
Do Transition Grants Help Rural Hospitals?

Judith Wooldridge, M.A., Valerie Cheh, Ph.D., Rachel Thompson, M.P.H., Lorenzo Moreno, Ph.D., and Nancy Holden, M.A.

Congress introduced the Rural Health Care Transition (RHCT) Grant Program in 1989 to assist financially troubled, small rural hospitals. This article discusses grant effects on the second cohort of hospitals to complete their 3-year grants. Although three-quarters of the grantees implemented all or most of their goals, 11 percent could not implement a viable project. Grantees added or upgraded 523 services with the help of their grants, especially outpatient and social services, most of them financially self-supporting. Except among the largest hospitals, there was no evidence that the grants improved grantee finances. Management appeared unaffected by the grants.

INTRODUCTION

Congress introduced the RHCT Grant Program to improve the management and finances of small rural hospitals. During the 1980s, the financial condition of small rural hospitals declined as they contended with unfavorable demographic and economic trends, changing practice patterns, and replacement of cost-based reimbursement for acute inpatient care with prospective payment. As a result of financial problems, many rural hospitals closed. The RHCT Grant Program was one of several Federal initiatives developed to maintain access to health care in the rural United States.

This article reports on an evaluation of the grant program, focusing on the cohort

of grantees that completed their 3-year grant projects in 1993. The grants enabled rural hospitals to add many new services. As a result, access to specific services improved. The grant program may also have improved the financial condition of the largest grantees (those with 60-100 licensed beds), but did not appear to affect the finances of the smallest grantees.

Rural hospitals have undergone major changes during the past decade. Hospital days and lengths of stay decreased substantially as medical technology and changing practice patterns shifted patients into outpatient care. The average length of hospital stays also decreased in response to the incentives of prospective payment for inpatient care. Rural hospital admissions dropped 8 percent between 1984 and 1989 (Buczko, 1992), as did rural hospital occupancy rates between 1984 and 1988 (Office of Technology Assessment, 1990).

Small rural hospitals have weaker finances than larger hospitals and have been slower to make the transition toward outpatient care (Office of Technology Assessment, 1990). Stiff competition from urban providers for primary-care physicians and a relatively high rate of physician turnover force rural hospitals to recruit physicians continuously. Economic conditions in rural areas do not favor rural hospitals; moreover, the population is older, growing more slowly, and more often lacks health insurance than the urban population. Finally, small hospitals must contend with scale problems; their small size makes it harder for them to staff efficiently and to recruit talented managers.

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Congressional concerns about the financial viability of rural hospitals and rural residents' access to health care led to the enactment of the RHCT Grant Program (Omnibus Budget Reconciliation Act [OBRA] of 1987, Public Law 100-203, Section 4005 [e], subsequently updated by OBRA 1989, Public Law 101-239, Section 6003 [g]). Eligibility for the grant program is restricted to non-Federal, not-for-profit, rural hospitals with fewer than 100 beds. The grants are awarded for up to 3 years, with maximum funding of \$50,000 per year. Congress imposed only two restrictions on use of the grant funds: (1) grants may not be used to retire debt incurred for capital expenditures before the grant period; and (2) expenditure on capital items is limited to a maximum of one-third of the grant amount. Congress (OBRA 1987) stated the purpose of the program as follows:

“...Each demonstration project...shall demonstrate methods of strengthening the financial and managerial capability of the hospital involved to provide necessary services. Such methods may include programs of cooperation with other health care providers, of diversification in services furnished (including the provision of home health services), of physician recruitment, and of improved management systems. Grants may be used to provide instruction and consultation...via telecommunications to physicians...”

The first cohort of 181 rural hospitals received RHCT grants in 1989. The second cohort of 211 rural hospitals (the subject of this article) received grants in September 1990 (the “1990 grantees”).¹ Most of the 1990 grantees were in the program for the maximum period of 3 years. They introduced a variety of new services and programs at a cost of \$21.7 million to the Medicare program.

¹ By September 1993, 796 hospitals, about 41 percent of all eligible rural hospitals, had been awarded transition grants.

The 1990 grantees were small and many were financially weak. Eighty percent of them had fewer than 60 beds at the time of grant award, their median occupancy rate was 27 percent, and their median operating margin was minus 6 percent. Relative to rural community hospitals nationwide, the 1990 grantees were smaller, located in less densely populated areas, more likely to be publicly owned, and plagued by poorer financial indicators (Table 1). Their major concerns were recruiting and retaining physicians and obtaining reimbursement for services.

