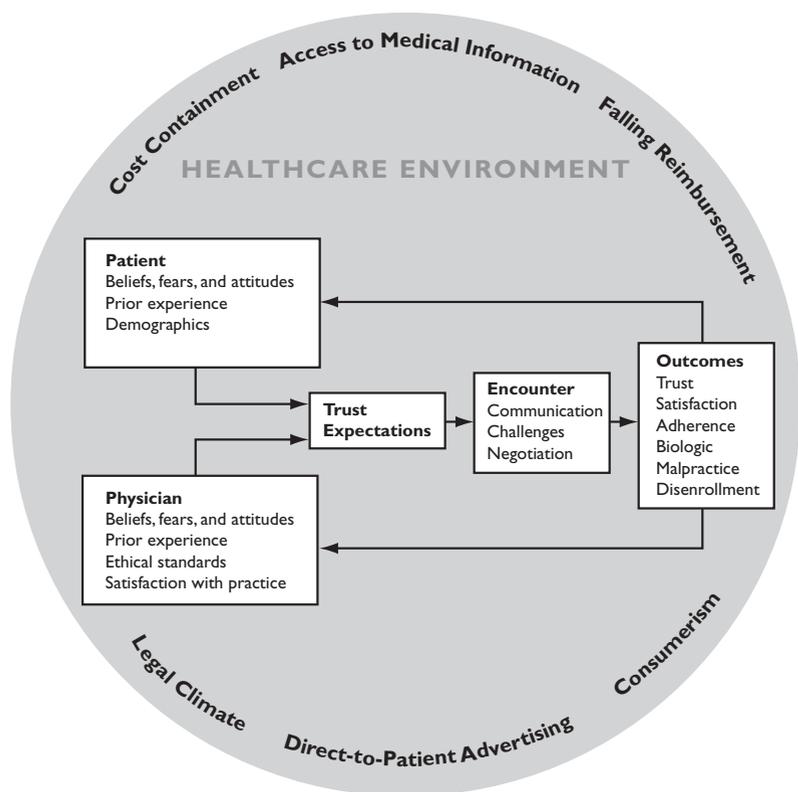
A complex system operates in the routine practice of medicine (see **Figure**). Both patients and physicians have personal beliefs, fears, and attitudes that shape their expectations for a medical encounter. Their beliefs engender a previsit level of trust that exists before they walk into the examination room. In turn, expectations and previsit trust both influence what transpires during the visit, including the nature of the questions patients ask, the negotiation between patients and physicians, the process of decision making, and the emotions both patients and physicians experience. The interaction and communication during the visit shape outcomes, including the postvisit level of trust, the likelihood that the patient will follow treatment recommendations,⁹ patient satisfaction,¹⁰ actual biologic outcomes,^{11,12} the potential for malpractice litigation in case of a bad medical outcome,¹³ and physician satisfaction. Subsequently, these outcomes become incorporated into both patients' and physicians' previsit beliefs and trust in future encounters. For example, a patient's high level of satisfaction

with a particular visit will lead him or her to anticipate a future visit with greater trust and positive expectations. Arrows in this diagram also could flow between a variety of different components of the model. For example, health outcomes can influence the previsit trust and expectations directly, in addition to influencing patients' and physicians' beliefs.

Further, the physician-patient relationship is placed within the overarching context of the healthcare environment. The current healthcare environment is complex, and includes the rise of consumerism, the legal climate, direct-to-patient advertising,¹⁴ easy access to information about medical conditions,¹⁵ and for-profit healthcare, to name a few important factors. However, the most acute challenge to the doctor-patient relationship is the need to control healthcare costs, given the conflicts such cost-containment efforts can create between the interests of the patient and the physician. These cost-control programs include restrictions on choice of physicians, utilization review, limited access to specialists, use of nonphysician providers, shorter appointment times, and financial incentives for physicians. Not all cost-control programs are imposed on physicians by health plans. For example, some physicians may decide themselves to shorten appointment slots or use physician extenders to preserve (or increase) their income as reimbursement rates fall.

This model highlights a number of important aspects of the current doctor-patient relationship. The model stresses that the doctor-patient interaction is inextricably linked to the context in which care is delivered. The model also emphasizes the importance of considering how the perspective of the patient and the perspective of the doctor interact with one another. As we describe below, the healthcare environment is leading patients to worry about cost containment, a concern they hesitate to share directly with their physician. Physicians are frustrated about the impact of managed care on the care they deliver and on their role as physicians. The interaction between anxious patients and frustrated physicians leads to disagreements and other communication challenges, problems that many physicians feel ill equipped to handle. These strained doctor-patient encounters can in turn impair important patient outcomes, as

Figure. Physician-Patient Relationship in Context



well as how patients and physicians approach subsequent visits.

