Key Issues in Measuring the Quality of Health Services

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Introduction

It's great to be back in Georgia, and at a Centers for Disease Control and Prevention (CDC) function with so many old friends. I've been asked to talk with you today about **key issues in measuring the quality of health services.** I'd like to walk you down the memory lane of measuring quality, at least how I recall it. I'll talk with you about how the private sector is using quality measurement concepts to improve the delivery of health care. And I'll do a little "crystal balling" on where the health care system is going.

My work on measuring quality began during my tenure at the Health Care Financing Administration (HCFA). It continued during my time at the White House, and at the CDC, and it has further progressed now at Prudential.

In this talk, I will use the pronoun "we" a fair amount -- it should be heard to include my colleagues at HCFA, the White House, CDC and Prudential.

Early Developments

At the time, Medicare passed the Congress in 1965, there was a real fear on the part of doctors that this would lead to large-scale government intrusion into medical practice, and to interference with the day-to-day work of physicians. In fact, a provision was specifically written into the statute prohibiting such intrusion with the idea that decisions about medical practice should be left exclusively to doctors.

During the 1970's, however, and surely during the 1980's, concerns, first, about the cost of care, and then also about quality of care, led to a general ignoring of this dictum. This finally led employers and other payers, including the government to explicitly say, concerning Medicare, that they were "no longer going to sign a blank check" for health care, and that they were intent in demanding much more accountability. This notion was fueled by important work, done by Jack Wennberg, showing wide variation in rates of certain medical and surgical procedures within comparable populations, by Bob Brook demonstrating that a sizable portion of services performed were judged by experts to have been unnecessary or of dubious value, and by David Eddy highlighting the lack of clear-cut evidence for the effectiveness of many such practices.

HCFA and Medicare Activities

I became HCFA Administrator in the Spring of 1986, and recall that the Prospective Payment System for Medicare hospital services was passed in the Spring of 1983 and was later implemented during the next year. Also implemented during this period was the Peer Review Organization Program and additional intermediary and carrier oversight of the program, affecting both hospitals and physicians. By 1985 there was a growing chorus of complaints that Medicare patients were being discharged

from hospitals too early, and to their detriment.

The Congress held hearings on the "quicker and sicker" issue, and the general question of Medicare quality grew in importance. It was because of these developments that I decided, before going to HCFA, to make improving the quality of care we paid for, one of the top three priorities for my tenure at the Agency.

To be clear, much was already underway at HCFA on this subject -- I simply chose to push it to the top of the agenda. An example of work already underway was the publication, in March 1986, of the Medicare Hospital Mortality Statistics. We then pursued vigorously the general issue of quality -- thorough refinement of hospital mortality information, PRO activities, publication of new nursing home standards, and ultimately information about nursing home quality. I believed then, and do now, that there is no better way to deal with legitimate questions about quality than to undertake scientifically valid studies and then to report these findings to providers, payers and to an interested public as well.

Effectiveness

By the latter part of 1987, we began to focus not only on service quality, but on the even more fundamental issue of effectiveness -- whether a service should have been done at all. Medicare's coverage decision process, largely focused on new technology, had always touched on this issue, but we had not dealt with it directly.

It soon became apparent that quality and cost concerns were not separate matters, but were appropriately joined in the quest for "value in health care."

The HCFA Effectiveness Initiative

By Spring of 1988, we had decided to put a major emphasis on not just measuring quality, though we planned to continue publishing hospital mortality statistics, but to begin nursing home information, and to launch what came to be called HCFA's Effectiveness Initiative. We did this with a particular focus on the Medicare program and its priorities, but **in** cooperation with the Public Health Service's National Center for Health Services Research, which was also beginning a focus on outcomes research. I soon came to understand that it was not just the issue of measuring quality, but a more fundamental question of measuring the effectiveness and appropriateness of whatever services are rendered. At about this time, Paul Ellwood in his 1988 Shattuck lecture proposed the notion of "Outcomes Management," described as follows: "Outcomes management consists of a common patient-understood language of health outcomes, a national data base containing information and analysis on clinical, financial, and health outcomes that estimates, as best we can, the relation between medical interventions and health outcomes, as well as the relation between health outcomes and money. Addititionally, outcomes management also provides an opportunity for each decision-maker to have access to the analyses that are relevant to the choices they must make."

