Healthcare Ethics: A Patient-Centered Decision Model

Alfonso R. Oddo

ABSTRACT. A common financial model used in business decisions is the cost/benefit comparison. The costs of a proposed project are compared with the benefits, and if the benefits outweigh the costs, the project is accepted; if the costs exceed the benefits, the project is rejected. This model is applicable when tangible costs and benefits can be reasonably measured in monetary units. However, it is difficult to consider intangible factors in this model because intangible factors cannot be readily quantified in money.

While some might argue that the financial model should not apply to healthcare decisions, the fact is that costs do enter into the picture. People may decide to forego needed healthcare because they cannot afford it. Healthcare providers may make choices based in part on the costs of diagnosis and treatment, rather than solely on medical information and what is best for the patient. Should financial issues enter into healthcare decisions – decisions about human health and well being? If so, how should the costs and benefits be measured and evaluated? What are some ethical issues and dilemmas involved in such decisions?

This paper addresses ethical dilemmas and financial issues in healthcare. A healthcare decision model, which considers medical information, financial information, as well as ethical and other intangible factors, is proposed.

Alfonso R. Oddo is an Associate Professor of Accounting at Niagara University, and Associate Director of NU's Center for International Accounting Education and Research. *He received the Sears Award for teaching excellence and campus leadership, and the Vincentian Mission Award. His current research interests include business ethics, international accounting issues, and innovative learning models. He has published many research papers, and is an author and reviewer of accounting textbooks and software.*

The dilemma

The dilemma in healthcare today is how to provide high-quality healthcare while keeping costs at a minimum. Healthcare in the United States is generally provided under two models: fee-for-service and managed care. Under fee-for-service arrangements, doctors set the fee for the services they provide, and patients and/or health insurance companies pay the bill. Until recently, fee-for-service has been the traditional model used in the U.S. In recent years, however, managed care programs have grown significantly. Under managed care programs, third party payers determine how much will be paid for defined medical treatments, and doctors get that amount and no more. Managed care companies are also called health maintenance organizations (HMO's) and managed care organizations (MCO's).

Eddy (1997) outlines the characteristics of fee-for-service and managed care as follows:

Fee-for-service

1. No defined population for which the insurance company is responsible.
2. Contacts are initiated by patients.
3. Main focus is on treating sick patients.
4. The responsibility of the insurance company is to pay the bills.
5. Physicians decide what care their patients should receive.
6. Physicians have an incentive to overuse care;
7. Insurance company has no managerial control over healthcare providers, and there is no centralized decision making.
8. The locus of the cost/quality trade-off is split:

Journal of Business Ethics **29**: 125–134, 2001.

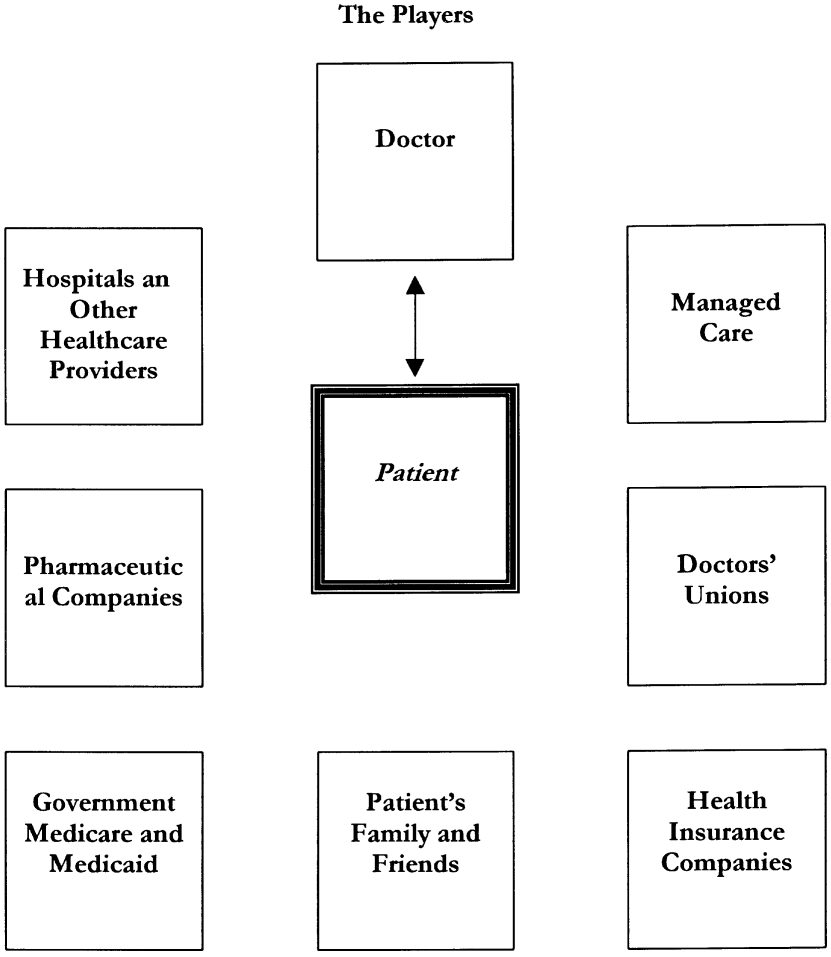
physicians have income incentives to maximize the services they deliver to patients, whereas administrators have market incentives to keep premiums low.