In the following sections, we describe the various components of the model and pertinent research evidence about how managed care affects these components.

Patients' Previsit Beliefs and Attitudes

Patients' beliefs and attitudes shape their trust and expectations for a medical visit.¹⁶⁻¹⁸ These previsit beliefs and attitudes come from a variety of sources. Most people have had prior experiences in the healthcare system, either personally or through the shared healthcare experiences of friends and family members. Increasingly, patients' expectations for care also are being shaped by information from direct-to-consumer marketing and medical Internet sites, information which is of variable quality.¹⁵ In addition, people are exposed to the media,¹⁹ which influence the general public trust of medicine as an institution, a trust that has been declining during the last decade.²⁰

Health plans' focus on containing costs clearly affects patients' previsit beliefs and attitudes. In fact, 56% of patients worry that if they were sick their health plan would be more concerned about saving money than about what treatment is best for them.²¹⁻²³ Patients enrolled in managed care plans are nearly twice as likely to report this concern as patients in traditional fee-for-service plans. Sixty percent of patients say that managed care has made it harder for people who are sick to see specialists, and 67% report that managed care has decreased the amount of time doctors spend with their patients.²³ Patients' fears about managed care are further heightened by media coverage portraying individuals who were harmed by health plans' efforts to control costs.^{2,19,24}

It is unclear whether patients are equally concerned about the specific strategies managed care plans use to contain costs, such as giving physicians financial incentives to consciously practice cost containment. In part, this may be because the public's overall understanding of managed care is relatively limited.²⁵ As of 1998, 54% of the public had either never heard of managed care or were not sure what the term meant.²⁶ Even fewer patients are aware of the various strategies managed care plans use to compensate physicians, with only one third of patients being able to correctly identify how their physician was paid.³ However, when patients are told about common managed care cost control strategies (eg, giving physicians bonuses for keeping healthcare costs under control), their attitudes towards such practices are generally quite negative.^{27,28} Many managed care companies are redesigning their financial

incentives to reward higher healthcare quality rather than just lower healthcare utilization. Although incentives that reward both cost control and high-quality care are viewed somewhat more favorably by the public than incentives focused only on utilization, nearly half of the public still believes such mixed incentives are a "bad idea for patients."²⁷

Yet patients may be suffering in silence, fearful of expressing their concerns about cost containment directly to their physician. Patients are especially leery of broaching the subject of whether cost-containment programs might be affecting their physician's recommendations. Although 91% of the public want their physicians' bonuses disclosed, 62% believed that "talking with my doctor about bonuses would be awkward," and 38% agreed that "asking my doctor about his or her bonuses will make my doctor mad at me."²⁷ Patients may voice their concern about managed care obliquely, such as by making repeated requests for specialty referrals or expensive diagnostic tests. Although patients may appear to be making a simple request, they are actually expressing a more profound worry that their doctor may be inappropriately withholding important resources.

These negative attitudes and beliefs may be impairing patients' previsit trust in their physicians. Although patients' overall trust in their personal physicians remains high, managed care patients have less trust in their physicians than do fee-for-service patients. In one study, 94% of fee-for-service patients expressed trust in their doctor, compared with 83% of patients in capitated settings and 77% of patients whose doctors were salaried.³ A second study also found that patients enrolled in group and staff model HMOs have less trust in their physicians than do patients in other types of health plans.²⁹ Such diminished trust between patients and doctors can set the stage for challenging doctor-patient interactions.

Physicians' Previsit Attitudes and Beliefs

Physicians also hold attitudes and beliefs that shape their previsit expectations. A variety of studies have documented a general drop in physician satisfaction, a decline that is most prominent in areas where managed care penetration is high.^{30,31} Physicians' attitudes towards managed care have become more negative over the last 3 years, despite the fact that some managed care plans have abandoned cost-containment strategies such as gatekeeping.³² Eighty-seven percent of physicians say their morale has decreased in the last 5 years.³² Physicians share patients' belief that managed care is having a negative impact on the quality of care.^{33,34} While crediting managed care for improvements such as

practice guidelines and disease management protocols, 73% of physicians believe managed care has decreased healthcare quality, and 88% report that managed care has decreased their time with patients. Physicians are especially concerned that financial incentives are compromising the quality of care.³⁵ In one survey, 75% of physicians felt that using financial incentives to limit services was ethically unacceptable.³⁶