EVALUATION OBJECTIVES, METHODS, AND DATA

Our principal objective was to assess whether the grant program improved rural hospitals' finances and management (the Congressional objectives). However, our first consideration was whether the grantees even implemented their projects (for example, introducing a new outpatient service) and whether they achieved the intended outcomes (for example, improving access).² Assuming that implementation occurred, we assessed whether there had been changes in management, finances, and utilization, and the likelihood that the grant program was responsible for these changes.

We assess project implementation by drawing on two data sources: (1) grantee reports on progress and services added using the grant; and (2) our case studies of 54 grantees. We describe the effects of the grant program on the availability and quality of services and access to care

² It was possible for the grant program to improve access to a specific rural hospital without improving access locally—if another provider lost patients—or for access to improve locally, but at the expense of another area—such as when one area recruits a physician away from another area. We were able to assess the extent of local effects through discussions with local providers who might have been affected, but our evaluation was not designed to measure the impacts of the program on access in rural areas nationwide.

Table 1
Transition Grantee Characteristics Compared With Rural Hospitals Nationwide

Characteristic	1990 Grantees (At Award)	Rural Community Hospitals Nationwide
Licensed Acute-Care Beds (Percent):		
30 or Fewer	29.1	10.8 ^{1,2}
31-60	51.0	42.8 ^{1,2}
61 or More	19.9	46.4 ^{1,2}
Median Occupancy Rate for Licensed Acute-Care Beds (Percent)	27.3	31.2 ³
Ownership (Percent):		
Private Not-for-Profit	45.9	48.0 ⁴
City, County, or District	53.7	52.0 ⁴
Other	0.5	—
Management (Percent):		
Independent: No Management Contract	60.0	—
Independent: Management Contract	23.4	—
Multihospital Systems	17.6	17.7 ⁵
Finances:		
Median Operating Margin (Percent)	-5.60	0.97 ³
Median Net Patient Service Revenue (Dollars)	3,719,577	—
Median Travel Time to Nearest Hospital (Minutes)	35	—
Median Population Density in County (Persons per Square Mile)	19.8	24.1 ⁶

¹ The distribution of rural hospitals nationwide, by bed size, is 6-24, 25-49, and 50-99.

² 1990 data for all rural community hospitals from (American Hospital Association, 1990).

³ 1990 data for median rural hospitals of 25-99 beds from (HCIA, Inc., and Deloitte & Touche, 1994.)

⁴ 1990 percentage distribution, excluding for-profit hospitals (which were not eligible for the grant program) from (American Hospital Association, 1990).

⁵ Percentage of not-for-profit and local government-owned rural hospitals with fewer than 100 beds in multihospital systems in 1987 from (Office of Technology Assessment, 1990).

⁶All counties with a hospital eligible for the transition grant program.

SOURCES: Grantee baseline reports, 1990; Health Resources and Services Administration: Area Resource File, 1993; American Hospital Association, 1990; and (HCIA, Inc. and Deloitte & Touche, 1994).

(using structural measures) based on a comparison of services offered at the start and end of the grant program. We also assess whether these changes in availability of services were due to services added with the grants. Once again, we use grantee baseline and end-of-grant reports for this analysis. We assess changes in management between the start and end of the grant program using grantee baseline and end-of-grant reports. Finally, we assess changes in financial performance and hospital utilization over the life of the grant project to determine whether the grant program was responsible for the changes. This analysis uses semi-annual grantee reports and grantee annual financial reports and compares trends with national financial and utilization data. A change is attributed to the

grant program only if it occurred after the grant program began and was greater than changes found nationwide among comparable hospitals in the same period.^{3,4} One caution is necessary—because it took hospitals considerable time to implement their projects, grants could have affected finances after the grant period, but we would not have been able to observe the effect during the 3-year evaluation timeframe. Absence of the report of effects should, therefore, not be construed as proof that the grants did not affect finances.

³ We had originally hoped to use a comparison group approach, but the continuing expansion of the grant program to new hospitals every year from 1990 onward ruled this out.

⁴ Although we drew on self-reports by the grantees, the grantees had no incentives to misreport the services they offered, or the activities they had completed under their grant project; grant continuation was not affected by the progress reports.

