Rural Physicians, Rural Networks, and Free Market Health Care in the 1990s

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The changes brought about by managed care in America's urban communities will have profound effects on rural physicians and hospitals. The rural health care market characterized by small, independent group practices working with community hospitals is being offered affiliations with large, often urban-based health care organizations. Health care is evolving into a free market system characterized by large networks of organizations capable of serving whole regions. Rural provider-initiated networks can assure local representation when participating in the new market and improve the rural health infrastructure. Although an extensive review of the literature from 1970 to 1996 reveals little definitive research about networks, many rural hospitals have embraced networking as one strategy to unify health care systems with minimal capitalization. These networks, now licensed in Minnesota and New York, offer rural physicians the opportunity to team up with their community hospital and enhance local health care accessibility.

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Managed care is permeating rural communities where its effect will be at least as profound as it has been in America's urban communities. The fragmented fee-for-service health care market is maturing into a vertically integrated regional managed care market that may challenge local control and alter patterns of access. Inevitably rural physicians will find themselves allied with other rural and urban health care providers (hospitals, pharmacies, and allied health institutions) to direct the transition. With the use of an extensive literature review and experience working with networks in New York State, we will illustrate how networking may be a viable rural market strategy for the new era of shared risk taking.

Major change is not new to the health care market. Health care was characterized by independent practitioners contending with unregulated supply and demand until a World War II wage freeze compelled industry to offer hospitalization insurance as an employee enticement. In the ensuing decades, more than two thirds of Americans gained hospitalization coverage, at least partly paid for by their employer.[1,2] Medicare and Medicaid, added in the mid-1960s, further fueled market expansion in response to third-party payments.[3-5] In 1971, President Richard Nixon proposed national health insurance to control skyrocketing costs but settled for legislation encouraging formation of health maintenance organizations (HMOs), but a patchwork of regulations and fiscal restraints failed to control expenditures.[6,7] The failure of federal health reform in 1994 released the health care market to seek its own checks and balances, empowering managed care insurers to help employers and governments in cutting costs and improving access. As a result, rural providers are being asked to affiliate with large urban-based provider networks when America is only beginning to appreciate the effect of a managed care–dominated market.

Shared risk taking, the basic tenet of managed care, particularly challenges the small hospitals and medical groups that characterize rural communities. While all physicians have concerned themselves with

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autonomy, patient access, and payments when contracting with managed care insurers, rural physicians also worry about their community's limited health care infrastructure. Rural community provider networking can create opportunity for mutually beneficial negotiation with external insurers.

THE NEW FREE MARKET AND HEALTH CARE

Like many states, New York State is moving from a regulated, price-controlled health care environment typical of the 1980s to a free market environment characterized by competing large managed care insurance companies that negotiate with providers and hospitals for the best deal. The rationale for this transition is provided by the moderate 39% increase in health care expenditures during the 1980s in relatively unregulated health markets such as California vs the 85% increase in price-controlled states such as New York.[8] Only Maryland tightly regulates health care reimbursement.

Managed care insurers have been slow to penetrate rural America because of the rural market's generally low operating margins, aging equipment, older buildings, scattered providers, and lack of large employers.[9,10] Many urban adjacent rural markets have experienced HMO penetration. Examples include the Community Health Plan headquartered in Albany, NY; Healthlink in St Louis, Mo; and United Northwest Services of Spokane, Wash. Most rural residing enrollees in these plans work in urban communities but live in nearby rural communities.[11] In New York State, fewer than 5% of rural residents are enrolled in managed care organizations. Of the 31 New York State–licensed HMOs, not one is based in any of the state's rural counties. Nationally, fewer than 1% of HMOs are serving solely nonmetropolitan counties, and they are smaller, serving fewer than 10 000 persons compared with the more than 370 000 to several million served by each of the nation's 10 largest HMOs.[11-14]

Government attempts to bridle Medicaid and Medicare expenditures by contracting with managed care insurers are forcing HMOs to expand service areas to include entire states. This regionalization is a major force bringing managed care to rural markets where the effect of managed care is likely to be distinct from that in urban areas.[12,15,16] Large population centers with more than 1.2 million persons can support 3 fully independent managed care plans competing in primary, secondary, and tertiary care. In service areas with fewer than 180 000 people, where 29% of Americans live, 3 plans may be able to compete at the level of primary care, but to be financially viable they need to share all inpatient services in small markets.[17] Many rural markets serve 30 000 persons or fewer, making it improbable that a truly competitive environment can be established.