The need to constrain healthcare costs has led many physicians to reconceptualize their role.³⁷ Traditionally, physicians have held that their role is to advocate for the best interest of each patient as an individual, uninfluenced by the broader needs of a population of patients. Faced with the need to contain costs, some physicians are starting to redefine their role as an advocate both for individual patients and others in the broader community, balancing a variety of needs that may be in conflict.^{38,39} The pressures of managed care are leading other physicians to “game the system,” exaggerating or misrepresenting patients’ conditions to secure needed services.^{40,41} Whether or not physicians see themselves as guardians of community resources may have a profound influence on the patient-physician encounter as they discuss reasons for restrictive use of expensive tests or procedures.

Patient-Physician Interaction

Interactions between anxious patients and frustrated physicians are a prescription for conflict and disagreement. In one recent study, patients’ rating of their doctors’ communication and interpersonal skills declined noticeably between 1996 and 1999.²⁹ Concern about cost containment can lead some patients to adopt a “squeaky wheel” approach, pressing their demands for medical services to ensure their healthcare needs are addressed. Disagreements typically arise when patients expect or request a particular service that the health plan restricts. Typical areas of disagreements include restrictions on resources (ie, hospitalization, specialty referral, tests, treatments), access to care (ie, time with providers, use of nonphysician providers), and financial arrangements of physicians (fees of physicians and financial arrangements of the healthcare plan with physicians).⁴²

These interactions are difficult for a number of reasons. Such disagreements put the physician in the challenging position of explaining the restriction while making the patient trust that his or her health concern can be adequately addressed. It is frustrating for physicians to feel they are the objects of patients’ mistrust given how little control physicians have over most cost-containment policies. Such frustration makes it difficult for physicians to respond empathically to patients’ concerns about managed care. These interactions are

further complicated by the shorter doctor-patient relationships that result from patients frequently changing health insurance.²³ Finally, if patients remain silent about their concerns regarding cost containment, physicians may be unaware of the root cause of these conflicts. Even when physicians recognize patients’ concerns about managed care, the path of least resistance may be for physicians to simply ignore these clues rather than trying to discuss cost containment in a short office visit. Yet if unaddressed, patients’ concerns about cost containment will only worsen, further straining the doctor-patient relationship.

The Managed Care Doctor-Patient Interaction and Outcomes

As our model posits, the doctor-patient relationship matters in part because the nature of the interaction affects important outcomes such as patient and physician satisfaction, biologic outcomes, and the risk of malpractice. Does evidence exist that strains in the doctor-patient relationship are impairing these outcomes? As was previously noted, patient trust appears to be lower in the managed care environment. This distrust is affecting patient behavior. In one study, low trust was the leading predictor of voluntary disenrollment from primary care physicians’ practices.⁴³ Restrictions on patient choice of providers and the use of gatekeeping also were associated with lower patient satisfaction.⁴⁴ Yet studies comparing the quality of care in managed care plans with that in fee-for-service plans yielded mixed results.⁴⁵⁻⁴⁷

THE HEALTH PLAN AND PUBLIC POLICY RESPONSE

Keenly aware of patients’ and physicians’ unhappiness with managed care, many health plans are modifying their approach to cost containment. Some health plans have reduced or eliminated their gatekeeping and preauthorization requirements.⁴⁵ Other plans have abandoned capitation and are returning to fee-for-service mechanisms for paying primary care physicians. Both health plans and employers are striving to make patients more cost sensitive (eg, by using multitiered formularies or defined-contribution health benefit plans).⁴⁸ Despite these changes, patient concern about cost containment dropped only slightly between 1998 and 2002.^{23,49} As healthcare costs resume their rapid ascent, tension in the doctor-patient relationship around cost containment will continue for the foreseeable future.⁵⁰

State and federal policymakers have responded to the managed care backlash by adopting a variety of

patient protection bills. However, these patient protection efforts are unlikely to strengthen the doctor-patient relationship. One key aspect of patient protection bills is the right to external review of health plan decisions. For external review to assuage patients' concerns, patients must be aware of this right, be confident of the review's objectivity, and feel secure that seeking external review will not lead to retribution from their health plan. Efforts to promote patient awareness of and comfort with external review programs are not components of most patient protection bills. The second major focus of patient protection bills is the right to sue health plans whose decisions or policies harm patients. The right to sue also is unlikely to comfort patients worried about managed care. Such lawsuits take place only after an injury has occurred, and typically take years to resolve. Furthermore, the vast majority of patients who are injured do not take legal action.^{51,52} New strategies will be needed to mitigate the impact of cost-containment programs on the doctor-patient relationship.