Table 2
Services Added or Upgraded With Transition Grants, by Service Type

Type of Service Added or Upgraded	Number of Services Added or Upgraded	Percentage of Grantees Implementing 1 or More Services	Most Common Services Implemented
Outpatient	229	58	40 Rural Health Clinics 35 Outpatient Surgery Programs 34 Home Health Agencies/Hospices 29 Emergency Room Upgrades 25 Cardiac Rehabilitation Programs
Preventive	99	37	61 Community Education Programs
Community Medical and Social	76	30	37 Social Service Programs
Diagnostic	47	20	10 Mammography Programs
Inpatient	39	17	14 Skilled Nursing Units
Transportation	33	17	26 Routine Medical Transportation Programs

NOTES: In addition to the new services listed above, 45 grantees recruited physicians using their grants. These physicians also added services to the grantee areas.

SOURCE: Semiannual progress reports from 1990 grantees.

FINDINGS

Grantees Implemented Many Services

Grantees used their grants to add or upgrade 523 services (Table 2). Grantees also recruited physicians (45 grantees recruited 79 physicians).⁵ A minority of grantees implemented strategic plans and needs assessments or used the grants to train health professionals.

Some services were less likely to be implemented than others. None of the proposed assisted-living and ventilator-dependent units, fewer than one-half of the proposed adult day care, emergency transportation, primary-care clinics, and wellness programs, and only 55 percent of the home health or hospice programs were actually implemented. Consortia had mixed success at implementing their goals.⁶ The case-study grantees provide illustrations of the problems that stalled projects. Primary-care clinics ran into problems recruiting physicians; emergency transportation projects had difficul-

ties getting their staff certified as paramedics; and assisted living units and adult day care programs could not obtain financing. Two of the four case-study consortia planned to consolidate services. They dropped those consolidation plans because more serious problems arose that needed their attention.

The case-study grantees also illustrate the high rate of project implementation. Nearly three-quarters implemented all or most of their goals; only 11 percent did not implement any of their goals or implemented a service that was discontinued by the grant's end. They were more likely to be successful if they had more than 50 beds, were located in areas with incomes above the median for grantee counties, and experienced no administrator turnover during the 3-year period. Conversely, the grantees least likely to implement their projects were located in lower-income areas, had been in poor financial condition during previous years, and changed administrators during the grant period.⁷

⁵ However, one-fourth of these physicians were recruited from other rural areas.

⁶ Successful and unsuccessful projects are summarized in a guide prepared for rural hospitals (Wooldridge et al., 1994a,b).

⁷ We explore the influence of low-income locations on a later grantee cohort in the Technical Note at the end of this article.

Table 3

Changes in Hospital Use Among Transition Grantees Compared With Rural Hospitals Nationwide: 1988-92

Year	Inpatient Days		Outpatient Visits	
	Grantees (Median)	Community Hospitals (Mean)	Grantees (Median)	Community Hospitals (Mean)
1988	5,010	9,352	9,122	14,541
1989	4,933	9,394	9,410	15,444
1990	5,119	9,516	10,326	16,655
1991	4,585	—	11,146	—
1992	4,219	9,452	11,617	20,493
			Percent Change	
1988-90	2	2	13	15
1990-92	-18	-1	13	23
1988-92	-16	1	27	41

NOTE: National data are calculated as the unweighted mean of non-governmental, not-for-profit, and local government hospitals with 6-99 beds (both urban and rural).

SOURCES: National data are based on American Hospital Association statistics for the period 1988 through 1992 (American Hospital Association, 1988, 1989, 1990, 1991b, 1993). Data for 1990 grantees are drawn from annual financial statements and semiannual grant reports.

Projects Improved Access to Care

To improve access to care, the grant projects had to introduce or augment services and also continue to provide them after the grant period was over. As shown in Table 2, the grants increased the number of services available locally and thus reduced the time rural residents had to spend traveling to receive services such as outpatient surgery or cardiac rehabilitation.⁸

Moreover, grantees reported that all of the inpatient and outpatient services implemented with the grants would continue after the grant period. Most of these services were financially self-supporting by grant end.⁹ The grantees also planned to continue most of the community medical and social services implemented with the grants, even those that were not financially self-supporting, because of their importance for community health status or hospital image.¹⁰

⁸ The grantees provided about 838,000 visits to 229 grant-funded outpatient services during the grant period.

⁹ By the end of the grant period, 75 percent of the outpatient services and 96 percent of the inpatient services implemented with grant support were financially self-supporting (and inpatient services generated sizable revenues).

¹⁰ One-half or fewer of the following services turned out to be self-supporting: social services, adult day care, wellness programs, patient education, Lifeline™, and routine medical transportation. Moreover, only 53 percent of Rural Health Clinics emerged as self-supporting, because patient volume had not yet built up.

