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EXECUTIVE SUMMARY

This was a study of strategic alliances of rural health care provider organizations in the United States, with an emphasis on cooperative societies or cooperative-like alliances. The underlying hypothesis was that the scale, scope, efficiency, and quality problems of rural health care can be reduced by better coordination and rationalization of the delivery system and that this coordination and rationalization can be achieved through strategic alliances of provider organizations.

The study divided alliances into three types: cooperatives; consortia, IRS 501(c)(3) or (4) organizations that rely on grants for the majority of their funding; tied networks, that are organized and led by a major urban, tertiary hospital. The cooperatives were described as self-help organizations, while the consortia and tied networks were other-help organizations. Consumer cooperatives, not included in this study, have been formed in the United States for the purpose of starting prepaid health plans or underwriting clinics in communities having trouble retaining a doctor. While rare today, such coops were comparatively numerous in rural America during the 1930s because of a federal government facilitating loan program.

The report of the findings: (1) reviews the activities and functions of these alliances and makes specific

recommendations regarding activities that can and should be organized cooperatively; (2) makes recommendations regarding capitalization, sources of funding, pricing, and dividend policy; (3) reviews and makes recommendations regarding organization, membership, legal structure, and governance structure. With regard to both the efficiencies associated with economies of scale and scope and the efficiencies in governance transaction costs, the tied networks were somewhat more efficient than were the cooperatives and consortia. The latter two need, and have, at least one urban hospital associated with them to help in achieving the scale and scope required to offer some specialized services. Therefore, any case favoring rural hospital cooperatives over tied networks must be based on avoiding a conflict in objectives and the effectiveness with which a cooperative can coordinate and enrich the rural health care delivery system in a region. All members must see clearly that local autonomy can only be achieved through cooperative efforts. It is a role that requires patience and allows the rural hospitals to lead the cooperative. The rural community hospital boards and managements need to learn empowerment and not dependence.

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I. INTRODUCTION

The access of rural communities to health care and the efficient delivery of that care continues to be a serious problem in this country. Most rural areas share a set of common problems: growing shortages of health care professionals; inequitable physician and hospital reimbursement; higher unemployment and lower family incomes; fewer insured people and people with lesser ability to pay health care bills; many migrant workers; a shrinking tax base with an increasing demand for public services; inability of the small hospital to cover its costs.

California is not immune to these problems. Some 1.3 million Californians live outside Metropolitan Statistical Areas (MSA). While this is just 5 percent of the state's population, these people live in counties comprising over 43 percent of the state's area. Fifty two California hospitals with approximately 3,000 beds and 100,000 admission per year are outside metropolitan areas. These hospitals are located north of a line from Santa Rosa to Sacramento, in the Central and Eastern Sierra, and in the Central Valley excluding the Sacramento, Stockton, Modesto, Fresno and Bakersfield areas. These areas share many problems found in urban California but also encounter other problems or the same problems in slightly different form. For example, the rural elderly population is growing faster than is the urban elderly population because retired people are moving to rural areas. The California urban population is relatively young.

The supply and demand problems of the rural delivery system feed on and exacerbate one another. Difficulty access reduces demand; reduced demand limits the scope of services offered, creates high costs of operations and quality difficulties for providers. The underlying hypothesis of this research is that these scale, scope, efficiency, and quality problems can be reduced by better coordination and rationalization of the rural delivery system and that this coordination and rationalization can be achieved through strategic alliances of provider organizations. Such networks or strategic alliances, must, in some fashion, encompass primary care and the rural physicians as well as acute

and long-term care providers. One model of strategic alliance is a cooperative of rural community hospitals and clinics.² Is this form of cooperative alliance an efficient, effective, and viable form? Are other organizational forms of alliance, affiliation, or integration superior? To what extent could the cooperative model be useful in California? These are the general problems and questions addressed in this research.

The study was a comparative design of a variety of strategic alliances of rural health care provider organizations in the United States, with an emphasis on cooperatives or cooperative-like alliances. The purpose was to help these alliances and emerging alliances of rural health care providers to:

- evaluate the relative performance of various organizational forms of strategic alliance in terms of effectiveness in serving their communities, efficiency, and viability;
- recommend the legal structure and governance structure that best meets the unique needs of rural health care providers and will best facilitate the continued prosperity of providers in rural communities;
- identify the set of services the alliances around the country are providing or have tried, so that other alliances can learn from these experiences;
- share problems and solutions with one another;
- appraise the applicability of the cooperative form in helping to solve the problems of rural health care in California.

This report begins with an overview of the problems of rural health care delivery and the role of cooperatives, networks, and consortia in dealing with these problems. The next section presents the research questions and describes the design of the empirical study. The bulk of the report are the findings, Section 4. A last section contains conclusions and recommendations.

II. OVERVIEW OF THE PROBLEMS OF RURAL HEALTH CARE DELIVERY AND RURAL HOSPITALS IN THE US³

A. The Problems

The problems of rural health care delivery are

summarized here into four topic areas: economic barriers to access; physical barriers to access; operating problems of small hospitals; the problems of country physicians; shortages of allied health professionals.

Economic barriers to access often outweigh physical barriers. The problem of uninsured rural residents is complicated by the substantial population of migrant farm workers and a population with risk characteristics that, while just as substantial as the urban uninsured, are different from those of the urban uninsured. Most farm families have access to some form of health insurance, but because of the adverse health characteristics of this group and high administrative costs, this insurance is often more expensive than that available to proprietors and employees of small urban businesses. Farm workers without property have even fewer health insurance options. In 1987, one in six rural families lived below the poverty line. As a result, 18.2 percent of the rural population had no health insurance coverage in 1986, as compared with 14.5 percent of the urban population. In addition, only 35.5 percent of rural persons below the poverty line in 1987 were covered by Medicaid, as compared with 44.4 percent in urban areas (U.S. Congress, 1990, p 7).

Physical access remains a serious problem, particularly in western mountainous regions where the population density is six or fewer persons per square mile.4 The national average rural population density is eighteen persons per square mile. Nationally, 13.5 percent of rural hospitals closed during the 1980s just under 39 hospitals per year (American Hospital Association, 1991). Most rural hospitals are public or nonprofit, community or district based institutions. Although 23 percent of the U.S. population, in 1988, lived in nonmetropolitan counties, many of the hospitals in these counties are too small to survive as classic, acute care facilities. Thus, most have beds designated to swing from acute to skilled nursing beds. Chronic disease rates are relatively high in rural areas, 14 percent of the population vs. 12 percent in urban areas (U. S. Congress, 1990, p 6). So, between one-fourth and one-half of rural hospitals now have a skilled nursing facility on-site. To accommodate older residents who do not wish to flee to warm climates, independent living units are frequently found as a part of these community medical complexes.

Rural hospitals, urban hospitals, and government are seeking innovative solutions to maintain an acceptable level of care in these isolated and hard-to-reach areas. Rural hospitals have joined with urban specialists and hospitals to offer clinics staffed by urban specialists who visit on a prearranged schedule. As a result, the shift in rural hospitals to more ambulatory or short-stay surgery has been even more dramatic than in urban hospitals, now amounting to half of all surgical procedures.

The average rural hospital has 83 beds, between 65 and 70 percent have fewer than 100 beds. Eight percent have fewer than 25 beds. In this research, we visited some hospitals with eight beds and an average occupancy of about four. Maintaining surgery skills, laboratories, and emergency medical services in facilities with such low volumes is just about impossible. Certainly, they cannot be maintained at breakeven prices. Specialization of labor becomes just about unachievable. Consequently, a rural hospital can easily earn a poor reputation for quality. Residents in the service area are then inclined to bypass the local hospital and drive to the city for care. Innovative methods of care delivery are required to deal with these problems.

On the government side, the federal government in 1991 awarded about ten million dollars in grants to seven states, including California, to establish partner hospitals in adjoining areas. The larger partner is called an "essential access community hospital" and the smaller a "primary care hospital." The research described in this report does not investigate the success of hospitals in this brand new program.

Hospitals obviously cannot function if there are no physicians in the community. Most physicians prefer to practice in urban areas. This problem persists despite programs by government, some medical schools, and rural communities to encourage rural practice. In metropolitan areas there were, in 1988, 216 patient-care MDs per 100,000 residents. In nonmetropolitan areas the average was 91; in counties with fewer than 50,000 persons there were just 60 patient care physicians per 100,000 persons (U.S. Congress, 1990, p. 18). Selling the lifestyle advantages of rural life to medical students who have grown-up in urban environments is an uphill battle. Only 1.5 percent of medical students graduating in 1990 expressed a preference for practicing in a small town or rural area. Even when the local hospital obtains emergency room coverage from an outside emergency medicine firm, country doctors have long working hours, have more trouble getting back-up coverage, often must work with outdated equipment, and are isolated from colleagues.5

Medical Doctors may be complemented in rural practice by Osteopathic Physicians. These DOs appear

to perform very satisfactorily and carry big patient loads. The success of the other midlevel practitioners — Nurse Practitioners (NPs), Physician Assistants (PAs), and Certified Nurse Midwives (CNMs) — is mixed. NPs and PAs appear to be most successful when they can staff a one-person clinic in an isolated hamlet and state laws permit some distance between the physician and the midlevel practitioner. Of course, these practitioners, like the physicians, often do not like the isolation and move to an urban practice.

Another common physician substitute in rural communities is the Certified Registered Nurse Anesthetist. Our discussions found considerable satisfaction with nurse anesthetists substituting for physician anesthetists. Of course, in this day of litigious, defensive medicine, the hospital and the physician are very careful not to perform procedures that could lead to malpractice liabilities. The greatest area of concern in rural communities today is childbirth. Even family practitioners who are trained and competent in normal delivery are likely to send an expectant mother to an urban center if there is any hint of an irregularity. Mothers often seem willing to drive great distances to reach a medical community with an OB/GYN specialist and some level of care for women with difficult pregnancies and deliveries.

But physicians aren't the only profession of care providers that are in short supply in rural communities. (Can you imagine how far a parent has to drive kids to the orthodontist?) Nurses and physical therapists are in very short supply nationally. But other health professionals such as laboratory technicians, technologists, respiratory and occupational therapists, dentists, dental hygienists, mental health workers, radiologic technologists, and medical records specialists appear to be the professions in greatest shortage in rural communities. The most successful retention rates always are for professionals who prefer the lifestyle of rural life and have overcome the problems of professional isolation.

In summary, rural residents need access to technical, specialized services, including emergency services. Often, the demand for some procedures and services is so low that it is not possible to provide the service outside an urban medical center. Other services can be provided but at capital, fixed, and variable hospital costs that are well in excess of reimbursement rates. Still other services could be provided in rural settings if physicians and allied health professionals had the support services required for them to perform in a professionally satisfying manner.

B. The Role For Cooperatives

Note the similarity between the rural hospital and the family farm. There may be three or four doctors as compared to one farm family; the rural hospital is a collective good for those doctors and the community while the farm is the property of the family. But in many other respects they are very similar. The cooperative has proven to be a useful institution for support of the family farm production unit. The characteristics of these production units are: small size, independent production units; a desire to remain independent; a significant investment in fixed assets committed to specialized production; products or services that are perishable. Notice that rural hospitals have exactly these same characteristics: smaller than optimum scale of production unit; the need to stay small and independent as a community service; committed fixed assets; production of a perishable service.

Thus, it would appear that the cooperative form may be ideally suited for alliances of rural health care providers. Indeed, the largest consortia of urban hospitals in the country, Voluntary Hospitals of America, is a true cooperative that is now forming regional cooperatives within its membership. However, the complexity of the stakeholders within the health services delivery system may make for governance problems far more complex than those generally found in cooperatives. One stakeholder group is the community, i.e., potential customers and leaders of the potential customers. This constituency must be considered separately from customers. A second important stakeholder group is physicians. They practice in the community hospital as private contractors with an organizational structure, reimbursement structure, and professional structure distinct from that of the hospital. A third unique stakeholder group is the third party payers who are, in fact, often gatekeeper intermediaries between providers and ultimate consumers of health care services. A fourth unique stakeholder group for the rural hospital is the urban tertiary hospitals that receive and treat patients requiring services the rural hospital cannot provide. This stakeholder looks to the rural hospital as a source of customers. A fifth unique stakeholder group is the owners. The owners of a rural hospital, as a nonprofit corporation, may be a self-perpetuating community membership, an elected district or county governing body, a religious order, or an urban leaseholder-manager. These five stakeholder groups are in addition to the more conventional stakeholders of suppliers, employees, and managers that must be considered in organizational governance.

The point is that rural health care providers may capture some economies by forming consortia and alliances with other stakeholder organizations. While industry characteristics suggest that a cooperative of rural providers would make a natural organization form for such alliances, there are other characteristics of the industry that cause that conclusion to be not quite so obvious. This study was designed to compare and evaluate alternative forms of rural health alliances.

C. Alternative Structures

Short of going out of business and relying on surface or air ambulance service, there certainly are other structures for cooperation being employed in attempts to keep rural hospitals viable and to maintain the delivery of health care to rural communities.⁶

One alternative to a cooperative is a consortium that behaves much like a cooperative but is not organized as one. Such organizations usually resulted from a successful grant application to a foundation and legally are 501(c)(3) tax-exempt organizations. Because of the grant application beginnings, they have a carefully selected membership with similar problems. They engage in specific ventures that offer services to members that these members would otherwise not be able to provide for themselves. Members pay both annual dues and fees for services provided by the alliance. Such strategic alliances may be very cooplike. Indeed, one task of this research is to determine just how they differ from cooperatives and if their legal or governance structure have any advantages or disadvantages vis-a-vis the cooperative form.

Another kind of organization might be characterized as a *trade association*. This is merely a consortium of provider organizations who get together to: share information; provide some training in a conference format; lobby. Such organizations collect dues, but not an ownership investment, from their members. They own no committed fixed assets.

A third form of alternative organization is a network of rural hospitals organized and supported by a major regional tertiary medical center. We will call this kind of organization a *tied regional network*. In this structure the tertiary facility takes the lead and often pays the general operating expenses for the network. This hospital then provides services to its rural network on a fee basis. Thus, in some ways it may have the

potential to provide all the services of coops and consortia, but its primary objective is to support the tertiary hospital, not the rural community.

A fourth form of alternative structure is an extension of the tied regional network. It is for the tertiary medical center simply to buy or lease the rural hospitals. From the tertiary hospitals point of view, this is a hybrid horizontal and vertical integration strategy. Horizontal in the sense of buying competing acute hospitals; vertical in the sense that the rural hospitals are feeding patients to a higher level of care when required.