PROTECTING THE DOCTOR-PATIENT
RELATIONSHIP

Strengthening the patient-physician relationship will require addressing both the fears of patients and the frustrations of physicians. Our prescription for protecting the doctor-patient relationship contains 4 interrelated components:

1. Define and promulgate standards for the doctor-patient relationship.
2. Develop strategies to advocate for the relationship.
3. Enhance incentives for exemplary doctor-patient relationships.
4. Expand training and assessment of physicians' communication skills.

This approach will help health plans and policymakers address those aspects of the healthcare environment that are impairing the doctor-patient relationship, as well as enhance physicians' ability to communicate with patients about cost containment.

Recommendation 1. Define and Promulgate Standards for the Doctor-Patient Relationship

An essential component of protecting the doctor-patient relationship will be defining evidence-based standards for the relationship. Such standards would allow health plans and policymakers both to understand and minimize the impact of their decisions on the doctor-patient relationship. For most common clinical conditions, clear standards and guidelines have been developed to support the delivery of patient care and

allow the quality of that care to be evaluated.⁵³ For example, effective care for diabetic patients is thought to include regular measurements of the glycosylated hemoglobin and annual examinations of the patients' eyes and feet.⁵⁴ Health plans track their performance relative to such standards, with this data leading to public report cards comparing the quality of care across plans.

Few evidence-based standards exist regarding the doctor-patient relationship. Most previous descriptions of the essential components of the doctor-patient relationship came primarily from conceptual analysis, not from empiric research. Emanuel and Dubler asserted that the ideal doctor-patient relationship consists of 6 C's: choice, competence, communication, compassion, continuity, and (no) conflict of interest.² How these 6 C's could be operationalized as specific measures of the doctor-patient relationship was unclear.

No metric will capture every aspect of this complex relationship. Nonetheless, important new instruments will help measure the doctor-patient relationship with considerably greater accuracy, facilitating the development and promulgation of comprehensive standards for the relationship. One such instrument is the Primary Care Assessment Survey (PCAS), a 51-item validated questionnaire that measures the primary care doctor-patient relationship.^{43,55-59} The PCAS takes 10-15 minutes for patients to complete, and can be administered to patients waiting to see their primary care provider.⁶⁰ Eight PCAS questions measure patients' trust in their physician, though no questions directly assess patients' concern about cost containment. Ultimately, key measures of the doctor-patient relationship should be widely promulgated and included alongside other commonly accepted dimensions of high-quality care. Plan-specific PCAS scores could help consumers make more informed choices regarding their healthcare coverage. Provider-specific PCAS report cards will help health plans monitor and enhance the quality of the doctor-patient relationship.

In addition, clear standards can support critical research on how the healthcare environment affects the doctor-patient relationship. Most prior studies of the physician-patient interaction have been cross-sectional, with few studies examining the consequences of the relationship over time. Even less research has examined the effect of the healthcare environment on the doctor-patient interaction. For example, many health plans and physicians have sought to increase productivity by decreasing the time allotted for patient visits.⁶¹⁻⁶³ Only a few studies have examined the association between the length of visits and the quality of doctor-patient relationships,^{10,11,42,64} and no studies to date have

assessed how shortening patient visits affects outcomes. In the absence of this data, standards about minimum time required for primary care visits cannot be firmly grounded or defended.

Recommendation 2. Develop Effective Strategies to Advocate for the Relationship

At present, there are no clear mechanisms through which doctors and patients can identify what they value in the doctor-patient relationship and then advocate for a stronger relationship.⁶⁵ Although patients are free to voice their dissatisfaction with managed care, the primary purchasers of healthcare are not patients but rather the patients' employers. Because many employers offer employees only 1 health plan, patients are restricted in their ability to "vote with their feet" and disenroll from plans they believe are unsatisfactory.⁶⁶ Further, it is difficult for physicians to speak out about the sanctity of the physician-patient relationship without simply appearing self-interested.

The ideal advocate for the relationship would be a patient-physician coalition, working collaboratively to refocus decision makers' attention on the physician-patient relationship. The physicians in such a coalition could educate patients about the realities of practicing medicine cost effectively, and the patients could help physicians understand the experience of receiving healthcare in today's environment. Joint doctor-patient advocacy could be a powerful political force for reforming those aspects of the healthcare environment responsible for the fears and frustrations of patients and doctors.

