Neuroradiology has grown from a club to a scientific discipline since the early 1960s. The American Society of Neuroradiology has catalyzed this transformation, assuring this field respect, credibility, and leadership in the neuroscience community and organized medicine. Health care reform offers neuroradiology a great opportunity to participate in structuring the future evolution and management of neuroimaging. President Clinton's health care initiative, regardless of its fate, has accelerated the proliferation of managed-care systems and assured their dominance for the near future (1, 2).

As managed care puts neuroradiology under siege, there are several ways to respond. At one extreme, a health maintenance organization, physician hospital organization, or outside company will dictate the terms of capitation, leaving the radiology community fragmented with little influence in management, cost containment, quality, or development of technology. As a result, radiology will bear all the economic risk and have little control over quality and innovation. Alternatively, radiology can take the initiative by creating networks of private and/or academic radiology groups to contract with health maintenance organizations, insurance companies, and private industries to deliver all imaging services for fixed prices based on capitation formulas within geographic regions. In this model, networks would be independent companies comprising radiology groups and controlling the critical components that affect the delivery of radiology services. The networks would establish credentialing criteria for who may image and interpret images, manage use, and reimburse hospitals, imaging centers, radiologists, and nonradiology imagers. To help restructure and accomplish this undertaking, it would be imperative that each network develop practice guidelines for imaging indications, credentialing criteria, utilization-review standards, and peer-review guidelines.

A network also must develop and acquire several services that radiology groups may currently be unaccustomed to providing. To maintain control of imaging issues, the network must assume significant economic risk and deal with a complex reimbursement process. As a result, a third-party administrator is essential for processing the bills submitted by radiology groups, imaging centers, nonradiology imagers, and hospitals. In addition, the network must develop a credentialing and peer-review process comparable with that of a medical staff. Likewise, it will be critical to have a process to evaluate and add new technologies and procedures and to determine how and when reimbursement will occur (3). Technological advances will test the relationship of quality, research, cost, and improved patient care. Too often initial indications of efficacy have not been reproduced, and using advanced technology has not improved outcome (4–8). Evaluation of new technologies and procedures will be based on cost-effectiveness and ultimately on the impact on outcome.

Over the next decade networks will develop sophisticated techniques for financial analysis. Simple utilization-review programs will become more complex, relying more on outcome analysis to ensure that appropriate imaging will not be abandoned for the sake of simple cost savings (9). Refined standards of contracting will evolve along with precertification for high technology. In my opinion, neuroradiologists should be involved in and spearhead these kinds of advances. In addition, the neuroradiology community must become more diligent in establishing the most appropriate exams for clinical symptoms. It is time to progress from demonstrating what technology can do to demonstrating how the effective application of technology improves patient treatment (10).

Radiology networks probably will compete among themselves for the opportunity to manage imaging for health maintenance organizations and insurance companies. This could increase the stress between local radiologists but
would not necessarily be a destructive process. This type of competition would be similar to that currently existing and would still be based on cost, quality of studies, and quality of service to patients and physicians.

A stronger radiology community can result from networks incorporating both academic and private radiology groups, thus revitalizing their relationship. However, academic and private radiology groups alike must evaluate a potential network to determine whether there is a common vision of subspecialization, autonomy, compatibility, and hospital dependency. Evaluating a group’s compatibility with a potential network is similar to an individual evaluating a radiologist’s compatibility with a prospective radiology group. However, once a network is established, it is imperative that the group develop a collective philosophy for contracting, managing, credentialing, and peer review.

Neuroradiology is involved with technology that is the most expensive and sophisticated in the radiology arena. How neuroradiologists interact with other radiology and clinical colleagues will determine how strong a voice neuroradiology will have in determining how and with what tools neuroradiology will be practiced in the future. This will require active involvement of organized neuroradiology and individual neuroradiologists. By assuming these responsibilities and risks, neuroradiologists will benefit society through innovative and cost-effective use of technology and continue to participate in directing neuroradiology’s future.

References
2. Drew P. Follow the money to see where health care reform is leading. AJR Am J Roentgenol 1994;162:772-774