Chapter 6

Short- and Long-Term Strategies for Effective Change by Rural Providers

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Short- and Long-Term Strategies for Effective Change by Rural Providers

INTRODUCTION

The current problems for rural health care facilities and services are varied and complex, and the prognosis for rural health care delivery seems uncertain at best. The difficulties rural hospitals face, for example, are not limited to immediate concerns such as declining inpatient demand and increases in uncompensated care. Rural hospitals must also find ways to redirect their services to meet evolving community needs and changing environmental realities. This chapter will discuss approaches rural hospitals and primary care facilities have taken to altering or expanding their missions, both in the short term to strengthen operations and community support, and in the longer term to restructure the organization and delivery of services.

SHORT-TERM STRATEGIES

Local Fundraising[1]

Local fundraising has historically been a major source of capital to finance construction and renovation of rural health facilities. By one estimate, 40 percent of cash donations garnered through fundraising by rural and urban hospitals in 1988 were earmarked for construction, renovation and equipment purchases (80). A 1989 national survey found that more than 30 percent of responding individuals had contributed to hospitals or other health care organizations (rural and urban) within the previous 2 years, and the great majority of these were regular donors (566).

For some hospitals, fundraising is an important source of capital for longer term investments. For others, however, local donations and philanthropy are needed simply to sustain immediate operations. There is considerable uncertainty whether hospitals in severe financial crises have all the necessary elements to survive effectively beyond the receipt and use of such "bail-out" funds (see box 6-A). Success may be contingent on how well these resources are spent on planning for and ensuring future needs.

Establishing endowments is another strategy to raise ongoing funds. For example, Copley Hospital, a 50-bed nonprofit facility in Morrisville, Vermont, in 1988 resolved to raise a $5 million endowment for maintaining the provision of adequate indigent care and helping with its capital needs (186). In addition to providing some financial benefits to local donors, endowments and other planned giving arrangements may enhance the hospital's reputation in the community.

Hospitals are not the only focus of fundraising efforts in rural communities. South Gilliam County, Oregon, for example, has created a health district fund in cooperation with a local foundation to accept private donations for primary health care projects in the district. Donations may also be earmarked for specific health needs (e.g., ambulances) (314).

Box 6-A—Example of Local Fundraising

Hall County Hospital, a 42-bed facility in the small town of Memphis, Texas, nearly closed in 1988. Two of the three physicians on the hospital staff had recently ceased practicing, and patients began migrating 90 miles north to Amarillo for most of their care. Significant declines in patients and revenues could not be **offset** through local tax increases because the community was already taxed at the full legal levy to support the hospital. Instead, the town of 3,000 raised about $400,000 to maintain hospital operations. Memphis' residents had differing opinions on how to address the hospital's problem, and many were weary of spending large sums of money on the hospital. The fund drive to save the hospital appeared to revive and reunite the community. Local school rallies and support from passing truckers helped to raise the money over 3 months, leaving the hospital about $100,000 short of the $500,000 needed and the necessity of still recruiting two physicians. Local officials acknowledged that unless the town could find the two physicians, the hospital's survival remains in doubt (79).

[1]Local tax support is another major source of nonpatient revenue for health care facilities (see ch. 8).

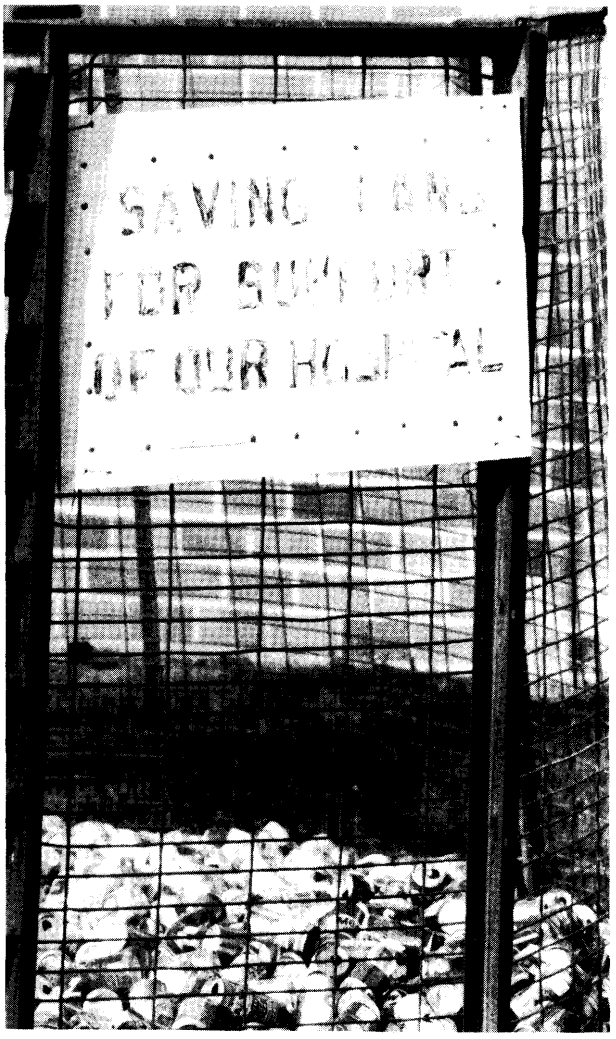


Photo credit: Gail Mooney

Even the smallest donations can help rural hospitals struggling to survive, and fundraisers can reflect a strong desire by the community to **keep their hospital** open.

Cost Containment

Excess capacity, small size, and unexpected variations in utilization can make cost reductions difficult to achieve in many rural hospitals. One common strategy for lowering costs has been to reduce staff. From 1980 to 1987, rural hospitals reduced the number of full-time equivalent (FTE) staff by 9 percent, while urban hospital staffing actually increased 14 percent. Both rural and urban hospitals had a decline in labor costs as a percentage of total costs (382).

Much of the staff reduction took place immediately after the inception of the Medicare prospective payment system; the number of FTE employees in rural hospitals dropped by 7.7 percent between 1983 and 1985 alone (31). Rural hospitals also increased their use of part-time staff to enhance their staffing flexibility. In recent years, the numbers of FTE staff per hospital have actually increased. Possible reasons for the increase include more severely ill patients, the growth in outpatient care and swing bed services, and longer lengths of stay (31,462).

A few rural hospitals, however, have continued to improve staff efficiencies. Some successful strategies include:

- planning staff size and workloads according to expected daily work volume,
- emphasizing cross-training and cross-utilization of employees to do nonclinical tasks,
- combining departments (e.g., housekeeping and engineering) to facilitate flexibility in staffing, and
- identifying appropriate uses of outside contract services for both clinical and administrative functions (203).

In 1988, for example, the new administrator of a 75-bed hospital in Columbus, North Carolina applied some of these strategies to lay off 10 full-time employees (a 6 percent reduction in staff). Other expenses were reduced and patient fees increased, creating a net income of $735,000 for the hospital in 1988, compared to a net loss in 1987 of $358,000 (361).

Many community health centers (CHCs) have also had to find ways to further reduce costs. As noted in chapter 5, increased use by patients who cannot pay for care has lowered collections in many rural CHCs. A recent survey of these centers found that most reported lowering operating costs through imposing personnel hiring freezes and layoffs, eliminating staff education programs, and reducing supply orders. Some said they were forced to eliminate certain services altogether (e.g., dental and pharmacy services) (307).

The cuts made by some CHCs to ensure survival have been drastic. A CHC in rural Maryland, for example, was forced into bankruptcy in the early 1980s. Facing pressures from some 900 creditors, a new administrator closed three satellite clinics, reduced staff from 100 to 25, and lowered salaries. The center has remained in operation, relying on State and local grants instead of Federal finding, and

was due to make its final payment on the $1.4 million bankruptcy decision in 1989 (108).

Tougher Billing and Collection Practices

Hospitals appear to be increasingly aware of how improved billing and collection activity can enhance critical cash flow. Hospitals and clinics can affect delays in billing and payment by methods such as:

- submitting correct or "clean" claims to third-party payers in a timely manner, reducing the number of improperly submitted claims returned to the hospital for reprocessing;
- reducing the delay in assigning final diagnoses and completing patient charts;
- increasing the number of patients paying their bill at the time of service; and
- reducing the number of patients who incorrectly do not receive a bill.

In order to streamline the billing and collection process, one rural hospital put a single individual in charge of registration, billing, discharge, and medical records. Another hospital assigned a staff member to the task of ensuring that nurse and physician notes are properly recorded in advance of patient discharge. A third hospital trained staff to encourage payment before patients leave the hospital, resulting in 12 percent of collections made before the patients' discharge (431).

Some hospitals are establishing inhouse collection agencies in order to collect a higher proportion of bills, eliminate commission costs, and improve access to account information. A rural South Carolina hospital's inhouse agency has collected 22 percent of its bad debt (about $200,000 a year) that otherwise was uncollectible. When the hospital used an outside firm, it recovered only about 10 percent annually, and 40 percent of this amount was lost in commission costs (432).

Some CHCs have also changed their collection practices in response to the growing demand for care by the medically indigent. About 42 percent of recently surveyed centers reported that they were making changes designed to lower sliding fee use and improve collections. These changes included increasing sliding fee scale eligibility and documentation requirements, increasing the minimum fees paid under the scale, and enforcing stronger collection procedures on self-pay balances (307).