Joint doctor-patient advocacy efforts have enjoyed considerable success when organized around specific diseases such as diabetes or breast cancer.⁶⁷ Enhanced advocacy for the doctor-patient relationship may suffer from the difficulty in mobilizing individuals to take action around the goal of promoting the doctor-patient relationship in general. As standards for the doctor-patient relationship emerge, research using such standards will pinpoint those aspects of the relationship most closely linked to patient outcomes, as well as explore how the healthcare environment affects these outcomes. If research confirms a link between visit length and patient outcomes, advocacy could be directed at ensuring adequate time for doctor-patient encounters.

Recommendation 3. Enhance Incentives for Exemplary Doctor-Patient Relationships

Strong doctor-patient relationships are of great intrinsic value to most physicians. Yet as expanding clinical and preventive visit objectives clash with shorter appointment times, busy physicians may fail to invest adequate energy into nourishing and sustaining

the doctor-patient relationship. Positive incentives for exemplary relationships may help remind physicians that strong doctor-patient relationships are critical to effective patient care and in turn diminish physicians' frustrations with practicing medicine in the current environment. Some incentives could be financial in nature, as physicians clearly alter their behavior in response to financial stimuli.⁶⁸⁻⁷¹ Some health plans currently offer physicians positive financial incentives based on patient satisfaction.^{72,73} However, these patient satisfaction incentives are typically small in nature. Furthermore, most patient satisfaction instruments do not measure patient concern about cost-containment programs.

Consideration should be given to developing meaningful nonfinancial incentives for physicians to develop stellar doctor-patient relationships. Most physicians care deeply about how they are perceived by their peers. Once standards are in place that allow the doctor-patient relationship to be measured with accuracy and precision, physicians with consistently exceptional doctor-patient relationship ratings should be held up as "heroes," "clinical stars," or "master communicators." Such public recognition could take place at levels ranging from the local medical group or association to national specialty organizations.

Recommendation 4. Expand Training and Assessment of Physicians' Communication Skills

Medical education has traditionally devoted relatively little time to teaching the basic skills needed to establish and maintain strong doctor-patient relationships.⁷⁴ Even less attention has been focused on assessing whether students have achieved these core doctor-patient relationship competencies. Many medical schools have recently expanded their curricula on doctor-patient communication and related relationship-building skills,⁷⁵ and accrediting bodies now include communication competencies in their examinations. Ultimately, the knowledge, skills, and attitudes regarding the doctor-patient relationship should be taught and assessed with rigor equal to that devoted to the biomedical curriculum.

In addition, medical education should prepare students for common, challenging communication dilemmas such as discussing issues of cost containment with patients. Most physicians enter practice without any previous experience or instruction in talking to patients about cost containment, and see such conversations as uncharted and potentially treacherous territory.⁷⁶ Practicing physicians should realize that their patients are worried about cost containment, and seek to improve their skills at recognizing and responding to these concerns. Models for teaching communication

skills about end-of-life care, breaking bad news, and other sensitive topics could be adapted to prepare physicians for conversations about cost containment.^{77,78} Research demonstrates that tailored communication programs enhance physicians' skills and lead to more effective patient care.⁷⁹

CONCLUSION

Practicing physicians know that their relationship with patients is essential to delivering high-quality care. To protect and strengthen that relationship, practicing physicians, academics, policymakers, and advocacy groups must publicly articulate the centrality of the relationship and demonstrate the effect of managed care on the relationship and health outcomes. These measures will allow physicians to respond to the changes inherent in the current healthcare environment while preserving the essential element of superb care—a strong patient-physician relationship.