III. RESEARCH QUESTIONS AND DESIGN

This study compared three types of organizational forms: cooperatives; other consortia; tied regional networks. Trade associations were not included. The intenthere was to define collaborative alliances as broadly as possible, but at the same time to excludes forms with very different missions from those described here. For each of these three organizational forms, the following research questions were addressed specifically.

- 1. What activities and functions do rural hospital alliances perform that have been helpful for member survival by increasing scale economies, scope, efficiency, and quality?
- 2. Do cooperatives have the same access to and cost of capital as contrasted to other structures of alliances of health care providers?
- 3. Do cooperatives have management skills, human resources development capabilities, and incentive systems equivalent to other structures of alliances of health care providers?
- 4. What appear to be the criteria for success of such alliances?
- 5. What legal structure offers the most advantages to rural health alliances?
- 6. Does the cooperative governance model, e.g., one-member, one-vote, provide the same effectiveness and efficiency as other governance structures?
- 7. Are the Board members of cooperatives of health care providers more or less effective in strategy formulation than would be true for the comparative structures? Are there useful types of services that never are considered because of the limited focus of directors?
- 8. Do some forms of alliance do a better job of

- supporting service in and with the community than do others?
- 9. Is conflict resolution in this kind of cooperative inefficient vis-a-vis hierarchies because of the use of democratic decision making and a strong desire for consensus?

A. Sample Design

Developing a sampling frame for rural health strategic alliances was not a task marked by precision. The University of Minnesota reported that in 1989 there were in the United States as many as 127 networks of rural health providers (Findings, 9, Winter 1990, p 2; Moscovice et al., 1991, p. 578). However, this larger list was not made available to us. It appears that almost half are not active or have no budget, most have no paid staff, and often fall into the trade association category. The Rural Health Cooperative Alliance in 1990 reported on 31 organizations within their membership. The American Hospital Association recognized just 16 hospital alliances in 1990; these being mainly alliances of big urban hospitals.

Based on lists from the National Rural Health Association, the National Rural Electric Cooperative Association, and many telephone calls, we were able to identify 32 consortia in the continental United States that might be of interest under the definitions of this research. This group was composed of 5 cooperatives, 11 other consortia, 10 tied networks, and 6 consortia that had been formed for the sole purpose of receiving a foundation grant, lacked other sources of revenue, and had not developed very far. Telephone interviews were conducted with these 32 organizations.

Eighteen were rejected for the following reasons:

- 6 formed to receive foundation grant with no additional revenue;
- 2 out of business;
- 4 new in 1990-91, very little activity, narrow focus;
- 6 tied systems that appeared to be redundant and less interesting than others in the sample.

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The sample was selected from the remaining fourteen alliances: four cooperatives; seven other consortia; three tied networks. Mail questionnaires were sent to these fourteen plus three of the eighteen in order to find out more detail about their operations. Two of the seven "other consortia" refused to respond. Follow-up conversations suggested low activity or a troubled organization. This reduced the potential sample for personal interview to twelve. Two of these were not interviewed because they appeared too new to provide useful experience. So, the final sample comprised three cooperatives, four other consortia, and three tied networks.8 In addition, Voluntary Hospitals of America (VHA), a cooperative discussed in more detail below, was interviewed. One alliance in the "other consortia" category was actually out of business, but was interviewed as a way to understand more of why alliances fail. So, besides this organization and VHA, the sample included three coops, three other consortia, and three tied systems. The Appendix contains a listing of all these alliances, that had a total of 155 rural hospital members.

One might question the representativeness of such a small sample. But note that the effective universe of viable alliances is also small. Depending on how one defines the universe, this sample comprises about onethird of the active, on-going alliances in the country. Sample selection was designed to study successful alliances. New organization, networks without staff, and alliances that were not prospering were excluded.9 Thus, this is not a small random sample, but a sample that is small because it purposely excludes outliers. The number of other consortia and tied networks are about equal in the universe and they are equal in the sample. Cooperatives were oversampled. Descriptive statistics for this sample are quite consistent with descriptive statistics for the Moscovice sample of the 127 consortia they telephoned (1991, p. 580).

There is another motivation for favoring small samples. A sample of three per stratum does provide variance that is not possible in case studies. By conducting only eleven interviews it was possible to study intensively each organization. In most locations, site visits lasted at least one whole day. The detail and insights garnered from this level of exposure is an order of magnitude greater than is possible with structured questionnaires.

It may be helpful to say a bit more about the interview process. The telephone interview screened out inappropriate organizations. The mail question-naire collected statistical and financial information so that the site interviews would be more productive and not bog down in secondary data collection. The topics covered in the mail questionnaire were capitalization and funding sources, legal and governance structure, staff organization, financial performance, activities

and functions performed for members, and description of member organizations.

On-site interviews were conducted with the alliance director in an unstructured manner but following an interview guide. The topics included: history of the organization; its environment; review and expansion on the topics covered in the mail questionnaire of services and activities; the research question listed above. Next, at least two alliance members were interviewed individually to obtain their perspectives on the alliance. Usually, the investigator visited the rural hospital and interviewed the administrator. At a few sites, the administrators came to a central location for these meetings. In three cases, the investigator attended a board meeting of the alliance; in one case, an annual meeting was attended. In a few communities, a physician practicing at a hospital belonging to the alliance was interviewed in order to get the physician perspective on the functioning of the alliance. This procedure permitted the investigator to gain far more depth of insight than would have been possible from a less intensive data collection process.

IV. FINDINGS

The findings are reported as a mixture of quantitative statistics and qualitative descriptions. Where there are differences among the three strata, this fact is also reported.

A. Mission and Goals

There are relatively few significant differences in the mission and goal statements of these alliances. Where there are significant differences, they stem more from regional differences than from differences in philosophy.

This is true even when the membership composition is different, and there are differences in the scope of membership. Only one alliance had no urban participants. Two alliances consciously included among their members providers beyond rural acute care hospitals, i.e., nonhospital affiliated clinics and long-term care facilities. In fact, only one alliance outside the tied networks used the word "hospital" rather than "health" in its name. The seven alliances with only hospital members would certainly include in their mission nonacute activities such as off-site clinics.

The mission statements of the six alliances not in

tied networks all contained some form of the following elements:

- Providing, in a specified geographic region, cooperative shared support services for the survival and further development of a coordinated system of rural health care;
- · A high quality of care;
- Delivered in a cost efficient manner;
- When possible in the rural community where the hospital has its roots;
- By being a catalyst for change and innovation;
- Through collective action;
- The need for a continuity of care;
- Training, continued education, and placement in rural communities of health care providers;
- Efficient allocation of health care resources within the region.

Other thoughts that appeared explicitly in only some of the six mission statements but with which all would agree are:

- By building strong ties with rural physicians;
- · Maintaining and improving access;
- Recognizing the hospital's role in community development;
- Providing a broader base of support for programs requiring substantial participation or risk sharing.

Perhaps the only controversial difference among these six (or the nine) is the role of advocacy. Four of the six specifically mentioned political advocacy as a part of their mission. The other two and the three tied networks saw advocacy as often a lose-lose situation for the alliance and the organizing medical center and therefore were neutral or selective in engaging in advocacy activities for the rural providers.

While only three of the nontied mission statements mentioned integration of the urban tertiary centers into the network, all the alliances clearly recognize that the tertiary center is a part of the continuity of care referred to above. The only other respect in which the mission statements of the *tied networks* differed is their replacement of the word "cooperative" with "help." For example:

to help health care providers in the region deliver the finest, most up-to-date care in the most economical way possible while keeping the patient near their family, in their own community, and in a familiar environment—through the provision of technical service, education, management support, shared

services, shared staff, and shared specialty clinics.

It was clear in this investigation that a network of rural hospitals tied to and supported by one or two urban medical centers is a clear, viable alternative organizational structure to an alliance of rural hospitals.

B. Size and Scope of Rural Alliances

In order for the reader to get some general understanding of these alliances, some aggregate statistics for all nine of the organizations is useful. These are shown in table 1. Since the discussion that follows concerns the differences between organizations and between types of organizations, the statistics in table 1, for the most part, are clear overaggregations. However, they do provide a way to begin to understand the compositions of the alliances.

The difference between the total number of members and the total number of rural hospital members is caused by urban hospitals associated with the affiliation and by two consortia that admit nonhospital members. Nevada Rural has 30 physician practices and clinics in its membership; Northern Lakes Minnesota has 51 physician practices, clinics, community health centers and nursing homes in its membership. The merits of expanding the scope of an affiliation from hospitals to all types of rural providers are discussed in detail below.

The number of rural hospital members in an affiliation is slightly skewed upward because Northern Lakes Minnesota and Sioux Valley have considerably larger memberships than the others. While the mean number of rural hospitals in 17, the median is 12. The size distribution of these rural hospitals is pretty much the same across groups and similar to the national pattern. Rural Wisconsin has a greater proportion of 50-90 bed hospitals than the others; otherwise there are no important differences among groups.

It is important to observe that every affiliation has involved urban tertiary hospitals in some way. Nevada Rural is reported in the table as having zero urban hospitals involved; that is not quite the case. Conflicts between urban and rural hospitals in Nevada have grown to the point that it was not prudent for Nevada Rural Health Project to include specific urban hospitals as alliance members. Instead, the Project recently helped the State Legislature to mandate that the urban hospitals provide a "technical support" program for the rural

hospitals. The Project is to play a leading role in organizing and governing this technical support. This report will not develop the pros and cons of such mandated transfer payments. Suffice it to say that: (a) the tertiary medical centers must be a part of an integrated delivery system for rural areas, and (b) Nevada is the only state we know of where a legislative mandate has been required to begin to achieve some form of integration of the system.

The data on number of employees and total budgets are flawed because of differences in the way the alliances do business and keep their books. The principal distinction is whether the affiliation: "makes" the services it provides to members with its own staff, "buys" the products and services and resells them to members, or only "brokers" services that are sold directly to members so that only the commission is reported on the books of the alliance. Most alliances have two of these three kinds of revenue, Rural Wisconsin is the outlier in the upper tail of the distributions of employees and budgets in table 1 because they run the revenues for all services, both made and bought, through their books and resell them to their members. Some other affiliations are careful to run almost no services through their books and only record brokerage fees or overrides as revenues. Another accounting difference is that since the cooperatives cannot receive foundation grants directly, they must use an available 501(c)(3) foundation for this purpose. Sometimes the grant money shows on the cooperative's books as a subcontract; sometimes it never gets into the cooperative's books.

It is more interesting to analyze the revenue mix of the various types of alliances after correcting for bookkeeping differences. This analysis is shown in table 2. In terms of total activities, the three types are surprisingly similar in size. Rural Wisconsin is involved in far more activities than any of the other eight alliances. Without it, the tied systems would be larger than the other two alliance types.

Because of the accounting point concerning the receipt of grants, the grant income of the cooperatives is probably somewhat understated. It is interesting to observe that the tied systems have not been hesitant to apply for and have been successful in receiving foundation grants. Because of probably a somewhat richer human resource base in terms of grant writing capability, the tied networks have been at least as effective on this dimension as have the other types of alliances.

One reason the tied networks service fee percentage is so large (43 %) is because they earn management

fees from some of their hospitals. The other alliances have generally not offered contract management. Further, it appears that the more innovative and successful tied networks (one criterion for inclusion in this study) actually provided a greater variety of services to their members than did the other types of affiliations. These fees more than offset the absence of dues income.

The consortia were set up to apply for, receive, and administer grants from government and foundations. It is not surprising therefore that 72 percent of their revenue comes from grant sources.

Both the cooperatives and consortia expressed a desire to reduce annual dues. We agree on this point. There is a strong need to generate enough fees from services rendered to cover overheads. Then, grants would not be required to keep the office staff employed and the membership would not be asked for dues. Most of the cooperatives had a fixed annual dues amount for full, rural members; the consortia were more likely to have a variable dues schedule based on size. Consortia annual dues were quite modest, averaging about \$1,500. The cooperative, on the other hand, had dues in the range from \$7,400 to \$30,000 per year. This was in addition to the initial investment in shares at the time of joining: \$10,000 in two cases; a nominal amount in the third.

While all felt pressure to keep dues in check, they seemed to feel more pressure to pass along all savings from services to member hospital. Fees averaged about one percent of the value of the service provided, and many, perhaps most, services were provided with no override. There was considerable variance among the three cooperatives on this practice. Rural Wisconsin billed over \$3 million is services to its members and charged \$7,400 for dues; Vermont Rural billed only \$12,000 and charged \$30,000 for dues.¹⁰

TABLE 1

Descriptive Statistics of the Nine Alliances

Characteristic	<u>Mean</u>	Range
Total Members	27.8	6-84
No. of Rural Hospital Members	17.1	4-50
Under 50 acute beds	13.5	1-44
50 - 99 acute beds	3.3	1-10
100 - 122 acute beds	0.3	0-1
Urban hospital affiliates	1.6	0-3
Number of Employees	8.7	1.5-46
Total Budget (\$000)	988	116-3,354

It is recommended that brokerage fees be increased and dues be decreased. To avoid cross-subsidization, both fees and patronage dividends (or discounts) should be in proportion to a member's use of the services of the alliance. This is a necessary condition for a successful cooperative. Some of the cooperatives have not faced up to this principle. Within the consortia, heavy reliance on grants had meant that too many staff have been paid from "soft money." The consortia need to begin to act like cooperatives even if they do not change their corporate form.

A last point that needs to be covered in this overview is to characterize these alliances in the lexicon of the cooperative. The investigator's interests have been in marketing cooperatives, defined as those in which members are suppliers to the society, and the primary function of the society is marketing of the inputs supplied. Another type of cooperative for the present purposes is the supply cooperative, defined as a society that provides members with management services, brokered group purchasing of services and supplies, and purchased supplies so as to get advantages of large order sizes that would not be available to members purchasing individually.

To some extent, these hospital cooperatives could be a mixture of both types. The cooperative could operate as a marketing cooperative if, for example, it offered to the public a health plan under the coop's brand name. MRI service might be marketed in the same way. However, one goal of these affiliations is to protect the brand integrity of the member community hospitals. Therefore, a mobile MRI service would be marketed in a local community as a service of the local hospital. The coop merely supplies the service. Specialty clinics clearly promote the reputations of the specialists coming from the city, but the clinic is physically located on the hospital campus and presented as a local hospital service. Here too, the alliance is a supplier. The alliance may supply marketing ser-

TABLE 2

Distribution of Revenue Sources by Type of Alliance

	•	,		
Type	Fees for Services	Dues	Grants	Total
Cooperatives	9.2	65.7	25.1	100.0
Consortia	10.2	17.6	72.2	100.0
Tied Networl	cs 42.7	0	57.3	100.0
Total	18.3	34.3	47.4	100.0

(Percent)

vices to the local hospital but again in the role of a supplier of professional services. Thus, these cooperatives function more as supply coops than as marketing coops. We turn now to a description of the scope of products and services offered to members.

