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Physician Responses to Evidence-based Hospital Referral Programs

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Recent reports documenting quality deficiencies throughout the U.S. health care system (1,2) have increased recognition of the need to improve quality of care. In this issue of *The American Journal of Medicine*, Kazim Sheikh (3) adds to this growing debate about how to improve quality. Specifically, he opposes the recent trend toward “evidence-based hospital referrals” (4). We wish to provide a definition for this initiative, describe why employers support it, consider Dr. Sheikh’s position, and suggest how the clinical community might respond to evidence-based hospital referrals.

Evidence-based hospital referrals involve the referral of patients, based on available data such as case mix-adjusted mortality rates, complication rates, or other quality measures, to hospitals where they are likely to have the best possible outcome. In its real world implementation, evidence-based hospital referrals have been pursued almost exclusively by employers. Historically, employers had assumed all hospitals and health plans to be equally good and thus based their purchasing decisions on cost (5), but continuing increases in premiums have now caused some to consider both the quality and cost of health care for each dollar spent (6). Such employers view evidence-based hospital referrals as a means of obtaining the most value from health insurance (4). Employer interest in health care quality is a development clinicians should welcome. Their new commitment to quality may give clinicians, if clinicians can demonstrate that the services provided are necessary and of high quality, a chance to regain some control of health care from managed care organizations.

Although proponents of evidence-based hospital referral initiatives would like to base referrals on clinically detailed measures of quality, they have usually had to use indirect measures, such as hospital volume. For example, the Leapfrog Group, a collection of national employers representing about 30 million beneficiaries, asked hospitals for case mix-adjusted mortality rates for patients undergoing coronary artery bypass graft procedures (4).

However, most hospitals were unwilling or unable to provide these data, so Leapfrog asked its participating insurers to refer patients to hospitals that perform more than 500 coronary artery bypass graft procedures annually because many studies have reported lower mortality rates among high-volume hospitals than among low-volume hospitals (7,8).

Those who support volume-based hospital referrals have recognized the limitations to this initiative. Because of concerns about negatively affecting patients and physicians in rural areas without offering viable alternatives, Leapfrog and others pursue volume-based hospital referrals only in urban areas where multiple competing hospitals offer the same service. In addition, evidence-based hospital referrals allow patients to refuse the referral, provided that they have been informed about potential quality differences.

Although Dr. Sheikh agrees that patient outcomes for many complex procedures are better at higher-volume hospitals, he opposes volume-based hospital referrals for three reasons: it might create considerable problems in rural areas, the causes of the observed volume-outcome relation are not fully understood, and hospitals with low volume but high quality might suffer untoward and unfair economic consequences. The arguments about rural areas are well recognized by proponents of evidence-based hospital referrals and are not relevant to any extant initiative. In addition, studies have shown that some of the volume-outcome relation can be explained by the better compliance of high-volume hospitals with widely accepted clinical guidelines, such as the use of aspirin after myocardial infarction (9).

Thus, a valid concern is that volume-based hospital referrals may be unfair to high-quality, low-volume hospitals. However, because this concern is raised in a setting where physicians have failed to address and eliminate severe quality deficiencies (1), it is less credible with policy makers, including employers. The clinical community therefore needs to address balancing hospitals’ legitimate desires for fairness with patients’ needs for optimal care.

Considerations for Selecting Quality Improvement Initiatives

There must be alternative approaches to improving quality. Often, this involves referring patients from low-quality to high-quality hospitals or increasing quality at hospitals without moving patients. An optimal strategy should be selected on a condition-by-condition basis,

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and should consider patients' preferences, whether patients can be moved safely between hospitals, and whether low-volume hospitals can provide high-quality care. To illustrate this last point, consider an uncommon procedure such as esophageal cancer surgery. Seventy-five percent of esophageal cancer surgeries in California take place in hospitals performing six or fewer procedures annually (10). Can these hospitals ever become high-quality providers with low caseload volumes?

The selection of a community quality improvement strategy should also be based on feasibility. Dr. Sheikh argues that providers can "implement their own improvement plans" (3). Many hospitals acting alone, however, would find factors that influence quality—such as attracting quality staff—beyond their control. In addition, individual hospitals cannot generate benchmark data against which to assess their performance, and so they may not know where improvement is needed. Finally, improving the quality of a particular service at all hospitals must be achievable at a reasonable cost if this strategy is to be preferable to evidence-based hospital referrals.