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REFERENCES

1. Gabel J, Levitt L, Pickreign J, et al. Job-based health insurance in 2001: inflation hits double digits, managed care retreats. *Health Aff (Millwood)*. 2001;20(5):180-186.
2. Emanuel EJ, Dubler NN. Preserving the physician-patient relationship in the era of managed care. *JAMA*. 1995;273(4):323-329.
3. Kao AC, Green DC, Zaslavsky AM, Koplan JP, Cleary PD. The relationship between method of physician payment and patient trust. *JAMA*. 1998;280(19):1708-1714.
4. Mechanic D. Changing medical organization and the erosion of trust. *Milbank Q*. 1996;74(2):171-189.
5. Mechanic D, Schlesinger M. The impact of managed care on patients' trust in medical care and their physicians. *JAMA*. 1996;275(21):1693-1697.
6. Rodwin MA. Conflicts in managed care. *N Engl J Med*. 1995;332(9):604-607.
7. Annas GJ. A national bill of patients' rights. *N Engl J Med*. 1998;338(10):695-699.
8. Lesser CS, Ginsburg PB. Back to the future? New cost and access challenges emerge. Initial findings from HSC's recent site visits. *Issue Brief Cent Stud Health Syst Change*. February 2001(35):1-4.
9. Carter WB, Inui TS, Kukull WA, Haigh VH. Outcome-based doctor-patient interaction analysis, II: identifying effective provider and patient behavior. *Med Care*. 1982;20(6):550-566.
10. Stewart MA. Effective physician-patient communication and health outcomes: a review. *CMAJ*. 1995;152(9):1423-1433.
11. Kaplan SH, Greenfield S, Ware JE Jr. Assessing the effects of physician-patient interactions on the outcomes of chronic disease. *Med Care*. 1989;27(3 suppl):S110-127.
12. Kaplan SH, Greenfield S, Gandek B, Rogers WH, Ware JE Jr. Characteristics of physicians with participatory decision-making styles. *Ann Intern Med*. 1996;124(5):497-504.

13. Levinson W, Roter DL, Mullooly JP, Dull VT, Frankel RM. Physician-patient communication. The relationship with malpractice claims among primary care physicians and surgeons. *JAMA*. 1997;277(7):553-559.
14. Hollon MF. Direct-to-consumer marketing of prescription drugs: creating consumer demand. *JAMA*. 1999;281(4):382-384.
15. Berland GK, Elliott MN, Morales LS, et al. Health information on the Internet: accessibility, quality, and readability in English and Spanish. *JAMA*. 2001;285(20):2612-2621.
16. Gray BH. Trust and trustworthy care in the managed care era. *Health Aff (Millwood)*. 1997;16(1):34-49.
17. Pearson SD, Raeke LH. Patients' trust in physicians: many theories, few measures, and little data. *J Gen Intern Med*. 2000;15(7):509-513.
18. Thom DH, Campbell B. Patient-physician trust: an exploratory study. *J Fam Pract*. 1997;44(2):169-176.
19. Brodie M, Brady LA, Altman DE. Media coverage of managed care: is there a negative bias? *Health Aff (Millwood)*. 1998;17(1):9-25.
20. Kramer RM, Tyler TR. *Trust in Organizations: Frontiers of Theory and Research*. Thousand Oaks, Calif: Sage Publications; 1996.
21. Henry J. Kaiser Family Foundation/Harvard University School of Public Health. Update on Americans' Views on the Consumer Protections Debate. Available at: <http://www.kff.org/content/1999/1502/PublicOpinion99Topline.PDF>. Accessed April 9, 2003.
22. Henry J. Kaiser Family Foundation/Harvard University School of Public Health. Update on Americans' Views and Experiences in Managed Care. Available at: <http://www.kff.org/content/1998/1501/PublicOpinion98Topline.PDF>. Accessed April 9, 2003.
23. Henry J. Kaiser Family Foundation/Harvard University School of Public Health. National Survey of Consumer Experiences With Health Plans. Available at: <http://www.kff.org/content/2000/20000607a/Toplines.PDF>. Accessed April 9, 2003.
24. Blendon RJ, Brodie M, Benson JM, et al. Understanding the managed care backlash. *Health Aff (Millwood)*. 1998;17(4):80-94.
25. Miller TE, Sage WM. Disclosing physician financial incentives. *JAMA*. 1999;281(15):1424-1430.
26. Brown JB, Boles M, Mullooly JP, Levinson W. Effect of clinician communication skills training on patient satisfaction. A randomized, controlled trial. *Ann Intern Med*. 1999;131(11):822-829.
27. Gallagher TH, St Peter RF, Chesney M, Lo B. Patients' attitudes toward cost control bonuses for managed care physicians. *Health Aff (Millwood)*. 2001;20(2):186-192.
28. Hall MA, Dugan E, Balkrishnan R, Bradley D. How disclosing HMO physician incentives affects trust. Not all cost-minimizing physician incentives are ethically troubling to patients. *Health Aff (Millwood)*. 2002;21(2):197-206.
29. Murphy J, Chang H, Montgomery JE, Rogers WH, Safran DG. The quality of physician-patient relationships. Patients' experiences 1996-1999. *J Fam Pract*. 2001;50(2):123-129.
30. Murray A, Montgomery JE, Chang H, Rogers WH, Inui T, Safran DG. Doctor discontent. A comparison of physician satisfaction in different delivery system settings, 1986 and 1997. *J Gen Intern Med*. 2001;16(7):452-459.
31. Kassirer JP. Doctor discontent. *N Engl J Med*. 1998;339(21):1543-1545.
32. Henry J. Kaiser Family Foundation/Harvard University School of Public Health. National Survey of Physicians, Part III: Doctors' Opinions About Their Profession. Available at: <http://www.kff.org/content/2002/20020426c/PhysicianSurveypartIII.pdf>. Accessed April 9, 2003.
33. Kerr EA, Hays RD, Mittman BS, Siu AL, Leake B, Brook RH. Primary care physicians' satisfaction with quality of care in California capitated medical groups. *JAMA*. 1997;278(4):308-312.
34. Halm EA, Causino N, Blumenthal D. Is gatekeeping better than traditional care? A survey of physicians' attitudes. *JAMA*. 1997;278(20):1677-1681.