C. Activities and Functions

Table 3 summarizes the types of services offered by the affiliations.11 This table reveals many differences among the three types that merit discussion. In this discussion, the reader should not conclude that each affiliation should be offering all or even the same menu of services. Our field investigation showed that there are significant and important regional differences that make the needs of each region somewhat unique. These differences are created largely by factors relating to topography, population density, and industry structure. Obviously, there are correlations among these three factors. On the other hand, this impressive and long list of 41 services (by this classification schema) does dramatically demonstrate that cooperation among rural providers has proven to be a method of increasing the economic viability of rural hospitals.viability of rural hospitals.

In total, it appears that tied networks are offering more services to their members than are the coops or the consortia. ¹² The major areas of difference are consulting services, shared services, and shared personnel. Each of these will be discussed as will general support services, advocacy, joint contracting, insurance programs, and financing programs.

1 Support Programs

While joint purchasing in volume and specialization of services in one location are perhaps the most common reasons for cooperation across all industry, modern strategic alliances are most often consummated in order to bring together unique assets that neither partner possesses nor is likely to obtain easily. While these assets may be cash or patents, say by a biotechnology firm forming an alliance with a major drug firm, they are even more likely to be human assets in the form of specialized skills, information, and routines (Nelson and Winter, 1982; Sen, 1990).

Fourteen of the 41 services offered by the rural hospital alliances were in the area of skill and information support, education, and training. These services all involve specialized human skills. Alliance executives

and hospital administrators alike reported that support and education services were the most valued benefit of the affiliation. With geographic isolation and little opportunity for specialization of skills, the professionals, both managers and care givers, require a support system that will help them deal with new problems and help them keep abreast of changes in their field.

The councils (roundtables or task forces) merit special mention. These groups are composed of the managers of a particular function, say human resources, from each member hospital.¹³ They are authorized and enabled by the board of the alliance. They are staffed by the alliance. Their mission is not only to share information but also to propose new programs for the alliance to undertake. Thus, they become a source of new program generation. In addition, they help to create social relationships, so members can contact their peers privately when an occasion for individual support arises.

The cooperatives had the greatest number of such councils; the tied networks the least. The latter had the administrators meet together but encouraged other managers to contact their counterpart at the tertiary hospital for help and support. This mechanism could more easily lead to billable consulting time than having the managers come together for a meeting. The tied networks did offer formal training sessions somewhat more frequently than did the other types of alliances. Sometimes there was a charge for these sessions, but revenue was not a primary objective of the tertiary hospitals involved.

While this point will be discussed again in the section on governance, it should be emphasized that the most important of these councils was the council of hospital CEOs. Indeed, in three of the six nontied alliances, the board of the directors of the alliance was composed of the CEOs of the member hospitals. Thus, the board of directors was the council of administrators. Without exception, the administrators found these board meetings to be of great value. Among the three boards with only administrators, all expressed strong interest in keeping the board as a closed "administrators' club."

The only concern about the councils that was expressed and deserves sharing was a tendency of some councils to run a bit too far and too fast. Some councils had taken their empowerment seriously, developed a new program, and got ready for implementation only to have the alliance veto it. This is the reason that councils need to have an alliance staff member as secretary. If a

TABLE 3. SUMMARY OF SERVICES OFFERED BY TYPE OF AFFILIATION

(Reported are the number of affiliations within each set of three offering the service, unless otherwise noted.)

SERVICE	COOPS	CONSORTIA	TIED NETWORKS	TOTAL
Management Support				
No. of councils ^a	6.7(1-12)	3.7(1-7)	1.3(1-2)	3.8
Quality management	2	2	3	7
Hospital management	0	1	3	4
Performance comparison	1	1	2	4
Consulting				
Marketing, planning	1	3	3	7
Legal	1	1	3	5
Human resources	2	0	3	5
Grant writing	1	1	3	5
Computer systems	0	2	2	4
Technical Support	-	_	_	•
Physical plant ^b	1	0	3	4
Medical practice mgt.	Ô	2	Õ	2
Education, training	v	-	v	-
Business staff	2	3	3	8
Nursing & allied	2	2	3	7
Board members	2	2	2	6
Shared Services	2	2	2	v
Physician recruitment	3	3	3	9
Allied prof. recruit.	1	1	1	3
Supplies & services ^c	2	1	3	6
Biomedical equip. svc.	2	1	3	
		2	2	6 5
Publishing, printing	1			
Library	0	i	3	4
Mobile CAT, MRI	2	1	1	4
Emergency med. MDs	1	0	2	3
Telecommunications	1	0	1	2
Equipment leasing	1	1	0	2
Home health agency	0	0	1	1
Shared personnel				
Allied prof.d	3	3	3	9
Nurses	2	1	2	5
Specialty clinics ^e	0	3	2	5
Locum tenens MDs	0	3	2	5
Administrators ^r	2	1	2	5
Advocacy	2	3	0	5
Joint Contracting				
IPA, PPO	1	1	1	3
НМО	1	0	0	1
Joint Insurance Programs				
Employee life, health 3	1	1	5	
Workers' comp.	1	1	0	2
Employee retirement	0	1	0	1
Liability, malpractice 0	1	0	1	
Casualty	0	1	0	1
Financing Programs	V	•	v	-
Banking, treasury	1	1	0	2
Bond financing	i	2	2	5
Hospital leasing ^g	0	1	2	3
Hospital leasing	_			
TOTAL	47	56	71	174

*Unlike the other statistics in the table, the mean numbers of such councils and ranges are reported. All affiliations had some version of these councils — even if it was just the administrators. These are groups of functional managers, e.g., directors of nursing, CFOs, CEOs, HRD directors, that meet on a regular basis to exchange information and to plan joint programs. They are called councils, roundtables, task forces, or similar names in the various affiliations. Most are monitored by a staff person from the affiliation who keeps minutes and makes sure that the affiliation executive knows what each group is doing.

blncludes plant maintenance, pest control, housekeeping, safety, dietary, materials management.

^{&#}x27;Includes shared purchasing of reference laboratory services.

⁴Allied health professionals include physical therapists, occupational therapists, rehabilitation therapists, respiratory therapy therapy therapists, speech therapists, pharmacy, audiologists, lab techs, radiology techs. Most affiliations shared only 1 or 2 of these professionals; Rural Wisconsin shared 5 types.

The hospital coops may work with their tertiary members in providing specialty clinics to member hospitals, but they are not a party to the negotiations. The consortia with physician members also just facilitated mutual support, but their role was a more active one, and therefore these activities are included in the count. The affiliations providing specialty clinics offered specialists on site in an average of 6 specialties. The maximum number was 13. The Mercy Des Moines network serviced a total of 110 clinics in 35 different locations.

Includes acting management as well as sharing of top managers e.g., CEO, CFO, Director of Nursing.

^{*}Leasing entails total financial and managerial responsibility. Services provided to leased hospitals are not included in the counts elsewhere in this table.

council appears to be developing a program that will not be acceptable to the alliance, that information can be fed back in time to change direction before the council has become strongly committed to it.

2 Shared Consulting

As shown in table 3 and as suggested above, the tied networks offer about double the number of consulting services as do the other types of affiliations. This is one of the areas where the tied networks differ significantly from the other types. The reason for this difference is clear. The tied networks have the skilled professionals on their staffs anyway. They simply gain scale economies by selling the services of these professionals to the rural hospitals. It is a win-win situation. For the cooperatives or the consortia to offer such services they would have to have demand volume sufficient to justify having a specialist on staff.

However, there is another arrangement used by some non-tied alliances. That is, to act as a broker and purchase consulting services at a discount for their members. One source of such consulting services could be the tertiary hospital members of the alliance. For all such services, it is recommended that the alliance receive from the vendor, be it outside consultant or tertiary member, a commission for performing the broker function.

3 Shared Services

Shared services is another area where the tied networks offer more to their members than the other two types of affiliations. ¹⁴ Again, the reason is that the tertiary hospitals already either make or buy these services while the alliances must act as a broker to procure them at a reasonable cost for the combined membership. If some member hospitals do not want to participate in a particular program, the coop or consortium often is left with too little volume to make an attractive group purchase. The tied networks do not have this problem. Hospitals can pick and choose as they wish without injury to the group.

Surprisingly, the purchasing of consumable supplies is not a major service of the nontied alliances. (The tied networks offer supply services through their purchasing group, such as VHA.) Brokered services and capital equipment procurement were more common. The reason is that group purchasing of supplies in the hospital industry has progressed to a point that

virtually every hospital, regardless of size, has one or more sources of supply at favorable discounts. Three of the nontied alliances have helped to arrange adding most of their members into a particular purchasing group. In the other three, the hospitals had established relationships and did not need purchasing service from the alliance. The two largest purchasing groups, AmeriNet and MedEcon Services, have not been eager to work with the rural alliances.

4 Shared Personnel

The final set of activities where the level of activity is a function of the type of affiliation is in the area of shared personnel. Here the cooperatives lag the other two forms of alliance. This difference is entirely in the area of physician services: specialty clinics and locum tenens service.¹⁵ It results because the coops are all hospital coops, while two of the consortia have physician members and the third has been aggressive in getting the tertiary hospitals to staff clinics in rural areas. A major objective (probably the major objective) of the tied networks is to capture referrals. Therefore, they are eager to encourage their specialists to staff specialist clinics in the rural communities.¹⁶

This coop difference may be somewhat illusory due to the historic nature of hospitals dealing with their medical staff in an arm's length fashion. If the difference is real, and we believe it is, then the coops should become more aggressive in this area. They all, philosophically, believe in an integrated delivery system, many operate nursing homes, some manage independent living facilities and home health agencies. Closer coordination with physicians is a natural extension of integration and an easy extension to make. The question of how to bring physicians into the coop is discussed later in this report.

5 Advocacy

While three consortia and two cooperatives actively engage in advocacy activities, the variance among memberships and among the affiliations is greater than reflected in that statistic. It is relatively clear why the tertiary hospitals that lead tied networks want to avoid urban vs. rural controversy. It is less clear what the extent of involvement of the cooperatives and the consortia should be. There are also regional differences that may cause the alliances to take different positions on offering advocacy service.

Two of the three consortia have registered lobbyists at their head. Northern Lakes Minnesota is actually incorporated as a 501(c)(4) civic advocacy group with a 501(c)(3) subsidiary. In Nevada, Texas, and particularly in the North Central states, rural hospital advocacy groups have been instrumental in establishing loan guarantee programs and improving systems of rural health clinics. Our analysis suggests the following principles may be useful in helping an affiliation to decide just what role it should play in advocacy.

Hospitals, like corporations, should and do lobby their various governments on matters of concern to them. Their cooperatives are a natural extension of the hospital and should engage in activities that are better done jointly than individually. Advocacy likely is just such an activity. However, the cooperative must decide that it is the best vehicle for representing it members. If the members have different interests in a particular controversy, the cooperative is not an appropriate advocacy vehicle. If the members or the cooperative itself belong to a trade association that is skilled and knowledgeable on a particular topic, then that trade association may be superior to the cooperative as an advocacy vehicle for the membership. In sum, the cooperative should engage in advocacy for issues on which the membership is united and in situations where a trade association is not better prepared to do the job. It should not take positions on every issue. Advocacy may be a part of the mission, but it certainly is not the primary function of the cooperative alliance.

Some realism can be brought to these principles by recognizing that there is urban-rural controversy in the hospital industry and recognizing that there are state hospital associations in the lobbying business at the state and national levels. In states where the rural hospitals have a powerful position in the state hospital association (just about all the states in our sample), the state association may be able to do the job. One role of the alliance may be to support individual members who are active in the state association.

But just because a majority of hospitals in a state are rural does not give the rural hospitals a majority of influence in a state hospital association. Such would be the case in states with large urban concentrations such as California and Nevada. If the state hospital association is trying to balance its representation of both urban and rural hospitals, it is guaranteed to seek a lowest common denominator. Where the state association is divided or the rural hospitals do not have a majority, then the alliance may have to play a more active role.

In other words, a strong, vocal advocacy is needed to represent the position of the rural hospitals and to help preserve the values and quality of rural life. If no other organization in the state is effectively doing so, then the rural hospital alliance may have to play this role.

When playing a supporting role, the alliance may find the Vermont Rural Health Consortium position helpful (Advocacy Committee recommendation, September 4, 1991):

- The Consortium should develop positions on key issues . . . that are strictly rural.
- The Consortium should focus on self-awareness and education (of) . . . our hospital board members, medical staff, and employees, as well as elected officials and other healthcare organizations.
- The Consortium should support hospital boards in lobbying.

6 Joint Contracting

The penetration of contracting between third party payers and provider hospitals and physicians varies considerably among geographic regions. More importantly, the opportunity for such contracting is heavily dependent on the nature of the economic base in a particular geographic region. In the north central states, most small towns have one or two small manufacturing facilities; this is not so in the far west. The parent companies of these small manufacturers or their health insurance carriers often are interested in preferred provider contracting. In some agricultural regions, farmers, as a group, have prepaid managed-care health plans available to them. In either case, the administration costs of small plans is high and there are some adverse selection problems associated with rural populations. Thus, the interest in managed care coverage by insurers and consumers is not great. As a result, the interest in contracting with rural hospitals and physicians is not great. Consequently, the coops and consortia, while not opposed to developing such programs, have had little opportunity to do so.

The one consortium and one tied network that have been active in this area see affiliated rural primary physician Independent Practice Associations (IPA) as a natural extension of their specialist IPA. If they are to be able to help their affiliated members keep patients in their communities, then these community physicians and hospitals have to be an approved provider of the health plan covering the patient. But even in this case,

not every member of the network is a candidate for joint contracting.

Note that any likely scenario for reform of the health care financing system in this country is going to shift risk to providers, and providers will form risk pools to contract with one or more fiscal intermediaries. Thus, it is likely that all rural providers will have to enter into joint contracting organizations of some sort in the not too distant future.

Rural Wisconsin's development of HMO of Wisconsin was such a defensive move and provides another example of regional differences. While Southern Wisconsin is covered with small dairy farms, it also has a substantial manufacturing base and the state capital at Madison. In 1983, the state mandated that state employees have an HMO option. Without forming one themselves, the rural hospitals would have lost a substantial portions of their potential patient base to HMOs contracting with Madison hospitals. The coop started HMO of Wisconsin that contracts with coop member hospitals. It has now been spun off as a viable, separate organization.

