

**INTEGRATED HEALTH SERVICE DELIVERY AND FINANCING
APPROACHES IN RURAL ENVIRONMENTS**

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Ira Moscovice, Ph.D.
Institute for Health Services Research
University of Minnesota
Minneapolis, MN 55455

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EXECUTIVE SUMMARY

"INTEGRATED HEALTH SERVICE DELIVERY AND FINANCING APPROACHES IN RURAL ENVIRONMENTS"

Introduction

Health care reform and market demands have generated pressure for development of integrated health service delivery and financing approaches in rural areas. This paper addresses development of locally-based rural health networks and broader managed care arrangements, two approaches that have the potential to address fundamental problems of rural health care such as inadequate access to primary care, insufficient infrastructure to deliver services and inability to monitor or maintain appropriate levels of quality of care.

Rural Health Networks

State and federal reform efforts depend on network formation as a cornerstone. Rural health networks have been defined as "locally directed or governed organization[s] which provides a set of defined health and administrative services needed in the community. . . ." Examples of private sector network initiatives include those featured from Arkansas, Iowa and Colville, Washington described in NIHCM's July 1994 Video Conference profiles. In addition, Adirondack Rural Health Network in New York state offers an excellent example of an integrated network formed in response to state and private sector initiatives to assure access and cost-effectiveness. Community Integrated Service Networks, encouraged by the 1993 state MinnesotaCare legislation and regulations proposed by the Minnesota Health Care Commission will help promote of community-based rural network development. The growing interest in rural health networks suggests the need to monitor their impact and how they serve the public interest.

Rural Managed Care Arrangements

Managed care arrangements have been defined to include "systems that integrate the financing and delivery of appropriate health services. . . ; selected providers. . . ; formal programs of ongoing quality assurance and utilization review; and

significant financial incentives for members to use [plan] providers and procedures." Current knowledge about rural managed care indicates:

- though not currently substantial, rural managed care is likely to increase;
- to access limited capital and technical expertise, some rural providers and businesses are likely to partner with urban managed care plans;
- rural physicians may be more willing to join managed care arrangements and trade some autonomy for maintaining patient bases, as managed care becomes more accepted by employers and employees;
- rural hospitals may initially view managed care as an opportunity to improve market share; however, these increases may be fleeting; and
- the use of non-physician providers by managed care plans to fill primary care needs is likely to increase.

Rural managed care models include: 1) expansions of urban-based IPA model HMOs into rural areas (such as those in Minnesota); 2) rural multispecialty group practice HMOs (such as the Geisinger Health Plan); and 3) rural-based IPA models sponsored by consumer cooperatives or hospital networks (such as HMO-Wisconsin). IPA-like models are most generalizable because of their ease of implementation and the relative freedom from structural requirements.

Next Steps for Policymakers

Policymakers can assist development of rural health networks and rural managed care by: assuring rural health professionals are not placed at undue financial risk; considering modifications of solvency requirements (at least temporarily); offering technical assistance to locally-based plans; offering loans, grants and reinsurance pools to networks along with protecting community health centers and rural health clinics and supporting professional training that encourages service in rural areas. In addition, balancing antitrust enforcement and network establishment must be considered. A good current example of government support for rural network development is the New York State Rural Health Network Development Program, which provides planning and implementation grants, seed grants to support structural and organizational changes, rate enhancements for network providers and regulatory waivers that may be necessary for network implementation.

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Introduction

Health care reform and the increased environmental turbulence it has promoted has generated pressure for the development of integrated health service delivery and financing approaches to serve rural communities. Nerenz (1992) identifies the key dimensions of health system integration as information integration; control (or at least coordination) of resource allocation, strategic planning and policymaking; and the integration of finance and delivery functions. He asserts that the "ability of an organization to arrange financial incentives as needed to support key delivery system goals is a clear advantage."

The purpose of this paper is to discuss current approaches to integrate the delivery and financing of health services in rural environments and to suggest potential ways that policymakers can support these approaches. The paper specifically addresses the development of locally-based rural health networks and broader rural managed care arrangements, two approaches that have the potential to address fundamental problems of rural health care such as inadequate access to primary care services, insufficient infrastructure to support the provision of health services, and inability to monitor and maintain appropriate levels of quality of care.