Strategic Planning

Rural hospitals, particularly small hospitals, may often view planning either as a luxury or a burden. It is clear now to many rural providers, however, that they must find the means to reexamine their missions and roles and improve their capacity to solve problems.

One example of efforts to improve the ability of rural hospitals to engage in such planning is the WAMI[2] Rural Hospital Project at the University of Washington. With funds from the Kellogg Foundation, WAMI recently assisted several rural communities and their hospitals to develop and implement a range of strategic planning activities. In Tonasket, Washington, for example, the Project worked in partnership with the community and its 22-bed hospital to determine the area's major health care system problems by doing area demographic profiles, community need assessments, and reviews of hospital operations. Tonasket was experiencing a depressed economy, substantial patient outmigration, and persistent physician shortages. The hospital suffered from negative operating margins, the highest percentage of uncompensated care of any hospital in Washington, weak management expertise, and patient dissatisfaction. The project facilitated the development of community teams to clarify goals and establish trust through open communication and conflict resolution, and to initiate community leadership and skill building efforts to plan ways to solve identified problems. Specific plans were made for the hospital to lower costs, increase revenues, recruit physicians, market and diversify its services, and restructure its board. Within 3 years, North Valley Hospital began showing income from operations (45).

Some hospital associations have also been emphasizing support for strategic planning among small and rural hospitals. In North Carolina, the hospital association, with support from a private foundation, recently opted to make planning grants available to such facilities. Of the 67 hospitals eligible for participation, 55 were expected to receive planning grants by the end of the project (276).

Washington, Alaska, Montana, and Idaho.

Box 6-B—Three Examples of Marketing/Public Relations Efforts

Central Plains Regional Hospital—For hospitals in small towns, "word-of-mouth" and improved visibility can play critical marketing roles. Central Plains, a 151-bed hospital in Plainview, Texas, recognized that a significant number of its local residents were migrating to Lubbock, 45 miles away, for hospital services. Central Plains' administrator decided to promote the institution's quality and convenience, especially to senior citizens unwilling to travel frequently. To do this, he joined local chapters of service organizations and provided space at the hospital for their regular meetings, started an annual health fair, and provided health programs at senior citizen centers. He also encouraged the local newspaper to print a regular column on hospital services and activities, and he personally followed up with discharged patients to ask how they enjoyed their hospital stay. He noted that these more personalized efforts appeared to have increased the local appeal of Central Plains over the last 3 years (175).

Mercy Medical Center--Other marketing efforts have attempted to expand the awareness of a facility's capability to a larger geographical area. Mercy Medical Center, in the isolated mountain community of Durango, Colorado (population 15,000), decided in 1987 to become more of a regional hospital. Impetus came from its need to compete with the other hospital in town, a public facility, for patients in an overbedded market. The 100-bed facility began to promote its 85-physician medical staff, $1.7 million outpatient center, magnetic resonance imager, trauma center, and high-technology emergency aircraft to 120,000 residents living over 7,500 square miles in 4 States. The hospital used advertising to promote the hospital's expanded services and its picturesque mountain environment (24.?).

Harts Health Clinic—CHCs have also used marketing to successfully improve community awareness and increase access to care. A center in the small remote town of Harts, West Virginia, successfully used feature articles and announcements in the local weekly newspaper, open houses, speaking engagements at area civic clubs, and colorful brochures and banners to communicate the presence of new providers, equipment, and services. Clinic service utilization noticeably increased, apparently countering earlier community concerns about the lack of personal physician care and the lack of available needed services in the area (251).

Rural CHCs can also benefit from strategic planning. The Public Health Service provided categorical grants to many rural centers in-tie mid-1980s to develop and implement plans to adapt to local changes and reduced Federal funding (585). No known evaluation of the success of these planning efforts has been performed to date.

Marketing and Public Relations

Many rural hospitals have traditionally encountered little competition by other facilities and providers. These hospitals now increasingly face declining inpatient demand, competition for patients from more aggressive rural and urban providers, and poor community perceptions of the extent and quality of their services (see ch. 5). The consequence is a renewed emphasis on marketing and public relations by many rural facilities (see box 6-B).

A 1987 study of 476 small or rural hospitals by the American Hospital Association (AHA) found that about 60 percent of the institutions were actively engaged in marketing, with a heavy reliance on image advertisements in newspapers (244). A related study in 1985 found that the rural hospital's administrator was most commonly charged with the marketing function, in contrast to urban hospitals where such responsibilities are typically handled by a marketing director. The study also found a lack of understanding of marketing, and its importance, by trustees and management (166).

Improved Leadership and Management

Rural hospitals often suffer from inexperienced administrators and high management turnover. According to one report, the administrator turnover rate reached 24 percent in 1986-87 among urban and rural hospitals combined. The hospitals with the highest turnover have generally been small, and they are more likely to have experienced higher costs and lower profits and admission rates than other hospitals (607). Yet experienced administrators may be unattracted to rural hospitals because of lower salaries, and thus many rural institutions may have to accept untested or mediocre administrators (361). CHCs can also suffer if their administrators are inexperienced; such administrators may lack the time or sophistication to prepare Federal grant applications and operations reports in a satisfactory

reamer, potentially jeopardizing receipt of funds and center solvency.

Rural managers with small operating budgets and limited specialty staff may need to acquire for themselves the skills needed for recruiting and trimming staff, writing service plans, creating advertising copy, and completing cost reports. It is possible that more extensive management training enhances the ability of administrators to carry out such diverse tasks. One survey found that 53 percent of rural hospital administrators with bachelor's degrees stated their hospitals were sound financially, compared with about 62 percent of those with master's degrees (361).3

Governing boards also play a critical part in hospital viability, a factor recognized in several communities. For example, with assistance from the WAMI Rural Hospital Project, several rural institutions in Washington have implemented plans for trustee education and development in order to increase the quality of leadership and teamwork (45).

In the early 1980s, the Association of Western Hospitals Educational and Research Foundation, with support from the Kellogg Foundation, created a 6-year program to improve management and leadership skills in rural hospitals (see app. E). Projects included a fellowship program to place recent graduates in health management into rural institutions, the use of retired healthcare executives as consultants, an educational and development program for trustees, and a program to help form alliances between rural hospitals and local businesses. Evaluation of the experimental program among participating rural hospitals found enthusiastic support (188).

An example of successful short-term management is shown in box 6-C.

Box 6-C—Example of Successful Short-Term Management

Trigg Memorial Hospital, a 30-bed facility in Tucumcari, New Mexico, was in critical financial condition in the mid-1980s. Demand for inpatient care had dropped 16 percent a year for the 4 previous years and the hospital had accumulated a $1 million debt. Staff morale was low and patient dissatisfaction was high as a result of some budget cuts; for example, the management had discontinued linen service, and patients began complaining of having to dry themselves with paper towels. A new administrator, hired in 1985, found ways to reduce expenses without sacrificing patient satisfaction, made other operational improvements, and increased collections. He invested considerable time in increasing community acceptance and support by attending civic club meetings, scheduling hospital open houses, and speaking on local radio talk shows. By 1987, the hospital was showing a small profit. Some major capital improvements, including replacing a boiler and water pipes, however, were still unrealized (258).

LONGER TERM APPROACHES

To maintain or improve their financial position, and to better serve their communities, rural health care facilities may take actions that involve some change in their mission or the extent of their autonomy. These actions fall into two general categories:

1. The reconfiguration of a facility's own services, through:
   - —hospital conversion to some form of nonacute care;
   - —hospital diversification into new products or services; and
   - —service expansion and practice enhancement by primary care centers.
2. The establishment of interinstitutional relations and partnerships through:
   - —formation of consortia and alliances, maintaining autonomy of the individual allied institutions; and
   - —affiliations with other facilities, or a system of facilities, that limit the control individual institutions have over their operations.

Limited specific information exists on these approaches, and what does exist is largely anecdotal. The following sections discuss some of the considerations and risks of each approach, and examples of how they have been applied.

[3]The relationship between an administrator's additional training and hospital operating performance may also be due to other conditions—e.g., sound hospitals may be more able to offer salaries that attract administrators with higher degrees.

Hospital Conversion

Low occupancy and shrinking markets have caused many rural hospitals to consider converting all or part of their service capacity to something other than inpatient care. The additional threat of financial insolvency and closure may have forced many hospitals to consider conversion as a last resort. The final decision to convert, however, may often be difficult and very risky for rural hospitals. Conversion may be an appropriate option when:

- the hospital core business has declined, and additional markets cannot be found;
- certain resources (e.g., adequacy of the facility, ability to attract appropriate staff or physicians) are limited;
- reimbursement for existing services is inadequate, and reimbursement for new services through conversion appear to be more acceptable;
- the hospital is having trouble covering existing debts;
- the conversion is targeted to a specific market population; and
- the hospital has a contingency plan and avoids unnecessary risks (373).