7 Insurance Programs

Hospitals, be they urban or rural, are among the largest employers in the community. In rural communities they are almost always among the top three. Employers today are concerned about controlling costs of their employee benefit programs. Therefore, it is not surprising that the alliances have placed a high priority on the development of employee benefit programs. All the cooperatives have combined their health, accident, and life insurance programs for employees. Montana had a particularly unattractive workers' compensation program, so that Montana Health Network developed their own. It has been their most successful program and has now been spun off as a separate organization.

Indeed, it is surprising that the alliances have not done more in this area. One reason is that disturbing existing pension and benefit plans, particularly in hospitals owned and managed by county government, is difficult and almost always increases costs rather than reducing them. More will be said about county hospitals later. Another reason for not moving into this area is that insurance expertise and capital for reserves are required. The alliances may feel they could not easily acquire these assets.

In sharp contrast, the success of Baptist of Oklahoma Alliance demonstrates just how much can be

done with insurance programs. This consortium decided to develop the insurance business. They offer all the types of insurance shown in table 3. The insurance division is entirely self-funded and is the chief source of income for the alliance. In spite of its profitability, it is able to offer lower rates on all forms of insurance than the hospitals could obtain elsewhere. Its malpractice insurance premium (Remember, it covers only rural physicians.) is less than that of the state hospital association.

8 Financing Programs

Because cooperatives tend to focus on the protection of property rights of stakeholders who contribute inputs in forms besides capital, cooperatives have always been suspect in the eyes of the suppliers of capital. These themes of balancing the rights of stakeholders and access to capital reappear throughout this report. This theme is heard for the first time in this section. Before beginning it, however, it is useful to conclude our elaboration of the statistics reported in table 3. Hospitals under contract management or under lease by a management company are discussed later in this report.

Even without a management contract or lease, the cooperative could provide some degree of centralized banking, payroll, and treasury services for its members. Community hospitals usually want to do some business with the local bank in town (another cornerstone of the community). None the less, some alliances have been able to offer programs for cash management that have proved popular and successful. It is access to bond or other capital financing that is a vital program for rural alliances. We turn to that subject now.

The most common symptoms of trouble that rural hospital boards encounter are no doctor in town and no money to buy the equipment and facilities that the doctors in town need if they are going to stay. Thus, money for capital improvement is a prerequisite for keeping the physicians. Local hospital boards therefore most frequently define their crisis problem as a need for capital.

In many areas, tertiary hospitals make proposals to the board representing themselves as having deep pockets and access to physicians. They promise to "try to save the hospital." The local board interprets this as a promise of capital improvements. The tertiary hospital may have in mind keeping a clinic with a few beds and a nursing home in the community and transporting acute patients to their hospital in the city.¹⁷ This is the process through which communities lose control of their hospital by sale or lease and then sometimes lose their hospital altogether. Another common scenario is for the urban hospital to realize it can't do the job of saving the hospital and it also doesn't see any payoff to capital investment. This results in termination of the lease; the local board is back where it was five years or so earlier.

It is our conclusion that these rural hospital boards are looking at the wrong symptoms to begin with. The primary problem is the high cost of operation and the low level of quality provided. In addition, the mix of services being offered is probably not optimal. In short, the local board should fix the management of the hospital first and only then decide where capital infusions are required. They should look to affiliation with a cooperative or tied network for management strength, scale economies and scope economies as the first order of business.

The cooperatives and consortia are probably more credible when making this point than are the tied networks, and they should be making it to boards whenever the opportunity arises. ¹⁸ However, they then need to demonstrate that they have access to capital financing. Some alliances have made impressive progress in this regard. We describe two of these now.

In 1991, two alliances, Rural Wisconsin and Nevada Rural, each started loan programs that are based on an innovative idea that has been discussed among not-for-profit organizations for about the last five years. 19 Under this schema, the Robert Wood Johnson Foundation loans to the alliance \$0.5 million on the condition that the state makes a matching loan.20 The rate of interest on these loans is about 4 percent. The alliances then make loans to their member hospitals at, say, 8 percent. Unloaned balances are also earning at about that same rate. Even with a bad debt reserve of, say, 10 percent, it appears as if the capital reserve pool can pay back the loans to the foundation with the four percent spread and maintain the capital base of the original \$1.0 million. After the original loans have been repaid, the alliance capital fund can continue to function as a source of loans for members.

In most of these kinds of programs now in operation, a bank is the fiscal intermediary that actually makes the loan. Presumably, the National Cooperative Bank in Washington could help cooperatives in finding new loan funds, acting as fiscal intermediary, and minimizing administrative costs. In a recession such as

experienced since 1990, the spread above the 4 percent borrowing rate may be difficult to maintain, but if local loan committees do a careful job of screening, this program will certainly help with equipment purchases.

The second example of how affiliations can help in capital financing is based on the work of the Sioux Valley - Rapid City (SD) Affiliates Network. This network, working through the state hospital association, persuaded the state legislature to change the qualifications for funding through state municipal economic development bonds so that funds based on sales tax revenues or municipal funds could be directly transferred to "nonprofit healthcare facilities and hospitals of less than fifty beds." Given the economic importance of rural hospitals to the community, this inclusion is a reasonable one. Next, the Affiliated Network worked with the banks in the same community to buy the entire bond issue of the South Dakota Health and Education Facilities Authority issued for expansion of their member hospital. The result was that tax-exempt, unrated bonds were privately placed and underwriting costs were very small compared to most tax-exempt bond financing. Here is an example of the advocacy skills of the affiliation combined with the additional credibility of the affiliation resulting in bond financing on a much smaller scale than would have been possible using conventional state programs.

D. Summary of Scale Economies

This analysis of activities and functions shows that the alliances are offering a wide variety of services and that the tied networks offer more services than do the cooperatives or consortia. This is because the tied networks can capture economies of scale through their networks that are not available to the other two types of alliances. These economies of scale are not simply related to investments in specific fixed assets. Indeed, the areas of greatest difference — consulting, shared services, shared personnel — are all labor intensive. This is skilled, professional labor requiring specialized education, experience, and often trained teams of providers.

Tertiary hospitals require these skills on their staffs, i.e., most are made not bought. This is often true even for a service like physician recruitment that is purchased by most hospitals through an outside vendor. A large, urban hospital may find it cost effective to perform these functions internally. However, when it does so, there are many skills for which it has excess

capacity. In other words, the tertiary hospital has the skills on its staff but with insufficient volume to capture many economies of scale. Thus, selling these specialized services to rural affiliates is a win-win situation. The rural hospital obtains a source of supply for the service; the urban hospital obtains marginal revenue that goes directly to the bottom line. In addition, the tertiary hospital can afford to offer these services at very favorable rates because of the referral business generated from the rural community.

The other types of alliances have far less opportunity to capture such economies. In terms of size, the cooperatives and consortia total, on average, about 600 beds, with a minimum of about 200 beds. Thus taken together, the average rural alliance is about the size of one efficiently sized urban hospital. An urban hospital of this size would band into a system to capture even more economies of scale. In addition, the rural hospitals in an alliance are not grouped together in one location. They do not offer many, if any, specialty services. They really don't, even together, have the capability to capture the economies of scale of a single urban hospital.

In short, cooperatives are formed for the members to do together what any one member cannot do on its own. While the cooperatives and consortia in this sample have found, on average, 19 different services to offer to their members, the tied networks have found an average of 24, and generally the latter are providing a greater volume of these services than are the other alliances. Many of the 19 services offered by the coops and consortia are provided with the assistance of their tertiary hospital members.

Our conclusion is that alliances of rural hospitals cannot be effective and viable without partners. They must work with at least one urban medical center. (The range in the sample is one to three urban hospitals.) A question still to be explored in this analysis is: What is the optimal nature of the relationship between the rural hospitals and their urban partner or partners?

Before addressing that question directly, it will be helpful to analyze some other aspects of rural hospital alliances. We turn next to some specific services that speak to the question of the potential for economies of scope.

E. Hospital Management

Table 3 lists "hospital management" as a support activity and "shared administrators" as a shared per-

sonnel activity. The latter service is of two types. One is an arrangement by which one manager occupies the same position in two hospitals. Chief financial officer was the most common example. A really skilled CFO is under-utilized in a 25 bed hospital. However, the complexity of hospital financing and reimbursement requires the skills of a talented CFO, and such talent is scarce. Thus, having the alliance sponsor a CFO functioning in more than one hospital was not uncommon.

The second alliance service is providing an acting administrator to a rural hospital while the search for a permanent replacement is underway. Often the tertiary partner can be the source of such acting administrators. This service is an important one because it is not uncommon for a CEO to depart because the hospital is in trouble. If a talented replacement cannot be found immediately, the hospital can quickly get into even more serious trouble. Thus, the availability of an experienced acting administrator can be of great value to the community and to the alliance.

These services are not controversial. Of more interest is whether the alliance should provide contract management for a rural hospital member. All three of the tied networks offer this service. If fact, they probably prefer it. Of the cooperatives and consortia, only the Baptist Alliance of Oklahoma offers contract management. Theirs is a special case that will be described shortly. Why don't the cooperatives or other consortia offer contract management? Two reasons were given. First, the point of the cooperative was to leave control of the hospital in the community. If the coop managed the hospital, the community would be losing a degree of control. Second, since the boards of three of the six coops and alliances are the CEOs of the hospitals, the coop could have its own employees as board members.

We find both arguments unconvincing. First, a management contract is not a sale or lease. Control does remain with the local community board. One responsibility of the alliance is to strengthen these local boards. Thus, if the alliance is doing its job of supporting a strong local board, then having a CEO that is an alliance employee should not dilute the governance authority of the local board.²¹ Second, below we will argue that the alliance board of directors should not be composed exclusively of the hospital administrators. It is proper that a hospital managed under contract by the cooperative be represented on the coop board by the chairperson of the hospital board.

There certainly is precedent in cooperatives generally for the sharing of managers. The only difference

here is contract management of a member's operation. The analysis of this sample suggests that the non-tied alliances need to increase the scope of their activities if they are to reach their potential for helping their rural hospital members. Contract management is recommended as one activity that should be explored and not summarily dismissed.

1 The Alliance of the Baptist Healthcare Corporation of OK

The Baptist Alliance of Oklahoma is classified as a consortium in this report. It really is a special case that does not fit neatly into any of the three categories. It is, in fact, a not-for-profit hospital management company. It is not only unique in this sample, it may very well be unique in the country. While the history of this Alliance will not be summarized here, suffice it to say that it is not a model that is likely to be replicated today. The alliance owns three hospitals, leases seven, and contract manages two. All twelve hospitals are rural. The Alliance includes two tertiary urban hospital associate members with no ownership or blanket contractual ties, one in Oklahoma City and one in Tulsa.

Unlike any of the tied networks, it functions as a hospital system with no flagship hospital. It is a member of Voluntary Hospitals of America; it runs a large insurance division (described above); it has a subsidiary that manages physician practices; it does joint contracting; it has a leasing division; it has a centralized treasury function; it does centralized bond financing—all with just twelve rural hospitals.

The activity of this affiliation of interest for the present discussion is that the managers of its hospitals are all on the payroll of the affiliation just as they would be in a management company. These managers are evaluated by the local boards, but their performance and management of the hospital are the responsibility of the Alliance.

Contract management of rural hospitals is not an unusual practice. It clearly works. Objections to this practice usually take the form that the management firm does too little for the money it takes out of the community. If the cooperative of which the community hospital was a member did the management, then the community would have greater control over what happened to management fees. The cooperatives should consider offering contract management services.

2 Alliance Members Managed by Others

Clearly, such service is in demand by community

boards. The Oklahoma Alliance was the only affiliation in the sample that did not have a few members who were owned or leased by outside hospital systems or under contract management. Sometimes the rural hospitals were owned by Catholic orders that pioneered healthcare on the plains. Brim and Quorum, the two largest management companies in the country, managed many hospitals in the alliances surveyed.²² For the most part, the community boards were satisfied with their current management contract. The point here is not to cast dispersions on management companies. From the hospital administrator's point of view, he or she had two support systems upon whom to call, the management firm and the alliance (or other members of the alliance). Those we interviewed had developed strong opinions on where they went for what kinds of help. They enjoyed the availability of alternative resources.

From the alliance's point of view however, outside managers were not always a positive force. Clearly, the local hospital administrator had divided loyalties. Some proposed services of the alliance could not get sufficient interest to be implemented because the managed hospitals were obtaining the service through their management company. It encouraged cherry-picking and distortion of the mission of the alliance. Put more sharply, the management company was a source of competition for the alliance. Our recommendation is for the alliances to meet this problem in a competitive spirit; offer contract management to member boards.

3 Northern Sierra Hospital Council

The one situation uncovered where management contracting destroyed an alliance was the Northern Sierra (California) Hospital Council. This organization was formed as a 501(c)(3) alliance in 1979 to engage in the same set of activities as described above. It had twelve rural hospital members and received two grants to help in organization (Avery and Hefner, 1983). Thus, it would have been one of the earliest of this kind of rural alliance. Its members were all located in mountainous areas of Northeastern California. At its high point, this alliance of sixteen members was offering eighteen separate services (nine using the classification system in table 3). Others were under development or had been put on hold as a result of feasibility study.

What happened? As early as 1982 and lasting until 1989, thirteen of these sixteen hospitals were purchased or signed management contracts with outside

organizations. One has had four different lessor/managers since 1982. The sixteen have had an average of 2.25 lessor/managers during this period. Five urban hospitals and one management company were involved in these management arrangements. While all six organizations are still involved, the urban hospitals have been unsuccessful in making these hospitals a contributor to their operations. What they did do was make all the services of Northern Sierra Hospital Council uneconomical by reducing the number of hospitals using any one service.

Today, the Council is a division of the Hospital Council of Northern and Central California (HCNC) that runs conferences; the 501(c)(3) is inactive. Five of the sixteen hospitals are independent. These five obtain some purchasing services through HCNC and some insurance services through the Association of District Hospitals of California.

F. Summary of Scope Economies

The scope of activities of the leading rural hospital alliances is already impressive. The previous sections have attempted to highlight particular programs that were somewhat unique and have promise for other alliances. The alliances should try to maximize the number of programs they can offer. If hospital boards cannot get the scope of services they want from the alliance, they will seek other networking arrangements. These dual affiliations have the effect of making it all the harder for the alliance to be successful. For this reason, it is recommended that the cooperatives offer contract management services.

Another form of scope economy that was not observed to any great extent in the field was specialization in a single institution. That is, if a particular service cannot be offered at every member hospital, could it be offered at a few and, thereby, make it more convenient for local residents than going to the tertiary hospital? For example, a kidney dialysis center could be developed by the alliance and shared by several member hospitals. A positive answer to this question is heavily driven by the geographic configuration of member hospitals. However, it appeared that there is potential for more of these kinds of "centers of excellence" away from the tertiary hospital.

