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The Healthcare Quality Debate: The Case for Disease Management

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ABSTRACT

The recent healthcare quality debate is driven primarily by the concern that managed care, in its efforts to cut costs, will jeopardize the quality of care. The debate is complicated by the fact that patients, clinicians, purchasers, and plans define quality differently, resulting in varying evaluations of quality and approaches to quality improvement. Over the past decade, each of these stakeholder groups has announced or implemented many different quality improvement initiatives. Ironically, disease management is rarely mentioned in this debate as a quality improvement approach. Yet, because of its ability to change care delivery, address multiple stakeholder perspectives, demonstrate favorable outcomes, and provide a system for continuous quality improvement, disease management represents our best strategy to enhance the quality of health care in the United States.

In the early 1990s, employers, concerned about the impact of rapidly escalating healthcare costs on their bottom line, championed managed care as the best solution to reduce healthcare costs. Approximately 31% of workers in the United States are now enrolled in HMOs, and another 14% are enrolled in other forms of managed care plans.[1] The United States government soon followed this lead, providing incentives for Medicare and Medicaid patients to enroll in managed care plans. Consequently, the majority of insured Americans are now participants in managed care plans.

This influx into managed care has fueled a national healthcare quality debate, driven primarily by the concern that managed care, in its efforts to cut costs, will jeopardize the quality of healthcare.[2] People in virtually all major stakeholder segments—including patients, clinicians, and purchasers—have voiced mounting anxiety and frustration over managed care in the media, courtrooms, and legislatures. In fact, over 1400 bills have been introduced in 35 states to modify, regulate, or control managed care.[3]

The complexity of the healthcare quality debate arises from the fact that patients, purchasers, plans, and clinicians define quality differently, resulting in varying evaluations of quality and approaches to quality improvement.[4] During the 1990s, each of these stakeholder groups has announced or implemented numerous, diverse quality improvement initiatives. The highest-profile efforts include the Health Plan Employer Data and Information Set (HEDIS) initiative directed by the National Committee for Quality Assurance (NCQA), the

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Presidential Advisory Commission's "Consumers' Bill of Rights," the Health Care Financing Administration's (HFCA) Quality Improvement System in Managed Care (QISMC), the American Medical Accreditation Program sponsored by the American Medical Association, and the Foundation for Accountability (FAACT).

Ironically, disease management is rarely mentioned as an approach to improve healthcare quality. It is more likely considered to be a cost-cutting methodology. Yet, disease management represents our best strategy for improving American health care quality. This article demonstrates this by describing the different definitions of quality of the various healthcare stakeholder segments, by evaluating their major quality improvement initiatives, and by highlighting the advantages of disease management over other initiatives.

QUALITY DEFINITIONS AND INITIATIVES

Quality, like disease management, has many different definitions. An often-cited definition is the 1990 Institute of Medicine definition that quality is the"degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."[5,6] Donabedian proposed a quality paradigm consisting of three parameters: structure, process, and outcome.[7] Structure refers to the attributes of care, such as clinician qualifications and the resources available at the care site. Process involves the provider-patient interaction, including treatment decisions and the overall appropriateness of care provided. Outcome measures the effects of care on health status and patient satisfaction.[8]

Yet, Donabedian recognized that "several formulations are both possible and legitimate, depending on where we are in the system of care and on what the nature and extent of our responsibilities are."[6] Essentially, quality is in the eye of the beholder.[9] The major healthcare stakeholder segments—patients, purchasers, plans, and clinicians—each have different perspective on and definitions of quality that logically call for different approaches to its management and measurement.[10]

QUALITY PREFERENCES OF PATIENTS

Perhaps the most important development in the healthcare debate on quality has been the growing recognition and belief that healthcare must incorporate the values and preferences of patients.[10] Unlike purchasers and plans, patients are primarily concerned with meeting their own healthcare needs and not with the overall health of the population. Often, they cannot readily understand or evaluate the technical quality of the care they receive.[7] Therefore, patients have traditionally focused on other attributes of care, like the waiting time in physicians' offices or the nature of the interaction with the physician. The single most important measure that has been linked to patient satisfaction is the amount of time spent with the physician.