Managed care

1. The managed care organization (MCO) has responsibility for the health of a defined population.
2. The MCO is responsible for the entire spectrum of care.
3. Contacts are initiated both by patients and by the MCO.
4. The MCO "manages" the actions of physicians.
5. The MCO has a capacity for centralized decision making.
6. The cost/quality trade-off comes together at the level of the medical director, who simultaneously feels pressure both to improve quality and to reduce costs.

The players

Who are the stakeholders in the healthcare system? The patient should be the central focus in healthcare decisions, and the doctor is the ultimate provider of healthcare services. Other "players" in the healthcare delivery system include insurance companies, managed care organizations, doctors' unions, the patient's family and friends, hospitals, clinics, and other healthcare providers, pharmaceutical companies, government programs such as Medicare and Medicaid. A diagram of the players in the healthcare delivery system is presented below:



One of the more recent "players" in the healthcare scene is the doctors' union. Doctors at Rockford Clinic in Illinois formed a collective bargaining unit to regain some of the autonomy they lost when they became employees of the Rockford Health System. The doctors want more control over decisions that affect patient care. The American Medical Association (AMA) supports the union by supplying doctors with labor attorneys through its new Division of Representation, created to protect doctors from "business-suit bullies" (Lowes, 1998). This is indeed a new twist in the healthcare delivery system in the U.S. Why are doctors forming unions? Is it because they want more money, or perhaps because they feel they are losing control over the very core of their existence – caring for patients? If the issue of control over patient care decisions is at the heart of the doctors' union movement, then the American healthcare system is at a critical juncture. Will doctors regain control of patient care, or will healthcare administrators play a greater role in healthcare decisions?

Cost/quality

The cost/benefit model for decision making in business compares the cost of a business project with the expected benefits to be derived from the project. In theory, if the benefits exceed the costs the project is accepted; if the costs exceed the benefits the project is rejected. There are many ways to compute the expected benefits, however all of the methods assume that the benefits can be measured in dollars – an assumption that is not necessarily valid in healthcare decisions. One of the methods used in business is the net present value (NPV) model, which compares the cost of a business project with the present value of the estimated future benefits to be received. The future benefits are discounted at an appropriate interest rate to determine the present value of the benefits. Then the cost of the project is subtracted from the present value of the benefits to determine the NPV:

NPV = Present value of benefits – Cost

For example, if a business is considering buying a machine that costs $100 000 and will result in reduced operating costs of $25 000 per year over the next five years, the NPV model would evaluate the project as follows, assuming an interest rate of 10%:

Present value of benefits ($25 000 × 3.79079*)	$ 94 770
Cost of the project	100 000
Net present value (NPV)	–$5 230

* Present value of an annuity for 5 years at 10% interest.

In this example, the project would be rejected because the cost outweighs the benefits. The project has a *negative* NPV of $5 230. Under the NPV model, only projects with a positive NPV should be accepted. Other cost/benefit models used in business include the payback period, the internal rate of return, and the accounting rate of return. While these other methods might result in different decisions as to whether or not the business should purchase the machine, the methods are similar in that they all involve costs and benefits that can be measured in dollars. As already mentioned, the benefits of healthcare treatments may not be easily measured or quantified in dollars. We will use the word "quality" in place of "benefit" when discussing healthcare decisions, and "cost/quality" decisions rather than "cost/benefit" decisions.