A version of this partnered specialization is the 1991 federally funded \$10 million Essential Access Community Hospital (EACH) — Primary Care Hospital (PEACH) program. Seven states, including Califor-

nia, are participating in this program. In California three networks, each with initially only two hospitals, are included. The primary care hospital provides 24 hour emergency service and has a maximum of six acute beds. It can remain financially viable by having SNF and swing beds and providing nonacute clinic and community social programs. The EACH is guaranteed transfer of patients stabilized at the PEACH, and its medical staff can service a larger catchment area. Two points need to be made clear about the EACH-PEACH program in the context of this discussion. First, the assumption is that the PEACH is not a viable hospital; the services offered by the PEACH are somewhere between that of a free-standing clinic and a true acute hospital. Second, these partnerships, even if they included multiple PEACHes associated with a single EACH, are not the kind of strategic alliances discussed here. They have too few members; they offer no tertiary services; the opportunities for scale and scope economies are limited.

Earlier a scope question was raised with regard to whether these alliances should be just hospital-based or delivery-system-based. As stated there, many rural hospitals are in the nursing home business, and rural physicians are involved in the alliances even if it is exclusively a hospital alliance. The down-side risk to turning rural hospital coops into rural health coops is the loss of focus and homogeneity that can result from increasing scope. To some extent, this appears to be a problem with the Northern Lakes (Minnesota) Consortium.

It is recommended that these alliances remain hospital cooperatives and that other providers in the system be brought in through one of two mechanisms. One can be used where all clinics, nursing homes, independent living units, etc. are associated with an acute hospital. The alliance can sponsor a physicians council, nursing home council, independent living council, etc. — just as they do for the functional area managers within the hospital. The other mechanism could be used for free-standing clinics, nursing homes, etc.. This mechanism would create a class of associate members who could share the appropriate alliance services but not have vote on the board of directors.

Successful cooperative organizations require homogeneity of membership in terms of size and goals. A diffuse membership will not have this homogeneity. Long term, it will not only reduce the focus of the alliance, but it also will lead to disfunctional opportunism as the different interests seek to attain their different

ent goals. In addition, size alone will create governance problems that are more difficult to deal with if the membership is not homogeneous. More will be said concerning board membership in the section on governance.

G. Some Other Conclusions Regarding Criteria For Success

The discussion surrounding table 3 shows that in terms of output or number of programs as a measure of success, the tied networks have been more successful than the other two types of alliances.²³ By removing the Baptist Alliance of Oklahoma from the consortia classification, the cooperatives ranked second in terms of outputs and the consortia ranked third.

Another measure of success that we hoped to measure on a quantitative scale was satisfaction of the membership. The quantification of satisfaction was not very successful. Our sample of members was too small to have much confidence in perceptual scales. Our impressionistic ranking would be that while the coop members may have been more enthusiastic, the coops and the tied network members were about equally, and very positively, satisfied, while the consortia members rated their satisfaction somewhat lower. All members were very satisfied with what had been accomplished through cooperation.

There was still a difference in commitment among the three types that is important. The members of tied networks saw the tertiary hospital as a vendor, albeit grateful that such a vendor existed. Despite the similarity of mission statements, the cooperatives and the consortia were viewed by their members differently. Cooperatives were seen as self-help organizations — the hospitals working together could achieve things not possible if they were working alone. In contrast, the consortia were seen as other-help organizations — the hospitals working together could get more help from others than if they were working alone.

One place to see this difference is in the financial commitment of members, table 2. The self-help alliances were willing to put up front-end money and pay dues until the fees for services could support administrative expenses. The consortia were formed for the purpose of receiving foundation grants and continue to rely on grants as the main source of their income. It is noteworthy that the consortia, relative to the other types, have not done all that much better in terms of grants received. The conclusion is that community

healthcare services and alliance services to community providers are just that — services. The alliances that survive and prosper are those that offer the most services in the most cost effective manner to their members. To reach this level of service, commitment by the membership, in terms of both financial and human resources, is a requirement.

1 The Role for a True Federated Cooperative

Another mechanism for offering more services in a cost effective manner that has not been utilized by rural hospital alliances is the tiered or federated cooperative. A tiered cooperative is a cooperative all of whose members are cooperatives. In the present context, the coops and coop-like alliances would form a new cooperative with themselves as the shareholders. The purpose of this tiered coop would be to achieve economies of scale that, as described above, have not been captured at the state or regional level.

Other candidates for programs of a federated cooperative (all have been successful in other industries) would be insurance, some employee benefit programs, purchasing services, and training. In the training area, note that the tiered cooperative might simply coordinate the expertise that exists within the existing alliances. For example, a consulting team on continuous quality improvement that exists in, say, Northern Lakes Minnesota could become fully utilized by offering its services to other regional alliances through the coordination of the federated coop.

We concluded earlier that the cooperative alliances require an association with a tertiary hospital if they are to offer all the services required by their members. Another way to increase the number and value added of services offered is through banding with other rural alliances. To date, this opportunity has not been exploited. Perhaps this would be a project the National Rural Health Association could spearhead. At present, the number of rural alliances that are ready for such an expansion are probably too few to support such a venture. It is hoped that if other of the alliances follow the recommendations in this report, the development of a federated rural health cooperative may not be too far off.

H. The Alternative Legal Structures for Rural Alliances

The legal organizational form of an alliance in-

volves choices with two government bodies: the state department of corporations and the Internal Revenue Service. Both will be discussed here. To introduce the topic, the legal forms found in this investigation will be reported first. The tied networks and the Baptist Alliance of Oklahoma are simply 501(c)(3) hospital corporations. Rather than reduce the reporting to the remaining five organizations, seven alliances not visited but included in the mail sample are included in this summary.

State Incorporation Status	IRS Code Section
2 Cooperatives	2 Subchapter T Coops
2 For-profit corporations	3 501(e) exempt
2 Nonprofit corporations	3 501(c)(3) exempt
2 Others ²⁶	1 501(c)(4) exempt
4 Unknown	1 Other ²⁷
	2 Unknown

All the alliances, except one, that are not exempt under Section 501(c)(3) have 501(c)(3) subsidiaries or use a 501(c)(3) foundation of a member hospital to receive grants. The tied networks, similarly, have foundations through which grants can be received. Thus, one principle that follows from the analysis is that it is not necessary for the alliance to have a 501(c)(3) exemption in order to receive grants.

The legal organizational form selected should be based on other criteria. The three criteria that appear most salient are to select the form that: (1) most nearly conforms to the mission of the organization; (2) provides maximum protection from taxation; (3) is least restrictive on governance and operations. The alternatives are discussed in the context of these three criteria.

1 State Incorporation Options

In the table above we see an equal number of coops, for-profit, and nonprofit corporations. Of the four organizations classified as coops in this study, two incorporated as cooperatives, one as a for-profit corporation, and one as a nonprofit. With one exception, the consortia are some form of nonprofit entity. For the most part, these alliances have incorporated themselves in keeping with the dichotomy above, self-help vs. other-help organizations. While we would recommend that the consortia revisit their mission, as originally conceived, most of the alliances registered with the state in keeping with their mission, the first criterion listed above.

If some *consortia* are limited in activities by their legal form, criterion 3 above, these limitations are more likely to come to light in the IRS classification for

taxation status. Yet the *cooperatives*, which are self-help organizations, do have some restrictions on governance and operations to consider in the choice among state incorporation status. First with regard to nonprofit status, it may be difficult in most states to register as a state tax-exempt company if the IRS doesn't grant that status or if the organization does receive enough revenue for services rendered to show a profit. It would appear the real choice for self-help organizations is between registration as a cooperative or as a for-profit corporation.

Unquestionably, registration as a cooperative is more restrictive. While there are variations from state to state, all state codes concerning incorporation as a cooperative have a standard act as their root (Baarda, 1982). This root standard act was written by the pioneer California cooperative lawyer, Aaron Sapiro, in the early 1920's.

One restrictive variation that appears in the codes of some states that would eliminate any choice for the present purposes, for example, is that the members must be farmers. Five states require an association "to operate for the mutual benefit of its members, limit returns to capital, and limit the amount of business done with nonmembers." Colorado requires distribution of earnings in proportion to patronage. Three states specify the one-member, one-vote rule. Thirteen states, besides the nine just mentioned, require all these standard cooperative principles for registration as a cooperative. Seventeen statutes require that the term "cooperative" be included in the association's name. One coop in the sample registered as a for-profit corporation because some members did not want to conform to this requirement. One useful provision of the cooperative statutes is that most specifically grant cooperatives special favorable treatment with regard to state antitrust laws.

In sum, while the state statutes governing registration as a cooperative are more restrictive than registration as a for-profit corporation, most of the provisions would not be restrictive for hospital alliances and, indeed, would be consistent with the mission and governance styles desired by hospital alliances.

2 Internal Revenue Service Code Options

The present policy of the Internal Revenue Service is to presume shared service organizations are fully taxable entities unless one of the following exceptions is met: inherently exempt activities; substantially below cost exception; integral part exception; 501(e) hospital cooperative service organization (Tracy and Chapel, 1991). As a taxable entity, the most favorable treatment can be received when the organization qualifies as a Subchapter T cooperative. In the sample, two coops are Subchapter T cooperatives and two coops and one consortium are exempt as 501(e) coops. The other consortia use 501(c)(3) exemption except for Northern Lakes (MN) that is exempt as a 501(c)(4) civic organization. As such, it views its primary mission as advocacy and not shared services. The 501(c)(3) consortia run two risks with regard to the IRS. First, if they provide services to members at fees that more than cover costs, they are violating their tax exempt status. Second, if they engage in lobbying, they are violating their tax exempt status. If the consortia really want to be self-help service organizations, then they ought to change their legal form. That is, engaging in either of these activities will violate the requirement of "inherently exempt activities."

The "substantially below cost exception" was designed to accommodate 501(c)(3) organizations that provide services to their members for a donation or at a price that is substantially below the cost of providing such services. For example, a consortium that receives a grant to train quality managers and conducts a training program with the funds would be tax exempt. Even if the members paid membership dues in an amount substantially less than the costs of the services received, the organization's tax exemption should not be in question. However, if a consortium desires to be self-supporting by providing services members cannot produce themselves or cannot buy at a lower price, then 501(c)(3) is not the correct IRS code classification.

The "integral part exception" applies to the tied networks when the urban hospital is a tax exempt hospital and their affiliates are tax exempt hospitals. This exemption will apply even if all the rural hospitals are not under ownership, lease, or contract management by the tertiary hospital. The affiliated hospitals are still considered to be an integral part of the organization.

For coop-like organizations, the 501(e) or Subchapter T provisions are appropriate. Internal Revenue Code 501(e) defines a "hospital cooperative service organization" as one that provides one or more of twelve specific services on a cooperative basis to members who must all be 501(c)(3) hospitals. The capital stock of the organization must all be owned by the members and net earnings must be paid to patrons

within eight and one-half months after the close of each fiscal year. The only restrictions to this classification for the alliances of interest here are that: (1) the alliance may well wish to engage in activities beyond the twelve listed in the code; (2) some members are clinics or taxable entities. It was for one of these two reasons that two of the cooperatives in the sample have chosen to be Subchapter T corporations.

Subchapter T type provisions have been in the federal tax code since the first revenue act of 1913. This classification has always been intended to cover the activities of cooperatives, excluding worker cooperatives. All the major agricultural marketing and wholesale cooperatives qualify under the provisions of Subchapter T. As such, it anticipates the organization is a cooperative or operates by cooperative principles. It must be incorporated by the state as a cooperative or a for-profit stock company. Its by-laws must state: onemember, one-vote democratic voting, a majority of business conducted with members, its intention to distribute profits in proportion to patronage within eight and one-half months after the close of the fiscal year, subordination, i.e., minimal returns, to capital, and return of assets to members upon dissolution in proportion to accumulated patronage.²⁸ While nonpatronaged-based income is taxable, operating under these cooperative principles usually results in no tax being paid by the cooperative. The only disadvantage, discussed earlier, is that the cooperative cannot receive donations or foundation grants directly; a separate, affiliated foundation or member's foundation must be used for this purpose.

We were somewhat surprised on site visits by how little some affiliations understood these legal organizational matters. It would appear that hospital attorneys are not as familiar as they should be with the 501(e) and Subchapter T provisions of the code.

3 Voluntary Hospitals of America

When anyone familiar with the hospital industry hears of a discussion of strategic alliances, they think of the approximately twelve or so alliances of large hospitals and hospital systems: American Healthcare Systems; Consolidated Catholic Health Care; Premier Hospitals Alliance; SunHealth; University Hospital Consortium; Voluntary Hospitals of America. It has been these alliances that receive attention in the literature (Zuckerman and D'Aunno, 1990). The largest of these is Voluntary Hospitals of America (VHA) whose

members have an estimated national market share of 20 percent.

VHA is organized as a Subchapter T cooperative corporation. It also has facilitated the formation of regional health care alliances of VHA members. It is encouraging them to convert to Subchapter T cooperatives as quickly as possible. They believe this option is the best in preventing taxation of profits at the national and regional levels. The requirements of one-member, one-vote, subordination of returns to capital, and distribution of income as patronage dividends all are perfectly consistent with the way VHA wants to operate.

Shareholders paid up to \$100,000 for their initial share investment, annual assessments are about \$20,000 nationally and more than that for the regional organization. VHA Supply Company also earns brokerage fees on the supplies that contract vendors sell to member hospitals. In the Pacific Region in 1990 for example, VHA paid patronage dividends in cash and preferred stock amounting to about 12 percent and 47 percent of total assessments respectively. Thus, when services provided to members make money, the patronage dividend goes a long way toward repaying the annual dues. Rural hospitals ought to be able to match this performance on a smaller scale.²⁹ The cooperative model is a natural for this kind of alliance.

4 The Bias For Corporate Affiliation

A discussion of legal form would not be complete without explicitly recognizing that strategic alliances are an alternative to merger. Clearly, some tied networks have been willing to purchase or lease a member when asked to do so by the local community. Are alliances simply way-stations on the road to merger? Sometimes they could be, but that need not be the case. Hospitals are a local or regional business that ought to be governed locally. It would be a mistake for hospitals to begin a merger mania simply because this fashion has struck other sectors of U.S. industry. On the other hand, it must be recognized that, first, some local acute hospitals may not be viable, and second, there are situations where legal, corporate ownership merger may be preferable.