Efforts are under way to help consumers evaluate the quality of care they receive from health plans and clinicians. The best-known of these initiatives is sponsored by the Foundation for Accountability (FACCT), a coalition of corporate, consumer, and government purchasers of healthcare based in Portland, Oregon. It was established in 1995 to create quality measures to meet the needs of healthcare consumers, patients, and purchasers.[11] Measurement tools have been developed for several disease states, including diabetes, adult asthma, breast cancer, and depression; and for certain population-based measures, such as consumer satisfaction with health plans and the health status of people over 65 years old. Recently, the organization has designed a framework to make quality performance reports and other resources simpler to understand and use.

Other consumer-directed quality initiatives go further by encouraging greater involvement of patients in clinical decision-making. Termed "patient-driven care," these initiatives empower consumers to make better healthcare decisions care by providing them with pertinent,

understandable information.[12,13] For example, Wennberg pioneered the development of a multimedia educational program designed to assist patients in making decisions about treatment for selected medical conditions.[14] One such program uses an interactive videodisc to educate patients with mild-to-moderate prostate disease on the clinical and lifestyle advantages and disadvantages of several therapeutic options: prostate surgery, hormone therapy, and watchful waiting.[15] Patients are given the healthcare information they need to be partners in their care and to make informed decisions based on personal goals and needs.

QUALITY INITIATIVES OF PURCHASERS

Organized purchasers of healthcare services, such as employers and governments, emphasize a population-based definition of quality that assesses the health of their enrolled populations and the functional performance of health plans. Purchaser-supported initiatives attempt to improve quality through evaluation. Two general types of evaluations are utilized: accreditation reviews and report card systems.[16] Two third-party organizations conduct the majority of these evaluations: the National Committee for Quality Assurance (NCQA) and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

NCQA, a Washington-based, nonprofit organization that assesses managed care plans, is best known for its cooperative effort with employers to develop and implement HEDIS, a measurement system designed to standardize the way in which health plans analyze and report performance information.[9] The most recent version of HEDIS, version 3.0, includes predominantly process measures, such as rates of cervical cancer screening and flu shots for high-risk adults; later versions are expected to include more outcome measures. However, many process measures have already been linked to improved outcomes of care in randomized clinical trials (e.g., annual eye exams of diabetic patients to prevent vision loss). NCQA also offers voluntary accreditation reviews. The main objective of NCQA evaluations is to provide information that enables corporate purchasers and consumers to make comparisons and choices among health plans.[17]

In contrast, the primary objective of JCAHO reviews has traditionally been to set minimum standards for hospitals to reduce the risks of adverse events. However, as healthcare organizations have evolved under managed care, this organization is now emphasizing quality improvement based on continuous reviews of a wide variety of healthcare organizations.[18] This is best reflected by its decision in early 1997 to launch the ORYX initiative, which was designed to collect and review outcomes data during the accreditation process in order to help healthcare organizations improve patient care.

The largest organized purchaser of healthcare services, the United States government, has followed employers' lead in utilizing these two organizations to assess and improve healthcare quality. For instance, NCQA worked with a consortium of organizations to develop a "Medicaid HEDIS," an adaptation of the 1995 version of HEDIS (version 2.5). Many states with managed care programs plan to require participating health plans to offer HEDIS data (based on the current version of HEDIS, which has subsumed the Medicaid-specific version) on samples of their Medicaid enrollees.[19,20] HFCA reqires Medicare managed care plans to use HEDIS.[21] Similarly, JCAHO accreditation is required for the participation of healthcare organizations in Medicaid and Medicare programs.

