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The Availability and Use of Capital by Critical Access Hospitals

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With funding from the federal Office of Rural Health Policy (PHS Grant No. U27RH01080), the Rural Health Research Centers at the Universities of Minnesota, North Carolina, and Southern Maine are conducting a performance monitoring project for the Medicare Rural Hospital Flexibility Program (Flex Program). The monitoring project is assessing the impact of the Flex Program on rural hospitals and communities and the role of states in achieving overall program objectives, including improving access to and the quality of health care services; improving the financial performance of Critical Access Hospitals (CAHs); and engaging rural communities in health care system development.

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EXECUTIVE SUMMARY

Policymakers are concerned that many rural hospitals are not obtaining the capital they need to remain viable sources of health care for rural America. Capital is critical for hospitals to remain compliant with state and federal requirements, to be able to renovate or construct facilities, and to expand operations and services to remain viable and effective. Those hospitals unable to keep pace with depreciation, advances in medical technology, and changing population need are at risk for not only compromising their performance but increasing their risk of closure and jeopardizing the availability of needed services for rural populations.

This study examines the experiences of Critical Access Hospitals (CAHs) in meeting their capital needs. It focuses specifically on their efforts to obtain capital, the capital sources tapped through these efforts, how CAHs have used the capital they have been able to obtain over the past few years, and assesses their current capital needs. Information on these and other capital-related issues were obtained through two surveys conducted in 2004 that cover a three-year period between 2001 and 2004. A national telephone survey was used to obtain information about these experiences from CAH administrators while an e-mail survey collected information on state-level capital issues from 44 State Flex Program Coordinators.

Study findings indicate that approximately 42 percent of all CAHs had pursued a capital loan at some point between 2001 and 2004. Almost all loan efforts (88%) were successful resulting in the acquisition of more than $400 million to support approximately 227 CAH related capital projects. Financial performance and general profitability continue to be the most important factors in accessing capital resources. The vast majority of the projects targeted the replacement, repair and updating of physical plant space and hospital equipment. The magnitude of the capital involved coupled with the level of success in obtaining that capital suggest that CAH administrators are well aware of loan market criteria and are able to mobilize the effort and credibility needed to achieve their financial goals. It appears that lenders are becoming more comfortable about Flex Program participants, their cost-based reimbursement, and their likelihood of continued financial improvement over the period of a loan contract.

The findings further suggest that this increased willingness to provide capital loans is more likely for local lending institutions compared to private capital markets located outside of the CAH's community. While the proportion of capital projects supported by both of these sources has remained comparable since 2001, the total amount of local lender dollars has doubled while private market lender funding has been cut in half. Comparisons of available capital sources based on program tenure suggests that earlier CAH converters are more dependent upon public sources of capital and half as likely to acquire private market capital as later converters.

Our results also indicate that CAHs who responded to the survey have significant capital needs far in excess of the amount obtained during the study period. This included approximately $89 million to address important fire and life/safety issues, $383 million to improve operations and effectiveness, and $346 million for total facility replacements (i.e., for 29 CAHs). The random sample used in this study is representative of the 717 CAHs that were operating on December 1, 2002. A conservative estimate of the capital needs of these facilities approaches

$1.6 billion including $970 million for general construction/renovations and expansion, $145 million to address fire and life safety code issues, and $526 million for total facility replacement projects. The magnitude of these potential needs coupled with the small proportion of CAHs actively accessing capital markets suggests their struggle to keep pace with depreciation as well as other important operational needs is likely to remain problematic for the near future. This is particularly troubling for those CAHs that continue to require installation or replacement of critical fire suppression systems and those facilities that need to better prepare for growing health information technology (HIT) requirements.

On average, later converters appear to be in better financial shape and more able to obtain the capital they need from loan markets than earlier converters. At least a third of all CAHs are using leasing arrangements to expand their capacity to meet local needs. Virtually all of the equipment leasing arrangements involve advanced clinical technologies such as digital x-ray, CT scanners, and MRI equipment. Grants and contributions continue to represent significant sources of capital and are frequently bundled with capital loan funds to underwrite major projects.

CAHs now represent almost half of all rural hospitals in the United States. Their ability to obtain sufficient capital to maintain safe and effective operations is in question. Findings of this study suggest that participation in the Flex Program provides advantages for small rural hospitals seeking to enter capital markets but is not likely to be sufficient to address their future capital needs.