It was recommended above that the alliances should offer contract management services. This service is one way for the board of a failing rural hospital to test what kind of local health service can be salvaged. A professional management team experienced in rural healthcare delivery should be able to work out with neighboring communities a way to keep services in a

small community with a failing hospital. Most likely, the solution can be found through cooperation with other close-by communities that are also members of the alliance.

Merger may be preferable under three sets of circumstances. First, some joint contracting activities need to be organized as legal entities with stock investment by members in order to avoid being considered simply collusive arrangements by antitrust regulatory authorities under the "Copperweld decision test." Obviously, this is one major advantage of the cooperative form of legal organization.

Second, opportunism in the form of cherry-picking of alliance service may so weaken the ability of the alliance to develop programs that no economically viable program can be found. Such behavior is eliminated by internalizing transactions so that members do not have access to markets and are prevented from using them by a command structure. Opportunism is discussed in more detail in section 4.11 below.

Third, even without actual opportunistic behavior, the transaction costs of alliance management and preventing opportunism may prove to be greater than that under single ownership. Alliances must always be diligent to this concern. Is there sufficient discipline, organizational control and financial integration to compete effectively with unified ownership and management? Put another way, do the programs of the alliance add as much value as they would if operated under single ownership? If they don't, could it be that governance and coordination costs are simply too high?

If alliances plan to operate businesses either directly or through subsidiaries, they will need to develop more effective discipline, better decision-making processes, sounder capital structures, tighter financial return mechanisms, and stronger commitment by their members to accomplish significant change (Montgomery, 1991, p. 27).

We believe cooperatives in the hospital industry and in other industries have shown that they can develop these attributes at levels of transaction costs that are competitive with merger. Still, to attain this level of efficiency requires diligence and attention to the subtleties of effective governance. We turn to that subject next.

I. Governance

Obviously, legal structure has a strong bearing on

governance structure. The legal cooperatives must have democratic governance; the tied networks have no need for a legal board of directors or by-laws. There is sufficient variance in governance structure among the alliances that it is useful to begin this section with a summary.

Indeed, the governance of the tied networks consisted of a vice president and his staff at the tertiary hospital who coordinate and service the needs of the affiliated hospitals. This coordination function had staffs of 2.5 to 5.0 persons. Two of the three tied networks had monthly meetings of the administrators of their leased and managed hospitals, but administrators of independently managed hospitals, and the administrators in the third system, did not meet together on a regular basis. In addition, the vice president or his aide attended the local board meetings of the hospitals they managed. (The coops and consortia staff do not normally attend local board meeting.) Thus, governance could be characterized as a hierarchical reporting relationship combined with a stakeholder board representative at the local level.

Governance structures of the other six alliances are summarized in the following table.

		No. of Meetings
<u>Alliance</u>	Size of Board	Per Year
MT., WI., VT., NV.	11 - 20	10 - 12
MN	18	6
OK	25	2

While these statistics show considerable homogeneity, there are some differences that merit mention. Board composition is perhaps the most interesting.

The Montana Network and Rural Wisconsin have boards composed entirely of administrators. Nevada Rural has twelve administrators among a board of fifteen. Thus, five of the alliances (two tied networks, two coops, and one consortium) have governance boards that are composed essentially of hospital chief executives. The Vermont Rural structure is unique in that, since there are only four rural hospitals involved, each hospital has two board members. The by-laws state clearly that CEOs cannot have a majority of the votes on the board. Thus, this board includes significant physician and lay input.

The Northern Lakes Minnesota structure is unique in that, since it has 84 members, it must have a representative board. It is not a cooperative, so every member need not have one board vote. While the by-laws are

not specific regarding the composition of this board, the nominating committee has followed a practice of having 50 percent of the board be physicians, 33 percent be administrators, and the balance representing the other provider members. Also note that the Northern Lakes' board meets somewhat less frequently than the others. This suggests it is less of a hands-on board.

The Baptist Alliance of Oklahoma again is different from the other alliances. It is more autocratic in that it is the only alliance that has an active, seven member executive committee. The full, twenty five member board meets only twice a year.³⁰ On both groups, administrators of member hospitals comprise one less than the number required for a majority. Also on the board of directors are five officers of the corporation and eight at-large members including representatives of the tertiary hospitals in the alliance.

While this structure is clearly more hierarchical and the local boards in this system have their powers more restricted than is true for most managed systems, interaction among the administrators is maintained at a relatively high level. The administrators have regular quarterly meetings as well as informal consultations. A member of the corporate staff attends board meetings of the managed hospitals. In addition, this system (and some others such as the Montana Network) has a combined retreat for the board members of all their hospitals. These retreats are an excellent way for community leadership to become informed and build commitment to the alliance. It is a practice we recommend to other alliances. For example, some communities in Nevada lack strong board leadership. The Rural Health Project could contribute to solving this problem through joint board retreats with a strong educational component.

The commitment issue is a main problem we see with the CEO only board structure. Others are the tendency to micromanage the alliance and the opportunity for illegal collusion. These are discussed in reverse order.

The obvious conflict between competition and cooperation is very evident in all the health care industry but is nowhere more evident than in the rural delivery system. Both public and private policies are designed to encourage the survival of the rural delivery system through systems integration and cooperation. Further, every administrator with whom we talked in all six alliances that hold regular meetings of the CEOs said they felt these meetings were the single most important benefit they personally received from the

alliance. The concern over illegal collusion is not great; the CEOs have many opportunities to talk together if they wish to do so. Still, one aid in overcoming any concerns of the alliance on this score is the addition of physicians, lay leaders, or even outsiders to the board of directors.

We found micromanagement to be more of a problem. CEOs are, or at least see themselves as, leaders. In all alliances where CEOs dominated the board, the classic cooperative governance problem of micromanagement was in evidence. On most, but not all boards, the CEOs, or more commonly one or two of the CEOs, tried to dominate the activities of the alliance and became involved in operating decisions of the alliance executive that the latter was perfectly capable of dealing with on his or her own. One aid in overcoming this problem would be the addition of physician and lay leaders to the board. In fact, a by-law requirement that the chairperson not be a hospital administrator might be appropriate.

Given this kind of enthusiasm by the administrators, why is commitment a problem? The answer is that administrator turnover is rapid in this industry and administrators have personal goals that sometimes conflict with the goals of the hospital. The frequency with which hospitals (generally, not in this sample) switch alliance membership and the multiple alliance membership found in this study suggests that commitment by the *administrator* often is not what it needs to be. However, the commitment of the *hospital* could be enhanced by the addition of local physician and lay trustees to the board of directors.

It is for these reasons that the Vermont Rural board structure is so appealing. This cooperative does not permit the administrators to have a majority of votes. At present its chairman is a physician. These outside influences do seem to neutralize some concerns expressed here about CEO dominated boards. At the same time, the Vermont model, while building commitment, has not led to low monitoring effectiveness by the cooperative board. The administrators are present, and they do voice their opinions. They certainly effectively monitor the activities of the cooperative.³¹ The lay members are interested and aggressive in wanting to preserve quality health care in their communities.³² Cooperative democracy was working. Perhaps Vermont has a greater pool of knowledgeable and talented local board members than some other states, but we can see no downside risk to broadening boards beyond the CEOs.

Of course, Vermont Rural has the luxury of two board members per hospital because of its small size. A bigger cooperative would have to restrict itself to one board member per hospital. Even here, it is recommended that CEOs be limited to no more than 50 percent of the votes. One advantage of this arrangement is that it would solve the problem found in Northern Lakes Minnesota of having become a healthcare provider alliance rather than a hospital alliance. Nevada Rural is facing this same problem. It is recommended that these alliances remain alliances of hospitals. Other providers can be integrated into the alliance through councils or roundtables (Section 4.3.1), associate membership (Section 4.6), and board membership rather than through institutional membership. For example, a physician trustee of a member hospital can represent his or her clinic and colleagues as well as representing the hospital on the alliance board. If the board size becomes a problem, another options would be to allow each hospital two board members (one being the CEO) but only one vote. The two members would then have to agree on their position on decision items in advance of the meeting.

In sum, the recommendation is to restrict full membership to hospitals only but to expand the board to include more than the CEO. The goal of this recommendation is to maintain focus, limit the number of members, increase community commitment, and simultaneously permit the alliance to take a delivery system perspective in its activities.

One research question of this study was to inquire whether some forms of alliance do a better job of supporting service in and with the community than do others. While it may be premature to provide a final answer to that question at this point in the analysis, it can be said that the addition of physicians and lay trustees to the alliance board of directors would be helpful in recognizing the integrated delivery needs of a community. Indeed, in today's managed care environment, hospitals and physicians are struggling to find new ways to come more closely together in order to do joint contracting and to better coordinate care. The inter-community alliances can help to facilitate intra-community alliances through the governance structures of the former.

In the spirit of comparative analysis, this discussion might ask if governance within the tied networks is inferior or superior to that of the coops and consortia. It may well be that such a comparison is unfair given that, for the leased and managed hospitals within the

tied networks, a democratic board is replaced by a managerial hierarchy. Still, fair or not, such a comparison is possible. It is our conclusion that the tied networks do quite well in honoring the wishes and needs of the local communities. It has already been concluded that the services provided by the tied networks are greater than those of the coops and consortia. Our concern about the tied networks is that they are biased toward being too acute care and specialist oriented. An alliance that follows the cooperative principles and whose primary objective is the preservation of the region's rural healthcare delivery system at all levels, is superior to a division of an urban tertiary hospital. But this is so if, and only if, the rural alliance has the strong support of urban hospital associate members.

1 Governance of Local Hospitals

The careful reader will note that concerns about the quality of lay leadership at the local level have been voiced along with a suggestion that more local lay leadership would improve the governance of the alliances. There is an obvious potential inconsistency here. It is true that many local boards need help and the alliance should help in the training of local boards. The importance of the alliance supporting board retreats and encouraging joint board retreats has been mentioned. Any alliance will be frustrated if its members cannot get local approval for important programs.

There is a special problem in this regard with respect to county or district hospitals with elected boards. In some states (Iowa), local property tax levies are still an important source of revenue for the local hospital. In most states, such support is minimal or zero. Nonetheless, hospitals owned and operated by local government create special governance problems. Practically all the alliances in the sample expressed concern over the special problems of these hospitals. Two will be noted here.

One such problem has to do with the quality and motivation of persons willing to run for office (or be appointed by county commissioners) to serve on a local hospital board. A second problem is the application of county or state restrictions on hospital operations. One example of this problem is the openness with which the business of a public board must be conducted. A second example is a requirement that the hospital be tied into particular insurance programs or particular employee benefit programs. A primary concern is restriction on compensation that make it impossible for the hospital

to hire the quality of management staff required to make the operation successful. There are limits to how much alliance membership can do to shore up an unqualified administrator unless, as suggested above, the alliance manages the hospital under contract.

The tied networks and Baptist Alliance of Oklahoma have partially been able to circumvent this problem by contract management of county facilities. Note that such contracts will permit the hospital to retain any property tax levy that may be available. It is recommended that the alliances go into the contract management business so that special help can be given to public facilities to help them circumvent government restrictions or convert to nonprofit community hospital status. The result will be more efficient operation and an improvement in governance quality.

J. Strategy Formulation

This investigation found distressingly large variance in the quality of strategic planning among the alliances. Of course, the purpose and process of strategy formulation is different among the different types of alliances, but even allowing for this difference, the quality of the planning process was quite varied. Northern Lakes Minnesota had the best strategic planning process in the sample. It could serve as a model for the other coops and consortia. It will be described first and then some characteristics of other planning processes will be mentioned.

Northern Lakes has achieved an excellent balance between bottom-up and top-down planning with involvement at many levels. This consortium has a strong task force (council, roundtables) system. The task forces develop initiatives for new programs as a part of their regular activities. Consortium staff can make inputs to these initiatives because there is staff leadership provided to the task forces. These new program initiatives go up to the board and then go into the annual strategic planning retreat. This is a two-day affair for the board. At this retreat, the consortium executive and the board members can provide top-down inputs into identification of strategic development projects that get combined and ranked along with the initiatives from the task forces. Obviously, a written plan results from this process.

One way in which the processes of the other five coops and consortia differed from Northern Lakes was the balance of sources of creative ideas in the latter. In two of these other organizations, the alliance executive was the fountain for creative new programs. In one coop, the executive and the entire board meet to update the plan each year and to draft the annual work plan. In the fourth alliance, one or two CEO board members were the motivating force. The strategy formulation in these four alliances was largely top-down and was accomplished through a one-day meeting or several half-day meetings reserved for this purpose. With CEOs as board members, there clearly is input from the local level on what the alliances should be doing. One research question for this study asked if useful types of activities were being overlooked because of the limited focus of directors. We found no evidence of this.

However, this observer was concerned about the fragility of the bridge between alliance strategic planning and the strategic planning of member hospitals. This frail link is the cause of some opportunistic cherry-picking (discussed in the next section) and a lack of commitment to cooperation that was found in some of the hospitals.

The fifth coop had a relatively weak strategic planning process. Because of a change in executive, there had not been a strategic planning retreat for some time. Thus, the incoming executive offered an operating plan for the year that had to assume some consensus regarding strategic direction. Consensus on even the mission of the coop did not exist. The coop recognizes this problem; a strategic planning session was scheduled for early in 1992.

Four of the six coops and consortia had formal, written strategic plans that were kept up to date. The other two had an annual "workplan" or "operating plan" that looked very much like a strategy agenda for the year.

The bridge in the Baptist Alliance of Oklahoma and in the three tied networks is somewhat more direct because in leased and managed hospitals, for the most part, the alliance formulated strategy and forced it on the local community through the command hierarchy. In all cases, the alliance executive encouraged and supported strategic planning at the local level, but had a pretty good idea of what the strategy was going to be before the meeting. All the tied networks, being departments of their hospitals, developed annual plans for their network (outreach, affiliates) department.

But not all the hospitals in the tied networks were managed by the tertiary hospital, and there were a few differences among networks and among hospitals that deserve note. The Mercy Des Moines network and the North Mississippi network have competition from other tertiary hospital systems. They posture themselves as providing the services the local community wants. If it wants to be led, they will lead. If the local board and administrator want to lead, they will wait by the phone to be called. They customize their relationship with each member hospital based on the desires of that hospital board. The Sioux Valley (SD) network is much larger than the other two (50 rural hospitals as compared to 7 - 11), and the vast majority of these are just affiliates, i.e., not leased or managed. As a result, Sioux Valley holds a special strategy planning and prioritization meeting for administrators once a year in addition to offering strategic planning help to the boards of member hospitals.

The important distinction made here is that the tied networks view the local boards as their customers. That is a somewhat different perspective from the CEO dominated alliances who may view their local board as a community monitor. As a result, the nature of bottom-up involvement in the planning process is different, and sometimes superior, in the tied networks than in the coops and consortia.