35. Grumbach K, Osmond D, Vranizan K, Jaffe D, Bindman AB. Primary care physicians' experience of financial incentives in managed-care systems. *N Engl J Med*. 1998;339(21):1516-1521.
36. Sulmasy DP, Bloche MG, Mitchell JM, Hadley J. Physicians' ethical beliefs about cost-control arrangements. *Arch Intern Med*. 2000;160(5):649-657.
37. ABIM Foundation, American Board of Internal Medicine; ACP-ASIM Foundation, American College of Physicians–American Society of Internal Medicine; European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter. *Ann Intern Med*. 2002;136(3):243-246.
38. Kassirer JP. Managing care—should we adopt a new ethic? *N Engl J Med*. 1998;339(6):397-398.
39. Pearson SD. Caring and cost: the challenge for physician advocacy. *Ann Intern Med*. 2000;133(2):148-153.
40. Wynia MK, Cummins DS, VanGeest JB, Wilson IB. Physician manipulation of reimbursement rules for patients: between a rock and a hard place. *JAMA*. 2000;283(14):1858-1865.
41. Werner RM, Alexander GC, Fagerlin A, Ubel PA. The "Hassle Factor": what motivates physicians to manipulate reimbursement rules? *Arch Intern Med*. 2002;162(10):1134-1139.
42. Levinson W, Gorawara-Bhat R, Dueck R, et al. Resolving disagreements in the patient-physician relationship: tools for improving communication in managed care. *JAMA*. 1999;282(15):1477-1483.
43. Safran DG, Montgomery JE, Chang H, Murphy J, Rogers WH. Switching doctors: predictors of voluntary disenrollment from a primary physician's practice. *J Fam Pract*. 2001;50(2):130-136.
44. Forrest CB, Shi L, von Schrader S, Ng J. Managed care, primary care, and the patient-practitioner relationship. *J Gen Intern Med*. 2002;17(4):270-277.
45. Dudley RA, Luft HS. Managed care in transition. *N Engl J Med*. 2001;344(14):1087-1092.
46. Miller RH, Luft HS. Does managed care lead to better or worse quality of care? *Health Aff (Millwood)*. 1997;16(5):7-25.
47. Dudley RA, Miller RH, Korenbrot TY, Luft HS. The impact of financial incentives on quality of health care. *Milbank Q*. 1998;76(4):649-686, 511.
48. Christianson JB, Parente ST, Taylor R. Defined-contribution health insurance products: development and prospects. *Health Aff (Millwood)*. 2002;21(1):49-64.
49. Harris Interactive. While managed care is still popular, hostility has declined. *Health Care News*. Available at: http://www.harrisinteractive.com/news/newsletters/healthnews/HL_HealthCareNews2002Vol2_Iss20.pdf. Accessed April 9, 2003.
50. Strunk BC, Ginsburg PB, Gabel JR. Tracking health care costs. *Health Aff (Millwood)*. 2002(suppl):W39-50.
51. Brennan TA, Sox CM, Burstin HR. Relation between negligent adverse events and the outcomes of medical-malpractice litigation. *N Engl J Med*. 1996;335(26):1963-1967.
52. Localio AR, Lawthers AG, Brennan TA, et al. Relation between malpractice claims and adverse events due to negligence. Results of the Harvard Medical Practice Study III. *N Engl J Med*. 1991;325(4):245-251.
53. Blumenthal D, Epstein AM. Quality of health care, part 6: the role of physicians in the future of quality management. *N Engl J Med*. 1996;335(17):1328-1331.
54. American Diabetes Association. Standards of medical care for patients with diabetes mellitus. *Diabetes Care*. 2002;25(1):213-229.
55. Safran DG, Kosinski M, Tarlov AR, et al. The Primary Care Assessment Survey: tests of data quality and measurement performance. *Med Care*. 1998;36(5):728-739.
56. Safran DG, Rogers WH, Tarlov AR, et al. Organizational and financial characteristics of health plans: are they related to primary care performance? *Arch Intern Med*. 2000;160(1):69-76.