INTRODUCTION

Policymakers are concerned that many rural hospitals are not obtaining the capital they need to remain viable sources of health care for rural America.[1-3] This report explores the extent to which access to and use of capital may be a concern for small rural hospitals that have converted to Critical Access Hospitals (CAHs).

Access to capital is critical for hospitals to remain compliant with state and federal requirements, to be able to renovate and/or build facilities, and to expand operations and services.[4] Those unable to keep pace with depreciation, advances in medical technology, and changing population needs are at major risk not only for compromising their operational performance but increasing their risk of closure.

Until recently little data were available about the capital needs and activities of small rural hospitals and especially CAHs. Most of the available information was provided by the market research and topical reports of major investment houses and ratings firms like Standard & Poors, Moody's and Fitch. Unfortunately, these data related only to those hospitals that were already active in capital markets and therefore could provide little insight into the circumstances facing most small rural hospitals. In recent years, several studies have been completed to fill this gap for rural hospitals and, more broadly, for not-for-profit hospitals.[4-9]

Findings from a recent survey of CFOs of not-for-profit hospitals highlight the current uneven access to capital for not-for-profit hospitals in the U.S.[8] The gap between the "haves" (larger hospitals that are strong financial performers with broad access to capital) and the "have-nots" (weaker performing smaller facilities with limited access to capital) has been widening as access to capital has tightened since 2001.[10]

Since the late 1990s all but the strongest financial performers have experienced reduced access to traditional finance strategies (e.g., direct loans, third party credit enhancements, grant awards and leasing arrangements). This tightening was fueled by a marked drop in market and lender confidence after a series of major health care investment failures.[11] Bond issues dropped 30 percent between 1998 and 1999 followed by an additional 40 percent by 2000.[12] The 2000–2001 recession further tightened capital markets including local non-loan capital sources as the national crisis continued and state deficits reached record levels. Faced with added financial responsibilities and reduced income, many municipalities found it harder to permit tax levies to provide needed funds for municipal and district hospitals. By 2002, capital support for not-for-profit hospitals including bond sales, bank loans, philanthropy, and equipment leases had reduced 29 percent from the previous year's levels.[8] By 2003, states were facing a total deficit of $70 billion forcing many to make hard choices just to maintain spending for public programs such as Medicaid and the State Children's Health Insurance Program.[13]

At a recent *Wall Street Comes to Washington* roundtable, health care finance experts raised concerns over the worsening finance environment and its implications for hospitals that have historically deferred capital investment (e.g. the majority of not-for-profit hospitals).[14] Others have highlighted this concern pointing out that the present circumstances are not likely to improve in the short term.[10,15]

This report explores the relationship between participation in the Medicare Rural Hospital Flexibility Program and opportunities for participating CAHs to address their capital needs. Timely information on the capital needs and priorities of CAHs will help policy and program decision makers determine if existing opportunities are sufficient to meet capital needs, if they should be augmented, or if new strategies should be developed.

METHODS

Data sources for this study included a telephone survey of CAH administrators and an e-mail survey of State Flex Program Coordinators. Members of the Flex Monitoring Team at the University of Minnesota, North Carolina at Chapel Hill, and the University of Southern Maine developed the survey designs. Additional expertise was provided by an expert panel of CAH administrators and CFOs to identify and refine areas of inquiry for inclusion in the capital segment of the telephone survey.

The telephone survey was conducted between January and April 2004 by the Survey Research Center in the Division of Health Services Research and Policy at the University of Minnesota. The survey contained multiple sections including one on capital needs and market experiences. The capital section of the survey was part of a special effort to collect specific and detailed information on CAH capital needs, relevant factors driving decisions to pursue capital, experiences with capital loan markets, the contribution of non-loan capital in meeting important needs, and the types of projects that have been the focus of these activities. A random sample of 500 CAHs was selected for the telephone survey, stratified into two groups: 1) CAHs that were certified by the Center for Medicare and Medicaid Services as of May 1, 2001 that had participated in our previous survey of CAHs conducted in 2001 **(Wave 1)**; and 2) CAHs that were certified after May 1, 2001 and no later than December 1, 2002 based on certification dates provided by CMS **(Wave 2)**.