The grantees discontinued some services, especially wellness programs (5 of 21 closed) and adult day care (1 of 5 closed).

When hospitals close, access to health care may immediately be reduced. The grants were intended to reduce the risk of hospital closure and to assist in orderly conversions when closure could not be averted. During the grant period, five grantees closed their facilities because the grant projects were insufficient or came too late to avert closure. However, this represents an annual rate of less than 1 percent, lower than the recent trend nationwide.¹¹ Moreover, five case-study grantees claimed that their grant projects had helped them to avert closure during the grant period, after financial crises developed associated with physician losses. Few grantees ever considered conversion to another type of health care facility (the proportion of grantees seriously considering such a conversion averaged 7 percent throughout the grant period). Most of the case-study grantees said their ability to meet the needs of the community had improved during the grant period, at least partly because of new, grant-funded outpa-

¹¹ Between 1 and 2 percent of rural hospitals closed annually between 1986 and 1990 (American Hospital Association, 1987, 1988, 1990, 1991a, and 1991b).

tient specialty services, physicians recruited, and equipment purchased.

Grantees Made Transitions to Outpatient Care

The grant program assisted some grantee hospitals to make transitions toward a lower level of inpatient care. The percentage of grantees with cardiac care units decreased from 49 to 35 percent, and the percentage with skilled nursing and transitional care units increased from 49 to 54 percent. Not surprisingly, grantees also reduced their inpatient acute-care days (by 18 percent), whereas small hospitals nationwide in this period maintained the same number of inpatient days (Table 3). Like hospitals nationwide, grantees also dramatically expanded their diagnostic imaging facilities, especially computerized axial tomography (offered by 77 percent of grantees by the end of the grant period) and magnetic resonance imaging (offered by 26 percent of grantees by the end of the grant period). Without these diagnostic services (often supplied by mobile units), hospitals believe that they will lose patients and physicians to hospitals offering these services. The only one of these changes that could have resulted from the transition grant funding was the increase in availability of skilled nursing units; 14 grantees added or upgraded this service using their grants.

Grantee outpatient visits increased more slowly than at comparable size hospitals nationwide. The median number of outpatient visits at grantee facilities increased 13 percent during the 3-year grant period, relative to a national increase of 23 percent (Table 3). But the percentage increase in outpatient visits varied by grantee size. Outpatient visits increased by 25 percent among the largest grantees (those with more than 60 beds), but among smaller

grantees, they increased by less than 10 percent. Thus, the largest grantees slightly exceeded the national community hospital increase of 23 percent, a difference that may be partly attributable to new grant-funded services.

The grant program was instrumental in increasing the percentage of grantees providing home health services from 42 to 55 percent during the grant period. Furthermore, some grantees reported improved access to home health services, especially those that had reported shortages before grant award and added home health services with the grant.

Grantees Made Modest Physician Gains

Although physician recruiting and retention was the greatest concern of the 1990 grantees when they received their grants, only 29 percent of the grantees proposed using their grants to recruit physicians. But after 3 years, almost two-thirds spent some of their grants on physician recruiting. Grantees ended the grant period, on average, with 5 percent more active staff and 25 percent more courtesy admitting staff—though this figure translates to less than 1 active staff physicians per hospital, on average. In addition, by the end of the grant period, fewer grantees felt that they still had a physician shortage—78 percent compared with 86 percent at the beginning of the period.

The grants were partially responsible for the increase in physicians. Grant-funded recruiting resulted in 79 physicians being added to 45 grantees' staffs (though 10 left before the end of the grant period). The 25-percent increase in courtesy staff was consistent with the increase in outpatient specialty and surgery clinics funded by the grants (25 percent of grantees used their grants to add such a service).

Table 4
Percent Changes in Inpatient and Outpatient Revenues Before and During the Grant Period

Revenue	Grantees		Hospitals Nationwide	
	Inflation-Adjusted	Nominal	Nominal ¹	As Percentage of Gross Patient Revenue ²
Inpatient Revenues				
1988 to 1990	-4	8	18	—
1990 to 1992	-7	9	16	—
Outpatient Revenues				
1988 to 1990	24	43	38	10
1990 to 1992	36	52	37	19

¹ Data for all U.S. hospitals from (Levit et al., 1994).

² Data for median value for rural hospitals with fewer than 100 beds from (HCIA, Inc. and Deloitte & Touche, 1993, 1994).