Common types of hospital conversions are from acute-care inpatient to ambulatory care or long-term care facilities. For example, some rural hospitals have converted to comprehensive ambulatory care centers with capability to deliver some level of emergency care. Services might include primary care, emergency care, basic laboratory and radiology service, and outpatient surgery. Existing hospital beds might support surgical recovery, emergency waiting, or adult day care services. Other hospitals may convert more simply to nonsurgical, diagnostic, or urgent care outpatient centers. Conversion to some form of long-term care facility may be especially attractive to some rural hospitals with excess acute care capacity and large elderly service populations.

Some small rural hospitals have already in effect converted to short duration, medical observation facilities or infirmaries. In these facilities, patients typically are held 24 to 48 hours for stabilization and observation by a physician or nurse, and then either released to home or transferred to a hospital. However, current Federal and State regulations still usually require these facilities to be licensed as fill-service acute-care hospitals and bear basic costs associated with this designation (74).

Conversion does not necessarily eliminate the problems faced by rural hospitals. State limits on the addition of certain services and beds may prevent conversion itself. For example, Minnesota has recently had a statewide nursing home bed moratorium (391).[4] Also, State facility licensure laws typically prevent the conversion of hospitals to "lower level" emergency treatment and stabilization facilities unprepared to abide by regular hospital licensure requirements.

Obtaining the capital to cover the planning and construction costs of converting an existing facility may be difficult and expensive. Legal fees, unemployment compensation to displaced staff, and the payment of existing debts and obligations typically must also be covered. The facility may need to recruit new staff or operational expertise (e.g., nurse aides for a long-term care unit who must undergo additional training and certification) (187).

There is no information on the number and scope of rural hospital conversions nationwide, but case examples describing some of the range of experiences are available (see box 6-D).

Hospital Diversification

Unlike conversion, in which part or all of a hospital actually changes its mission and service structure, diversification involves expanding into new services. Diversification is commonly intended to:

- increase the institution's revenue base,
- strengthen referral sources,
- enhance community image,
- develop more comprehensive services, and
- limit excess capacity.

Diversification, like conversion, carries many risks and requires careful research and planning to avoid overextending resources. Understanding the market demand for the proposed service, having a favorable reimbursement and regulatory environment, know-

[4]Moratoria on nursing home services by States may, in addition to indicating that there is currently a sufficient supply Of such services, reflect the fact that State Medicaid budgets (the major payer of nursing home care) are already severely constrained, and the States cannot afford further requests for nursing home care payments.

Box 6-D—Two Examples of Hospital Conversions

***Warren** General Hospital,* a 37-bed public hospital in rural North Carolina plagued by debt, low occupancy rates, and an impoverished patient base, decided to close in 1985. The community feared that if services ceased they would lose their remaining physicians and their only local source of emergency care. In 1988, the community passed a bond referendum to raise the capital for the conversion of the hospital to a primary care center. They did so, however, at the expense of other vital community services, such as schools, that were also dependent on support from the county's eroding tax base.

With coordinated support from the State and Federal Governments, the community was able to recruit three new physicians. The clinic currently is delivering primary care under the joint direction of the county's health department and a federally supported community health center (86,87).

McGinnis Hospital, a 17-bed hospital in rural Pennsylvania, was struggling with declining inpatient utilization and ensuing operating losses in the early 1980s. The hospital was previously privately owned, but it had recently been purchased by a nearby hospital group, Westmoreland Health System. Because of the hospital's aging facility, eroding financial condition, and small size, Westmoreland management explored a number of facility conversion options, including ambulatory surgery, substance abuse, wellness services, hospice, and various types of long-term care. In 1984, Westmoreland decided to convert the hospital to an ambulatory care facility, specializing in same-day ophthalmologic and reconstructive surgery. The center now has a medical staff of 28 performing over 2,000 outpatient surgeries a year, drawing from a large geographic area, and it is realizing a profit from operations. However, Westmoreland has had to overcome some difficulties, including resistance to change by the facility board and community residents and lack of enthusiastic support from employees and medical staff. The center decided to retain its acute-care license in order to remain eligible for maximum reimbursement rates, but in order to comply with hospital licensure requirements it has had to maintain certain expensive facility and staffing standards. Proposed changes in Medicare reimbursement for outpatient surgery (see ch. 3) may limit the facility's profits (374).

ing the competition's capability as well one's own, and being willing to risk failure by providing nontraditional services are all critical elements of this process (214).

Diversification can take many forms, although in most cases hospitals probably diversify within the health care industry.[5] It is often a form of vertical integration, where the hospital expands its service base to encompass a more comprehensive level of care. Examples are hospital sponsorship of a primary care group practice or home health agency. This strategy has several advantages for the hospital, including:

- greater control over referrals;
- increased access to reimbursement at different levels of patient care;
- an attraction for consumers who would have a variety of their needs met at one location or by one system of care;
- the possible forestalling of competitive practices of physicians (e.g., housing certain diagnostic lab equipment in their own offices); and
- reduced need to transfer or refer patients to other health service providers (109,387).

Common candidates for diversification include:

- long-term care units (see ch. 5);
- psychiatric and substance abuse treatment;
- rehabilitation services;
- ambulatory care (e.g., outpatient surgery, diagnostic imaging, wellness and health promotion services);
- occupational medicine; and
- women's medicine and birthing services.

An example of how these services might be used is presented in box 6-E. The use of swing beds for long-term care and diversification into various ambulatory care services are particularly common for rural hospitals.

Use of Swing Beds

Swing beds are hospital beds that may be used to provide either acute or longer term care. The term

[5]Some nonprofit hospitals may undergo corporate restructuring by creating parent holding companies and changing their tax status, making it possible to engage in non-health diversification (e.g., apartment leasing, credit collection services) with minimal adverse tax or regulatory consequences. Competition within these hospitals for limited resources, however, often may make the use of funds for unrelated activities less of a priority and thus unacceptable (374).

Box 6-E—Example of Hospital Diversification

Gritman Memorial Hospital, a 62-bed facility in Moscow, Idaho, has developed a number of diversified programs in the past few years. The hospital had previously experienced annual declines of 10 percent in utilization, "outmigration" of nearly 30 percent of its area residents, and a governing board and administration resistant to change. The board finally decided to appoint new members and hire a new management team for the first time in 25 years.

The new administrator developed a detailed diversification strategy with input from staff and community. Market research identified the demand for potential services and some of the reasons for the high rate of patient outmigration. Ultimately, the hospital decided to institute a comprehensive family birthing center, a diagnostic imaging center with computed tomography scanner and nuclear medicine, a mammography program, an outpatient physical therapy complex with rehabilitation and sports medicine, and an outreach laboratory. The hospital undertook most of these diversified programs without obtaining large amounts of capital or incurring substantial new debt. Since diversifying, Gritman has increased utilization by up to 12 percent annually, improved its operating margin threefold, and witnessed a 20 percent decline in patient outmigration (.374).

"swing bed" is used because the hospital patient may 'swing' between acute and skilled or intermediate care as needed, and still qualify for Medicare and Medicaid reimbursement (see ch. 3). Federal payment for swing beds is relatively recent; it was initiated after studies in the 1970s found that swing beds improved access to skilled nursing care for rural residents.

The growth of the swing bed program was slow at first, with only about 150 participating hospitals by 1984 (553). Recent growth has been rapid, however, perhaps in part as a result of the Medicare prospective payment system and its incentives for hospitals to discharge patients from acute care beds more rapidly. By July 1987, approximately 1,000 hospitals (about 47 percent of all eligible facilities) were participating (552).

Swing beds may be attractive or appropriate services for hospitals that:

- are in rural communities with an unmet need for institutional long-term care;
- have low acute-care occupancy and excess staff capacity; and
- have staff with satisfactory knowledge and training in long-term care (554).

Studies have found that the swing bed program both fills a gap in care for post-acute patients and provides small rural hospitals with a welcome source of revenue (510,552,555,700). A 1987 evaluation of the swing bed program concluded that three-fourths of all swing bed admissions in 1985 were from acute care beds; two-thirds of these were from the swing bed hospital's own acute-care unit. Medicare is the major payer, covering 49 percent of all swing bed days in 1985. Medicaid pays for about 8 percent of swing bed days (555).

The additional cost to hospitals of providing swing bed care is relatively small, since the beds already exist. Although swing bed care is not a major moneymaker, even low utilization levels can create net revenue for the hospital.[6] Nationally, swing bed revenue represents about 8 percent of total revenue in hospitals that have such beds (510). Also, having on staff specialized personnel (e.g., a social worker or physical therapist) for swing bed care may make it more feasible for a hospital to diversify into other services for the elderly.

Swing bed services generally provide short-term post-acute care rather than long-term care. The quality of care provided to the subacute, shorter stay patient appears to be satisfactory; however, care for patients needing more traditional, longer term nursing care may be better provided in area nursing homes (700). This finding is probably related to the type and level of staffing required. For example, the more intensive needs of swing bed patients may necessitate more regular attention from physicians. Also, hospital staff that serve acute and long-term care patients may lack the necessary expertise to provide different levels and quantities of care (e.g., coordinating social, recreational, and other therapeutic services not typically provided to short-stay patients) (700).

[6]For most hospitals, swing bed revenues exceed swing bed costs at low volumes of swing bed care. However, at high swing bed volumes (about 2,000 patient days), one study found that costs began exceeding revenues (*541*).