The Development of Rural Health Networks

The current health care and public policy climate is receptive to network formation. Some state-level reform efforts (e.g., Minnesota, Florida, New York, Washington) depend on network formation as their cornerstone. They have created incentives for rural health professionals and institutions to develop regional

networks that can jointly offer a comprehensive range of services. Proposed national health care reform proposals rely on networks of providers and insurers to provide a range of covered services and to control the costs of service delivery. The federal government is promoting rural network development through programs such as the Health Care Financing Administration's Rural Health Networking Initiative. These types of initiatives are indicative of the level of policy support for integrated system development. However, they are able to support only a limited number of networks.

In response, providers are developing network relationships on their own initiative without government or philanthropic support. A recent survey by the accounting firm, Deloitte & Touche, found that 71% of hospitals in the U.S. are in the process of developing integrated delivery systems and 81% predicted that in five years their hospitals will be parts of service networks designed to provide broad coverage and reduce costs. (*Washington Post*, 1994). Rural providers and communities have begun to devise strategies for coping with the changes in their environments that market and health care reform are likely to bring. These strategies may vary depending on specific regional circumstances and on community capacity for change.

Before describing some examples of rural health networks, it is important to define what is meant by the term "rural health network". Networks of organizations have been defined at a general level as ". . . organizational arrangements that use resources and/or governance structures from more than one existing organization" (Borys and Jemison, 1989). The New York State Department of Health (1992) defines a rural health network as a locally directed or governed organization which provides a set of defined health and administrative services needed in the community served by the network. They define the minimum set of

services provided by the network to include primary and preventive care, acute care, and emergency medical care services.

As part of our current research on rural health networks, my colleague, Anthony Wellever, has proposed that an integrated rural health network is a formal organizational arrangement between and among rural health care providers, social service providers, and insurers that uses the resources of more than one existing organization and specifies the objectives and methods by which various collaborative functions will be achieved. This definition requires that the organizational arrangement be formal (i.e. explicit and legal) with a specified membership, there be a commitment of resources and/or the use of governance structures of at least some of its members, and the performance of network functions/activities according to an explicit plan of action.

Despite all of the recent activity related to rural health networks, examples of rural-based networks that provide the full range of acute inpatient and outpatient services to rural communities are relatively rare, being confined primarily to a small number of successful rural-based HMOs (Christianson and Moscovice, 1993). Instead, existing rural health networks tend to be groups of similar primary care, and sometimes secondary care, providers that form to address common problems or to respond to reimbursement opportunities (e.g. rural hospitals participating in a hospital consortia or rural physicians organizing individual practice associations). The experience of these more limited networks has demonstrated that rural providers can work together cooperatively but it provides little evidence regarding the ability of rural networks to effectively assume responsibility for all of the medical care of entire communities, operate within a constrained budget, guarantee access to needed services, or provide substantial benefits to participating providers.

Our current research has provided us with the opportunity to complete case studies of a sample of rural health networks throughout the country. Although we tried to identify mature networks that involved multiple types of providers and insurers, it is evident that rural health network development is currently in an embryonic stage and in tremendous flux. Examples from Arkansas, Iowa and Colville, Washington are briefly described in profiles developed for the July 15, 1994 NIHCM Video Conference, "Meeting Rural Health Needs Through Integrated Delivery Systems." Two other examples of rural health networking approaches that have developed in response to the call for integrated delivery systems are the Adirondack Rural Health Network (ARHN) in upstate New York and the Community Integrated Service Network concept in Minnesota.

Adirondack Rural Health Network

In a memorandum of agreement among network participants, the mission of ARHN is described as follows:

ARHN has been organized to ensure the access, availability and cost-effectiveness of high quality health care services to all residents within its defined service area through the coordination of health-related services and the identification and development of new and expanded services as required.