Unlike employers, the government serves not only as a purchaser but in other roles as well; therefore, it has additional perspectives on healthcare quality and approaches to ensure it. The government serves as a healthcare regulator and patient protector, as a supplier of funds for research, as a disseminator of information, and as a provider.[22] Important government-sponsored healthcare quality initiatives are under way in each of these domains. For example, the government requires participating health plans to show evidence of improvement in the healthcare they provide. HFCA's Quality Improvement System in Managed Care (QISMC) initiative will determine

current service levels (e.g., immunization rates and mammography rates) and set target points for annual improvement.[23,24]

A widely publicized patient protection initiative is the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry, which has proposed a Consumer's Bill of Rights.[25] The Commission delineated seven rights for consumers: information disclosure to assist healthcare decision-making, sufficient choice of providers and plans, access to emergency room services under the "prudent layperson" standard, participation in treatment decisions, respect and nondiscrimination, confidentiality of healthcare information, and a fair complaints and appeals process.

The Agency for Health Care Policy and Research (AHCPR), part of the Public Health Service in the Department of Health and Human Services, is the lead agency within the government for supporting research into improving healthcare quality and disseminating information regarding the effectiveness of medical care.[26] The AHCPR has several quality improvement initiatives under way: the Evidence-Based Practice Program, consisting of 12 North American centers that will investigate, analyze, and disseminate information on topics most relevant to improving clinical practice; a national guideline clearinghouse, an online database of existing guidelines developed by public and private sectors; the Computerized Needs-Oriented Quality Measure Evaluation System (CONQUEST), the first publicly available computer database of approximately 1,200 existing clinical quality measures developed by public and private-sector groups; and the Consumer Assessment of Health Plans (CAHPS) program, a collection of survey and report tools that provides reliable and valid information to help consumers and purchasers assess and choose health plans.[27]

QUALITY FROM THE PERSPECTIVE OF HEALTH PLANS

Like purchasers, health plans, including managed care organizations and insurance companies, define quality based on the health of enrolled populations and functional performance of the organization. The major difference between purchasers' and plans' definitions of quality is that plans need to take into account the extent to which care meets the needs of a plan's enrollees as a group; therefore, they must allow for the possibility that when resources are scarce, overall quality may still be enhanced by restricting the access to or amount of care some persons receive so that all members of the group receive certain essential services.[7] David Eddy, Senior Advisor at Kaiser Permanente Southern California, has stated that "the objective of [the health plan] is to maximize the health care quality of the population it serves, and that the proper measure of quality is how well it does that."[28]

In addition to participating in accreditation reviews and performance measurement programs, individual health plans have implemented a number of their own initiatives to improve healthcare quality. These initiatives fall into three general categories: clinical quality improvement initiatives, research programs, and patient satisfaction surveys. Plans have used numerous types of clinical quality improvement tools, including clinical practice guidelines, clinical process reengineering, physician credentialing and profiling, continuing medical and patient education programs, quality assurance programs, outcomes management and other measurement tools, case management, and disease management initiatives.

Some of the largest health plans operate quality improvement research programs to monitor healthcare trends, determine optimal treatment approaches, establish quality standards, and define processes for improving healthcare quality. For example, Prudential HealthCare operates the Prudential Center for Health Care Research, a large research and development center dedicated to enhancing the effectiveness of medical care by identifying new treatments and procedures and by tracking patient outcomes using database analysis.[29] Similarly, since 1990, U.S. Healthcare (now Aetna U.S. Health Care) has conducted research through its U.S. Quality Algorithms (USQA) subsidiary to develop and apply of clinical improvement tools and performance

measures. In particular, USQA has been a leader in leveraging an integrated healthcare administrative data warehouse to manage chronic diseases in its enrollee population.[30]

Virtually all health plans conduct patient surveys to assess the quality of care they provide. On the basis of members' input, health plans modify their operations and programs to meet changing needs, thereby enhancing quality.