Table 6-l-Community Hospitals With Medicare-Certified Swing Beds, 1987

Swing bed hospitals	
Total Medicare-certified swing bed hospitals[a]	983
Percent of hospitals in frontier areas that are Medicare-certified swing bed hospitals	60
Percent of sole community hospitals[b] that are Medicare-certified swing bed hospitals	**38**
Characteristics (per swing bed hospital)	
Mean number of acute care beds designated as swing beds	17.3
Mean percent of swings beds to total facility beds	39.6
Mean swing bed admissions (number (percent) of total admissions)	47 (6)
Mean swing bed inpatient days (number (percent) of total inpatient days)	888 (13)

NOTE: Community hospitals are defined here as all non-Federal, short-nonspecialty hospitals (see app. c).

[a] Number does not include 19 hospitals that had swing beds but were not Medicare-certified swing bed hospitals. Number includes only hospitals in nonmetro areas; Federal law defining geographical eligibility for Medicare swing bed certification uses the U.S. Bureau of the Census definition of a rural area.

[b] As defined for Medicare purposes.

[c] Total facility beds include all beds—hospital and long-term care beds.

SOURCE: Office of Technology Assessment, 1990. Data from American Hospital Association's 1987 Annual Survey of Hospitals.

Hospitals converting acute-care beds to swing beds may face problems such as:

- staff reluctance to accept new responsibilities;
- staff recruitment difficulties imposed by Medicare's conditions of participation that require the provision of certain services (e.g., recreational therapy);
- unfamiliarity with regulations that were designed for skilled nursing facilities; and
- inadequate third-party reimbursement.

Most of these problems diminish with hospital experience as a swing bed provider (700).

Recent legislative changes (Public Law 100-203) enable all rural hospitals with under 100 beds to participate in the Medicare swing bed program[7], thus expanding the pool of eligible hospitals to about 2,800 (555). Hospitals with more than 49 beds must meet conditions intended to minimize competition with nursing homes. These conditions include transferring extended-care patients within 5 days to a skilled nursing bed in the hospital's region unless the transfer is not deemed medically appropriate by a physician or there is no such bed available.

In 1987, 983 hospitals were reported to be certified by Medicare as swing bed providers (table 6-l). In these hospitals, swing beds accounted for nearly 40 percent of total beds and 13 percent of total inpatient days. Hospitals located in frontier areas find swing beds especially attractive. Swing bed hospitals are most prevalent in the central and western parts of the United States; the West North Central region contains 42 percent of all swing bed facilities (figure 6-1).

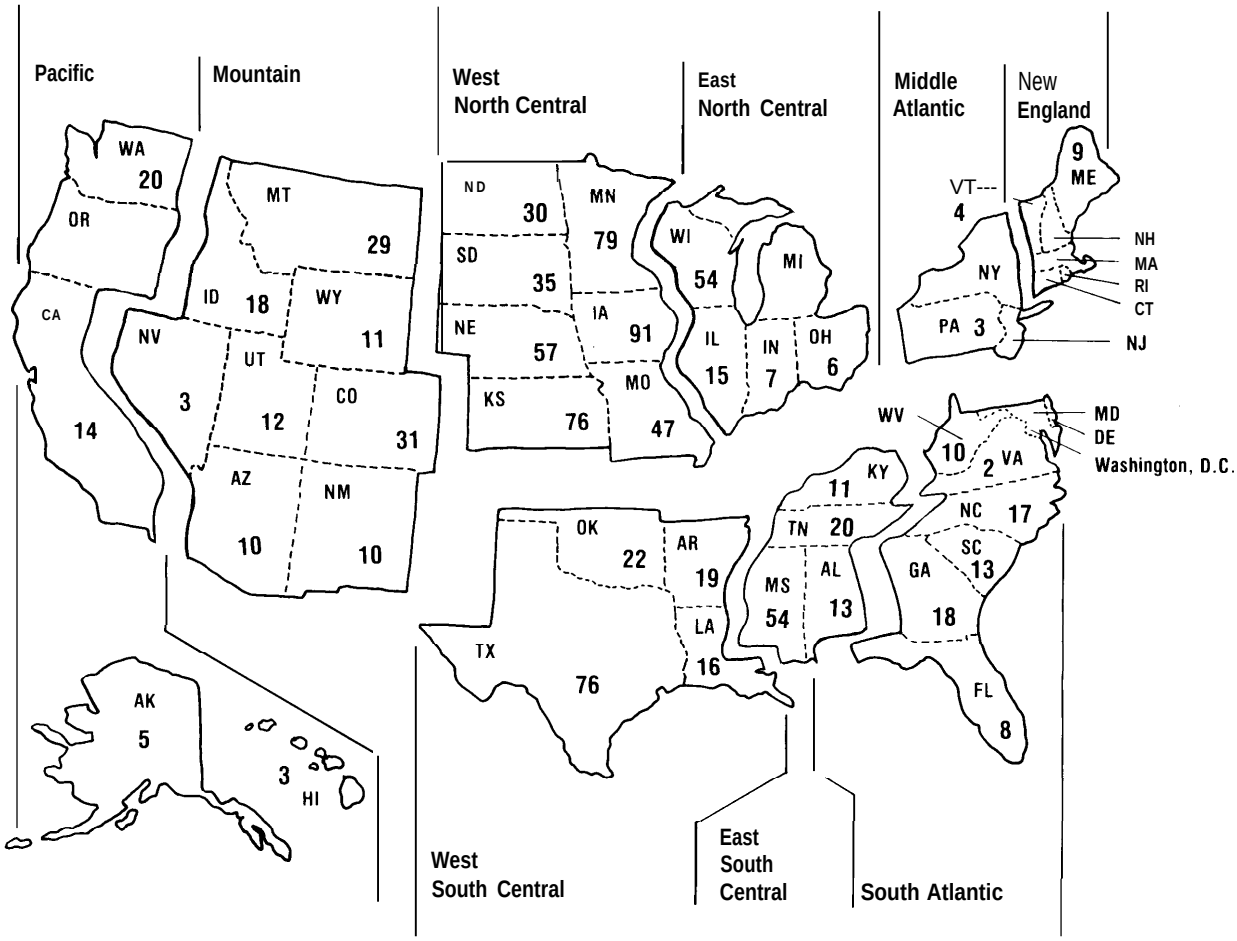
The growth of swing bed use in some Statesman be hampered by certain Federal and State regulations (see ch. 7) however, some States have eased restrictions on swing bed development. North Carolina now exempts swing beds from certificate-of-need review unless expenditures related to swing beds are $2 million or more, which is unlikely given the small capital costs required for such diversification (474). Montana, which previously had allowed Medicaid payment for swing beds only when there was no available nursing home bed within a 100-mile radius of the swing bed hospital, reduced its limit in 1989 to a 25-mile radius (452). Also, several States recently have passed laws authorizing Medicaid to pay for swing bed services. A 1989 survey found that 31 States were presently providing Medicaid coverage of swing bed care (474).

Ambulatory Care

Although nearly all rural hospitals provide some outpatient services (see ch. 5), ambulatory care continues to be an attractive area of hospital diversification. In 1987, about 80 percent of all hospitals (both rural and urban) surveyed by the

[7] States also may extend Medicaid coverage to all rural hospitals under 100 beds.

Figure 6-l—Number of Medicare-Certified Swing Bed Hospitals, by Census Region and State, 1987



Regional totals:

■ **West** North Central	415	■ South Atlantic	68
■ West South Central	133	■ Pacific	42
■ Mountain	124	■ New England	13
■ East South Central	98	■ Mid-Atlantic	3
■ East North Central	87		

SOURCE: Office of Technology Assessment, 1990. Data from American Hospital Association's 1987 Annual Survey of Hospitals.

AHA said they planned to diversify further into ambulatory care. They perceived the advantages to be increased revenues, larger market share, greater inpatient occupancy, and the improved ability to compete with area providers (275).

Hospital-based ambulatory surgery facilities can be particularly attractive in rural areas. They require limited capital, are convenient for physicians, and are a major source of surgical emergency care for the community. However, many hospitals are concerned about their profitability because of low patient volumes and changes in reimbursement (see ch. 5).

Another ambulatory care option for-rural hospitals is the sponsorship of primary or urgent care clinics and group practice centers. Physicians may sometimes find these arrangements attractive because they ensure back-up assistance and remove many administrative responsibilities from the physician.

For hospitals, the benefits include working more closely with physicians to capture and retain patients, stabilizing the physician practice, and improving the delivery of primary care services. However, obstacles to rural hospital diversification into primary care may include:

- difficulty recruiting and retaining physicians;
- hospitals' lack of knowledge and experience in primary care delivery;
- opposition by the local medical community;
- competition from primary care physicians and hospital emergency rooms;
- unstable financial condition of the hospital or primary care practice; and
- lack of patient awareness or acceptance due to poor marketing and quality assurance.

Nationwide, the number of hospital-operated freestanding centers providing primary or urgent care services had risen to 1,003 in 1988 (362). No data specifically exist for rural hospitals.