SOURCES: Data for 1990 grantees are drawn from annual financial statements and semiannual grant reports. National data are drawn from (Levit et al., 1994) and (HCIA, Inc. and Deloitte & Touche, 1993, 1994).

Some Grantees Developed Consortia

Sixty-one hospitals received grants to implement or expand 16 consortia. Two of the four case-study consortia improved their networks, and one of these consolidated services. The other two case-study consortium projects did not consolidate services as they had planned (because physician losses distracted them), although each indicated that interhospital communication had improved as a result of the consortium's existence.

Largest Grantees Improved Finances

About one-fifth of the grantees believed that the grant projects had improved their finances, and most case-study grantees believed the grant projects would contribute to their hospitals' long-term viability. However, the supporting evidence for these beliefs is mixed. (See the discussion of hospitals in low-income areas in the Technical Note at the end of this article.)

During the 5-year period beginning 2 years before the grant program, the grantees' inflation-adjusted inpatient revenues fell, their inflation-adjusted outpatient revenues increased, and their operating margins improved (consistent with their inpatient and outpatient utilization trends). These trends were found in all U.S.

rural hospitals of comparable size during the same period (though the grantees generally had poorer financial status). Table 4 shows changes in revenues among the grantees and hospitals nationwide during the 5-year period starting in 1988. The small group of grantees with 60 beds or more (20 percent) increased both their inflation-adjusted inpatient revenues (including subacute care revenues) by 14 percent and inflation-adjusted outpatient revenues by 47 percent after the grant period began, thereby exceeding national growth trends. This pattern suggests that, for this group, the grant projects may have helped to increase revenues.

We saw no evidence of grant effects (measured by changes in trends) among smaller hospitals. These grantees' financial changes during the 5-year period were consistent with national trends and did not change after the grant award.

Management May Have Improved Slightly

Congress intended the grants to improve managerial performance. The grants could do this by financing changes in either the structure or the process of management. In either case, such changes should be reflected in improved outcomes. We saw little evidence that the grants affected organization,

excepting the few grantees that introduced management improvements such as computerized billing. About 9 percent of grantees set out to use the grant to undertake strategic planning, many for the first time. Strategic planning usually led them to start new outpatient services, but in no case did it lead to major structural changes such as downsizing or consolidation with other providers.

During the 3-year grant period, grantees improved with respect to two measures that indicated improved management. First, billing performance improved: Median hospital days in net accounts receivable dropped from 74 to 69. But this decrease is comparable to that found among rural hospitals nationwide during the same period (HCIA, Inc. and Deloitte & Touche, 1994). Second, at the end of the grant period, grantees reported lower proportions of their local populations traveling to other hospitals for services that the grantee provided compared with the proportion they reported at the beginning of the period. This outcome is consistent with the increase in outpatient and community medical and social services (many grant-funded) available at the grantee hospitals.

DISCUSSION

For the most part, the grantees appear to be using the grants to make the types of transitions that Congress had in mind. The second cohort to complete their 3-year projects followed the nationwide trends of rural hospitals to provide fewer specialty acute inpatient services, more lower-acuity inpatient services, and more outpatient and community services.

Results Comparable to Earlier Evaluation

The findings of the evaluation of the 1990 grantees are similar to those of the earlier evaluation of 1989 grantees (Cheh

and Wooldridge, 1993), with two exceptions. First, many more of the 1990 grantees implemented Rural Health Clinics (consistent with a nationwide increase), and the 1990 grantees had fewer difficulties implementing them. Second, short-term financial trends among the largest of the 1990 grantees—those with more than 60 licensed acute-care beds—improved, unlike those of the 1989 grantees.

There Is No Model Grant Project

There are no hard and fast rules about what makes a good grant project or which grantees are most likely to implement or retain their projects. Although correlations existed between grantees' ability to implement their projects and their initial financial conditions, sizes, income level of the local population, and administrator turnover, none of these factors ruled out either success or failure. Based on the case studies, ability to implement grant projects seems, rather, to be related to the less easily measured factor of leadership.

No Measurable Effects on Smallest Grantees

The smallest grantees (those with 30 or fewer beds) appear to have benefited least from the grant program. They started the grant period in poorer financial condition than did larger institutions. Although outpatient revenue for the smallest grantees grew during the grant period, the rate of growth was slower than in the period before the grant began.

