

The Gatekeeper in Managed Care: Too Much of a Good Thing?

*J. Sanford Schwartz, MD, and Allan Hillman, MD, MBA
Leonard Davis Institute of Health Economics
and Departments of Medicine and Health Care Systems
University of Pennsylvania*

A strongly held and widely adopted managed care initiative is the concept of the primary care physician as the medical care system gatekeeper. The gatekeeper, as the physician with primary responsibility for the patient's medical needs, is accountable for: evaluating the initial assessment of complaints, signs, and symptoms; developing an initial diagnostic and management plan; and monitoring the patient's response to therapy until the problem resolves, the underlying condition is cured, or if a cure is not possible, symptoms are controlled and patient function is optimized. Included in this set of responsibilities is the decision whether and when to refer patients to appropriate specialists for advanced medical services (diagnostic evaluation, assessment, and management of patients with unusually complex presentations, who do not respond to routine or initial therapy, or who require specialized technical procedures) that are beyond the capacity of the primary care physician.

The primary care physician/gatekeeper developed in response to well recognized problems with fee-for-service medicine as practiced in the United States for much of the past 3 decades. Rapid growth of scientific knowledge, diagnostic and therapeutic options, reimbursement incentives for performing technical procedures, and increased prestige and other social rewards resulted in increased numbers of specialists and subspecialists compared to primary care physicians. It also resulted in more fragmented and expensive medical care.

Under a gatekeeper system, the primary care physician in an HMO has financial and other incentives to influence specialty referrals. Most widely adopted are incentives to eliminate referrals that are inappropriate or of low marginal benefit. Such physician case management is partly responsible for reductions in specialty referral, especially for patients with conditions and problems of lower acuity, lesser severity, or those who do not require highly specialized technical proce-

dures. In addition, incentives may be directed toward quality enhancement (in terms of patient outcomes and satisfaction), and may increase appropriate referrals and outcomes (eg, ophthalmologist evaluation of diabetics for evidence and early management of diabetic retinopathy).

A fundamental premise underlying the gatekeeper concept is that primary care physicians are capable of managing the vast majority of presenting clinical problems, of recognizing complex diagnostic management problems, and are motivated and able to refer the patient to an appropriate specialist or subspecialist in a timely fashion. Also implicit is the assumption that the same or better health outcomes can be obtained at the same or lower cost through a primary care physician-controlled referral system than by patient self-referral for specialty care.

However, primary care medicine is difficult, complex, and challenging. While the benefits of comprehensive, continuous, and accessible care can be substantial, it is increasingly difficult to achieve. Medical knowledge and potentially effective diagnostic and therapeutic interventions continue to grow at a rapid and unprecedented rate, placing tremendous and growing demands on the breadth and depth of medical knowledge and judgment demanded of primary care providers. At the same time, primary care physicians face demands for increased productivity (in terms of volume of patients cared for per unit of time) and enhanced quality, while subject to increased financial pressures.

While one can readily identify patients and conditions for whom specialist care is required and indicated, the majority of specialty referrals are for patients and clinical problems for which evidence of benefit is less clearly defined (this is true of medical interventions in general). As access to specialists has been increasingly and effectively constrained, opposition to referral restrictions has arisen from patients, specialists, and sometimes the gatekeepers them-

selves. Patients and their advocates are concerned that the fee-for-service conflicts of interest encouraging overutilization of services are being replaced by conflicts of interest among managed care plans, primary care physicians (who benefit financially from fewer specialist referrals), patient needs (potential delayed referral, diagnosis, and institution of appropriate, effective care resulting in increased morbidity, disability, and risk), and patient preferences (disruption of established care patterns; lowered confidence and reassurance). Specialists are troubled by reduced demand for their services, which results in increased competition, and the possibility of reduced compensation, loss of professional autonomy, increased dependence on primary care physician referrals, and disruption of specialist-physician relationships. Primary care physician case managers may face increased bureaucratic barriers, reduced efficiency, and potentially increased liability risks.

The short-term benefits to managed care systems are readily apparent to the extent that reduced use of specialist services may result in equivalent or improved short-term outcomes, at reduced cost, with increased patient convenience and satisfaction. The long-term impact of the gatekeeper system is unclear.