Hospital-affiliated primary care in rural areas takes various forms, including:

1. *Hospital-based and sponsored primary care clinics—In this* model (used by many Indian Health Service hospitals), the hospital delivers the primary care. In one example, an 80-bed rural hospital in North Carolina provided an onsite facility and operating subsidies to attract a primary care group practice to the hospital campus (485).
2. *Hospital-based certified rural health clinics* (RHCs)--Becoming a Medicare-certified RHC may help a rural hospital's ambulatory care diversification efforts. As noted in chapter 3, hospital-based primary care clinics under this program are paid a rate covering all reasonable costs for serving Medicare and Medicaid patients if they offer the use of midlevel practitioners at least 50 percent of the time. However, many rural hospitals remain unaware of this opportunity, find midlevel practitioners unavailable, are in States that limit Medicaid reimbursement for their services, or face other discouraging factors (see ch. 7). As of 1989, no more than 25 hospitals had been certified as RHCs (see ch. 5).
3. *Hospital-sponsored, satellite primary care centers*-satellite clinics extend the hospital's referral base and provide primary care to a geographically broad service area. Satellite clinics may provide community education, screening services, other primary care services, and diagnosis and treatment for essential emergency care. They can also provide a more accessible and less costly source of primary care for poor patients who previously may have used the hospital's emergency room (see box 6-F) (190).

Box 6-F—Example of Hospital Diversification Into Primary Care

In the mid-1970s, *Roanoke-Chowan Hospital in* Hertford County, North Carolina, opened a primary care center in Gatesville (25 miles away in Gates County) to make health care there more accessible and comprehensive. (Gates County is predominantly poor and has one of the highest infant mortality rates in the State.) The hospital's outreach effort was unusual in that it was believed to be the first case of a North Carolina public hospital providing such services beyond its county borders. Development of the satellite program involved initial foundation support and the cooperation and assistance of the Gates County commissioners and a nearby State-supported rural health clinic. The center was to be staffed full-time by a family nurse practitioner with onsite supervision from a hospital emergency room physician 20 hours a week Center services were to include a pharmacy, diagnostic care, and transportation services for patients to and from the hospital and area specialists (485).

Corporate Restructuring

Hospitals may restructure their corporate or organizational identity in order to diversify. For example, they may transfer certain hospital assets or functions to a separate corporation, such as a parent holding company of which the hospital becomes a subsidiary. This arrangement may be attractive to private, nonprofit hospitals wishing to protect their tax-exempt status while diversifying into unrelated and often for-profit businesses (31).

Hospital restructuring through the formation of parent holding companies and subsidiaries has not become common. A 1987 national survey of hospitals interested in diversification found that only one-fourth had created a subsidiary to operate diversification activities (275). Corporate restructuring is particularly uncommon in rural hospitals. About 11 percent of rural community hospitals were

Box 6-G—Four Examples of Rural Primary Care Networks

MarshfieldClinic, located in Marshfield, Wisconsin, is a large private, multispecialty group practice that offers a variety of outreach programs to a large rural region of the State. Created by 6 physicians in 1916, it now has over 250 physicians representing some 60 medical specialties. Since 1976, Marshfield has established 17 regional clinics, most located in small towns 10 to 100 miles from the main clinic. A regional services program provides advanced diagnostic testing and medical education and consultation services to over 370 hospitals and health care facilities serving a population of 3.5 million. The program provides various mobile diagnostic services (e.g., echocardiology), and a regional reference laboratory performs about 250,000 tests annually. The Clinic has also formed the Marshfield Medical Research Foundation to provide support in such areas as physician recruitment, clinical research, and administration of a federally funded clinic serving low-income patients (449).

The Southern Ohio Health Services Network, a private, nonprofit system of primary care centers, was originally created to attract physicians to a poor and medically underserved Appalachian region. The number of primary care centers operated by the network has grown from 1 in 1976 to 12 in 1988, covering 4 counties and serving 30,000 patients. In addition, the network manages a center that provides State-supported comprehensive prenatal care and supplemental nutrition services. Federal funds now provide 32 percent of the network's budget, compared with 52 percent when the network began operations. The centers share the services of some specialty physicians. They also share central office financial and personnel management and centrally organized staff education (724).

West Alabama Health Services (WAHS), opened in 1973, operates 5 primary care clinics, a 20-bed hospital, and a 52-bed nursing home and serves 8 counties in rural Alabama. Greene County, site of the central office and main medical center, is one of the five poorest counties in the Nation. In response to a high incidence of infant mortality and teen pregnancy in the area, WAHS began the Rural Alabama Pregnancy and Infant Health Project, providing preventive care with the support of a private foundation and participation by the district health department, an urban community health center, and university medical center. WAHS also employs dentists and specialists in mental health, nutrition, hypertension, and preventive health, and it has linkages with area Head Start and elderly meal programs. WAHS now provides more than 100,000 patient visits a year; nearly one-fifth of its patients rely on transportation services provided by WAHS. The central office handles all purchasing, billing and other administrative support requirements for the centers (135).

United Clinics--some rural private practices have also used satellite clinics to expand services. In 1965, two private physicians (a family practice physician and a radiologist) formed United Clinics, a private multispecialty group practice in rural North Dakota. The group expanded into internal medicine, obstetrics, pediatrics, and general surgery, and now has 17 physicians. Over a period of 20 years, United Clinics established six satellite clinics serving nine counties in North and South Dakota. Each clinic maintains x-ray, laboratory, and minor surgery capability to support the delivery of basic primary care and some specialty services (536).

part of a holding company in 1987, and just 6 percent operated a subsidiary (625).[8] For publicly owned hospitals, there are several legal restraints to corporate restructuring (see ch. 7).

Primary Care Facility Diversification

Like hospitals, some primary care centers have sought to diversify their services in order to provide a fuller array of health care while maintaining or improving their financial standing. These centers may depend on government funding (e.g., as community health centers (CHCs)) or operate as private practices. One emerging "diversification" strategy is the development of satellite clinics or multicenter networks that permit both operational efficiencies and service expansion (see box 6-G).

Satellite clinics staffed by midlevel practitioners can be used to expand primary care services, particularly in sparsely populated areas where there may be no local physician. Such midlevel practitioners can operate with considerable autonomy, receiving routine clinical supervision and support from physicians in other communities. In one clinic in a small isolated South Dakota community, for example, a physician assistant (PA) is the sole provider of care. The clinic is located between two Indian reservations and serves three of the area's poorest counties. The PA can call in prescriptions to the nearest pharmacy 55 miles away, and orders

[8] Includes only rural hospitals with fewer than 300 beds.

usually arrive in the community within a day. The PA is also allowed to have predispensed starter doses of drugs on site for common needs (354).

Some communities have resorted to unusual arrangements to obtain urgent primary care. A small rural community near the Colorado/Kansas border lost all essential primary care services in late 1985 when its small hospital closed and was converted to a nursing home, and the local physicians closed their practices and moved away. In 1986, investors from the community agreed to become partners with a private urgent care medical group in Denver, in order for the group to reopen the community clinic next to the nursing home as an urgent care center. Three physicians from the medical group were flown into staff the clinic. None of the physicians lived in the community on a regular basis and none offered extended hours, but they were on call for emergencies around the clock. To ensure some continuity of care, the group also planned to negotiate contracts with regional hospitals to arrange secondary and tertiary care for patients seen at the clinic. Community support in the early stages of the venture was reported to be excellent (723).

Where no traditional primary care providers are available, some local health departments have begun providing primary care, often to poor patients or residents of sparsely populated areas. For example, the health department in Price, Utah contracts with a physician to deliver primary care and case management services to Medicaid recipients and those without insurance in a four-county frontier area. The health department also has become a Medicare-certified home health agency (622).

In 1986, rural Marion County, Florida opened a primary care center, funded through the county health department, in order to reduce inappropriate use of the county hospital's emergency room facilities by indigent patients. The primary care clinic furnished nearly 3,700 patient visits in its first 5 months of operation (222).

Local health departments sometimes target a very specific service and population. With private foundation and State support, the district health department in Elizabeth City, North Carolina began in the mid-1970s providing mobile dental clinic services to needy children living in a four-county region. Services include screening, education, treatment, and referral. The mobile unit serves children onsite at area public schools; eligibility for services is tied to eligibility for the free school lunch program. About half of the children examined in the first year of the project were found to need immediate dental treatment (485).

Hospital Cooperatives

Financial problems and increased competition for Shrinking resources (e.g., capital financing) have compelled many rural hospitals to seek assistance from or cooperation with other providers. Such alliances may be sought in order to increase operational efficiencies, obtain management expertise, and enhance access to other resources.

Cooperative efforts have a solid history in the delivery of essential rural services (e.g., electricity, credit unions). Cooperative ventures to attract and provide health services bloomed in the 1940s, only to fade within a decade as community and government support declined (306). The cooperative concept appears to have experienced a resurgence in recent years, due to its promise of enhancing resources while preserving the independence of individual providers. The nature of the relationship among cooperating facilities may vary considerably (see box 6-H for examples).