The 500 CAHs represented approximately two-thirds of all CAHs that had been certified by CMS by the time of the December 1, 2002 cutoff date. December 1st was selected as the cutoff date for the sample to assure that all respondents would have at least one full year of operational experience (older CAHs had up to four years of operational experience). The sample

was reduced to 497 facilities after it was discovered that one had closed since selection and two others reported certification dates after the December 1, 2002 cutoff date. A total of 474 CAHs responded to the survey for a response rate of 95 percent.

The design of the State Flex Coordinator e-mail survey was developed jointly by Monitoring Team members from the University of Minnesota and the University of North Carolina at Chapel Hill. The e-mail survey was fielded by the University of North Carolina at Chapel Hill in April and May of 2004. The survey was distributed to the Flex Coordinators responsible for each of the 45 participating state programs. Forty-two out of the 45 states responded by e-mail for a 93 percent response rate. Subsequent phone calls to State Offices of Rural Health to follow-up and verify data issues resulted in the inclusion of two more states in the data base for a final survey response rate of 98 percent.

National CAH Telephone Survey

CAH administrators were asked about their experiences over the past two years in addressing major hospital projects (i.e., those costing at least $250,000). Specific questions were asked about efforts to secure public and private loans, third-party credit enhancements, and other non-loan vehicles such as grants, philanthropic contributions, fund raising, municipal support, and leasing arrangements. Information was also collected on their hospital's current capital needs in terms of their *single most critical* fire and life safety code (F&L/S) issue requiring action and *up to two* other major capital project needs that were essential for their hospital's safe and efficient operation.

State Flex Coordinator E-Mail Survey

The e-mail survey was developed to identify state-supported efforts that were available to the CAHs and could provide capital assistance to eligible facilities. Specific questions were

posed to determine if states had engaged in capital needs assessments of rural hospitals, the level of technical assistance available to rural hospitals to work with state and other capital programs, and the opportunities and barriers facing CAHs in need of capital. Data collected from a previous telephone survey of State Office of Rural Health and State Hospital Association representatives on the same issues in 2001 were used to provide a comparative assessment of state-level changes over the past three years.[4]

RESULTS

The discussion of the capital survey results is presented in five sections: 1) capital loan experiences; 2) sources of loan capital; 3) federal and state capital options; 4) capital investment strategies; and 5) current CAH capital needs.

Capital Loan Experiences

Forty-two percent of all responding CAHs reported pursuing loan capital to support at least one project during the two years preceding their participation in the 2004 CAH administrator survey. Of these facilities, almost nine out of every ten applicants (88%) were successful and acquired more than $400 million over the two year period that supported 227 separate projects (Table 1). The majority of funded projects involved activities that updated physical plant and equipment assets.

Among the few CAHs that were unsuccessful in obtaining a capital loan the most common reason for denial was poor creditworthiness. Although creditworthiness also includes factors such as leadership, current market conditions and a project's fit with the borrower's overall strategic goals, a major component focuses on the borrower's profitability, liquidity, and capital structure. Each of these components is strongly linked to past performance which for

most of these facilities is weak (i.e., poor cash flow, uneven payment history and financial goal attainment, and large debt).

Table 1

Efforts to Obtain Capital (n=474)

Facilities pursuing loans over the two years prior to the survey • 88% successful loan applications – 45% New Construction and Remodeling – 41% New Technologies and Equipment – 9% Refinancing – 5% Diversification of Services • 12% unsuccessful loan applications – 46% New Technologies and Equipment – 23% New Construction and Remodeling – 16% Refinancing – 10% Diversification of Services – 5% Total Facility Replacement	42%
Facilities not pursuing loans over the two years prior to the survey	58%

One-third of the 272 CAHs that did not pursue a capital loan during this period reported that their main reason for not doing so was financial weaknesses (Table 2). Approximately one-third of the respondents reported not having any significant needs requiring capital that could not be allocated from internal resources. Eighteen percent of the CAHs preferred alternative vehicles for capital such as grants, fund raisers, etc. over capital loans. Additional comments made by some of the respondents indicates that this preference may be due to the desire to avoid long-term commitments that obligate the hospital and/or reduce its ability to flexibly deal with changing market conditions.