In June 1988, we held a day-long meeting in Washington, D.C., where we invited a discussion of these matters by representatives of organized medicine, the hospital industry, academia, patient advocates, payers, regulators, and others. There was widespread, indeed unanimous, encouragement, at that meeting, for HCFA to launch a full-scale effort, focusing **dollars,**

data, and leadership on the pursuit of better information of medical outcomes and effectiveness. One of the participants in this June 1988 meeting was Dr. Arnold Relman, then editor of The New England Journal of Medicine. He invited me and my colleagues to write a paper for the Journal elaborating our activities and plans. This paper was published in November 1988, with an accompanying Relman editorial, "Assessment and Accountability: The Third Revolution in Medical Care." A desired end-point expressed then was better information to guide medical practitioners, but there was disagreement on whether this information should be called **"standards," "guidelines**.....**practice parameters,"** or something else. Up until this point, the shibboleth of "cookbook medicine" had frequently squelched any consideration of guidelines, but that began to fall by the wayside. Even airplane pilots need guidance on how to find fairways at airports.

About this time, the American Medical Association (AMA) established its office of quality measurement, a major step toward legitimizing this process among practicing physicians.

A key question, in addition to the precise format of future guidelines, was who would control the process -- whether the government, especially HCFA, or some unit in the Public Health Service (PHS), or medicine itself in some form. The stance HCFA took at the time was that this issue of control, while very important, could best be resolved over time as the effort proceeded, but we understood that HCFA could not permanently lead the effort, though the results would be very important to Medicare and other payers. In part, to shift the focus of concern from, "what sinister things was HCFA going to do with this?," to the process and promise of effectiveness research and guidelines for practitioners, we asked Dr. Sam Thier to use the Institute of Medicine (IOM) process to advise us on priorities.The IOM convened a meeting in September 1988, under Dr. Ken Shine's leadership, to begin to set priorities for effectiveness research. Dr. Shine's group held several follow-up meetings focused on specific disease conditions, and gained consensus on priorities for HCFA.

The HHS Effectiveness Initiative

The year 1989 brought the Bush administration to office, and the President noted health care effectiveness as a priority at Secretary Sullivan's swearing-in ceremony. Secretary Sullivan made the Effectiveness Initiative a priority. It became fully an effort for the Department of Health and Human Services (HHS), not just one for HCFA. HCFA continued work on its data development activities and priorities for effectiveness research. The major development in 1989 was a year-long debate on Medicare physician payment reform. This culminated, after several harrowing ups and downs, in the passage of landmark legislation which called for new fees for physician services based on a relative value scale and limits on overall expenditures. The legislation also called for the establishment of a new agency in the PHS, the Agency for Health Care Policy and Research (AHCPR).

This package of physician payment reforms, including AHCPR, is especially significant for the explicit acknowledgment of the stake that the government has in how physicians practice, especially in the Medicare program. Despite earlier fears of "government interference in the practice of medicine" and "cookbook medicine," this legislation marks a watershed.

Agency for Health Care Policy and Research (AHCPR)

The past 5 years have witnessed the start-up of this new agency in the PHS, with the understandable and predictable pulling and tugging over priorities, funding, personnel and programs. AHCPR has been busily engaged in developing new scientific information related to quality, effectiveness and outcomes, and in formulating and publishing clinical practice guidelines. Legitimate arguments over priorities and techniques have been raised, but the idea of a substantial government effort in this area is now widely recognized. This dramatic shift has largely gone unnoticed from previous arguments over whether holding health care providers accountable for quality and effectiveness was proper or even possible. Now, the discussion has shifted to how best to do it, and what is government's appropriate role.

