

Radiology Managing Radiology

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The business community remains the driving force behind health care reform because of cost and perceived failures in delivering high-quality, open-access, cost-effective health care (1). Businesses and, to a lesser degree, consumers continue to demand decreased cost, increased accountability, customer satisfaction, and competition. The delivery side of health care has responded through the formation of integrated delivery systems, the empowerment of primary care physicians' Independent Physician Associations (IPAs), and the introduction of for-profit business alternatives. These entities have attempted to maintain or increase market share through the contracting of managed care and by moving from the inpatient to the outpatient arena while decreasing price. Additionally, the perceived number of beds and specialty physicians, including radiologists, needed in this evolving health care system is significantly lower than the number available.

During this health care evolution we have witnessed a fundamental move from managed care to managed competition (2). The competition between providers has centered solely on price, with little emphasis on outcome improvement, cost-effectiveness, or patient advocacy. During the past several years the public has become increasingly weary of the effects of HMO policies and of the gatekeeper model of IPAs, with their perceived economic incentives for withholding care. These events are placing the primary care physician, who is at the frontline of health care delivery, in a very precarious position. To maintain economic viability, the physician is under increasing pressure to process more patients per hour. The resulting decrease in physician-patient time has been accompanied by an increase in the use of prescriptions and imaging, as clinicians attempt to maintain patients' satisfaction. For example, a radiology network in Colorado provides imaging for 180,000 outpatient lives. This network has seen a 10% rise in utilization of all imaging techniques over the past 3 years and a 10% rise per year for MR imaging. This increased utilization in a moderately managed environment continues to keep radiology in the center of economic controversy during the health care evolution because of its expensive technology, its high cost, and the loss of potential cost-effective imaging/savings. The cost of imaging in the late 1980s and early 1990s was two to three times the medical inflation index.

Although this rate has tempered during the past 5 years, radiology will remain under significant scrutiny.

The degree of success with which the radiologic community interacts with clinical colleagues, hospitals, and the insurance industry will determine the strength of the voice we have in the changing health care environment. The extent to which radiologists can integrate within and across health care systems, IPAs, and insurance contracts within a geographic region will determine how successful we are in directing our future and maintaining our role in the health care delivery system.

The tools with which we can demonstrate our value to our health care partners include the use of appropriateness guidelines, utilization management, analytic devices for demonstrating cost-effective imaging, and involvement in outcomes studies. Radiology is a neophyte in determining cost-effectiveness and outcome documentation, but with the initial work of Hillman and others we have an opportunity to be a major force in the coming years (3–5). To accomplish this goal, better information management across vertical, horizontal, or blended systems will be required, along with the sharing of practice guidelines, utilization data, and pooled outcomes information. Understanding utilization information in minimally, moderately, or highly managed health care markets will enable us to better manage cost and potential economic risk with our health care partners. This type of information management and sharing can be accomplished through the ACR, the ASNR, and the SCVIR. It will be important for us to drop the word *complementary* and use the word *supplanted* when evaluating a new technology. Technology is expensive, but when used correctly can be very cost-effective. One goal of future research should be to confirm the cost-effectiveness or improved outcome of clinically viable imaging, diagnostic, or treatment methods.

A current controversy is the evaluation of carotid artery disease by either duplex sonography, MR imaging, or CT angiography. In neuroradiology we should determine which of these studies is most appropriate, under which circumstances, and recommend reimbursement appropriately. If we do not focus on outcome analysis or cost-effectiveness, then the only value we bring to our partners or organizations is the opportunity to discount the value or price of our imaging studies.

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To accomplish the goal of adding or retaining value to our clinical partners, academic and private radiology communities must work together. Specifically, the ACR has developed great expertise in health care policy and Medicare, and has been effective in working with the AMA. Utilizing the ACR and SCVIR collaboratively for focused issues, such as carotid artery stenting and algorithms for stroke evaluation and treatment, is imperative. This cooperation between societies will be critical if radiology is to demonstrate its cost-effectiveness and value. Tools available through the ACR and other organizations are rapidly becoming available for the general and subspecialty radiologist to help manage quality assurance, utilization, economic risk, and risk-bearing contracts. By using these tools, we have an opportunity to not only control our own destiny but to become a

valued participant with our health care partners while maintaining a strong position as advocates for patients and for appropriate imaging utilization.

References

1. Bodenheimer T, Sullivan K. **How large employers are shaping their health care marketplace, parts 1 and 2.** *N Engl J Med* 1998;338:1003-1007, 1084-1087
2. Holman BL. **Can radiology save managed care? Preserving quality in the face of managed competition.** *AJR Am J Roentgenol* 1998;170:3-7
3. Powe NR. **Economic and cost-effectiveness investigations of radiologic practices.** *Radiology* 1994;192:11-18
4. Levin DC. **The practice of radiology by nonradiologists: cost, quality, and utilization issues.** *AJR Am J Roentgenol* 1994;162:513-518
5. Hillman BJ. **New imaging technology and cost containment.** *AJR Am J Roentgenol* 1994;162:503-506