This observer is concerned that the coops and consortia are not working closely enough with the boards of their member hospitals. This concern was suggested above in the discussion of governance. The local boards need to see a clear relationship between alliance membership and activities and the strategic goals of their own hospital. Combined retreats for the boards of member hospitals is one way to accomplish this. Another is to insure that lay and physician trustees are on the board of directors of the alliance. They play a role as board members that their CEO cannot play.

K. Opportunism

Research question No. 9 asks if conflict resolution in the cooperatives and consortia is inefficient vis-a-vis the tied network hierarchies because of the use of democratic decision making and a strong desire for consensus. If one defines conflict resolution in a narrow (and conventional) way, the answer is no. Tied network administrators spend about as much time persuading and cajoling as do cooperative executives.

Where a difference arises is in the area of opportunistic cherry-picking and the need for consensus in the coops. The tied networks can afford to permit their affiliated members to cherry-pick because the marginal cost of providing capacity for most services

offered is very low. This capacity is required at the urban hospital. The Mercy Des Moines requirement for a minimum purchase of services of \$15,000 per year in order to participate in free network services is an example of a minimum participation requirement that makes good sense from Mercy's perspective and is not burdensome to the affiliates. A rural hospital that belonged to three alliances might cherry-pick from all and still purchase \$15,000 worth of service each year.

The empirical evidence was consistent with this logic. Leased and managed hospitals bought from the urban hospital anything the latter could offer at close to competitive price. The networks experience significant variance in the quantity of services purchased by their affiliated members. The members do cherry-pick. But, as mentioned above, the urban hospital views the rural affiliates as customers and assumes a selling posture. There is strong motivation to minimize conflict.

The situation for the coops and two consortia (NV and MT) is dramatically different. These alliances cannot afford much cherry-picking. They need the scale in order to have any economic viability. Yet except for Rural Wisconsin, they all have serious problems of opportunistic behavior by members. None of the others have developed the commitment to the commonweal.

Rural Wisconsin is not completely free of cherry-picking, but the administrators with whom we spoke clearly understand the need to stand united and play by the rules. The credit for this commitment must go to the coop's executive director, Tim Size. One stated goal of this cooperative is to "speak and write within Wisconsin and the Nation about the cooperative model and principles as well as specific programs of RWHC." In just such a paper, Size (1991) emphasizes that cooperatives are organizations working together on the basis of enlightened self-interest and that leadership in such organizations must have a character that is distinct from those traditionally seen in hierarchical organizations. He suggests that cooperative leaders must try to follow the following five principles.

- 1. Each organization must know that it is needed for the success of the cooperative.
- 2. The planning of the cooperative is interactive, with the plan resulting from and feeding into the plans of the individual participants.
- 3. There is mutual trust so that the cooperative is not limited to the minimum performance inherent in written contracts.
- 4. Participants need to know where the cooperative

- is headed and where they are going within the cooperative.
- 5. The desire for local autonomy needs to be made to work for the cooperative through the promotion of collaborative solutions that enhance self-interest.

The other four cooperatives and consortia have not worked hard enough to instill these principles of cooperative enterprise. Since the Rural Nevada Hospital Project didn't set out as a cooperative, almost no attention has been given to this problem.

Should the cooperatives move in the direction of a requirement for 100 percent commitment? This requirement is permitted by law and broadly practiced by agricultural cooperatives in Europe. For agricultural marketing of some fruits and vegetables in the United States, the power of the cooperatives has been strengthened by federal and state "marketing orders" enabling legislation. No other way has been found to stop opportunistic behavior. If hospital cooperatives required consensus and 100 percent participation in every program, not many programs would ever be undertaken, and cooperative membership will shrink. Indeed, rural hospitals will see networks tied to urban hospitals as a much more attractive affiliation. In short, a 100 percent requirement is not the answer. Likewise, consensus is not a desirable requirement. Democracy requires discussion and a majority, not consensus.

A better approach would be to ask every hospital member to promise to purchase programs of the alliance unless that program is badly overpriced compared to alternative vendors. This would give the alliance the "first right of refusal" to offer the service at a competitive price. If one or two members now buy the program or service at a slightly lesser price, these hospitals should be required to buy the service from the cooperative if the cooperative will rebate the price disadvantage from its margin on the program. Of course, the best approach is for the alliance to offer competitive programs that make economic sense to begin with and, in addition, to educate the members on the principles of successful cooperative enterprise as has been done in Wisconsin. This proposal, of making a member with a particularly good deal whole, acts to define just when a program makes good economic sense to the group. It also requires that the coop make some margin on every service it develops.

But doesn't this create just another set of governance costs that the tertiary hospital affiliate programs don't have to carry? Probably so. But there is a tradeoff. If the tied networks in the region threaten the existence and independence of the local community delivery system, then the rural hospitals must band together. In three of the regions where the cooperatives and consortia in this sample operate, the motivation for the alliance in the first place was urban-rural conflict that led the rural hospitals to decide that tied networks were not the answer. In the other six regions, the leaders of the tertiary urban hospitals have shown the statesmanship and leadership required to facilitate the development of coordinated rural-urban delivery systems that have left the local rural communities with the degree of autonomy they desire.

The tertiary hospitals that are members of two of the cooperatives, Montana Health Network and Vermont Rural Health Consortium, provide a model of passive, effective leadership in shaping a coordinated delivery system in their regions. Again, their strategies would not have been successful if the competitive situations in their urban areas had been different. Lane Basso, President of Deaconess Medical Center in Billings, Montana, the single urban member, was a founding member of the Montana Health Network Inc. He is a dues-paying, voting member of the Board of Directors. He is not threatening to the rural hospitals; he waits to be asked whether he can provide a service to the members.³³ He supports the Network in many ways. In short, he has all the advantages of the tied networks without ever playing "the heavy." The rural hospitals have more independence than they would in a tied network, and it is their alliance. They are engaged in empowerment rather than dependence.34 This is the model recommended: a cooperative of rural hospitals with urban associate members who wait to be called.

V. CONCLUSIONS AND RECOMMENDATIONS

In order to be as prescriptive as possible, we have not been reluctant to offer conclusions and recommendations where we felt the evidence supported such recommendations. However, it must be emphasized that the problems in the various rural regions of the country are different. Some recommendations may not make sense for all regions. Consequently, we have not proposed a model of the "ideal" alliance form — although all of the elements of such an organizational form can be found in these recommendations. We hope all alliances will consider these recommended elements, but there may be circumstances where another course of action is preferable.

This section is organized around the research questions presented near the beginning of Section 3 of this report. Recommendations also are summarized under each research question.

A. What activities and functions do rural hospital alliances perform that have been helpful for member survival?

Table 3 summarized into 41 categories the services offered by the alliances. On average, the coops and consortia offered their members 19 services while the tied networks offered an average of 24. Many of the 19 services offered by the coops and consortia were provided through their associated urban hospital members. Many of the services needed by the rural hospitals require a scale of operation that an alliance of rural hospitals is unable to obtain on its own. Indeed, the tertiary hospitals that offer these services often have excess capacity. That is why it is a win-win situation for them to offer such services to rural alliances. The urban hospitals also gain by obtaining the tertiary patient flow from the alliance. Thus, they probably could offer many services to the rural hospitals at cost and still gain through scale economies and increased referrals. Rural alliances should take advantage of these economies that they cannot obtain in isolation.

Interestingly, many of the activities for which large volumes are required to capture economies of scale are labor intensive rather than fixed capital intensive. Our conclusion is that alliances of rural hospitals cannot be effective and viable in isolation. They must work with at least one urban medical center.

Table 3 can be used by alliances as a check-list of suggestions for new services. Some, probably most, new service proposals that come from this list are going to be controversial. For some of these, the study has led us to form some specific opinions that merit mention.

The role of advocacy in the mission of the rural alliances varied greatly among the sample. The alliances should engage in advocacy in situations where the membership is in complete agreement and the alliance has some differential advantage in playing the advocacy role vis-a-vis other organizations such as farmers' groups or the state hospital association. Yet, advocacy should not be the primary function of rural cooperative alliances.

Rural alliances should consider setting up rural "centers of excellence" where part or all the hospitals would combine to offer a particular service, such as

kidney dialysis, in a rural hospitals rather than using the facilities of their urban member.

Most important, it was recommended that the rural alliances should offer complete contract management of a member hospital, at least for a limited term. Perhaps in the longer term, the alliance might promote an EACH-PEACH type of affiliation between two members. Creation of bilateral dependencies between members further serves to elevate commitment and increase homogeneity. A regional rural alliance has more to offer a local hospital board and provides more synergy than does an independent hospital management company. In addition, it strengthens the financial base of and commitment to the alliance.

B. Do cooperatives have the same access to and cost of capital as contrasted to other structures of alliances of health care providers?

Capital can be generated internally or generated externally. Externally generated capital can come from bank loans, bond financing, or equity infusion.³⁵ Each of these will be summarized in order.

Some cooperatives have not recognized the importance of supporting their operating budgets through earning fees for services rendered. As a result, dues make up too much of their revenue base. There is no reason brokered services should be passed through to members at cost. Brokerage service was performed by the cooperative; it should earn a fee for services rendered. Boards need to appreciate this fact and not pressure the executive director to pass along all savings from services to member hospitals. It is recommended that the cooperative receive from the vendor, be it outside consultant or an associated tertiary hospital, a commission for performing the broker function. If the cooperative makes a profit, it should then pay patronage dividends in proportion to a member's use of services offered.

This report has identified bank (and foundation) loan programs uniquely developed for the use of cooperatives. More of the alliances should explore the potential of these programs.

To date, the tied networks, particularly Sioux Valley, have done more to facilitate the use of tax-exempt bond financing by rural hospitals than have the cooperatives or consortia. There is potential here for cooperative success. These vehicles should be explored.

Finally, two of the cooperatives have shown the way with regard to equity financing by requiring an

initial investment of \$10,000. This amount, as it turned out, was too low. Still, the point is that member hospitals and their boards need to take cooperative membership seriously. One expression of the seriousness of commitment is to make an initial equity contribution that is substantial. Full membership in VHA now requires an investment in the \$100,000 range. Compared to this amount, \$10,000 looks nominal.

C. Do cooperatives have management skills, human resources development capabilities, and incentive systems equivalent to other structures of alliances of health care providers?

There are a few topics that might be covered under this research question. One relates to a comparison of the quality of management among the cooperatives, consortia and tied networks. On this matter, we can state a very strong conclusion that the managements of the coops and consortia were excellent and impressive. Managing an alliance requires greater leadership skills than does being a manager in a bureaucracy. Without exception, the alliance executive directors we interviewed possessed these skills. Some are national leaders in rural health. Others could be if they chose to pursue that path.

On the question of whether these executives have personal professional development opportunities and incentives equivalent to their counterparts in the tied networks, we have less evidence. We didn't really pry too far into compensation packages. Below the executive director level however, there are clear differences. Too many staff of the alliances are on "soft money" and have little or no job security. Thus, a classic problem of cooperative organizations, i.e., exceedingly thin management organizations, exists in the alliances in our samples. In many, perhaps most, of these organizations, the alliance would be in serious trouble if the executive director were to leave. What is required to solve this problem is to improve the financial structure of the alliances. That is, to rely less on foundation support and more on earning fees for services rendered to members.

D. What appear to be the criteria for success of these alliances?

Such a broad research question suggests that all the answers in the study should be found here. Rather, listed in this section are the conclusions and recom-

mendations that don't fit neatly under any of the other research questions.

A clear understanding of mission is a primary requirement for success of these institutions. It was possible in this sample to distinguish between alliances that saw their mission as self-help and those that saw their mission as other-help. While some other-help organizations have been successful, we do not believe this is the path to long-run success. The alliances need to see themselves as working cooperatively to achieve the goals of each local hospital.

If this mission is clear, then the next requirement is to get the incentives right for accomplishing this mission. On this dimension, many cooperatives and consortia have work to do. Two recommendations for incentives were summarized in section 5.2: alliances should earn the majority of their revenue from fees for services rendered to members; an initial share investment of no less than \$10,000 should be required as an indicator of serious commitment to the alliance. The alliances should strive for achieving net incomes that would permit paying patronage dividends. Such dividends should offset dues and be paid partly in nonvoting shares so that both ownership interest and dividends would be roughly proportional to usage of the services of the alliance.

The alliances should receive an override or brokerage commission for services purchased by their members. The alliances might even consider charging commissions on services provided by the tertiary hospitals associated with the cooperative. In some cases, it may be most convenient for the tertiary hospital or other supplier to bill the rural hospital directly and then pay a commission to the alliance. Alternatively, the product or service could be sold to the cooperative, marked-up, and resold to the rural hospital member.

Finally, it was recommended that in order to maintain focus and homogeneity, the alliances should remain hospital cooperatives with other types of rural providers—physicians, nursing homes, etc.—brought into the alliance as associate members without vote on the board or through sponsorship of councils of executives of these institutions.

E. What legal structure offers the most advantages to rural health alliances?

One objective of legal structure should be to provide maximum flexibility for the institution. At the state level, incorporation as a cooperative should suit

the needs of most alliances. If state cooperative provisions are too restrictive, then it is recommended that the alliances register as for-profit corporations.

With regard to the IRS code, it is recommended that the alliances apply for tax-exempt status under section 501(e), hospital cooperative service organizations. If the limitations on activities under this section are too restrictive, the alliance should apply to become a Subchapter T cooperative for tax purposes.

If the alliance plans to apply for many foundation grants, it may want formally to incorporate a 501(c)(3) foundation subsidiary to administer these grants. However, many alliances can "borrow" an existing 501(c)(3) from a member or associated organization that receives the grant and subcontracts it to the alliance.

Finally, it was recommended that the rural hospital cooperatives in the country consider the formation of a federated cooperative of cooperatives that might be able to capture scale economies for all members that the regional cooperatives have not been able to capture.

F. Does the cooperative, democratic governance model provide the same effectiveness and efficiency as other governance structures?

The cooperatives and consortia in the sample all operate on a one-member, one-vote basis and try to achieve consensus on most issues. While consensus may slow development, no governance inefficiencies were detected because of a democratic philosophy.

A comparison of these organizations with the tied networks is a somewhat more complex matter. In this sample, the tied networks did quite well in honoring the wishes and needs of the local communities and the services provided to these communities were greater in number and intensity. Nonetheless, the objective of the urban hospital of maximizing referrals does place the tied networks into a serious potential conflict with the rural hospitals. A cooperative alliance whose primary objective is the preservation of the region's rural healthcare delivery system at all levels is superior to a division of an urban tertiary hospital, if the rural cooperative has the strong support of one or more urban hospital associate members. With regard to governance effectiveness, a board representing the rural hospitals is superior to working with a division of an urban hospital.