The Adirondack Rural Health Network is comprised of a full range of health care providers serving Warren County, northern Washington and Saratoga Counties, southern Essex County, and eastern Hamilton County in New York state. Its membership includes a 440 bed community hospital, a consortium of primary health care centers and eight affiliated private practices, a 40 bed rural community hospital, a regional network of EMS, three county public health services, two community service boards, and a county long-term care consortium. The Upper Hudson Primary Care Consortium (UHPCC), the contract agency, does not provide

direct services but instead provides central services, i.e., health professional recruitment, employment and retention, joint purchasing, technical assistance, strategic planning, medical student clinical rotations, and quality assurance programs to its member organizations. UHPCC is a not-for-profit corporation initially licensed as a "central service facility" in New York state in 1987. Its original focus was to serve as an umbrella administrative agency among four health centers in upstate New York.

ARHN was initially formed by the provider groups to address the needs and gaps in the rural health care delivery system in upstate New York. Providers have developed formal and informal agreements to link primary care, emergency, and public health services in outlying areas with acute inpatient and long-term care services more centrally located. Formal and informal referral agreements exist between the Consortium's health centers and affiliated private practices and the Glens Falls Hospital. Emergency medical services consist of small, well-trained rescue squads which provide emergency transportation generally to the regional hospital. Public health services in Warren County receive medical direction through the Consortium physicians and refer to the Consortium health centers and Glens Falls Hospital. The county community service boards have annual subcontracts with Glens Falls Hospital to provide outpatient mental health and substance abuse services and inpatient mental health services. Moses-Ludington Hospital refers high level emergency and secondary acute care to Glens Falls Hospital.

ARHN initially was financed through a contract between the UHPCC and the New York State Office of Rural Health in 1992. The contract supports the establishment of administrative functions which manage ARHN activities and

guide the implementation of new initiatives as well as operational plan development for a regional delivery system in rural upstate New York.

ARHN is an excellent example of an integrated rural health network formed in response to state and private sector initiatives to assure the accessibility and cost-effectiveness of health and social services to all residents within a multi-county service area in rural New York state. At the heart of the network is the Upper Hudson Primary Care Consortium that manages and oversees implementation of network activities. ARHN is a model of a locally-developed, primary care centered, integrated delivery system serving rural populations.

Community Integrated Service Networks in Minnesota

An example of rural network development under current discussion is embodied in MinnesotaCare, the health care reform program of the State of Minnesota. MinnesotaCare is composed of two essential components: an innovative health insurance program to provide coverage to the uninsured and a restructuring of the health care delivery and financing system. The cornerstone of this latter effort is the integrated service network (ISN). Included in the 1993 MinnesotaCare legislation, an ISN is defined as "an organization that is accountable for the costs and outcomes associated with delivering a full continuum of health care services to a defined population." ISNs are expected to arrange or deliver a range of services from routine primary and preventive care through acute inpatient care at a fixed price. Initial development suggests that ISNs are composed of three key stakeholders: physicians, hospitals, and insurers. The various stakeholders are bound to the ISN by ownership or formal agreement.

Provider and purchaser participation in ISNs is voluntary. However, providers and purchasers who do not participate in ISNs will be subject to a regulated all-payer system that reimburses according to a uniform fee schedule and manages cost through standardized payment and utilization review systems.

ISNs are HMO-like organizations that are expected to control rising health care costs while improving or maintaining the quality of health care services provided. In comparison with many other states, Minnesota is considered a mature managed care market, so the introduction of the ISN concept is viewed, in some quarters, as more evolutionary than revolutionary. However, the distribution of HMO enrollees is not uniform throughout the state. Almost one-half of Minnesota's 71 rural counties were not served by HMOs in 1991 and 86 percent had less than 10 percent of their population enrolled in HMOs. Clearly, rural Minnesota, like many other rural areas of the country, has neither vast experience with integrated delivery and financing systems nor the expertise and capital necessary to develop them in response to the incentives of health care reform.