It is surely true that other government agencies beyond AHCPR, including the National Institutes of Health (NIH), the CDC, the Veterans Administration (VA), the Department of Defense (DOD) and others have important roles to play in these areas. The coordination of the work is a challenge, But the core message here **is** an acceptance of a role for the federal government in building the scientific basis for outcomes accountability.

The Private Sector

In recent years, there has been an explosive growth in efforts by various private sector organizations in this field. They include medical professional organizations, accrediting bodies, health care purchasers, medical care organizations, academic institutions and others, which are designed to sponsor and carry out work that advances the field of health care accountability.

A key driving force for this private sector activity is the demand from the employer purchaser community for information about outcomes, utilization and satisfaction. This is what has given a powerful impetus toward objective measures of accountability, including the creation of a common set of performance measures, the Health Plan Employer Data and Information Set (HEDIS). Admittedly not perfect, but being continuously improved, HEDIS exists because companies like Xerox have pushed aggressively for it. However, much of the focus today is still on cost. Instead of decrying this, we **in** medicine must do something about it. As long as health plans give purchasers only cost data, it should be no surprise that clients remain focused there. We must lead the way on an agenda focused on quality and effectiveness measurement and improvement.

Remember that New England Journal of Medicine article I mentioned earlier? Well, near the end of the article is a section called "The Role of the Private Sector." I'll just quote a couple of sentences: "We believe government must play an important role in developing and distributing information about the effectiveness of health care services. The private sector must have an equally important role, however. Health care practitioners and providers, medical educators, researchers, private purchasers of health care services, consumer groups and foundations must all be involved in selecting areas to be given priority and research, organizing studies and reviewing results." That is the revolution going on in the private sector today, and it's what's happening at Prudential.

The overarching role of the private sector

is the day-to-day application of the tools of quality measurement and improvement. The struggle to measure quality, indeed the demand by the marketplace to measure quality, has increased greatly the importance of managed care.

Since managed care has the information on what services are provided for our members, we also are able to provide feedback to physicians about the care they give their patients. While most physicians evaluate the care they provide for individual patients, they do not usually have the data nor the time to evaluate the care they provide for their entire patient population. We can give them these data and implement systems to improve their performance. For example, it may be difficult for physicians to identify all of their patients who have not had mammograms, but we can do so. We also can support the physician by providing reminders or other interventions for patients who have not had this service.

These activities have helped us build stronger relationships with our physician and hospital colleagues and demonstrated that we are active partners in improving the health of the population that we serve. We are able to engage health care providers in a productive relationship with us, both to identify the most effective methods of caring for our patients and to develop processes that will assure that patients receive this care.

Prudential's Activities

Two years ago, The Prudential, as part of its transformation from a health insurer to a health care company, established the Prudential Center for Health Care Research, which I helped create. The Center's mission is to develop the information and methods for improving quality and enhancing effectiveness in the Prudential Health Care System, and in managed care generally.

We built a group of a dozen researchers, based in Atlanta, and now have more than 20 studies underway at one stage or another. We recently added to the Center the groups of associates in our corporate office who conduct health care information management and customer research. Therefore, we have brought together the health services research, outcomes research, survey research, performance measurement and report card publication capabilities for Prudential.

We are in partnership with many more in our regional offices, local health plans, affiliated medical groups, community physicians, hospitals, clients and others. In addition to the Center, Prudential has several quality initiatives that interact with one another to produce a comprehensive system of quality measurement, control, and delivery. Let's take a look. The National Committee for Quality Assurance (NCQA) is an independent, non-profit organization that reviews and accredits managed health care plans. Its findings are unbiased and objective. The Prudential was the first national health care company to invite the NCQA to scrutinize every one of our health plans. Every aspect of our plans is evaluated: the physicians, how we run the plan, how we monitor care, how we communicate with our members, how we communicate with our physicians, and the role of physicians in decision-making. When NCQA published their results in mid-1994, more of our plans were accredited, by far, than any other company's. NCQA continues to improve their process, and the standards are becoming even more demanding. We are committed to this type of accountability. We published **report cards** on all our health

plans, based on the HEDIS measures, in September 1994, and was the first national health care company to do so. We are committed to continuing the process annually. These report cards focus on evaluations in five areas -- membership stability, utilization of services, quality of care, access to care, and member satisfaction.