Factors Related to Loan Success

Considering the priority lenders place on hospital financial performance, it is not at all surprising to find that CAH administrators and Flex coordinators both agree that measures of hospital profitability and financial history are among the most important factors behind

successful loan applications. They were also in agreement as to the major impediments to successful loan applications – aspects of hospital performance that increase the perceived risk exposure of the lender of capital.

Table 2
Reasons for not Pursuing a Capital Loan (n=272)

Can't afford debt – financial profile too weak	34%
No significant need for capital at that time	19%
Administrator/Board prefer alternative vehicle	18%
Hospital able to meet need internally	16%
In planning phases and plan to pursue capital	8%
Prohibited by regulation or covenant	3%
Other	2%

Poor financial performance was listed as the most critical barrier to loan capital by more than half of all the respondents, of which 27 percent identified historic financial performance and 27 percent listed liquidity as major loan barriers (Table 3). Almost a quarter of the respondents (22%) identified external factors such as local economic and market volatility (15%) and local community support/brand loyalty (7%) as key barriers to acquiring loan capital. These two factors are especially important for community hospitals that depend on municipal or hospital district tax support to meet their capital needs.

Table 3
Greatest Barrier to Accessing Loan Capital

	CAH Administrators (n=107)	**Flex Coordinators (n=36)**
Poor financial history/debt too high	27%	33%
Poor cash flow/reserves	27%	29%
Local economy – market volatility	15%	8%
Organizational indecision/resistance	12%	8%
Loan application process (time/paperwork)	12%	14%
Poor community support	7%	8%

The most important factor underlying loan application success, for both the administrators and the coordinators, was financial performance (e.g., operating revenues and financial reserves or cash flow) (Table 4). The second most important factor was the quality and completeness of the loan package. A number of respondents highlighted the importance for the borrower to demonstrate a capacity to implement the project as well as to communicate the project's value for the future of the community and the hospital. Many considered outside experts to be extremely valuable in developing a strong application. The majority of respondents who reported having the right co-signer as a major strength were also members of healthcare and hospital systems.

Table 4
Most Important Strategy for Securing a Capital Loan

	CAH Administrators (n=126)	Flex Coordinators (n=34)
Operating revenue/reserves	27%	37%
Solid preparation/business plan	21%	30%
Find the right co-signer	16%	7%
Improved reputation since CAH	10%	7%
Board member involvement	8%	7%
Demonstrated need	6%	0%
Government loan guarantee	6%	0%
Strong local support	6%	12%

Sources of Loan Capital

Five sources of loan capital were identified during the survey: 1) local lending institutions (lenders within the CAH's immediate community); 2) private sector funding sources (banks and investment houses located outside of the CAH's community); 3) state sponsored programs; 4) federal programs; and, 5) health or hospital system sources including co-signer role. Given the deterioration of state and local economies over the past four years as well as the mergers within the banking industry, lending provided by local institutions was expected to have

reduced since last measured in 2001. However, local lenders accounted for over half of all capital loan projects as reported by CAH administrators (Table 5). The second most frequent source of capital was private lenders outside of the hospital's community. Private lender capital, though less frequent for rural hospitals, continues to provide larger loans than local lenders of capital.

Table 5
Capital Project Funding Sources (n=226)

	Source as a Proportion of:	
	Projects	**Dollars**
Local lender	53%	36%
State sponsored program	8%	11%
Federally sponsored program	12%	12%
Private funding program	23%	33%
System sponsored program	4%	8%

Over one quarter of the CAHs acquiring a capital loan were able to secure a second loan over the same time period. A total of 227 loan projects were supported with a total capital loan amount for all reporting CAHs of $418 million. A comparison between the number and amount of capital loans acquired by CAHs in 2001 with those acquired in 2004 revealed that the proportion of projects between local and private lenders remained relatively stable. However, there was a dramatic shift in the proportion of dollars linked to these loans. Funds by local lenders doubled between 2001 and 2004 while the proportion of private capital loan funds dropped by one half [1] (Table 6).