Some of the potential benefits of cooperative relationships are:

- *more efficient operations* from reducing duplication and sharing equipment, facilities, staff and benefit plans, administrative services, marketing and management talent, and other resources;
- *improvement of market strength* through cost savings (e.g., from volume purchase discounts), increased productivity, and improved access to capital financing; establishment of beneficial patient referral arrangements; and participation in ventures such as preferred provider organizations and regional reference laboratories;
- *providing a forum* for information sharing and political advocacy of common causes; and
- *strengthening quality of care measures.*

There are obstacles to these potentially advantageous relationships. First, a lack of trust among competitors may be hard to overcome. Second, the rigidity of some alliances may not suit some members' needs. The alliances may limit the choice of shared services, or they may not be flexible enough to adapt to changes in the market for

Box 6-H—Three Examples of Hospital Cooperatives

The Rural Wisconsin Hospital Cooperative (RWHC) is a network incorporated in 1979 that now includes 18 small hospitals (average 50 beds) located in southern Wisconsin, and an urban university hospital. The purpose of RWHC is to provide a base of support and a catalyst for the development of joint ventures. Modeled after the traditional (and familiar) dairy cooperative, member participation in particular shared services is voluntary and is contracted on a fee-for-service basis. RWHC's projects include:

- sharing such diverse services as rehabilitation therapy and physician coverage of emergency rooms;
- development and early administration of the Health Maintenance Organization (HMO) of Wisconsin, one of the first rural-based HMOs in the country;
- development and administration of the RWHC Trust, providing health and dental insurance for staff of member hospitals; and
- a mobile computed tomography scanner and nuclear medicine services program for RWHC members and other area hospitals.

In 1988, with support from the Robert Wood Johnson Foundation, RWHC implemented a regional approach to improve hospital quality assurance programs and physician credentialing, enhance hospital financial management capabilities, and improve hospital trustee governance (621).

Northern Lakes Health Care Consortium (NLHCC), founded in 1985, is a nonprofit cooperative network of 21 hospitals, 50 medical clinics, and 2 medical schools located in northern Minnesota. The consortium, which grew out of a series of workshops and studies in 1984, quickly became an arena for area rural hospitals and physicians to explore solutions to common problems. NLHCC roles include legislative advocacy, technical assistance, shared services (e.g., discounted joint purchasing), ongoing educational sessions to the community and consortium, and multifaceted research on issues such as health promotion and disease prevention.

With private foundation support[1], NLHCC has also instituted several demonstration projects aimed at assisting member hospitals adapt to change:

- *The Rural Health Transition Project,* under which NLHCC provides matching grants and technical assistance to consortium hospitals to assess their internal operation and service area needs, and to plan any necessary restructuring.
- *A quality assurance network,* to develop comprehensive quality standards and help hospitals implement quality assurance programs.
- *A physician recruitment program,* to match medical students graduating from the University of Minnesota with NLHCC's member hospitals.
- *A regional long-term care network,* which helps long-term care providers integrate existing services, assess local long-term care needs, and establish new services. The network provides shared technical services such as physical therapy; inservice education; community-based outreach services for the elderly (e.g., home health care, case management, transportation services); marketing support; personnel recruitment; and quality assurance (261,.391).

The CARES Project (Coordinated Ambulatory Rehabilitation Evaluation Services) was created in 1979 by the Medical Center Rehabilitation Hospital at the University of North Dakota in cooperation with two rural community hospitals. The U.S. Public Health Service provided initial funding. The goal was to provide coordinated, multidisciplinary services for rural children with multiple disabilities. CARES serves children in 10 sparsely populated counties covering nearly one-fifth of the State.

In the first phase of the project, a core team of visiting specialists from the rehabilitation hospital traveled bimonthly over 300 miles to each rural hospital to provide treatment and consultation to patients referred by area physicians. These physicians received written reports and continued to be responsible for overall patient care management. In the second phase, local providers (e.g., physical therapists) were trained by rehabilitation hospital staff to act as part of the core staff at the clinics. Specialty rehabilitation teams now are comprised primarily of local hospital personnel, with ownership and program responsibility shifting to the rural hospital and a few local physicians that have received special training. Because of the project, disabled children are now more likely to receive rapid evaluation and comprehensive care (459).

[1]Sources of support include the Blandin Foundation and the Retirement Research Foundation (in association with the University of North Dakota).

services. Third, alliances can be time-consuming to develop and maintain because of the loosely coupled nature of the cooperative relationship and the distances between participating institutions. Other obstacles may be legal or regulatory in nature (see ch. 7).

Table 6-2 describes characteristics of 120 rural hospital consortia or alliances existing in 1989.[9] The average rural consortium had about 15 members. One-half of the alliances included at least 1 rural hospital with 100 or more beds, and over one-half had at least 1 urban hospital. The most common consortia activities were physician or staff education programs and shared services (403).

Rural hospitals are less likely than urban ones to belong to an alliance. In 1987, of community hospitals with fewer than 300 beds, 19 percent of urban and 12 percent of rural hospitals belonged to alliances (625). One-half of the rural members had fewer than 100 beds, and nearly two-thirds had nonprofit owners (table 6-3). Rural hospitals in alliances had slightly higher expenses than did all rural hospitals (table 6-4).

Cooperative opportunities With Urban Referral Centers

Some rural hospitals formalize their patient referral relationships with urban tertiary centers and specialists (see box 6-I). Cooperative referral networks with urban providers may help rural hospitals and physicians stem the outward flow of patients and revenues to urban facilities. Conversely, referrals of complex cases from rural providers can bring substantial revenue to urban tertiary hospitals and specialists.

One report found that referrals from rural areas in Utah account for 5 percent of an urban tertiary center's patient days but up to 20 percent of its revenues (76). A study of referrals from rural family practice physicians to university-based physicians in mid-Missouri from 1982-85 found that the average referral generated nearly $3,000 in hospital and professional revenues within 6 months. Nearly one-half of the referrals (110 of 225) resulted in admissions to the university teaching hospital, representing 72 percent of all referral revenue for the hospital (213).

Table 6-2—Descriptive Characteristics of Rural Hospital Consortia[a]

Characteristics	Mean
Age (years)	6
Total number of members	15
Percentage with rural hospital having 100 or more beds	51
Percentage with urban hospital	55
Percentage with nonhospital member	30
Number of meetings past year	9
Percentage with board of directors	60
Size of board of directors	10
Percentage with paid director	44
Percentage with budget	63
Size of budget	$231,693
Sources of funding:	
Percentage with member dues	33
Percentage with grants	26
Percentage with revenues from activities	26
Percentage with other sources of revenues	23
Number of activities/programs offered by consortia	6
Types of activities (% consortia offering activity)	
Physician or staff education programs	81
Shared services	80
Legislative liaison	70
Marketing or community relations	62
Regional planning	58
Physician or staff recruitment	55
Shared staff	47
Management or financial services	47
Primary or specialty clinics	43
Quality assurance	42
Acute-care bed conversions	22

aBased on the American Hospital Association definition, 120 rural hospital consortia were identified (see text). Not included are rural hospitals working only with nonhospital organizations, meeting only for discussion purposes or to pursue a single activity pertaining to policy or planning issues, and those working together mainly because of multihospital system ownership or management arrangements (403).

SOURCE: I. Moscovice et al., "The Development and Characteristics of Rural Hospital Consortia," contract paper prepared for the Robert Wood Johnson Foundation Hospital-based Rural Health Care Program, New York, NY, 1989.

Rural hospitals and physicians benefit from such referral arrangements by:

. developing close relationships between referring and referral center physicians that lead to side benefits (e.g., occasional practice coverage for referring physicians);

[9] A hospital alliance in this table is defined by AHA as a formally organized group of hospitals or hospital systems that have come together for specific purposes and have specific membership criteria.

Table 6-3—Nonmetropolitan Hospitals[a] Under 300 Beds in Alliances[b] by Bed Size and Ownership, 1987

Bed size	Ownership		
	Government	Nonprofit	Total
6-24	5	7	12
25-49	27	28	55
50-99	29	50	79
100-199	27	66	93
200-299	10	39	49
Total	98	190	288[c]

[a]Community hospitals defined here as all non-Federal, short-stay, nonspecialty hospitals (see app. C).
[b]Alliances are defined by the American Hospital Association as a formally organized group of hospitals or hospital systems that come together for specific purposes and have specific membership criteria.
[c]For-profit hospitals in alliances numbered 3 (1 percent of total).

SOURCE: Office of Technology Assessment, 1990. Data from American Hospital Association's 1987 Annual Survey of Hospitals.

Table 6-4-Total Expenses per Hospital for Nonmetropolitan Hospitals[a] in Multihospital Systems and Alliances, 1987

Bed size	Total rural	In multihospital systems	In alliances
6-24	$1,357	**$1,661**	**$1,454**
25-49	2,747	**2,987**	**3,039**
50-99	5,907	**6,352**	**7,628**
100-199	12,820	**13,710**	**15,386**
200-299	25,526	**24,395**	**27,934**
300-399	44,681	**49,683**	**45,000**
400-499	48,264	**27,059**	**42,625**
500 or more	85,712	**96,129**	**77,908**
Total	$7,639	$7,830	$7,842

[a]Community hospitals defined here as all non-Federal, short-stay, nonspecialty hospitals (see app. C).

SOURCE: Office of Technology Assessment, 1990. Data from American Hospital Association's 1987 Annual Survey of Hospitals.

- providing local followup care for patients treated at urban facilities;
- receiving periodic support of urban specialists to perform certain procedures (e.g., uncomplicated surgeries), to gain access to sophisticated technologies, and to offer clinical training and expertise; and
- enhancing the overall image of the local hospital.