Prudential's **Technology and Clinical Practice Assessment** unit has been recognized nationally as the best practice in the area of technology assessment. This unit develops objective, scientific assessments of the safety and benefits of new and existing technologies. We also create quality measurement and quality improvement techniques to monitor the benefits to members and maintain a library of policy and protocols to facilitate consistent decision-making.

The Prudential **Institutes of Quality** provides state-of-the-art medical care at well-known facilities for organ and bone marrow transplants and for rehabilitation services. I say all of **this** not as a commercial for Prudential, but rather to give you some real examples of activity in the private sector to measure and improve quality.

Let's talk for a moment about the specific ways in which we are applying the data we collect to improving health care. Every one of our plans is using HEDIS data to evaluate the effectiveness of the care that members receive through their plan, using the Report Card initiative that I mentioned earlier. For example, our plans are using HEDIS data to identify opportunities to improve retinopathy screening for diabetics. Seventy-six percent of our plans have already put improvement processes in place. In Memphis, the Prudential Center for Health Care Research is engaged in a study to identify barriers to prenatal care for historically underserved women. We will use this information to collaborate with local community groups to meet the needs of this population. In Jacksonville, we just began a study to determine whether a nurse case manager, working with diabetic patients, can improve glycemic control. Our goal is to create a system where those with diabetes will have fewer health complications, generally improved health, and a better quality of life. In Houston, we just completed a very successful study on how to improve mammography rates among our members. One hundred and sixty additional mammograms were obtained using a phone intervention process. Our findings suggest that calling women who should have a mammogram done, combined with reminders, counseling, and scheduling, is an effective way to promote mammography among health plan members and that such efforts can be carried our successfully by existing medical group or health plan staff. Our Houston plan is already involved in incorporating these findings into their systems.

We are also committed to publicizing such findings so that everyone, not just Prudential members, can benefit.

The Future

So, what does the future hold? It will look less and less like the traditional fee-for-service model (Figure 1), where there are rewards for over-using health care, and no established systems to measure and improve quality. This is a system designed to feed off itself until it becomes bloated and collapses. It will continue to evolve in the direction of a managed care model (Figure 2). This slide is not as bad as it looks. You can think of it as an evolutionary