The grant program helped these very small hospitals introduce many services, and their administrators believed that the grant projects had improved their financial condition. For example, more than two-thirds of the small case-study grantees that introduced grant-funded outpatient serv-

ices thought that the services improved hospital finances. Furthermore, the three small hospitals that nearly closed attributed their ability to continue operations to their grant projects.

Why, then, do we not find financial effects of the grant projects on the smallest hospitals? Could contradiction between our findings and the administrators' perceptions be due to an impact that we did not observe? We found no evidence of accelerated improvements after grant award among these very small grantees; indeed, their performance declined. Most of the financially self-supporting services introduced with the grant projects became available only in 1992 or later, and their full impact could not be realized during the period we analyzed. Furthermore, it is possible that these very small grantees fared better than non-grantee hospitals of a similar size and financial condition. However, because we could not identify any nationwide financial trend data for rural hospitals with fewer than 30 beds for comparison purposes, we do not know whether this is the case.

What is different about the smallest grantees, however, is the extent of their scale problems, which can in turn hurt their financial performance. They are especially vulnerable to disruption resulting from physician losses, and they also find it harder to staff efficiently. Although the loss of a physician reduces hospital admissions in all hospitals, the loss is much greater as a proportion of total admissions in small hospitals. Furthermore, anecdotal evidence suggests that one loss increases the chance of losing other physicians (because of reduction in coverage). The smallest grantees also have the hardest time recruiting all types of health professionals, partly because of a limited number of colleagues available to provide coverage and partly because of lack of equipment and community amenities. They also have the

greatest difficulty operating efficiently because they must meet regulatory requirements to maintain a minimum number of staff, even if specific staff are not needed on any given day.

Transition Grants: Effective Policy Tool?

As we have shown, transition grants are very popular with rural hospitals; many grantees, especially the smallest ones, believe the grants to have been very effective at improving their financial status—a belief for which we found no supporting evidence. This popularity stems from the fact that the grants allow the hospitals to implement a variety of new programs with few strings attached. But we are concerned that the grants are often being used to pursue goals that could be better implemented through different types of government support. For example, while the grant program helps individual hospitals with physician recruiting—one of their major preoccupations—it often does this at the expense of other rural areas (largely because there are too few family practitioners to meet the nationwide demand). Secondly, some grants were used unwisely or frittered away, and at grant end there was nothing lasting to help these hospitals. These problems suggest two alternative approaches that government might take to help rural hospitals. First, government could provide broader support for training primary-care physicians who plan to practice in rural areas; second, it could provide technical assistance to help hospitals with implementation and certification of new services.

TECHNICAL NOTE

Effects of Low-Income Location

Hospitals' dual interest in serving the community and remaining financially

viable—i.e., balancing their mission with their margin—is strikingly evident among the transition grantees in poor areas. We interviewed 37 grantee hospitals in poor counties to discover how low-income location affects hospital financial stability and to explore the role of the transition grant in hospital finances and services. We found that only about one-half the hospitals used the grant money to improve their financial health. Instead, many put the money toward efforts targeted at improving community health. Only a minority of grantees expected the implemented grant projects to be self-supporting once the grant project ended. The grants allowed these hospitals to serve their communities better (albeit temporarily), while minimizing additional strain on their resources.

Previous research suggests that low-income location correlates positively with stronger financial performance—perhaps because of residents' inability to travel for alternative health care services (Seavey, Tucker, and Berry, 1989). In this Technical Note, we explore how characteristics of local economies, hospital characteristics, and government and community support affect the financial stability of the interviewed hospitals. We then examine the role individual grant projects play in helping these hospitals survive financially.

Data

We conducted telephone interviews with the 37 grantees located in the counties with the lowest annual per capita income among grantees (20 of the 1992 grantees and 17 of the 1993 grantees). We also used hospital data, including operating margin, type of ownership, and number of staffed beds, that grantees reported at the beginning of the grant program.

Characteristics of Local Economies

Most of the interviewed grantees are in the South (two-thirds) but a substantial minority (one-quarter) are in the West, primarily New Mexico (Table 5). Per capita income in the interviewed hospitals' counties averaged \$10,755 in 1990, more than 30 percent lower than the per capita income in counties with small rural hospitals nationwide.