Cost/quality trade-offs in fee-for-service

Eddy (1997) offers two examples of what he refers to as "implicit trade-offs between quality and cost" in traditional fee-for-service medicine. First, current National Cholesterol Education Program (NCEP) guidelines call for treatment if a person's cholesterol exceeds a specified level. There is reliable evidence that people with lower cholesterol levels would also benefit. Why does the NCEP not recommend treating everyone who would possibly benefit? Eddy reasons that it would cost too much.

Second, published criteria for admitting

patients with chest pain imply that patients whose probability of a myocardial infarction exceeds 7 percent should be admitted. But patients with a lower probability also would benefit from admission. Why don't we lower the threshold? Again, Eddy concludes because that would be impractical, or in other words it would cost too much.

The two examples cited above raise some questions. In the traditional fee-for-service environment, are not doctors and patients free to decide when treatment for cholesterol should be given, regardless of the guidelines? Can doctors admit patients with chest pain whose probability is less than 7 percent? Do doctors themselves determine the cholesterol guidelines and the chest pain criteria? It seems reasonable to conclude that when doctors are free to decide who gets cholesterol treatment and who is admitted for chest pain, the decision will be based primarily on medical information and what is best for the patient, even though costs may be considered in the decisions.

Eddy observes that many of the factors that influence medical decisions are personal and relatively independent of the financing system. These include physicians perceptions of the benefits and costs of the alternative choices; their personal training, skills, and preferences for particular procedures; their financial incentives; the preferences of their specialties; and the pressures placed on them by patients. Notwithstanding these non-financial factors, Eddy believes that two features of fee-for-service allow physicians to practice in highly variable and sometimes inappropriate ways: financial incentives to overuse service, and lack of management. If this is true, then we need to find a way to change the financial incentives so doctors are not inclined to overuse services, and we need to find a way to manage costs without managing doctors.

A study by Dr. Sheldon Greenfield showed no evidence that doctors who charge by the service provide consistently better results than those in managed care systems. The study points out, however, that more research is needed, and earlier studies showed that HMO's provided less comprehensive care with less continuity than fee-for-service plans, and patients were less satisfied (Kiplinger, 1996). Patient satisfaction seems to come up over and over again in research studies. Does this suggest that if patient satisfaction were the primary focus in healthcare decisions, then everything else – lower costs, higher profits, improved medical research – would be the result in our competitive, free-market economy?

Winslow (1996) reported a survey that showed corporate buyers prefer low prices to quality of healthcare. Respondents in the survey rated price as the most important factor in selecting a healthcare plan, and patient satisfaction as the second most important factor. The results of this survey seem to indicate that corporate America cares more about profits than patients. Patient satisfaction depends on many factors, presumably the quality of care received being most important, but other factors such as cost, and choice of doctors and hospitals are also important to employees. If corporate buyers were to set patient satisfaction as their primary goal, could the total cost of doing business go down because of improvements in worker productivity? Could healthcare costs even go down in the long run?

Mid Atlantic Medical Services (Mamsi), an HMO, controls costs by second-guessing doctors' decisions (Hayes, 1995). Mamsi gives doctors a printout, which shows the average monthly cost for their patients, compared with other Mamsi doctors. This has had an impact on medical treatment, since doctors don't want to be out of line from their peers and could even lose their jobs for cost reasons. In 1991, 34% of Mamsi babies were born by cesarean section; the figure in 1995 was 22%; the goal is 19%. This is interesting: Mamsi, not doctors, sets medical goals! Should HMO's use financial information to influence medical decisions? What are the ethical implications of Mamsi's practice? This example seems to get to the heart of the problem: doctors should make medical decisions; managers should make management (cost) decisions. It seems reasonable that doctors are in the best position to decide when a cesarean section is needed. So the question becomes "how can managers control costs without trying to control doctors?" Perhaps the answer lies in involving the patient more in healthcare decisions.