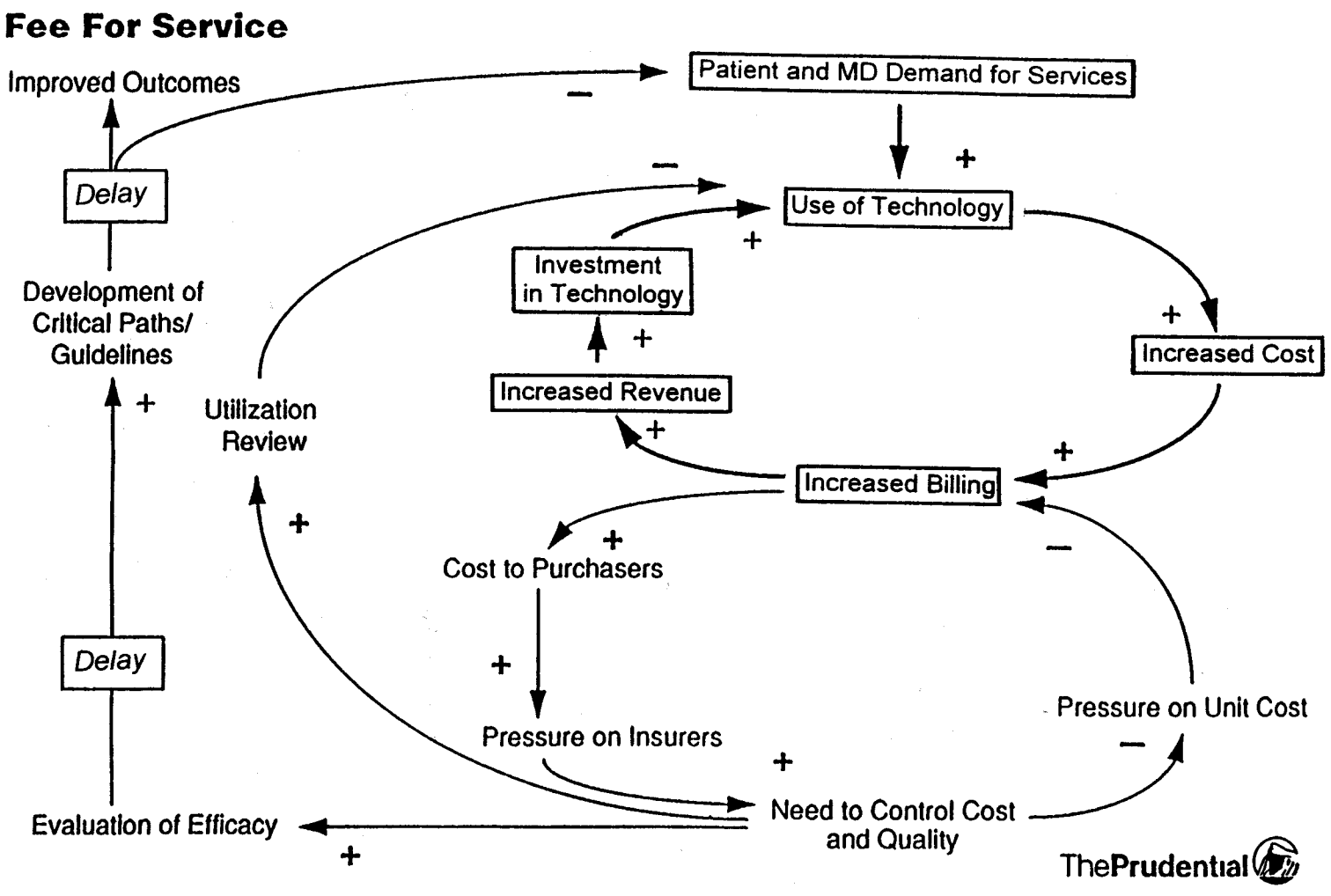

Figure 1. The Traditional Fee-for-Service Model.