The local economies include diverse industries. Slightly more than one-half of the interviewed grantees (20) reported small manufacturing in their economies. Another 14 grantees reported agriculture, such as corn and cotton crops, as a major source of income. Several interviewees are located in declining mining communities, in which employment fluctuates along with

Table 5
Comparison of 1992 and 1993 Transition Grantees With Grantees in Low-Income Locations

Characteristic	Grantees in Low-Income Counties	All 1992 and 1993 Grantees
Number	37	333
Distribution by Region (Percent)		
Northeast	3	4
Midwest	5	44
South	68	27
West	24	24
Operating Margin ¹	-0.01	-0.02
Median Number of Staffed Beds	34	31
Outside Management Contract (Percent)	30	27
Public Hospital (Percent)	56	56
Member of Multihospital System (Percent)	27	16

¹ Defined as: $\frac{\text{Net Patient Revenue} - \text{Total Operating Expenses}}{\text{Net Patient Revenues}}$.

SOURCE: Baseline reports from 1992 and 1993 grantees.

the price of copper, for example, or is simply dissipating as a result of mine closings. Correctional facilities are also a common employer; six areas rely on a Federal or State prison for jobs, and several more report prisons under construction. Seven areas have no significant private employer or main source of income, naming only the hospital, local government, or the school system as major employers.

The majority of these grantees describe their local economy as fairly static. Twenty-four reported no changes in the local economy during the past 5 years, and 23 do not expect changes in the near future. Fourteen hospitals, however, are optimistic about their community's future, citing new business and expected industrial growth.

Hospital Characteristics

Hospital Size and Management

The interviewed hospitals vary in size and management characteristics. They typically have 34 staffed beds (Table 5). Only a minority (30 percent) have an outside management contract, but a majority (56 percent) are public hospitals. Twenty-seven percent belong to a multihospital system.

Payer Types and Uncompensated Care

Medicaid recipients represent a sizable portion of these grantees' patients. On average, the interviewed hospitals drew 20 percent of their operating revenue from Medicaid, with some drawing more than 50 percent. This figure is higher than that for the average small rural hospital, which in 1992 had about a 15-percent Medicaid base (HCIA, Inc., and Deloitte & Touche, 1993). One hospital noted that more than three-quarters of the people in its service area receive public assistance.

The interviewed hospitals also provide large amounts of uncompensated care. This type of care represents an average of 11 percent of operating revenue for these grantees; in other words, more than 11 percent of these hospitals' charges are never paid.¹² This level of uncompensated care is larger than that for the average rural hospital, which reports only about 5 percent of hospital costs as uncompensated (Prospective Payment Assessment Commission, 1993).¹³

Financial Status

Although these hospitals are located in significantly poorer communities than the average grantee, their financial status is not markedly different from that of average grantees. Thirteen had positive operating margins during the past 3 years, 10 broke even, and 14 reported losses. The median operating margin for interviewees is negative 1 percent; the comparable figure for all 1992 and 1993 grantees is negative 2 percent (Table 5).

Hospitals in poor financial shape tend to be smaller and to have higher levels of uncompensated care. The mean number of staffed beds for hospitals with a positive operating margin is 43; those with a negative operating margin average, 37 beds. The percentage of uncompensated care provided in hospitals that lose money on operations is 5 percent higher (13 percent versus 8 percent) than in hospitals that make money.

¹² The uncompensated care figure includes both bad debt and charity care. It excludes contractual adjustments for Medicare, Medicaid, and other payers.

¹³ The two statistics being compared here are calculated differently. We calculate uncompensated care as a percentage of hospital operating revenue, but the Prospective Payment Assessment Commission calculates it as a percentage of total hospital costs. Even with this difference in calculation method, however, the gap between the two numbers suggests that a larger amount of uncompensated care is delivered in the interviewed hospitals. In the interviewed hospitals, operating revenues would need to be less than one-half of total hospital costs in order for the two figures to suggest similar levels of uncompensated care. For the 1993 grantees, the mean ratio of hospital operating revenues to total hospital costs was .98; substantially higher than the one-half ratio.

How Do These Hospitals Survive?

Despite their low-income location, one-third of these hospitals are able to maintain a positive operating margin without relying on direct subsidies from local government, the community, or a multihospital system. Of the remaining 24 hospitals, all of which have a negative operating margin or are breaking even, all but 6 rely on income from one of these sources or from Medicaid or Medicare disproportionate share payments to secure the hospital.

County and State Government Support

Local tax support is a key factor in the financial stability of many interviewed grantees. About one-half receive funds from State or local government, typically a levy collected from the local community, which often exceed \$100,000 per year. Of the 24 interviewed hospitals that did not make a profit on operations, 16 receive this type of support from local or State government. Conversely, only two of the hospitals with a positive operating margin receive these funds.