Absent any additional policy intervention by the State of Minnesota, two scenarios seem likely to occur in rural areas in reaction to the legislation: (1) providers will contract with or be purchased by urban-based ISNs, or (2) providers will do nothing, and, by default, become subject to the regulated all-payer system. These approaches, while appropriate for some rural areas, may not be appropriate for all rural areas. Recognizing that community-based ISNs may have merit, the Minnesota Health Care Commission proposed to the Legislature that small (i.e. rural) ISNs be encouraged by adopting a number of provisions that would help them overcome barriers to development.

These small ISNs would be called "Community ISNs" (CISNs). CISNs would be limited to no more than 50,000 members. They would be licensed a full three years before the first ISNs are licensed, giving them protection from competition with other ISNs during the early stages of their development. They will be subject to the licensure requirements currently in place for HMOs, with the following exceptions:

- At least 51 percent of the members of the governing body must be residents of the CISN's service area;
- CISNs may make use of accredited capitated providers (ACPs) to satisfy up to 30 percent of their net worth requirements. ACPs are capitated providers in the CISN that agree to provide services, without compensation, to enrollees of an insolvent CISN for up to six months after the ISN has been declared insolvent;
- CISNs must offer the HMO benefits currently required of HMOs, except that they may make benefits available with individual deductibles of up to \$1,000;
- CISNs are exempt from current HMO administrative requirements, including: maintaining certain statistics; filing provider contract forms; written quality assurance plans; preparation and filing of marketing plans; reporting of changes of provider addresses; and "focused studies."

The provisional status granted to CISNs will expire on July 1, 1997 and all CISNs will have to meet the requirements in effect at the time for ISNs. One of the initial efforts to develop a locally-based CISN that will serve a 14-county area in western Minnesota is Pioneer Health Systems, Inc., a joint venture between a multispecialty group of 95 physicians headquartered in Willmar and Blue Cross Blue Shield of Minnesota. The CISN concept is just getting off the ground and the next few years will allow us to observe whether the incentives created under MinnesotaCare will be sufficient to promote community-based development of rural health networks.

In summary, this section of the paper has described the wide and growing interest in rural health networks despite the lack of empirical evidence on what networks accomplish and whether they serve the public interest. The next section of the paper will describe rural managed care arrangements and their role in integrated health service delivery and financing approaches to serve rural communities.

The Development of Rural Managed Care Arrangements

An essential component of most health reform proposals is the use of managed care organizations to control costs and improve access to health services. One commonly cited definition of managed care is: "[s]ystems that integrate the financing and delivery of appropriate health care services to covered individuals by means of: arrangements with selected providers to furnish a comprehensive set of health care services to members; explicit criteria for the selection of health care providers; formal programs for ongoing quality assurance and utilization review; and significant financial incentives for members to use providers and procedures associated with the plan." (HIAA).

The expanded use of managed care organizations is likely to pose special challenges to rural health professionals, employers, and residents, particularly those with limited experience with these arrangements. How physicians, hospitals, and communities react to new managed care arrangements will depend, in part, on how and by whom managed care is introduced. Unfortunately, there is an extremely small body of available information on the operation and outcomes of rural managed care systems to inform policymakers. However, certain general observations can be made about what we know now about managed care in rural

areas and what we need to know to improve rural health policymaking within the context of reform.

Much of what we know about rural managed care comes from anecdotal sources or the interpretation of system-wide studies. A summary of current knowledge about rural managed care includes the following (Wellever and Deneen, 1994):

- The current penetration rate of managed care in rural areas is not substantial. Thirty-six percent of rural counties had at least one HMO providing services to their residents in 1992. HMO penetration rates in the South and the Great Plains are particularly low.
- Rural managed care is likely to continue to increase as rural providers seek to integrate services, urban-based insurers seek to expand markets, and employers seek to decrease health expenses.
- Limited capital to finance the development of managed care systems and limited technical expertise to develop and operate them have served as deterrents to the formation of managed care systems in rural areas. As a consequence, rural providers and businesses are more likely to contract or partner with urban managed care plans than to develop them themselves.
- Physicians who have not had experience with managed care plans generally hold negative opinions about them, however, physicians who have had managed care experience are generally positive or at least neutral about the experience. Despite the reluctance of some physicians to participate in managed care arrangements, rural physicians, in the future, may be willing to trade some of their autonomy for the security of maintaining their patient base. This is likely to be particularly true in areas where significant numbers of employers and employees elect managed care options.
- Rural hospitals, viewing managed care as an opportunity to preserve or improve market share and fill vacant beds, may be initially more receptive to managed care arrangements than rural physicians. However, increases in inpatient utilization as a result of participating in a managed care arrangement are likely to be fleeting.