Cost/quality trade-offs in managed care

Managed care involves an environment where doctors face increasing pressure to control costs in healthcare decisions. Doctors are paid a predetermined amount for specified treatments or an amount per patient regardless of the treatments given. Hence, a primary objective of managed care companies is to reduce costs. Managed care companies can be either "for-profit" or "not-for-profit" organizations. In not-for-profit organizations, the reduced costs are presumably passed on to patients in the form of lower healthcare premiums. On the other hand, for-profit managed care companies seek to make a profit for their shareholders.

More than 50 million Americans are enrolled in for-profit managed care companies, almost twice as many as in not-for-profit companies. A study of 329 managed care companies in 1996 found that patients in not-for-profit plans have a greater chance of receiving the treatment they need than patients in for-profit plans (*The Economist*, 1999).

Should managed care be operated for profit? Friedman and Savage (1998) point out that programs such as Medicare and Medicaid have created the perception that healthcare is a basic right of all people and should not be treated as a commodity to be bought and sold but rather provided as a community good. Under fee-for-service, there are no financial incentives to control costs – all costs could be passed on to the insurance company or the patient with virtual certainty that the bill would be paid in full. Friedman and Savage believe that a real turning point was reached in 1983 when the Health Care Financing Administration (HCFA) created a new method of paying hospital bills for Medicare patients. Diagnosis related groups (DRGs) were the beginning of a complete transformation of our healthcare delivery system. DRGs and other methods of determining in advance how much a doctor will receive for a particular treatment have effectively transferred the risk of healthcare from the payer to the provider.

Eddy (1997) believes that for standard and accepted practices, there are few differences between fee-for-service and managed care because physicians in both environments follow the same types of guidelines. But where variations in practice do occur, managed care financial incentives to hold overall utilization within a fixed budget tend to reduce variations. In theory, at least, when resource limits are being stretched, the first place to control utilization is in treatments that are ineffective or harmful. Eddy concludes that ". . . the economic requirement to stay within a fixed budget should have an increasingly beneficial effect on reducing variations and inappropriate practices in managed care."

A survey by J. D. Power and Associates and Medstat Group found that nearly 7 in 10 physicians expressed more dissatisfaction with HMO's than with non-managed care plans (Levin, 1998). The report found that more than 75% of doctors disliked justifying their decisions to HMO's, and 42% indicated that the cost of care should never be considered when making medical decisions. The most important factors driving doctors' ratings are financial reimbursements, authorizations for hospital admittance, lengths of stay at a hospital, and appealing denied claims.

Emanuel and Goldman (1998) propose six safeguards to reduce threats to patients' welfare posed by financial incentives and guidelines in managed care:

1. Disclosure – managed care plans should disclose their policies on physician salaries and guidelines, letting consumers make informed choices.
2. Professionalism – the Hippocratic oath's injunction that "into whatever houses I may enter, I will come for the benefit of the sick, remaining clear of all involuntary injustice and of other mischief" must remain a central medical value.
3. Competition – theoretically, competition could spur healthcare institutions to provide quality care while reducing costs. Ideally, providers who would try to skimp on quality to save money would be forced out of the market.
4. Limiting financial incentives – in developing policies to regulate financial incentives for physicians, we must recognize two

worthy but competing goals – to protect the quality of patient care and to restrain medical care costs. We need to separate doctors' incentives and remuneration from their patient care decisions as much as possible.
5. Guideline review boards – mandatory, prospective review of all guidelines, algorithms, or critical pathways of healthcare institutions by an independent board is proposed.
6. Appeals boards – the establishment of an independent appeals board for each hospital, managed care plan, or group practice is suggested.

Dr. Jerome Kassirer raises some difficult questions about managed care. Are we prepared to accept the reality of a two-tiered system in which the wealthy receive care and the poor are denied? Should we continue to comply with for-profit health systems that make millionaires out of venture capitalists and drain money away from patient care? Will the medical profession ever unify in opposition to market values as the foundation of our healthcare system? (Kodner, 1998). Kodner proposes the following "common ground" on which the medical profession should be able to stand:

1. Medicine must not be diverted from its primary tasks: the relief of suffering, the prevention and treatment of illness, and the promotion of health.
2. Pursuit of corporate profit and personal fortune have no place in caregiving.
3. Financial incentives that reward overcare or undercare weaken the patient/physician bonds and should be prohibited.
4. A patient's right to a physician of choice must not be curtailed.
5. Access to healthcare must be the right of all.