Disproportionate Share Payments

Disproportionate share payments are a major source of government financial support for the interviewed hospitals. The majority (22 of the 37) are classified as disproportionate share hospitals, indicating their relatively large proportion of low-income patients.¹⁴ Seven hospitals cited

¹⁴ Hospitals are classified as Medicare disproportionate share when they serve a relatively large volume of low-income patients. This volume is calculated on the basis of a hospital's percentage of inpatient days attributable to Federal Supplemental Security Income beneficiaries and the percentage attributable to Medicaid patients. These hospitals receive additional payments from the Medicare program on the basis of this status (U.S. House of Representatives, 1994). Minimum standards for Medicaid disproportionate share hospitals set by Congress include high rates of Medicaid use (greater than one standard deviation above the mean), low-income use of at least 25 percent, and availability of physicians to provide obstetric care if the hospital provides non-emergency obstetric care (U.S. House of Representatives, 1993).

disproportionate share payments as an important means of financial support, with payments ranging from \$70,000 to more than \$800,000 a year. Disproportionate share payments at four of these seven hospitals have been reduced or eliminated in the past 2 years, however. A comparison of the dollar amount of these reductions with the amount the hospitals lose on operations in a typical year reveals that the reductions will have a significant impact on the hospitals' financial future. Several hospitals that lost this funding are located in States requiring a hospital to offer obstetric services to qualify for Medicaid disproportionate share funding. These hospitals discontinued obstetrics, however, because the costs of offering the service were far greater than the revenue produced. Although each ultimately chose to discontinue obstetric services because of the financial drain on hospital resources, all expressed concern over the resulting loss of disproportionate share funding and its consequences for hospital financial stability.

Membership in a Multihospital System

Ten of the interviewed grantees are part of a larger multihospital system, but only two are actually subsidized by the system when they lose money. Most hospitals cite other benefits from their affiliation with a larger system, such as technical assistance, aid in physician recruitment, and financial advantages in investments and purchasing.

Direct Community Support

Few of these hospitals receive community donations or in-kind support. Many grantees noted that their communities are simply too poor and too preoccupied with survival to support the hospitals in finan-

cial or other ways. In fact, 27 of the interviewed grantees receive less than \$5,000 a year in community donations. Of the 10 hospitals that do receive more than \$5,000 a year in donations, 9 already make a profit on operations. Community donations are strengthening hospitals that already have a positive operating margin but not contributing to the survival of financially weak institutions.

Grant Project

Despite the fact that the grant program was designed to enhance rural hospitals' financial stability, many of the interviewed grantees did not design their grant projects to do so. Sixteen projects were designed solely to meet community need, without regard for the impact on hospital finances. Another 16 considered both community need and financial benefits. Only five projects were chosen specifically to bolster the hospital financial base.

Not surprisingly, a minority of the implemented grant projects are expected to be self-supporting once the grant project ends. Only 15 are generating enough revenue to cover their costs. The remaining 22 will require additional hospital resources to continue after the grant program ends.

The non-self-supporting projects were typically created to meet a community need. For example, one hospital had a 50 percent no-show rate for medical appointments. It used the grant to create a free patient transportation system to ensure that people in its service area kept their appointments. Another hospital used the grant to develop one of the recommendations from a recent countywide health planning effort—an information center for seniors. The hospital intended for this center to serve as a free clearinghouse of information on local services for

elderly people. Another grantee contracted with a tertiary-care center to provide specialty services to area residents free of charge, as long as they are referred by their primary physician. Although the services are well utilized, the hospital doubts that patients would be willing or able to pay for them if it discontinued the subsidy.

In addition, two hospitals implemented geriatric case-management programs that they describe as extremely valuable. The case-management staff members monitor the health status of elderly patients and arrange for necessary care. Not only does this service meet the health needs of patients, but it also reduces the risk that serious conditions go untreated and lead to long and expensive hospital stays. Despite their value to the community and hospital, the case-management services require a subsidy because most patients are too poor to pay for them, and Medicare does not cover them.

Although the majority of the grant projects do not directly affect hospital finances, most interviewed hospitals described the grants program as important to their hospitals' long-term survival. Many felt that the grant project helped position them for the future, allowing them to explore changes in health care delivery and develop their focus on community health rather than just medical care.

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Reprint Requests: Judith Wooldridge, M.A., Mathematica Policy Research Inc., P.O. Box 2393, Princeton, New Jersey 08543-2393.