Therefore, strategies are needed to assure that the effect of the urban managed care market on the rural health infrastructure is favorable. Simply transporting the competing urban-based HMO strategy may risk closure of even the essential rural hospitals and result in selective enrollment of only the low-cost patients. Managed care strategies that are rural driven may be more likely to retain jobs, improve access, and enhance local resource quality and use. A partnership with HMOs can enhance access to subspecialty care and clinical support for rural providers.

SHARING THE RISK

With the use of fee-for-service or indemnity insurance models, the insurer bore most of the financial risk, but treatment choices migrated toward inpatient specialty procedures that were well compensated. Managed care, particularly capitation, presses financial risk onto physicians in the hope that treatment choices are redirected toward less expensive cognitive evaluations.[18] Rural markets are well suited for managed care because of their generalist-based health care system and reasonable health care costs. Rural physicians care for a defined population (ie, their community) through continuous, longitudinal patient relationships already comparable with the relationships formalized under managed care.[19] Relationships among the community of rural physicians and other providers facilitate moving patients through the system to the most appropriate and effective care. Managed care further encourages the focus to change from episodic care to continuity care, from procedures to outcomes, and from fee generation to allocation of resources.[20]

Capitation further facilitates provider control over resource allocation and may be the evolutionary end point of risk sharing. In a capitated health care system, a group of providers is paid a fixed fee in anticipation of rendering a service to a patient in advance of the need for the care, independent of the actual volume or cost of the services rendered. Capitation rewards low system costs and low use rates and shifts responsibility onto the primary care provider.[15] In an organized rural community system, often referred to as a *network*, capitation allows for flexibility to manage care while sharing risk creates opportunities to share profits and retain those profits in the community of origin. Networking can be a profitable strategy for managing care and a mechanism for a community of providers to assume capitation reimbursement.

NETWORKS COMING OF AGE

Ninety-nine percent of America's hospitals report establishment of strategic linkages.[21,22] The Joint Commission on Accreditation of Healthcare Organizations has developed network evaluation criteria, and the Health Resources and Services Administration has initiated a study of integrated service networks.[23,24] Networking expands influence with little capital investment and has become so prevalent that the American Hospital Association changed the name of its trade journal to *Hospitals and Health Networks* in 1993.

Two states have codified networking. In 1993 the New York State health code was amended to license rural provider networks as "central services facilities."[25] Also in 1994 Minnesota authorized the creation of community-integrated service networks to organize services for up to 50 000 people at a capitated premium.[26] By the end of 1995 four community-integrated service networks were licensed as were 4 central services facilities.

Examples of rural networks include the Marshfield Clinic in north

central Wisconsin, where a highly integrated relationship among 400 physicians serves more than 300 000 people. Coordinated by a joint conference committee, achievements include a common electronic patient record, a regional ambulance system, and an integrated immunization database.[27] In Canadaigua, NY, a planning committee consisting of 2 hospital administrators (a CEO [chief executive officer] and a CFO [chief financial officer]), 3 primary care physicians, and 2 specialists coordinated a physician-hospital contract with a Rochester-based HMO. As the relationships matured, the financial risk was shifted from the insurer to the providers. After 8 years of operation, the plan's expenditures are 15% less than other upstate New York HMOs, and the local hospital had savings of $1.2 million per year. Insurance premiums are 8% below other Rochester region products.

Other examples of rural-based networks that have taken on the role of managed care include the Wisconsin Rural Hospital Cooperative, which operates the nation's oldest rural-based HMO[28]; 9 rural Oklahoma hospitals that teamed up with the state's largest HMO to create a network offering capitated health care in 1994[29]; and the physicians of Mesa County, Colorado, who formed a partnership more than 20 years ago with a local HMO to manage Medicaid.[30,31] The Columbia Basin Health Network in Washington State and the Bassett Healthcare Network in New York State have contracted with urban-based managed care insurers to administer quality management and credentialing for their physician networks. In New York, the central services facility license has been used as the organizational structure for bonding rural primary care hospitals with essential access rural hospitals. It is the central services facilities that can then contract with HMOs.[32] In Meadville, Pa, a physician, hospital, and community organization has been established by a hospital to contract health services directly with self-insured employers.[33]