A host of factors could lead to the observed pattern in funds flow including a change in how lenders assess hospital creditworthiness (e.g., increased faith in Flex Program future, improved hospital performance measures because of CAH) or a more proactive stance taken by local lenders to support the community's economy. Further study is needed of the terms and

[1] While system-related sources of capital were not identified in the 2001 survey, and additional category should have minimal impact on the analysis because of the small number of CAHs using that source of funding for projects.

conditions of local loans and the decision-making process used to assess creditworthiness and community value/risk. Site visit information collected over the past eight years of monitoring the Flex Program has suggested that CAH/local bank relationships vary on a case-by-case basis. Some local lenders may be reluctant to provide a loan for a major employer of the community because of the potential long-term credit risk not only for the bank but for the local economy. For others, a long history of short-term bridge loans to meet payroll, vendor bills and other expenses can either weld a solid lending relationship or try the patience of the local lender.

Table 6
Capital Loan Projects and Investments By Source, 2001 and 2004

	Average Loan (in millions)		Percent Loans		Percent Dollars	
Source	2001 (n=99)	2004 (n=125)	2001 (n=99)	2004 (n=125)	2001 (n=99)	2004 (n=125)
Local	$0.49	$1.05	48%	55%	16%	31%
State	$1.26	$2.93	10%	11%	9%	17%
Federal	$1.72	$2.20	9%	14%	11%	16%
Private	$2.74	$3.07	33%	18%	64%	31%
System	NA*	$4.10	NA*	2%	NA*	5%

* System was not asked as a loan source in 2001.

Comparisons of sources of capital for the period 2002 to 2004 also suggest that earlier converters (Wave 1 CAHs) are more dependent upon public sources of capital and less dependent on private market capital compared to Wave 2 CAHs (Table 7). This finding suggests that rural hospitals that were later CAH converters (Wave 2) may have been stronger financially at conversion than those converting earlier (Wave 1 CAHs) – a finding consistent with previous program assessments.

Table 7
Distribution of Loan Sources by Time of CAH Conversion

Source	All Capital Loans 2002-2004 (n=194)		Capital Loans, 2002-2004 For Wave 1 CAHs* (n=119)		Capital Loans, 2002-2004 For Wave 2 CAHs* (n=75)	
	Proportion Projects	Proportion Funding	Proportion Projects	Proportion Funding	Proportion Projects	Proportion Funding
Local	54%	35%	55%	31%	52%	41%
State	9%	11%	11%	17%	5%	4%
Federal	12%	12%	14%	16%	10%	6%
Private	22%	34%	18%	31%	29%	37%
System	3%	8%	2%	5%	4%	12%

* Wave 1 and Wave 2 comparisons only included CAHs in states represented in both waves.

Federal and State Capital Options

Flex coordinators provided information on the types of capital programs that had worked with their CAHs over the past few years. Respondents identified a total of 88 CAHs that had received some form of capital assistance from a non-state supported capital program over the previous two years (Table 8). Over a quarter of the hospitals were linked to either the HUD 242 or USDA Community Facilities Program. The majority of the CAHs working with the HUD 242 program were still in the planning and development phases. Thus far only three CAHs have been endorsed under that program. A third of the hospitals received support through private lender action, municipal bonds sales, or direct loans through the efforts of their affiliated system. The remaining CAHs were supported through a variety of sources such as HFFAs, the Small Business Administration, Farm Boards or other commercial loan programs.

Although the capital program activity for both HUD and USDA appears high for the two year period, this rate of activity reflects a recent increase in effort rather than a steady volume of loan activity. Prior research on the first three decades of these two programs revealed that while they collectively provided more than $14 billion to eligible facilities ($9 billion from HUD and $5.2 billion from USDA) less than 3 percent ($289 million) of HUD endorsements and 23

percent ($1.2 billion) of CFP support have gone to rural hospitals.[4] Less than one quarter of the more than 2,000 rural hospitals have received capital assistance through their efforts.

Table 8

CAHs Assisted by Non-State Funded Capital Programs, 2002 – 2004*

Capital Program	Number of CAHs Assisted
HUD 242 Hospital Mortgage Program	12
USDA Community Facilities Program	11
Small Business Administration Loan Program	3
Health Facility Finance Authority Program	9
Banks	18
Denali Commission	4
Municipal bonds, loans from affiliated system	15
Private institutions/foundations	15
Commercial lender	1
Total	88

*Includes completed endorsements as well as applications in process.
Source: E-mail survey of State Flex Coordinators.

A significant element of the Flex Coordinator e-mail survey was designed to collect information on state-sponsored programs and capital assistance efforts. Our previous study focusing on HUD and the USDA also canvassed states to identify additional capital programs available to rural hospitals.