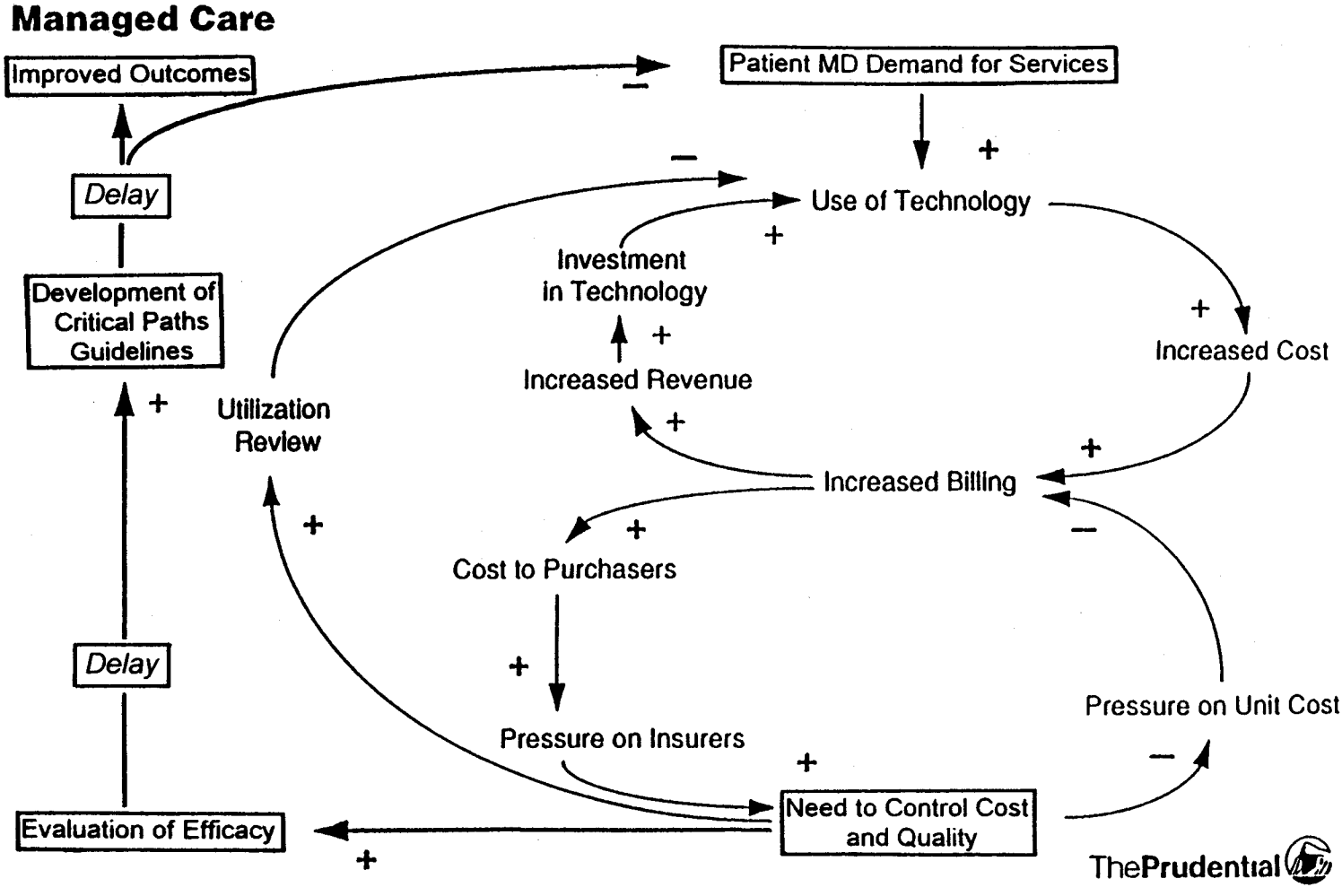

Figure 2. The Managed Care Model.

look at the health care system. Let's take it one piece at a time:

- **Fee-for-Service:** The highlighted loop in the upper left quarter is fee-for-service (Figure 1). It uses technology, which increases costs, which increases billing, which increases revenues to invest in technology. There are no checks and balances.

- **Cost Management:** Enter the cost management component (Figure 3), where increased billing gets the attention of purchasers who don't want to pay astronomical prices, but want to get quality for their money. So the purchaser puts pressure on the insurer, who has a need to control costs and control for quality, so they put pressure on unit costs.

- **Managed Care:** Along comes managed care (Figure 2), where you begin to see the system recognizing the need to evaluate, or measure, the efficacy of treatments. We begin to develop guidelines for health care delivery based on data, and we then see improved outcomes.

Based on everything I've said this morning, you can see that the system is moving into this vertical line. This is where we as a nation will be able to evaluate fully the quality of the health care Americans receive. This is where we will be able to develop fully systems to improve health care. It is an exciting time to be involved in health care and the pursuit of quality. I want to thank all of you for allowing me to share the past, present, and future of quality health care in the United States.