- Urban managed care plans make extensive use of non-physician providers (NPPs). As managed care expands into rural areas, NPPs may be used more extensively to help alleviate primary care provider shortages.

There are a variety of managed care organizations that can be used to serve rural populations. Until recently, these organizations typically were HMOs. Therefore, it is useful to study how HMO models have evolved in rural areas. Our prior work identified three HMO models that occur in rural areas: urban-based IPAs, rural-based group/staff model HMOs, and rural-based IPAs (Wellever and Deneen, 1994). The first model typically reflects expansion of an urban-based IPA into rural markets with the IPA contracting with rural private practice physicians and hospitals on a discounted fee-for-service basis with limited financial risk. Contracting physicians agree to follow the plan's utilization and quality assurance guidelines. This has happened in Minnesota, as mature HMOs based in the Twin Cities area have expanded to neighboring counties.

In the second model, the HMO is generally sponsored by a rural multispecialty group practice (such as the Geisinger Health Plan) whose medical staff may serve both HMO and fee-for-service patients. The Geisinger Health Plan is a nonprofit corporation centered around a group practice with approximately 530 physician in 37 Northeast Pennsylvania counties. A 577 bed tertiary care facility, a 230 bed community hospital and an 86 bed children's hospital (opening December, 1994), provide hospital services for the Plan's patients. During the past two decades, the Clinic has established a regional center system with 39 clinics located in mid- and Northeast Pennsylvania.

The Clinic is an example of an integrated rural health delivery system that sponsors a widely spread network serving it's an exclusive HMO. The networking

activities include a common electronic patient record, a regional ambulance and air transport system, a 57 bed inpatient drug and alcohol rehabilitation facility and a for-profit medical management company. The HMO has approximately 164,000 members. The generalizability of the Geisinger experience may be questioned due to its unusually large size for a rural group practice. On the other hand, it presents some of the advantages that may result from partnering rural group practices with hospitals, and others with vested interests in rural integrated systems and managed care development. (GHAA Conference, 1994).

In the third model, the rural-based IPA is often sponsored by a consumer cooperative or network of rural hospitals and may serve a wider geographic area than the other models. An example of this model is HMO Wisconsin (HMO-W) which was formed through the efforts of the Rural Wisconsin Hospital Cooperative, a coalition of rural hospitals in southwestern Wisconsin. It was initially formed to stem rural patient outflow to regional medical centers. It has been in operation since 1984 and serves approximately 40,000 subscribers in southwest and central Wisconsin.

The provider network that serves enrollees of HMO-W consists of hospitals and other health care facilities that contract directly with HMO-W as well as physicians and ancillary health professionals that are members of the IPA (called Community Physicians' Network (CPN)). The HMO-W provider network includes 41 community hospitals, 13 tertiary hospitals, 24 DME providers, 24 home health services, ten Home IV providers, seven SNFs, and 35 chiropractors. The Community Physicians' Network consists of 390 primary care physicians, 1,800 specialty physicians (approximately 300 community-based), 400 pharmacies, 125 dentists, 35 podiatrists, 150 optometrists, and 225 mental health providers. Its breadth assures HMO-W members of access to a complete range of services.

CPN is a strong gatekeeper model and, therefore, primary care physicians are paid on a capitation basis for primary care services. All physicians share in risk in CPN. The CPN is fully capitated by HMO-W for all physician services. Any deficit in the CPN is the responsibility of CPN physicians. Withhold funds are utilized to offset any deficit in the CPN. The CPN is also a risk partner in the HMO-W Hospital Fund.