However, efforts to formalize referral relationships (e.g., via contracts) may encounter drawbacks. These may include legal problems associated with self-interest in making referrals (see ch. 7) and limits on the use of alternative referral options.

Alliances Between Primary Care Providers

Some rural primary care providers have also developed cooperative arrangements. The Federal Government has recently encouraged CHCs to establish cooperative relationships with each other and with other health and social agencies.[10] Cooperative activities have included recruiting physicians, establishing computerized information networks, channeling low income patients to prepaid services, providing sources for continuing education, and sharing staff, equipment, and other resources (585). Some CHCs have linked management services to improve activities such as grantsmanship, board training and development, and provider recruitment. Box 6-J gives some examples of primary care alliances that have apparently been successful.

CHC alliances with area agencies on aging (AAAs) are a specific response to a need for greater linkage between health care and other services for the elderly. AAAs were created to provide a comprehensive and coordinated set of services for the elderly (e.g. home-delivered meals, information and referral, transportation) (Public Law 93-29). Rural AAAs appear to have smaller budgets and more limited ranges of services than do their urban counterparts (287).

In 1987, the U.S. Public Health Service and Administration on Aging undertook a joint initiative to increase cooperation between CHCs and AAAs. Cooperation may, for example, involve the use of AAA senior centers as satellite clinics for CHCs,and the provision of dental services to the elderly by CHCs. CHCs can provide many of the basic health, nutrition, and preventive care services that AAAs may be unable to offer (box 6-J) (460).

The mandates of both CHCs and local health departments (LHDs) to provide basic health services to the poor and disadvantaged may lead to duplication of services. With the recent involvement of many LHDs in primary care, CHCs and LHDs in

[10]The Public Health Service provided special funds to about 120 CHCs between 1984 and 1986 to support consortia activities, hoping to demonstrate their effectiveness and encourage their development elsewhere without further funds. A formal evaluation of these efforts is planned for 1990 (585).

Box 6-I—An Example of a Rural-Urban Hospital Alliance

Mercy Hospital Medical Center, a nonprofit 535-bed tertiary care facility in Des Moines, Iowa, has established a cooperative network linking Mercy and 38 rural hospitals within a 100-mile radius. The network attempts to improve and expand services of participating rural hospitals and increase patient referrals to Mercy from rural physicians. Witnessing greater competition among Des Moines hospitals, Mercy in 1985 surveyed area rural hospital needs and subsequently organized a network of outpatient specialty clinics. By 1989, physicians from 20 specialties were providing over 80 clinics in 28 rural hospitals. Urban consulting specialists are now encouraged to use local hospital resources (e.g., laboratory and x-ray facilities) that generate added revenue for the rural hospital. To assist the specialists and keep local physicians familiar with new medical technology, Mercy also provides certain clinical technology services and equipment (e.g., computerized EKG machine) at minimal cost to the local facility.

The Mercy Hospital Network has formal affiliation agreements with 11 rural hospitals, 7 of which have requested Mercy for an administrator. To maintain the local hospital's autonomy, the administrator is accountable to that hospital's board of directors. All rural hospital affiliates may obtain low-cost management and clinical consultation services, staff education programs, and assistance in recruiting physicians and allied health professionals. Network hospitals without formal affiliations may purchase similar services at somewhat higher prices (81).

rural areas may find it advantageous to share services and resources (box 6-J).

Multihospital Systems

A multihospital system (MHS) is broadly defined by the American Hospital Association as two or more hospitals that are owned, leased, sponsored, or contract-managed by a central organization (107). MHSs may be either nonprofit or investor-owned. Nonprofit systems are tax-exempt organizations, usually regional in scope. Investor-owned systems are for-profit, shareholder-based institutions usually controlled by a central management.

Affiliation with an MHS requires yielding some or all of a hospital's autonomy. A hospital will probably be unable to reverse its lease or sale to the MHS. Contract management by an MHS is also relatively irreversible. It appears to have improved the management of many hospitals (315), but it may be perceived by some hospitals as a means by an MHS to eventually gain more control.

Many of the conditions that lead hospitals to diversify or participate in cooperatives also apply to joining MHSs. In addition, hospitals may turn to MHSs because of immediate financial crises. Specific factors might include:

- physical plant deficiencies that the hospital does not have the capital to remedy;
- the perceived opportunity for the hospital to improve access to capital and specialized management expertise through an MHS; and
- pressure from local community leaders who are anxious to stabilize the hospital's operating environment (282).

For the MHS, advantages of recruiting rural hospitals may include eliminating competition, enabling more control over regional markets to gain patient share and profits, and improving the delivery and access of certain health services. Box 6-K provides two examples of MHSs.

Rural participation in MHSs has waxed and waned. From 1950 to 1983, the number of small rural hospitals (with fewer than 100 beds) that joined systems increased from 32 to 490 facilities. Most hospitals in MHSs (46 percent) were under contract management (345). By 1985, more than one-third of rural community hospitals were in MHSs (31). By 1987, however, the number of rural community hospitals in multihospital systems appears to have declined to about 25 percent of rural community hospitals with fewer than 300 beds (table 6-5).

The recent decline in MHS participation by rural hospitals is probably indicative of their fears that:

. their autonomy and flexibility will be diminished;
. MHS management will neglect local interests and needs (e.g., staff will be replaced with corporate-designated personnel); and
. local revenue may be lost from the community (345).

On their part, many MHSs are reportedly finding rural hospitals to be less attractive as investments.

Box 6-J—Seven Examples of Primary Care Alliances

Eastern Shore Rural Health Systems, a network of three Virginia CHCs, needed additional physician services in the mid-1980s but could not justify the use of a full-time provider. With Federal support, the network negotiated with Delmarva Ministries, a regional migrant service program that needed a physician during the migrant worker season. The subsequent agreement to jointly recruit and share another physician also allowed the joint purchase of a new van needed to serve people with inadequate transportation (585).

Aroostoock County Action Program, **a** consortium of five CHCs in northern Maine, was formed to improve access to obstetrical services for women in a 900-square-mile area. Consortium plans included recruiting and sharing a physician to provide obstetric care, and later expanding obstetrical services to include a multidisciplinary team of professionals (e.g., nutritionist, outreach worker) to be shared through cooperative agreements with area agencies. These efforts would coincide with the consortium's development of a perinata1 care plan for the area, linking needy and high-risk patients to a comprehensive array of services (585).

Three small CHCs in frontier Utah agreed in 1988 to establish an informal consortium. Major distances from other health care resources limited their ability to obtain regular coverage for their solo-practice physician assistants (no physicians were on site). Early efforts by the CHCs to develop a consortium have centered on applying for a foundation grant to support a preventive care program for the elderly at each of the centers, and jointly recruiting and sharing the costs and services of an additional midlevel provider (600).

Valley Health Systems, a group of southern West Virginia CHCs, affiliated in the late 1970s to share administrative and clinical services. Initially under a contract with a separate management group, the centers received support for grant writing, daily operations management, board training, provider recruitment, and other needs. In recent years, with encouragement from the Federal Government, the management group has assumed greater control over the centers to further consolidate grant activity and center operations (551).

The Alliance for Seniors is a cooperative effort begun in 1982 between area rural CHCs and the Egyptian Area Agency on Aging serving elderly persons in a 13-county area in southern Illinois. The alliance was in response to an Illinois requirement for a statewide case management system to serve as "gatekeepers" for elderly persons needing long-term care, Activities include:

- hiring a nursing home ombudsman,
- undertaking a 3-year elderly abuse prevention demonstration project,
- placing nurse educators in senior centers and encouraging local health departments to become involved in providing health promotion to seniors, and
- training homemakers and chore workers in oral screening and dental care, and purchasing equipment enabling area dentists to serve the homebound (287).

Wayne Health Service, a CHC in West Virginia lacking its own radiology equipment, had many patients in 1981 with no regular transportation but who often needed x-ray services. The only commonly available x-ray unit was about 40 minutes away, and the county health department's unit nearby was used infrequently. The CHC initiated an agreement with the health department to lease use of its x-ray unit at no charge, stipulating the CHC would cover all related operating costs. The CHC hired a part-time technician, setup a regular schedule for testing nonemergent referrals, arranged for an area radiologist to read films, and promoted the new service (251).

The Shenandoah Community Health Center in western Virginia, which serves a large migrant farmworker population at certain times of the year, relies on the local health department to contact migrants who have been exposed to infectious diseases. The CHC and health department jointly increase staffing and followup care during the harvest season to minimize delay in tracking exposed individuals. **To** address demand for more extensive laboratory tests, the health department is also helping train CHC staff to perform some of the laboratory work (501).

Some MHSs have divested themselves of rural hospitals. In 1985, for example, Republic Health Corp. sold five of its rural hospitals, while American Healthcare Management Inc., planned to sell five of its eight remaining rural hospitals that same year (559). Other MHS operating rural hospitals have suffered financial harm. Basic American Medical, which once managed 20 rural hospitals, was in 1988 operating only 3 rural hospitals that it had been unable to sell (360). Westworld Community Healthcare, which operated 40 rural hospitals at its peak in 1986, declared bankruptcy in 1987 while running 14 hospitals and reportedly incurring a $135 million debt (709).