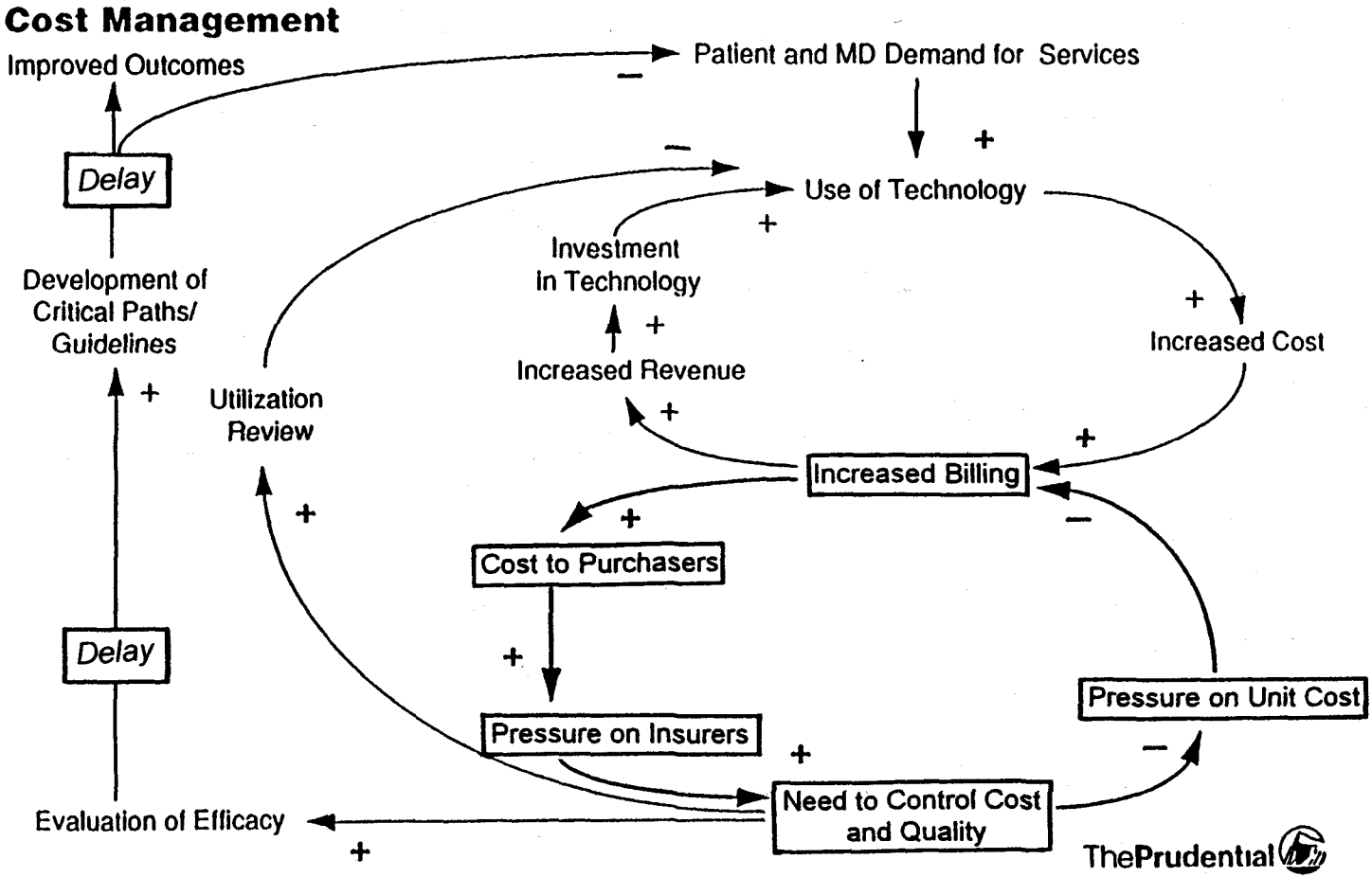

Figure 3. The Cost Management Model.