What impact has managed care had on physicians? A study by Warren et al. (1999) found that physicians believe that managed care has had largely unpleasant effects on many aspects of medical practice: doctor-patient relationships, clinical decision making, work conditions, and overall satisfaction. Notably absent in the doctors' list of grievances is money. If it is true that managed care has lowered the quality of healthcare in the U.S., then it seems clear that managed care is not the answer, even if managed care has resulted in lower healthcare costs. The ethical issue is how to provide quality healthcare to all people within the constraints of limited resources?

Ethical issues

Business ethics

Friedman and Savage (1998) identify four models that can be used to explain the relationship between business and ethics:

1. Principal-agent model. Since business managers are agents of the shareholders, then their exclusive job of management is to increase shareholder wealth by increasing the present value of the organization.
2. Moral reasoning. Morality is viewed as intrinsically good and should be seen as an end in itself, not just as a method for increasing shareholder wealth. In a conflict between moral principles and wealth, morality should always win.
3. Noninstrumental ethics. Ethics has a moral veto over maximizing shareholder wealth. Business has no special rules that override the moral obligations managers hold as humans. This approach is grounded in the theories of deontological ethics in which moral rightness is not solely dependent on outcomes or results. Immanual Kant suggests that the four principles common to the general morality of humans include not harming others, respecting authority, avoiding lying, and honoring agreements.
4. Agent-morality perspective. Moral principles are antecedent to the contract between the principal and agent and cannot be suspended by agreement between them. Only after basic moral duties have been met should shareholder wealth be a priority (Quinn and Jones, 1995).

Biomedical ethics

Friedman and Savage (1998) believe that persons employed in healthcare organizations are faced with a graver set of ethical concerns than people who work in other service or manufacturing industries. They outline four ethical principles for healthcare managers:

1. Respect for others – respecting individual autonomy, truth telling, and maintaining confidentiality and fidelity.
2. Beneficence – providing benefits to persons while at the same time balancing benefit and harm. Organizations are required to do all they can to aid patients.
3. Nonmaleficence – "first do no harm." An example of the balancing act between providing benefit and doing no harm is when staff are put at risk when treating trauma patients.
4. Justice – the equitable distribution of benefits and costs among individuals, groups, and organizations. Providing services to medically indigent persons is an example of this ethical standard.

Ethical conflicts in managed care

Because managers in managed care organizations must balance their responsibility to provide an adequate return for shareholders with their obligation to meet the needs of doctors and patients, ethical conflicts can arise. Friedman and Savage (1998) identify three areas of ethical conflicts in managed care:

1. Resources – physicians are provided financial incentives to minimize resource consumption and see as many patients as possible in a given period of time.
2. Wealth – by denying access to tests and procedures, are costs controlled even though the patient will likely benefit from the test or procedure?
3. Equity – recent studies suggest that the poor and elderly have worse outcomes in managed care than in traditional fee-for-service arrangements.

Eddy (1997) identifies three ethical principles that apply to trade-offs between cost and quality: fairness, equality, and optimality. *Fairness* means that if a group of people are all contributing equally to a pool of resources from which the costs of treatments will be paid, they should expect to receive equal consideration in terms of the treatments they will receive. *Equality* means that if two essentially identical patients seek treatment for the same health problem, they should get the same treatment. *Optimality* means that treatments should provide the best possible health outcomes, within whatever resource constraints the provider faces and consistent with the principle of fairness.

Optimality seems to really focus on the critical issue. It is a fact that our world has limited resources. We need to use our resources in an efficient and effective manner that provides the best possible healthcare consistent with the ethical principles of fairness and equality. How can we optimize the quality of healthcare within the constraint of limited resources?

Conflicts of interest

Emanuel and Goldman discuss conflicts of interest posed by financial incentives. Fee-for-service involves conflicts of interest by *commission* – physicians have an incentive to provide more care than is appropriate. Managed care can present conflicts of interest by *omission* – financial incentives may influence doctors to provide less care than is appropriate. Emanuel and Goldman offer an ethical evaluation of these conflicts as follows: medicine is a profession, and the physician's primary commitment is to the health and relief of pain and suffering for the benefit of the patient; physicians' personal financial interests and those of their practices, their hospitals, or their managed care plans should not influence physicians' decisions about how they care for their patients.