The American Association of Health Plans (AAHP) is the leading managed care industry association in the United States, representing more than 1,000 health plans serving 120 million people. While individual plans have pursued various quality initiatives, AAHP has launched the "Putting Patients First" initiative to inform patients of what they can expect from their health plans. Components of the program include readily accessible health plan information (e.g., plan structure, physician network, benefits coverage) for physicians and patients; requirements for open and full communication between physicians and patients, including therapeutic options; coverage for emergency care; and expedited appeals of coverage decisions.[26]

CLINICIANS' QUALITY INITIATIVES

Unlike purchasers and plans that define quality on the basis of populations and organizations, healthcare professionals recognize two different domains of quality: technical excellence and physician-patient interaction.[5,31] Technical excellence has two dimensions: appropriateness of services provided (high-quality decision-making) and the skill with which appropriate care is provided (high-quality performance.[32] The quality of the interaction between physician and patient is also multidimensional. It involves the quality of communication, the physician's ability to maintain the patient's trust, and his or her ability to demonstrate empathy, honesty, concern, and sensitivity.[5] In general, physicians tend to weigh technical excellence more heavily in the quality equation, while nurses emphasize patient care and patient satisfaction.[6]

Traditionally, individual physicians have tried to improve quality of care in informal ways by maintaining and updating their knowledge and skills; reading medical journals; attending continuing medical education programs, training programs, and other medical meetings; teaching students and residents; and interacting with their professional colleagues. However, the overwhelming amount of healthcare data and the increasing complexity of healthcare procedures and processes have resulted in calls for new, systematic approaches to quality improvement.[33]

In an attempt to accomplish this, the American Medical Association (AMA) has proposed a new quality improvement initiative called the American Medical Accreditation Program (AMAP). AMAP is a voluntary, comprehensive physician accreditation program created to measure and assess individual physicians against national standards and peer performance in five key areas: credentials, personal qualifications, environment of care, clinical performance, and patient care results. The goal of this program is two-fold: to develop a national benchmark of physician quality and to ensure that patients of AMAP-accreidted physicians receive the highest quality of care, regardless of practice setting or delivery system.[34]

ADVANTAGES OF DISEASE MANAGEMENT IN IMPROVING HEALTHCARE QUALITY

Disease management is one of the most publicized movements in healthcare today.[35] Despite this, there is no consensus definition.[36] It has been generally defined as a comprehensive, integrated system for managing selected patient populations across the health care continuum by using a variety of tools and interventions to improve the quality and reduce the cost of care.[37] Paradoxically, despite the enromous publicity surrounding disease management in the healthcare industry, it has been virtually overlooked as a quality improvement approach in the current healthcare quality debate. However, disease management has many advantages over other quality initiatives and tools that have been proposed or used.

For example, most quality improvement endeavors, such as HEDIS, focus on one stakeholder group, such as health plans, and on one methodology, such as health plan performance measurement. In contrast, disease management uses a multidisciplinary, multifaceted approach. Disease management is multidisciplinary by necessity: most chronic diseases, which have been the initial target of disease management programs, are multisystem conditions, requiring care delivered in variety of settings by a variety of healthcare professionals. Therefore, a disease management team treating diabetes might include general internists, family physicians, endocrinologists, ophthalmologists, nephrologists, neurologists, podiatrists, surgeons, nurse educators, dietitians, pharmacists, physiotherapists, occupational therapists, and case managers.[38] Disease management teams usually coordinate the delivery of care with health plan managers and other care site managers to ensure that the most appropriate healthcare professional provides the most appropriate care in the most appropriate setting at the most appropriate time.

Most experts believe that to improve healthcare, it is essential to focus on the most basic level: the provider-patient interaction. Performance evaluations initiatives like HEDIS or JCAHO accreditation are designed to assess healthcare organizations in the hope that they will ultimately lead to positive changes in the behavior of clinicians and the healthcare organizations where they work. In contrast, disease management initiatives *directly* and fundamentally alter the way care is provided to patients by using clinical process reengineering methodologies, clinician and patient behavior modification programs, and other tools.