One might conclude that increasing quality at all hospitals would be most appropriate for clinical conditions for which outcomes depend on the time to initiation of therapy (for example, stroke, in which time to thrombolysis is an important determinant of outcome) or in settings where telemedicine can be used to transfer expertise. Alternatively, complex elective procedures might be more amenable to evidence-based hospital referrals because patients can be transferred safely, low-volume hospitals may never have enough patients, and referrals may be less expensive.

OTHER APPROACHES TO QUALITY IMPROVEMENT: SUBSTITUTES OR COMPLEMENTS?

The other alternatives offered by Dr. Sheikh, such as voluntary sharing of best practices among hospitals or financial incentives to attract high-quality providers to rural areas, are also unlikely to convince policy makers that evidence-based hospital referrals are unnecessary (3). These options depend on the ability to identify high-quality hospitals (to select "teachers" versus "learners" in voluntary collaborations) and physicians. If such information were available, proponents of evidence-based hospital referrals would decrease their reliance on volume as a standard and use quality instead. However, it is the absence of such data that created the volume-based hospital referral movement (4). Furthermore, as these suggested strategies have been available for years and have not eliminated important quality differences, insistence on relying on these strategies may suggest to patients,

employers, and policy makers that physicians may not be serious about improving quality. These alternatives cannot be substitutes for evidence-based hospital referrals, but they can, at least, be complements.

WORKING WITH EMPLOYERS TO IMPROVE QUALITY OF CARE: BEYOND VOLUME-BASED HOSPITAL REFERRALS

Because the relatively new employer interest in quality allows physicians to improve a heretofore unfriendly health care market, physicians should address how to engage in long-term collaborations with employers where there is renewed attention to quality in addition to cost in the health care system. We believe the most important first steps to increasing the emphasis on quality are to improve our ability to measure quality substantially and to be willing to publicize our performance. These steps would support physicians' arguments that managed care's rules or reimbursement policies lower the quality of care. Only by collecting detailed and accurate data on the processes and outcomes of care can physicians demonstrate that certain cost-driven policies of managed care adversely affect quality. These data can also demonstrate that waste is uncommon, thus justifying that increases in reimbursement—including coverage of new technologies from vaccines to surgical techniques—are necessary. Although employers will not welcome rising insurance premiums, they have historically accepted increased costs that are product related (for example, increased spending on computers), provided that they believed the rising costs of production were justified. Because employers (and legislators) cannot know whether they are getting a good deal on health care, they focus on the only measurable variable: cost. Thus, the clinical community can reassure employers by measuring and reporting quality (including appropriateness of care). This emphasis would also facilitate discussions about the cost of new technologies.

Physician concerns about the reporting of performance to the public must be adequately addressed to change the health care market. For example, a known common concern is that case mix adjustment will be inadequate or that an individual physician's practice size is too small and can therefore lead to inappropriate conclusions based on random events (11). However, public reporting initiatives have existed in a number of states for several years, and there has been little evidence that imperfect case mix adjustment or small sample size has unjustly harmed any physician (12). Dr. Sheikh is also concerned that the data will confuse consumers. There is, however, no evidence of consumer confusion by public reports leading to inappropriate decisions or to untoward care (12). In fact, public reporting could help the medical

profession. Because patients' trust of physicians has decreased substantially (13,14), by supporting public reporting, clinicians can both regain public trust by adopting a position that clearly puts patients' interests before those of individual physicians and improve performance. In New York, where there has been public reporting of mortality rates for cardiac procedures for a decade, case mix-adjustment methodologies are developed with input from clinicians. Initial reports showed that mortality rates for coronary artery bypass grafting procedures varied by more than threefold among hospitals (7), but subsequently decreased faster than the national average (15). This improvement occurred because physicians with poor initial performances improved in view of losing patients (16).

Dr. Sheikh argues against the use of evidence-based hospital referrals, focusing on its potential effects in rural areas, when no proponents of these initiatives are targeting these areas. Evidence-based hospital referrals are most interesting for what they suggest about employers' willingness to advocate improvement of quality. The clinical community should applaud these efforts and engage employers in a wide-ranging discussion about how to make the health system work for everyone. Our most important step is to measure quality and to share data with employers and consumers, then to lead the discussion about what resources are necessary to ensure optimal outcomes.

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