Fulton (1999) advocates bringing doctors and healthcare managers together in a collaborative effort to achieve an "ethical consensus." Physicians were trained to be patient advocates, and managed care makes it difficult for them to

fulfill their advocacy role. The management ethic is founded in distributive justice, where healthcare executives try to allocate limited resources as fairly as possible, using the cost/quality model. The "ethical consensus" approach seeks to reconcile the managers' cost/quality model with the physicians' need to honor their duty to provide care and advocacy for the patient. One way to accomplish this is to involve physicians in the development and implementation of accepted care paths and protocols. Healthcare executives and doctors can agree upon and formally approve the components of the care paths and protocols, and address cost/quality issues involved in each component early in the process.

Equity and fairness

While the terms *equity* and *fairness* have been defined by Eddy (1997) and Friedman and Savage (1998), both terms involve the consistent treatment of patients with the same healthcare needs. For purposes of this paper, equity and fairness will be defined as follows:

- *Equity* means that all patients with the same healthcare needs should be treated the same.
- *Fairness* means that healthcare services should be provided equally to all persons regardless of their age or ability to pay.

It should be noted that the principles of equity and fairness seem to come into question more often in cases involving poor and elderly persons than in other cases.

Friedman and Savage (1998) believe that there is an ethical solution to the dilemma of providing appropriate health services while at the same minimizing costs and maximizing profits. They propose a model that calls on managed care administrators to take into account the moral principles of equity and fairness when they make business decisions. They believe that "even in for-profit managed care settings, it is not only possible but profitable to include equity and fairness into the calculus of difficult business decisions" (Friedman and Savage, 1998, p. 61). They see their proposed model as an extension of Quinn and Jones' agent-morality perspective: the values of social equity and fairness should be added to the values of truth telling, avoiding harm, respecting authority and honoring agreements.

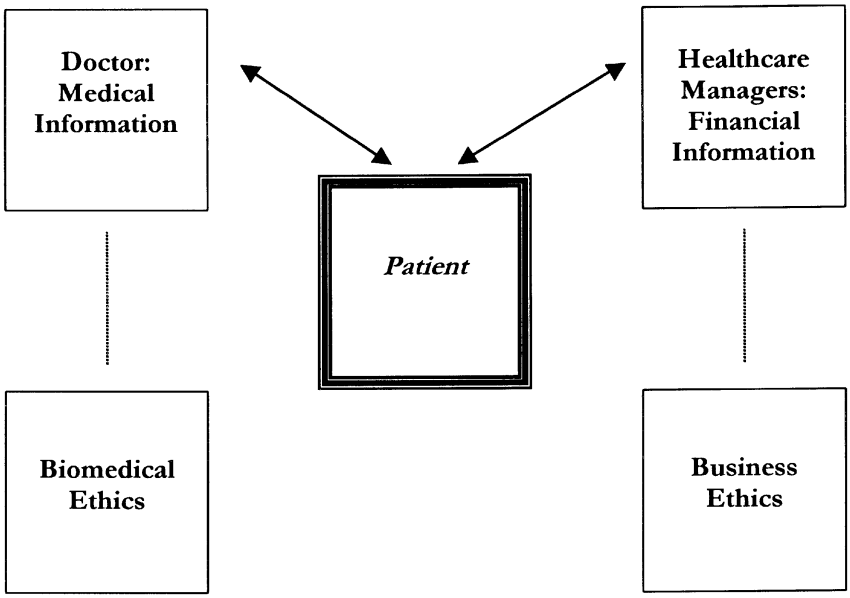
A patient-centered decision model

Given all that has been said about quality healthcare, controlling costs, and ethical issues, how can all stakeholders work together to provide the best quality healthcare within the constraints of limited resources and in an ethical manner? This paper proposes a healthcare decision model that incorporates medical, ethical, and financial information. The model recognizes that all three elements – medical, ethical, and financial – are important in quality healthcare decisions. What distinguishes this proposed model is that it is a *patient-centered* decision model. Medical decisions are made between the doctor and the patient; financial decisions are made between healthcare managers and the patient; both doctors and healthcare managers incorporate ethics into their decision process and their dealings with patients.