The literature on the previously described networks combined with our experience with more than 20 networks in New York State demonstrates that networks vary greatly in their level of integration, complexity, and assumption of risk. Most have started as loose affiliations of independent, self-interested providers who agree to participate in community health planning, with participants maintaining control over their own operations and administration but engaging in mutually beneficial projects much as physician-hospital organizations have done for years. As opportunities become available, some members find occasion to merge activities, such as pharmacy, laboratory services, and multidisciplinary office sites. Because of their flexibility, project-specific contracts between participants have been the most common network covenant, but as interdependency and trust builds, some network members affiliate more closely by sharing or merging administrative services.[34,35] The community network exceeds the role of an independent practice association because it incorporates multiple types of health care providers (physicians, nurses, hospitals, and allied health professionals) and integrates vertically as well as horizontally.[36] Horizontal linkages, the backbone of local networks, are forged when groups of rural providers, similar in their community orientation, unite. Eventually most networks form vertical linkages with referral centers that offer considerably greater service diversification and compliment the continuity profile.[37] The essential element is time; future networks may find that opportunities to form relationships are compressed by the urgency to meet the managed care challenge (**Figure 1**).

Eventually a formal organizational structure is needed if a network is to reach its full potential to interface between insurers (including Medicaid and Medicare), local providers (including primary and specialty physicians, rural hospitals, and home health care agencies), tertiary care hospitals, and the community consumers of health care. Hiring staff will require an administrative composition that defines authority and responsibility for decision making. Potential external partners are more likely to accept the network as a negotiator if a set of bylaws exists and operating principles clearly state the intention to address health care needs within a defined service area.[38] Roles for the staff, an executive committee, the membership, and a community advisory committee can be defined in the bylaws. Strategies for data collection, coordinating patient access to primary care, acute care, and emergency services, tracking, and monitoring quality should be clearly delineated. Obstetrical services, long-term care, home care, and mental health services will augment continuity and increase the network's attractiveness to external contractors.[39-41] Most networks have benefited by accommodating highly conjoined memberships and more limited affiliations into a structured hierarchy (**Figure 2**).

Rural community-oriented health networks can bring an added value to the preexisting health care system in the community, including cost reduction, efficient use of local services, improved distribution of services, streamlining patient referrals, quality of care monitoring, and increased use of preventive services and consumer satisfaction.[42,43] Improved income and captured market share are essential elements but should occur in the context

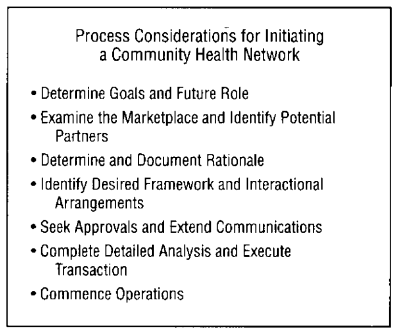

Figure 1. *Basic steps successful providers have used to establish networks.*

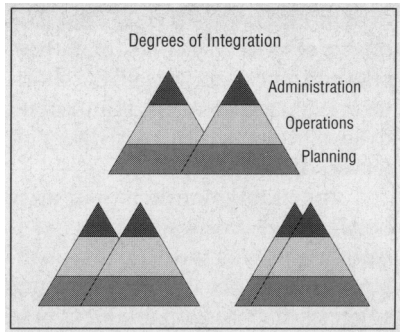

Figure 2. *Organizations that enter into networking arrangements often start by sharing planning functions and may later merge some operations and even administrative functions as the network matures. At any time, networks should be able to accommodate members at multiple levels of integration.*

of improved patient access, value, and quality of service.[27] Because many benefits will take years to realize, a short-term evaluation strategy is important to sustain momentum and direct interval adjustments.[44]

Inevitably conflicts will arise between network participants; networking is not without its problems. Experience in New York State suggests that sustainable networks form around preexisting self-interests and recognize established relationships within the community and outside of the community. Networks that seek external relationships counter to traditional referral patterns create internal stress. It is also true that members who pursue a high degree of integration early may find other members more restrained. The sense of ownership that develops among original participants can discourage new members and interfere with important new member additions.[45] Competition and power struggles can be mitigated by strong consumer representation, but networks that preplan a "boundaries" committee made up of providers and community representatives are more likely to survive difficult disputes. Even then, some group decisions will be perceived only as suggestions by less committed members. Successful networks inevitably postpone some issues until there is a favorable disposition. Experience suggests a competent, full-time staff is preferable to allowing one participant to supply the staff, as the latter model fosters an inappropriate sense of ownership. Technical assistance from outside experts can validate many network activities and override internal stress.