It is our view that rural alliance board composition in some cases might merit review. Despite the popularity of a board of CEOs only, micromanagement by the hospital CEO board members was observed. Also, there were indications that the local hospital boards had not always bought into the alliance because the board did not have a sufficient linkage to it. It is recommended that lay and physician hospital board members be brought onto alliance boards in some manner.

Finally and on a related point of gaining commitment from local boards, it was observed that the tied networks did a better job of relating to the local hospital boards than did some cooperatives and alliances. It is recommended that another way to gain local buy-in is to hold a combined retreat for the board members of all of hospitals in the alliance.

G. Are the Board members of cooperatives more or less effective in strategy formulation than would be true for the comparative structures?

While the dominant personalities on the boards that we visited were sometimes those of the alliance executive and sometimes those of one or two board members, skills in strategy formulation were uniformly at a high level. There is a wealth of talent in the governance levels of these alliances. Similarly, we were impressed with the statesmanship and clear, forward thinking of the executives responsible for tied network leadership. While there is no reason to think that there is a bottomless pool of leadership talent working in rural health care, the alliances in this sample were richly endowed.

H. Do some forms of alliance do a better job of supporting service in and with the community than do others?

All three types of alliance in this study were very sensitive and responsive to the needs of the local communities, but the nature of the responsiveness is somewhat different among the three. The consortia place the fewest obligations on members. Yet in return, the support offered to the communities is perhaps least of the three. As recommended above, some cooperatives need to interact more with local hospital boards. The tied networks view the local boards as their customers and hence project an image of being supportive in every way possible. Since our sample was of successful alliances, all these alliances understand well that their job is to keep effective health care services in the local communities.

I. Is conflict resolution less efficient or the incidence of opportunism more frequent in the cooperatives vis-a-vis hierarchies because of the use of democratic decision making and a strong desire for consensus?

There was evidence that the administrators of hospitals that belonged to other affiliations or were under contract management behaved somewhat more opportunistically than did administrators belonging to only one alliance. It is, after all, in the best short-run interest of a hospital to cut the best deals it can with whatever vendors are available. Our recommendation is not to try to restrict membership but for the cooperative to offer contract management services to member hospital boards.

Another possible requirement for reduction of cherry-picking would be to require members to purchase some specified amount of services from the alliance each year. The Mercy Des Moines Network requires an affiliation member to purchase a minimum of \$15,000 worth of services in each year. The cooperatives might consider a similar rule.

An alternative approach would be to put more emphasis on the cooperative principle of working together for achieving self-interests. Some cooperatives need to stress more the ideological glue that should be holding the alliance together. The implementation of this principle would be a requirement giving the cooperative the first right of refusal to offer each needed service at a competitive price even if it involves a rebate to a particular member in order to meet that member's current purchase price. Consensus on every issue should not be required. However, members need to support the alliance with actions of commitment to the general welfare.

The tied networks and The Baptist Alliance of Oklahoma (hierarchies) had more influence over what managed and leased hospitals purchased from the alliance. However, since most of these services were provided by the affiliated urban hospital, scale economies were not as big a concern for the tied networks.

J. Implications for California

This report described the way that management contracts and other affiliations reduced the activities of the Northern Sierra Hospital Council and that now most of the urban hospitals managing these hospitals have withdrawn from the area. It is our belief that there is a role for a hospital cooperative in Northern Califor-

nia. It is recommended that an effort be made to reactivate the previous organization following the guidelines suggested in this report.

Further, it is recommended that such a cooperative venture should become independent of the Hospital Council of Northern and Central California. The experience of the Rural Nevada Health Project suggests that it is best to split from a state hospital association sooner rather than later in the life of the cooperative.

No attempt has been made to explore the feasibility of a hospital cooperative in the Imperial, San Bernardino, Inyo, and Mono county areas.

K. A Final Thought

Based both on the efficiencies associated with economies of scale and scope and the efficiencies in governance transaction costs, the hierarchies and tied networks were somewhat more efficient than were the cooperatives and consortia. Therefore, any case favoring rural hospital cooperatives over tied networks must be based on avoiding a conflict in objectives and the effectiveness with which a cooperative can coordinate and enrich the rural health care delivery system in a region. All members must see clearly that local autonomy can only be achieved through cooperative efforts.

But even such a cooperative needs to have associated with it at least one urban hospital that can help in achieving the scale and scope required to offer some specialized services. The optimal relationship between the cooperative and its tertiary hospital member requires that the tertiary hospital's chief executive and board have a very statesmanlike attitude toward the cooperative. It may be that some urban competitive environments make it difficult for a tertiary CEO to play such a role. It is a role that requires patience and allows the rural hospitals to lead the cooperative. Examples of such cooperative alliance were found in this study. These success stories can be repeated elsewhere in rural America.

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APPENDIX LIST OF ALLIANCES INTERVIEWED

Cooperative Societies

Montana Health Network Miles City, MT Rural Wisconsin Hospital Cooperative Sauk City, WI

Vermont Rural Health Consortium Montpelier, VT

Other Consortia

Baptist Healthcare of Oklahoma Alliance Oklahoma City, OK

Nevada Rural Health Project Reno. NV

Northern Lakes Health Care Consortium Duluth, MN

Tied Networks

Mercy Hospital Medical Center Network Des Moines, IA

Northern Mississippi Health Services Affiliated Hospital System Tupelo, MS

Sioux Valley Hospital - Rapid City Regional Affiliates Network Sioux Falls, SD

Others

Northern Sierra Hospital Conference Chico, CA

Voluntary Hospitals of America Irving, TX

NOTES

'While the point is somewhat contentious, most classifications of "rural" for health care purposes follow county line. By this definition, counties such as Butte, Kern, Merced, Placer, and Yuba are considered metropolitan. The Bureau of the Census classifies residents of towns as small as 2,500 inhabitants as urban. However, if this town were outside an MSA county, it would be considered rural — as would its hospital.

²There are examples in the United States of consumer cooperatives formed for the purpose of starting prepaid health plans or underwriting clinics in communities having trouble retaining a doctor. Such coops were rather numerous, particularly in Texas, during the 1930s because of facilitating loans provided by the depression-responsive Farm Security Agency. Group Health Cooperative of Puget Sound was a product of that program. This study did not included consumer cooperatives. Nor did it include independent living retirement communities organized as cooperatives owned by the residents. The focus was only on alliances among providers where a majority of said providers were hospitals.

³For a longer-term history of the problems of rural health care, see Rosenblatt and Moscovice, 1982.

⁴Vermont, with the greatest percentage of its residents living in rural areas, 32 %, has less serious physical access problems than

does California which has the lowest percentage, 7 %.

⁵There is considerable variation in physician preference regarding emergency coverage. In some rural communities with, say, four physicians, the physicians prefer to provide emergency coverage themselves even though it may mean being on call virtually continuously. In other communities, the local doctors insist that the hospital contract with outsiders for emergency medical coverage. Almost always the latter arrangement is more costly.

R. DeVries, 1978 (Hospitals, 52, 81-84), classified alliances into seven categories: contract services, cooperative services, shared education services, contract management, lease, owned but locally managed, owned and centrally managed. Kanter (1989) suggests three classes of alliances: service, opportunistic (those formed for a single purpose, e.g., to bid on one big contract), and stakeholder. While the alliances considered here are mainly multiorganizational service alliances, some involve other stakeholders besides hospitals. One fashion in U.S. big manufacturing management literature in the 1980's has been the discovery of the "strategic alliance." See, for example, Jordan D. Lewis (1990) (Partnerships for Profit: Structuring and Managing Strategic Alliances, New York: The Free Press). While this new interest is bringing broader insights into the literature on cooperation, much experience exists in agriculture and much has been written about the strengths and frailties of cooperative organization.

⁷A tied network is not a cooperative and should not be confused with tiered cooperatives that are discussed later in this report.

⁸One of the cooperatives is legally a for-profit corporation that really wants to be a cooperative. The reasons for the lack of consistency in legal form are developed in a later section.

⁹The newest alliance in the sample was four years old at the time of interview.

¹⁰A part of the difference in billed services stems from the difference in accounting conventions described earlier.

"The classification schema is that of the author. The aggregations used may result in the total number of services offered being less than that reported by the alliances. For example, sharing physical therapists, occupational therapists, and respiratory therapists would all be classified under "shared allied health professionals" here, while the alliances may view these as separate programs.

¹²It may be that the greater number of services offered by the tied networks as shown in table 3 is a consequence of the sample design and would not be true in the population of all tied networks. The tied networks in the sample after the screening process were considered to be the best in the country. The coops are essentially the universe; the consortia were selected because of their diversity.

¹³Programs for the human resources function are perhaps the most numerous and successful across the entire sample. Health care is a labor intensive business, and getting competent professionals to stay in rural areas is perhaps the chief problems for the communities. Therefore, it is not surprising the employee benefit programs and employee continuing education are the most important programs of the rural alliances.

¹⁴Note in table 3 that all nine alliances in the sample offer physician recruitment and shared allied health personnel services. This may say something about where the greatest needs are in the rural delivery system. Sometimes the tied networks provide these services in slightly different ways, e.g., underwriting a primary care physician in a rural clinic, but all alliances offered these services in some form.

¹⁵Locum tenens physicians was one of the most innovative services we observed. Even in areas where the local physicians believed they could get backup from among their friends, this was not always true. Often the remaining physicians in town simply had to cover (usually unsatisfactorily) for the missing physician. Both the absent physician and their colleagues in town were very satisfied with the backup provided by the alliance.

¹⁶Mercy Hospital, Des Moines, operates a twin-engine airplane, at a cost of about \$150,000 per year, exclusively for the purpose of ferrying specialists to rural clinics. See footnote e to table 3. This airplane is in addition to their fixed wing and helicopter emergency aircraft.

¹⁷Often, of course, the urban hospital's evaluation is correct. The community hospital is not viable, and a free standing clinic would be a better choice. I do not want to tar with the same stick all tertiary hospitals and certainly not those with tied networks described in this report. In all three there was a great sensitivity to this problem. An excellent statement of this philosophy can be found in David A. Rykhus, Vice President for External Operations, Sioux Valley (SD), "Rural Hospitals' Criteria For Success," The Minnesota Hospital Trustee, August 1990.

¹⁸Two of the tied networks have put brick and mortar capital into owned or leased facilities where they felt the investment was a sound one. However, they are rightly concerned about spending the assets of their urban hospital in other facilities in a distant county.

¹⁹I do not know who originally developed this concept. From discussions with senior foundation executives, it appears that some version of the not-for-profit bank has been around since at least the 19th century. Tim Size of Rural Wisconsin Hospital Cooperative has been its leading proponent in the rural hospital community.

²⁰In Wisconsin, the state "match" is through the Health Facilities Authority so that more than \$500,000 in additional borrowing power is opened up. The Foundation money becomes an additional form of "loan insurance" for the Authority so that they can loan money to rural hospitals without jeopardizing their loan rating.

²¹Having part of the hospital's management team on one payroll and part on another does present problems that should not be minimized. However, many management contracts in many rural hospitals have successfully solved this problem.

²²Some management contracts did not suggest much synergy. For example, a Lutheran hospital system in North Dakota manages a community hospital in Nevada.

²³It could be argued that "value added," rather than "gross output" or "number of services," should be the measure of success. However, since members are not committed to buying every service offered by the alliance, output is a valid measure of success and commitment.

²⁴Again, the diversity of the consortia in the sample may make this evaluation somewhat unfair.

²⁵This organizational form, in Britain, is called a federal or secondary cooperative.

²⁶One subsidiary of the state hospital association; one not incorporated.

 27 Borrowed a 501(c)(3) corporation from the state hospital association.

²⁸The usual way of dealing with the dissolution provision and at the same time accumulating internally generated capital for

growth is to pay 20 percent of patronage dividends in cash (the IRS required minimum) and the balance in shares. More than one cooperative in the sample did not have provisions for resignation of members adequately detailed in their by-laws. Since Subchapter T status does not require state incorporation as a cooperative, some alliances may find the desired amount of flexibility as a for-profit corporation under state law and as an IRS Subchapter T company. The Montana Health Network is registered in this fashion.

²⁹Tertiary hospitals who are associated with rural hospital alliances and also are VHA members can, and do, bring in the rural hospitals as VHA member affiliates. In this way, the coop of big hospitals is helping the coop of small hospitals. Should this affinity be made more explicit by both parties?

³⁰Since most of the alliances have monthly meetings and interactions within councils or roundtables, communication within these alliances is excellent. In addition to meetings, minutes, agenda, telephone calls, and visits, six of the nine alliances have very professional newsletters. Although they vary in degree of formality and breadth of intended audience, the quantity and quality of written and oral communication within all the alliances was first-rate. While no one expressed this concern, the communication load on alliance executives appeared to this investigator to be something of a burden.

³¹Such is not always the case. In the UK grain cooperative study and in other farmer cooperatives, finding diligent and knowledgeable board members within the membership is sometimes a problem. Hospital CEOs, because they work with their own boards, are more knowledgeable about governance than the average farmer.

³²While it is difficult to generalize across all the alliances in the sample, attendance records of the CEOs appear to be no better than that of other board members. But to be clear, most of the alliances had not experienced attendance problems at board meetings.

³³Deaconess, like some tertiary hospitals in Nevada, found they really didn't want the responsibility of managing rural hospitals. It is not an easy task.

³⁴I am indebted to Tim Size of Rural Wisconsin Hospital Cooperative for this dichotomy. It is a powerful distinction.

³⁵For reasons discussed earlier in this report, grant financing is not considered as a source of capital in this section.

ABOUT THE CENTER FOR COOPERATIVES

The Center for Cooperatives was established by the California Legislature in 1987 as a Center in support of research, education, and extension activities to "advance the body of knowledge, concerning cooperatives in general and address the needs of California's agricultural and nonagricultural cooperatives…"

The Center's objectives are to promote:

- EDUCATION. The Center offers formal and informal educational programs to those involved in cooperative management and develops teaching materials for all levels of interest.
- RESEARCH. To help the state's cooperatives reach their objectives, research is conducted on economic, social, and technical developments. A practical aspect of this research: the provision of competitive research grants, and studies for government agencies on how cooperatives can help achieve public policy objectives.
- OUTREACH. The Center informs the public on cooperatives and their significance to the economy of California.

Located on the University of California, Davis campus, the Center is a University-wide academic unit. Its teaching and research resources are drawn from expert professionals from all University of California and state university campuses, other colleges and universities, as well as sources indigenous to the cooperative business community.

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