Cost/quality – the patient decides

The traditional cost/benefit model used in business decisions is uniquely applied in this patient-centered decision model by *putting cost/benefit decisions into the hands of the patient*. Currently, healthcare managers or doctors make many healthcare decisions based on cost/benefit information. For example, the healthcare manager may determine the treatment a patient gets based on cost/benefit information the healthcare manager uses to make the decision. Similarly, the doctor may make healthcare decisions based on cost/benefit data available to the doctor. Since costs and benefits have historically entered into healthcare decisions, and are likely to be an increasingly important part of healthcare decisions in the future, it is important for the *patient* to be involved in these healthcare decisions. The decision model proposed in this paper is an innovative application of the cost/benefit model to healthcare decisions.

A Patient-Centered Decision Model



The strength of this model is that it places decisions into the hands of those who are best qualified to make the right decision, and the patient is always involved in the decision. Moreover, ethics are an essential part of the decision process. Doctors are best qualified to make medical decisions in consultation with the patient and within the framework of biomedical ethics. Healthcare managers are best qualified to deal with financial issues, such as costs and profits, again in consultation with the patient and within the framework of business ethics. The patient is always at the center of the decision process, and receives information from the experts who are best qualified to provide relevant and reliable information. It is the patient, then, who makes the final decision based on appropriate medical and financial information.

Limitations and future research

The healthcare decision model proposed in this paper incorporates medical, financial and ethical elements, with the patient at the center of the decision process. A possible limitation of the model is that it places too much responsibility on the patient. In other words, the patient must ultimately decide whether or not to receive medical treatments based on medical advice from the doctor and financial information provided by healthcare administrators. What if, for example, the patient believes it is best to receive medical treatment based on medical evidence, but for financial reasons the patient decides to forego medical treatment? Hence, the model apparently favors those who can afford medical treatment, and penalizes the poor. Can a model be devised that enables patients to receive the medical treatment they need, even if it is beyond their financial means? Does society have a responsibility to provide healthcare services to all citizens, regardless of their ability to pay?

While much data is available to support the impact of financial incentives in promoting profits, much less data is available to demonstrate the impact of morality on profitability. Is the lesson from Friedman and Savage that equity and fairness promote profits? Additional research is needed to evaluate the impact of morality on profits in our free market healthcare delivery environment.

References

The Economist: 1999, 'Quality of Merc,,' **352**, 58.
Eddy, D. M.: 1997, 'Balancing Cost and Quality in Fee-For-Service Versus Managed Care', *Health Affairs* **16**(3), 162–173.
Emanuel, E. J. and L. Goldman: 1998, 'Protecting Patient Welfare in Managed Care: Six Safeguards', *Journal of Health Politics, Policy and Law* **23**(4), 635–659.
Friedman, L. H. and G. T. Savage: 1998, 'Can Ethical Management and Managed Care Coexist?', *Health Care Management Review* **23**(2), 56–62.
Fulton, J.: 1999, 'The Ethics of Managed Care', *Healthcare Executive* **14**(3), 65.
Hayes, John R.: 1995, 'Knowledge is Mone', *Forbes* **155**(4), 188.
Kant, I.: 1963, *Lectures on Ethics* (Harper and Row, New York).
Kiplinger's Personal Finance Magazine: 1996, 'Is Fee-For-Service Worth Extra Bucks?', **50**(3), 132.
Levin, A.: 1998, 'Physicians Dissatisfied with Managed Care, Study Finds', *National Underwriter* **102**(42), 11, 29.
Lowes, R. L.: 1998, 'These Doctors Pay Their Dues – To a Union', *Medical Economics* **75**(2), 157–164.
Quinn, D. and T. Jones: 1995, 'An Agent-Morality View of Business Policy', *Academy of Management Review* **1**(1), 22–42.
Warren, M. G., R. Weitz, and S. Kulis: 1999, 'The Impact of Managed Care on Physicians', *Health Care Management Review* **24**(2), 44–56.
Winslow, R.: 1994, 'In Health Care, Low Cost Beats High Quality', *Wall Street Journal* **223**(12), B1.

Department of Accounting,
Niagara University,
NY 14109,
U.S.A.
E-mail: aroddo@niagara.edu