Independent Practice Association (IPA) model HMOs are one of the most generalizable rural alternative delivery system forms. Many rural providers responding to health care reform are likely to seriously consider an IPA-like model because of its ease of implementation and the relative freedom from the structural requirements (such as, being anchored by a multispecialty group practice). The success of HMO-W in enrolling members, expanding its provider network, and remaining fiscally solvent reflect the strong commitment on the part of participating physicians and hospitals to the HMO's success, as well as effective leadership provided by HMO-W staff. This commitment has been sustained as the competitive threat of nearby urban-based HMOs has grown. The challenge facing HMO-W is deciding whether or not a 40,000 member rural HMO is large enough to compete in the health care system that will emerge from health care reform.

Next Steps for Policymakers

This paper has discussed the development of rural health networks and rural managed care arrangements as vehicles to integrate the delivery and financing of health services in rural communities. Initiatives such as those underway in Iowa and Arkansas demonstrate that managed care organizations, employers, and health systems can provide critical expertise, resources, and motivation for local providers in developing integrated care systems for rural areas. They also exemplify some

innovative arrangements to involve local providers in the ownership or management of the systems in which they participate. However, a number of rural providers have sometimes been reluctant to become part of regional or statewide health care systems and might well see a local provider-based organization as more responsive to community, as well as their own, needs and circumstances.

A natural question to ask is how public policymakers might support the development of rural health networks and rural managed care arrangements. There are several potential areas for such assistance. For example, measures might be taken so that participation in rural managed care arrangements does not place individual rural health professionals at undue financial risk. Creative mechanisms that involve the use of public resources (e.g. using a mill levy to pay for reinsurance for rural health professionals participating in managed care plans) need to be considered. In addition, state regulations concerning solvency requirements for managed care plans may need to be modified to encourage the development of rural-based managed care plans. Options such as the use of accredited capitated providers (ACPs) to satisfy net worth requirements for CISNs in MinnesotaCare need to be considered for modest sized rural managed care arrangements to satisfy solvency requirements.

More generally, the limited technical expertise and capacity available to develop and operate rural managed care system has likely served as a deterrent to their formation. Managed care plans require sophisticated information systems to allow administrators to truly "manage the care" of enrollees. Public policymakers could alleviate the financial burden facing local providers when developing or renting this part of the infrastructure from existing managed care plans, by creating a technical assistance cooperative that would subsidize the availability of information system specialists to locally-based plans.

With respect to rural network development, potential areas requiring assistance include (Christianson and Moscovice, 1993):

- Building Network Capacity and Infrastructure. Public policymakers can create incentives to stimulate network formation in several ways including the use of loans and grants to support the necessary capital investment, the provision of reinsurance pools for networks in their initial development period, the protection of existing capacity-building programs such as community health centers and rural health clinics, and the creation of financial, educational, and licensure incentives that support the training of health professionals likely to participate in rural health networks.
- Balancing Antitrust Enforcement and Network Establishment. The literal application of existing antitrust laws to rural health care delivery may not yield net benefits for consumers. Instead, it may represent a threat to the availability of services in some rural communities. Policymakers need to examine whether the state action immunity doctrine can provide relief from antitrust laws for appropriate joint ventures or whether federal action will be necessary.
- Assuring Access to Services and Quality of Care. Rural health networks need to be monitored to ensure that they provide access to appropriate providers and services, maintain or increase provider supply in rural communities, and have appropriate quality improvement processes in place. These issues are of particular concern for networks that are not locally-based.

A current example of state activities that provide support for rural network development are the efforts of the Office of Rural Health, New York State Department of Health, and the New York State Rural Health Council. State policymakers in New York identified the lack of recognition of networks in existing reimbursement methods and the uncertainty of support beyond grant periods as barriers to rural network development. The New York State Rural Health Network Development Program encourages cooperation and integration of rural health providers through:

- Planning grants to support network development.

- Implementation grants to support network administrative and staff services.
- Seed grants to support the structural and organizational changes required to implement networks.
- Rate enhancements for providers of network core and support services.
- Regulatory waivers that may be necessary for network implementation.

In summary, this section has described examples of how policymakers might take an active role in the development of rural health networks and managed care arrangements as state and federal reform efforts evolve.

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