57. Safran DG, Taira DA, Rogers WH, Kosinski M, Ware JE, Tarlov AR. Linking primary care performance to outcomes of care. *J Fam Pract*. 1998;47(3):213-220.
58. Taira DA, Safran DG, Seto TB, Rogers WH, Tarlov AR. The relationship between patient income and physician discussion of health risk behaviors. *JAMA*. 1997;278(17):1412-1417.
59. Safran DG, Wilson IB, Rogers WH, Montgomery JE, Chang H. Primary care quality in the Medicare program: comparing the performance of Medicare health maintenance organizations and traditional fee-for-service Medicare. *Arch Intern Med*. 2002;162(7):757-765.
60. Hartley LA. Using the primary care assessment survey in an ambulatory setting. *Nurs Econ*. 2002;20(5):235-236, 248.
61. Davidoff F. Time. *Ann Intern Med*. 1997;127(6):483-485.
62. Mechanic D, McAlpine DD, Rosenthal M. Are patients' office visits with physicians getting shorter? *N Engl J Med*. 2001;344(3):198-204.
63. Morrison I. The future of physician's time. *Ann Intern Med*. 2000;132(1):80-84.
64. Dugdale DC, Epstein R, Pantilat SZ. Time and the patient-physician relationship. *J Gen Intern Med*. 1999;14(suppl 1):S34-40.
65. Rodwin MA. Consumer protection and managed care: the need for organized consumers. *Health Aff (Millwood)*. 1996;15(3):110-123.
66. Mechanic D. Consumer choice among health insurance options. *Health Aff (Millwood)*. 1989;8(1):138-148.
67. Dresser R. *When Science Offers Salvation: Patient Advocacy and Research Ethics*. Oxford, UK, and New York, NY: Oxford University Press; 2001.
68. Fairbrother G, Hanson KL, Friedman S, Butts GC. The impact of physician bonuses, enhanced fees, and feedback on childhood immunization coverage rates. *Am J Public Health*. 1999;89(2):171-175.
69. Stearns SC, Wolfe BL, Kindig DA. Physician responses to fee-for-service and capitation payment. *Inquiry*. 1992;29(4):416-425.
70. Gabel JR, Rice TH. Reducing public expenditures for physician services: the price of paying less. *J Health Polit Policy Law*. 1985;9(4):595-609.
71. Hemenway D, Killen A, Cashman SB, Parks CL, Bicknell WJ. Physicians' responses to financial incentives. Evidence from a for-profit ambulatory care center. *N Engl J Med*. 1990;322(15):1059-1063.
72. Hanchak NA, Schlackman N, Harmon-Weiss S. US Healthcare's quality-based compensation model. *Health Care Financ Rev*. 1996;17(3):143-159.
73. Schlackman N. Evolution of a quality-based compensation model: the third generation. *Am J Med Qual*. 1993;8(2):103-110.
74. Blumenthal D, Thier SO. Managed care and medical education: the new fundamentals. *JAMA*. 1996;276(9):725-727.
75. Novack DH, Volk G, Drossman DA, Lipkin M Jr. Medical interviewing and interpersonal skills teaching in US medical schools. Progress, problems, and promise. *JAMA*. 1993;269(16):2101-2105.
76. Gorawara-Bhat R, Gallagher TH, Levinson W. Patient-provider discussions about conflicts of interest in managed care: physicians' perceptions. *Am J Manag Care*. 2003;9:564-571.
77. Hanson LC, Tulskey JA, Danis M. Can clinical interventions change care at the end of life? *Ann Intern Med*. 1997;126(5):381-388.
78. Gallagher TH, Pantilat SZ, Papadakis M, Lo B. Teaching medical students to discuss advance directives: a standardized patient curriculum. *Teaching and Learning in Medicine*. 1999;11(3):142-147.
79. Davis DA, Fox RD, eds. *The Physician as Learner: Linking Research to Practice*. Chicago, Ill: American Medical Association; 1994.