In 2001, 15 states offered a total of 20 capital-related programs that were available to rural hospitals.[4] Two-thirds of those programs relied on grant awards as their capital vehicle and the remainder provided direct loans except for one program that provided loan guarantees. Almost one-third of the programs were time-limited and dependent on legislative reauthorization or appropriation, created through one time funding opportunities or established to operate under a finite time line. Typical sources of program funds involved tobacco settlement dollars, state endowments, revolving loan pools, unused block grant dollars, and legislative appropriations.

The 2004 e-mail survey found 16 state-supported capital initiatives offered across 13 states (Appendix 1). In the prior three years, four grant programs ended and one new program

was implemented. Of the four capital programs lost since 2001, two were dropped because of financial concerns over state budgets, one had been inadvertently dropped during a complex legislative session, and the fourth was dropped because of waning support from the council overseeing it and the lack of advocacy from hospitals in the state. However, conditions remain favorable for three of the four programs to address future capital needs.

One grant program that was repealed in Minnesota because of state budgetary concerns was combined with an existing program that would continue to address the original program's goals and purposes, albeit with only two-thirds of the original combined funding base. The program inadvertently dropped in Arkansas has a number of advocates that intend to introduce the program for consideration of reauthorization and appropriation during the next legislative session. Finally, in Oregon where a struggling state budget claimed its capital program, advocates have completed a capital needs assessment for the state's CAHs and are preparing to reintroduce the program for legislative action.

Almost a third of the reporting states have conducted some form of financial assessment for their hospitals related to capital and have been using the information to educate and disseminate information about capital needs to important stakeholders. Since 1999, six states (Alaska, Colorado, Mississippi, New Mexico, South Carolina, and Tennessee) have conducted statewide rural hospital capital needs assessments. Seven states (Minnesota, Montana, North Dakota, New Mexico, Oregon, Washington, and West Virginia) specifically targeted the capital needs of CAHs or potential CAHs. The state of Minnesota has been able to use its assessment information to maintain multiple capital programs for its hospitals.[16] In 2003, the small rural hospital capital program in Minnesota provided $2.6 million to 26 rural hospitals with 50 or fewer beds.[17] Although unable to generate the funding to implement a rural hospital capital

program, the state of Washington was able to develop an excellent guide for hospitals to use in searching for sources of capital.[18]

Finally, when asked about the technical assistance (TA) needs of rural hospitals that would help them better access capital, a number of Flex coordinators reported that recognizing one's limitations and deciding to seek outside counsel was probably the most important characteristic of successful loan applications. More than half of the Flex coordinators identified where the most effective TA would likely be located in their state. The sources included private consultants, state hospital associations and state offices of rural health (Table 9).

Table 9
Source of Most Effective Capital-Related Technical Assistance (TA)

	TA Source (n=23)
State hospital associations	22%
State offices of rural health	13%
Source of capital	4%
State sponsored initiatives	13%
Private consultants/experts	13%
Combinations of above	35%

The role of State Offices of Rural Health was expected to rank high among respondents because of their central role in the administration and monitoring of statewide Flex Program activities and their special support and advocacy relationship with CAHs related to certification, reimbursement, and regulatory compliance. State Hospital Associations were considered effective primarily because of their association with private capital sources and contacts cultivated over the years working on hospital capital issues. Private consultants were considered effective because of their on-going focus on the issues, their personal breadth of experience, and ability to represent the hospital with lenders.

Capital Investment Strategies

CAHs that had been successful in obtaining capital were asked to describe the types of projects their facilities had initiated over the past two years. Administrators of CAHs that had successfully obtained loan capital were asked to identify up to two projects whose cost was $250,000 or more and made important contributions to their hospital's operational or financial performance. CAHs that successfully obtained non-loan capital were also asked to limit their project examples to those costing $250,000 or more. In addition, non-loan capital projects were limited to one example of an important construction/renovation related project and one example of an important equipment related project.