Discussions of medical workforce issues too often gravitate toward extremes dominated by narrow self-interest. Recognition of an absolute or relative under-supply of primary care physicians too often is equated with underappreciation of the need for and contributions of the depth of knowledge, expert judgment, and technical expertise provided by skilled specialists. Specialists, on the other hand, too often underappreciate the health and economic benefits of comprehensive, coordinated, continuous primary care. Unfortunately, the questions surrounding physician workforce composition and size have been the subject of far more rhetoric than empirical research.

In the current issue of *The American Journal of Managed Care*, Edward Havranek and his colleagues at the University of Colorado Health Sciences Center report the results of a limited retrospective chart review of patients with congestive heart failure cared for at Denver General Hospital or one of its 10 affiliated community health clinics. They determined the frequency of assessment of left ventricular systolic function, ACE inhibitor use and dosing, and CHF-related hospitalizations, as well as general health maintenance measures. Cardiologist-directed care more frequently provided CHF patients with services that more closely conformed to well accepted CHF practice guidelines than did care provided by general internists; the converse was true for more general measures of

care. Patients cared for primarily by general internists were less likely to have had a quantitative assessment of left ventricular function. While ACE inhibitor use was comparable across groups, cardiologists tended to use larger doses. In contrast, patients cared for by general internists were more likely to receive stool occult blood testing and influenza vaccinations. The number of outpatient visits per year were similar for CHF patients, regardless of whether they were cared for by general internists or cardiologists. In contrast, patients who were jointly managed had more office visits. Costs of care were similarly greater for patients managed by cardiologists, largely a reflection of their increased (and appropriate) use of imaging tests to quantitatively assess left ventricular function. Unfortunately, the size and length of the study provided inadequate statistical power to make any meaningful conclusions regarding impact on frequency, length, and cost of CHF-related hospitalizations.

The findings of better adherence by cardiologists to CHF recommended process measures and the superior performance of generalists for health promotion and disease prevention care outside the subspecialist's area of practice are largely consistent with the few previous studies in this area. The impact on patient outcomes is mixed and inconclusive—some studies demonstrate improved outcomes in acutely ill patients cared for by subspecialists, others find no differences.

While the study by Havranek et al extends our limited understanding of this important policy issue, it raises and leaves unanswered many questions. As noted by the authors, important methodological limitations (retrospective design, small sample size, and limited ability to assess and adjust for differences in case mix such as disease severity, comorbidity, baseline function, and sociodemographics) significantly compromised the investigators' ability to address some of the most fundamental clinical and policy relevant questions, such as the impact of observed differences in processes of CHF care on risk-adjusted mortality, functional status, hospitalizations, overall cost, and other outcomes.

The American healthcare system is in the midst of a massive, largely uncontrolled, and poorly studied evolving transition to managed care (heterogeneous as it is), characterized by the intuitive adoption of supposedly self-evident basic tenets, such as the primary care physician case manager model of utilization control. The validity of these assumptions, in general, have not been subjected to rigorous, formal examination which may confirm their value or may reveal less validity than widely believed.

The United States is blessed with a large, heterogeneous supply of well trained health professionals, including specialist and generalist physicians, advanced practice and registered nurses, physician assistants, skilled technicians, allied medical professionals, and paraprofessionals. Classes of providers are neither good nor bad. Rather, the questions are how good, for which patients, and under what conditions? The primary challenge thus is how to best and most efficiently integrate this diverse medical workforce.

It is the responsibility of all of us, especially providers, managed care systems, and government (as protector of the commons), to promptly initiate rigorously designed studies required to inform this fundamental policy issue which, until now, has been characterized by more heat (much of it self-serving) than light. Such studies should assess not only process measures (knowledge, utilization of appropriate and inappropri-

ate services), but also should be of sufficient size and clinical detail to provide valid and reliable evaluation of case mix adjusted health and economic outcomes. To assess effectiveness (net benefit under typical conditions of practice), these studies increasingly will need to be conducted in community-based naturalistic practice settings, minimizing protocol- or study-induced behavior. The policy implications of such studies will require thoughtful, dispassionate, and careful analysis and interpretation. The finding of improved knowledge, process, and outcomes by one class of providers may indicate the need for earlier referral, joint management, provider education and training, or improved management support systems. More than just keeping score, these studies must enhance our understanding of the care process and the impact on outcomes of its various components. Only then can we optimally organize, deliver, and manage care.