Box 6-K—Two Examples of Multihospital Systems

Memorial Hospital and Home, a 29-bed hospital and 102-bed nursing home in rural Minnesota, in 1984 was suffering from declining utilization, staff turmoil, a negative community image, and a $250,000 operating deficit. In 1985, Memorial's board of directors signed a 2-year agreement with Saint Luke's Hospitals-MeritCare, a large tertiary hospital located 70 miles west in Fargo, North Dakota, to contract-manage Memorial.

Neither hospital had previous experience with such an arrangement. The contract required Saint Luke's to hire an administrator and in the first year develop new operating procedures, strategic plans, and marketing programs; conduct board training; evaluate and revise administrative and nursing policies (e.g., a new wage system); and review quality assurance activities. By the second year, new purchasing and computer services contracts were established, and outside specialists from Saint Luke's were brought in as needed to run clinics and provide staff education.

By 1986, the hospital showed a profit of $97,000. In 1987, remaining problems included a lingering low patient census, some negative community feelings, and the return of unexpected operational losses; however, most board members agreed to a new contract for an additional 19 months, allowing Memorial to participate in a joint purchasing agreement with Saint Luke's and Voluntary Hospitals of America (246).

Intermountain Health Care, Inc. , a nonprofit MHS, was founded in 1975 in Salt Lake City, Utah to assume ownership of 15 hospitals in the region divested by the Mormon church. IHC now manages, leases, or owns 23 community hospitals (14 of which are rural) in 3 States. It also operates 4 freestanding ambulatory surgical centers and 25 rural primary care clinics that serve as outreach facilities to the rural hospitals. Services provided to its member facilities include:

. a cardiac emergency care network linking rural hospitals and physicians with area tertiary care centers;
. access to high-risk perinatal care, lithotripsy, and central lab services;
. crosstraining and continuing education to retain nurses;
• sharing of medical directors between some hospitals, helping smaller facilities with credentialing and quality assurance activities; and
• group purchasing for supplies, data processing services, insurance, and employee health benefits.

Intermountain has recently faced excess capacity and increasing losses in its rural hospitals, forcing it to consider liquidating hospitals or converting them to other use (115).

Overall, the effectiveness of MHSs in helping rura1 hospitals to survive is uncertain. A national study of MHSs from 1984 to 1987 found little difference in the profitability and scope of services between autonomous rural hospitals and those in MHSs. However, rural hospitals in MHSs had lower costs per admission, were twice as likely to enter into economic joint ventures with physicians, and provided less uncompensated care than did independent rural hospitals. Among rural hospitals in MHSs, nonprofit systems offered a greater number of out-of-hospital services, engaged in more economic joint venture and managed care activity, and had less uncompensated care and lower costs per admission than investor-owned systems, but they were less profitable and had higher room charges (418). An earlier study found similar results; there were few differences in performance between hospitals owned by or leased to MHSs and MHS-managed or independent hospitals. Owned or leased hospitals were more likely to be accredited by the Joint Commission on Accreditation of Healthcare Organizations, and they had a higher average expense per patient day, but they did not provide more services (88). Neither study examined whether rural hospitals in MHSs had improved access to capital-the most commonly perceived advantage of MHS participation.

Local Hospital Mergers and Agreements

Where a community has two or more hospitals providing duplicative services and suffering excess capacity, consolidation of these services may be a successful strategy (see box 6-L). If local hospitals merge their organizations and assets, or enter into a formal agreement regarding the division of services, they can each provide only those specialized services for which they are best suited (e.g., one hospital provides obstetrical services, another delivers long-term care). These arrangements may then help subsidize the continued provision at each hospital of

Table 6-5—Nonmetropolitan Hospitals[a] Under 300 Beds in Multihospital Systems by Bed Size and Ownership, 1987

Bed size	Ownership			
	Government	Nonprofit	Profit	Total
6-24	8	23	6	37
25-49	26	95	25	146
50-99	24	129	64	217
100-199	13	88	53	154
200-299	3	25	8	36
Total	74	360	156	590

[a]Community hospitals defined here as all non-Federal, short-stay, nonspecialty hospitals (see app. C).

SOURCE: Office of Technology Assessment, 1990. Data from American Hospital Association's 1987 Annual Survey of Hospitals.

essential services, such as emergency care, that it maybe inappropriate to centralize.

Success of these arrangements is affectedly:

- traditions of institutional independence and pride and the present extent of interinstitutional relationships, leadership, and community support;
- differences in ownership and corporate operating cultures of the institutions;
- the proximity and similarity of hospital service areas;
- area overbedding, service duplication and other operating inefficiencies in each hospital, and the resulting economic pressures;
- competition among hospitals for gaining area physician loyalty and support; and
- the growing threats of antitrust investigation and litigation.

Little is known about how common and how successful local mergers and service agreements between rural hospitals are.

Hospital-Physician Agreements

Hospital and physician services increasingly overlap. Hospitals may compete with the private practice of their medical staffs by opening and staffing their own ambulatory care centers; physicians may compete by offering ancillary and high-technology services in their private offices or in freestanding facilities.

In some cases, hospitals and physicians have decided to cooperate rather than compete, through joint ventures or other affiliations. The joint venture is a legally enforceable agreement involving financial speculation and risk for two or more parties in order to conduct a new business, most often out-of-hospital services. Like diversification, joint ventures with physicians may help the hospital strengthen its referral base for inpatient admissions and outpatient specialty care. Common ventures are diagnostic imaging centers, laboratories, ambulatory surgery centers, and leasing facility space. Some hospitals have also sold physicians a stake of minority ownership in their facilities, intending to strengthen physician referral loyalties and encourage maximization of hospital resources (471). Joint ventures are often corporations or partnerships in which the hospital assumes the greater risk as general partner, while the physicians are limited partners. These agreements may encounter some legal obstacles (see ch. 7).

Hospital-physician joint ventures are relatively new and few. A 1984 survey by AHA found fewer than 12 percent of hospitals (both urban and rural) reporting such arrangements, and these were predominately ventures creating prepaid medical care plans. Cities with populations of 250,000 or more were most likely to have hospitals with established joint ventures (401).

Hospitals also attempt to bond physicians by offering incentives that capture most of their inpatient admissions and referrals to outpatient services,

Box 6-L--Example of a Local Hospital Merger

In the 1970s, two 150-bed hospitals in a community of 50,000 residents on Michigan's remote upper peninsula decided to merge to improve the provision of acute care in the region. They hoped to create a more favorable image among area physicians, who were then referring patients to hospitals 200 or more miles away. After the merger, a new 144-bed facility was built adjacent to the old building of one hospital (Saint Luke's). The second hospital was sold to the State and later converted to a veterans' hospital. In 1984, a new outpatient cancer treatment facility was opened at Saint Luke's, and an extended care center with a magnetic resonance imaging scanner was planned for completion in 1987. Between 1984-85, hospital admissions increased 10 percent while other area hospitals were noticing declines (274).

and reduce competition from urban hospitals. Typical incentives are:

- office space and equipment;
- subsidized malpractice insurance;
- patient referrals from hospital satellite centers or through managed care contracts;
- management services (patient billing, marketing support, iiancial counseling);
- continuing education; and
- guaranteed income or cash incentive compensation.

A recent study asked physicians in nine rural Midwestern communities which factors were important in selecting a hospital for practice. Support services of highest interest included accredited continuing education, hospital liaisons to ease communications with administration, medical staff offices with effective support and communications, and assistance in developing patient information and satisfaction surveys. Services noted of least interest were billing services and opportunities to participate in managed care arrangements and joint ventures (534).

SUMMARY OF FINDINGS

Many rural providers have found effective means of adapting to changes in their environment. There are numerous examples of efforts by rural hospitals, CHCs, and other facilities to support effective change. Many have found ways to strengthen facility solvency and stabilize operations in the short term (e.g., renewed fundraising, tougher collection policies). Also, many rural facilities have instituted strategies that reconfigure their organizational and service structure for the longer term. These efforts include converting or diversifying service bases to address changing utilization and revenue patterns, and joining alliances or multihospital systems to share resources and lower financial risks.

Some strategies have been used widely and successfully. The number of rural hospitals, for example, that have become swing bed providers has grown to about half of those eligible, allowing these facilities to diversify away from declining acute care utilization and meet growing post-acute care demands.

Other strategies have been tried with more limited success. For example, rural hospital membership in multihospital systems appears to be declining. It is not clear whether certain types of rural hospitals are more likely to benefit from inclusion in multihospital systems.

Little is known about the success of many efforts, and no effective way now exists to predict and communicate their success. Also, little opportunity is available for communities to compare and exchange ideas. Examples of apparently successful strategies include improvements in leadership and management, hospital conversions to alternative health facilities, local hospital mergers, hospital-physician arrangements, and CHC consortia and categorical care initiatives.

Other rural providers have not availed themselves of helpful methods and strategies, in part because it appears they have been slow to accept necessary change. For example, despite significant declines in inpatient utilization (see ch. 5), many rural hospitals remain full-service acute-care facilities, apparently without the will or resources to thoroughly examine their roles and capabilities and make significant structural changes.