Unlike other initiatives that typically emphasize one aspect of quality, disease management recognizes that quality is multifaceted, requiring multiple types of tools and capabilities. Disease management uses a variety of quality improvement tools and integrates them to create a coordinated system for managing patient care; the approach is based on the premise that the sum is better than each of the parts. These component parts may be newly developed or "borrowed" from other sources. For example, a typical disease management program might incorporate clinical guidelines developed by the AHCPR; clinical processes reengineered from a health plan; and performance quality measures from FAACT, JCAHO, or AHCPR. For example, the integrated multifaceted Diabetes Quality Improvement Project incorporates capabilities from four different sources—the American Diabetes Association, FAACT, HFCA, and NCQA—to develop diabetes-specific performance and outcome measures.[16]

Taking a multidisciplinary, multifaceted approach enables disease management initiatives to address quality from multiple stakeholder perspectives. For purchasers, disease management offers an approach to improve the health of their employees or constituents with particular diseases while enhancing the overall performance of health plans. Health plans improve both their performance and resource utilization. Clinicians, often initially resistant to disease management approaches, have been impressed with the improvements in the clinical outcomes of their patients.[39] Patients, who benefit not only from improved clinical care but also from enhanced communication and education programs, report higher satisfaction and improved quality of life with disease management programs than with traditional care.

These quality benefits have been documented for a variety of disease states and settings. For example, in a trial of 282 elderly patients hospitalized with congestive heart failure, a nurse-led multidisciplinary team, including a geriatric cardiologist, a dietitian, and home care providers, significantly improved patient quality-of-life scores while reducing overall costs over a 90-day period.[40] In another randomized trial, a team of primary care physicians and psychiatrists used a physician and patient compliance enhancement program to manage 217 patients diagnosed with depression. They documented significant improvements in patient satisfaction, adherence to antidepressant medications, and self-reported depression scores.[41] Similarly, a 1-year study involving 86 pediatric asthma patients participating in multidisciplinary disease management program offered by an integrated delivery system demonstrated a 47% improvement in "optimal" asthma control while reducing

hospital admissions by 58%, emergency room visits by 79%, and missed school days by 83%.[42]

While disease management initiatives focus on improving quality of care, there is the additional benefit of cost efficiencies that result from redesigned clinical processes, appropriate resource utilization, and other factors. In fact, relative to other quality improvement initiatives, disease management is a cost-effective approach. For instance, Lovelace Health Systems has found that the internal rate of return is positive in over 80% of its disease management programs.[36]

Disease management has additional advantages over other quality improvement initiatives. HEDIS and several other quality programs focus on maintaining the health of those who are well by evaluating rates of preventive measures (e.g., mammography screening, Pap tests). In contrast, disease management emphasizes proactive care for those who are sick, especially those with chronic diseases. This makes sense for two reasons. First, most people have the greatest need for providers and health plans when they are ill. Second, chronically ill patients account for the vast majority of healthcare costs. Currently, more than 90 million people in the United States live with chronic diseases, which account for 70% of all deaths and 61% of the $655 billion spent annually on healthcare.[43] Moreover, a diagnosis of a chronic condition in a managed care plan results in a projected cost increase ranging from 80 to 300%, depending on age, sex, and chronic condition profile.[44]

Moreover, unlike legislative attempts to mandate quality, disease management does not create restrictive and often counterproductive regulations on health plans and clinicians. Disease management places quality improvement initiatives in the hands of those best qualified: healthcare professionals working in an efficient, coordinated way with their patients to ensure the highest quality of care.

CONCLUSION

In summary, there is a powerful case to be made for making disease management an integral part of the healthcare quality debate. While many important and promising quality improvement initiatives are being pursued, none of them provides as many advantages as disease management. Disease management coordinates the work of multidisciplinary professionals to provide high-quality, comprehensive care; integrates disparate quality improvement approaches and methodologies; redesigns the healthcare delivery process to improve efficiency; modifies the behavior of clinicians and patients; incorporates a system for measuring and improving quality of care; ensures appropriate resource utilization; and addresses various stakeholder perspectives on quality. Disease management is able to achieve these benefits in a cost-effective way without intrusive government regulations or interventions. The role of government and other healthcare stakeholders should be to foster and support disease management initiatives that have been shown to dramatically improve the quality of healthcare for Americans.

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