Preservation of the local hospital is a concern unique to rural communities. Inevitably all rural hospitals must adjust their mission and services to account for changes in health care provision. Remaining focused on the communities' need for provision of appropriate and affordable services will avoid dissolution of a network by ill-advised struggles to save the rural hospital at all costs.

Antitrust issues are threatening. The Marshfield Clinic has been defending itself against antitrust allegations for several years because of the perception that some insurers were excluded from equal access to the population. A recent US Court of Appeals ruling has suggested that networking to rural providers is essential to quality care.[46] Attempts to organize an entire community are subject to antitrust interpretations by those who believe they are left out.[36] Maintaining communication and conducting open meetings can avoid antitrust litigation, but working within guidelines established by a state government usually assures protection. Antitrust protection was specifically addressed in the legislation for New York State and Minnesota.

Adequate financing during planning and start-up phases can be met only by a combination of sources and is unlikely without the early involvement of a hospital, large insurer, or HMO. All participants should demonstrate early commitment by contributing enough to assist in hiring a staff; often, a rural hospital can provide office space and some administrative support services. In the least densely populated areas, states will likely need to provide technical assistance as well as grant support for start-up costs.

MORE THAN THE SUM OF PARTS

With a free market system, managed care organizations could strengthen America's rural community health care infrastructure or overwhelm it. Rural health care providers who unite their self-interests with those of their communities can convert managed care from a mere financing mechanism to a community-oriented case-management strategy.[47] Managed care insurers need access to agents and clients within any community to function. Preferably contracts with physicians not only affiliate the physician with the insurer but also bond physicians and clients and encourage use of rural providers rather than bypassing them for urban providers. When a rural health care network has organized a community's assets, managed care insurers actually reinforce the physician's participation in a continuum of local services.

These activities approximate the community-oriented primary care values of characterizing the community, identifying health issues, modifying practice patterns, and monitoring the effect of interventions.[48,49] The Institute of Medicine suggests that population-based health care include promoting successful birth outcomes, reducing the incidence of preventable childhood diseases, detecting treatable diseases early, and reducing the effect of chronic disease, morbidity, and pain through timely and appropriate treatment.[50] Rural managed care networks that incorporate these ideals into their mission can affect the disease burden and, therefore, the health care financial burden of their service area while securing their own enterprise.

Rural hospitals have typically captured only 35% of their potential market and rural physicians only 50% (A. Hagopian, MHA, P. J. House, MHA, J. A. Bartlome, J. LeMire, D. Billett, and L. G. Hart, PhD, unpublished data, 1994).[51] Increasing the use of local services stabilizes employment and retains the capital necessary to reinvest in the community's health care infrastructure while assuaging the community's concern about the availability of resources (A. Hagopian, MHA, P. J. House, MHA, J. A. Bartlome, J. LeMire, D. Billett, and L. G. Hart, PhD, unpublished data, 1994). Shared risk managed care strategies generate after expense reserves as high as 20%, liberating resources to update infrastructure and effect real improvement in a broad range of community services.[52-54] Population-based strategies can force community ratings, hinder HMOs from "cherry picking" the healthiest segments of a community, and make health insurance more accessible for smaller employers.[55-58]

Added responsibilities can frustrate the already difficult job of being a conscientious community health care provider, but rural physicians who are able to initiate change will advantage themselves and their communities in the competitive risk sharing environment of the 1990s. In many rural communities leadership will be provided by the local hospital because that is where the administrative expertise resides. In others, physician groups will lead the community through the processing maize. Inevitably, successful networking will be characterized by the early empowerment of a community advisory

board that provides insight to the needs and desires of consumers.[59] Networks start as simple alliances focusing on specific projects, maturing if they work. Rural physicians who assume responsibility will assist their communities in securing control of their health care system.

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