CAHs varied in terms of their use of loans, non-loans or both to support important projects (Table 10). Forty-eight percent of CAHs accessed some form of capital for their projects with the majority relying solely on loan capital. Only 11 percent relied solely on non-loan capital while 9 percent bundled their capital to meet their project needs

Table 10
Capital Vehicles Used by CAHs (n=474)

Capital Vehicle	CAHs
Loan Capital Only	28%
Non-Loan Capital Only	11%
Loan & Non-Loan Capital	9%
No Capital	52%

Loan Capital Investments

Thirty-six percent of surveyed CAHs successfully obtained a capital loan during the two year period prior to the survey. Fifty-two of these CAHs were able to successfully support at least one additional capital project for a capital loan total of $418 million supporting 227 individual CAH projects (Table 11). The majority of these projects (63%) targeted activities to improve hospital service capacity (e.g., clinic space remodeling and expansion, acquiring new

clinical equipment and diversifying existing services). The remaining projects focused on keeping pace with depreciation through repairs, and updating or replacing facility and medical equipment/technologies. Investment in information technology was much lower than expected given the increased demands for supporting performance improvement initiatives, patient safety and HIPPA provisions and the potential economies available through combining "back-office" functions such as billing and collecting.

Table 11
Most Important Loan Capital Investment Projects

	All Projects (n=227)	Wave 1 Projects (n=133)	Wave 2 Projects (n=94)
General remodeling/modernization	17%	16%	17%
Clinical remodeling/expansion	23%	26%	20%
Clinical equipment purchasing	35%	31%	40%
Information technology	6%	5%	7%
Refinance old debt	8%	8%	8%
Diversification of services	5%	7%	3%
Total facility replacement	6%	7%	5%

Total Expenditures: $418 million
Average Project Cost: $2.4 million

A review of Wave 1 and Wave 2 investment patterns suggests that later converters were more likely to invest in equipment purchases and less likely to expand clinical space than earlier converters. Wave 1 CAHs were then analyzed separately using 2001 and 2004 data to determine if there were any temporally-related factors underlying the observed investment patterns. The results of these analyses (Table 12) suggest that the longer a CAH participates in the Flex Program the more likely it will begin investing in activities to strengthen its market position and revenue flow. In 2004, Wave 1 CAHs were about half as likely to use their capital to refinance existing debt as in 2001 and a third more likely to invest in service capacity expansions (i.e., clinical remodeling expansion and diversification of services) than they were earlier. Although

refinancing old debt does not increase hospital service capacity, the reduction in this activity in 2004 when interest rates were more favorable than in 2001 suggests that it was not as pressing an issue as in 2001 compared to service expansion efforts and equipment purchases.

Table 12
Most Important Loan Capital Projects for Wave 1 CAHs

Project Category	2001 Capital Projects (n=110)	2004 Capital Projects (n=133)
General remodeling/modernization	14%	16%
Clinical remodeling/expansion	17%	26%
Clinical equipment purchasing	28%	31%
Information technology	10%	5%
Refinance old debt	16%	8%
Diversification of services	9%	8%
Total facility replacement	6%	6%

Non-Loan Capital Investments

Non-loan sources of capital such as grants, gifts, fundraising contributions, and private/ corporate philanthropic efforts have long been a mainstay for supporting small rural hospital projects. For this sample of CAHs, non-loan capital (approximately $113 million) accounts for one-fifth of all capital (Table 13). More than half of all non-loan projects were construction related and involved approximately 15 percent of the CAHs in the study compared to approximately 11 percent of the CAHs using non-loan capital to purchase major equipment. These amounts are underestimated because of the truncation of project costs at no less than $250,000 and the limit of examples to one construction and one equipment project.

The six main categories of construction projects included general construction, clinic construction/expansion, project bundling (combining loan and non-loan sources for project support), diversification of services, total facility replacement, and health information technologies. Approximately 11 percent of the non-loan capital construction projects were bundled with capital loans to complete on-going projects (Table 14).

Table 13
Non-Loan Capital Projects (n=123)

Total Expenditures	$113 million
Construction Projects	58%
• Total expenditures	$89.75 million
• Average project cost	$1.26 million
Equipment Projects	42%
• Total expenditures	$23.15 million
• Average project cost	$0.44 million

Table 14
Most Important Non-Loan Capital Construction Projects (n=71)

	Percent of Projects	Project Cost (in millions)	
		Average Cost	Total Cost
General construction	37%	$1.3	$34.4
Clinic construction/expansion	38%	$0.8	$22.3
Project bundling	11%	$1.4	$11.3
Diversification projects	6%	$1.1	$ 4.3
Replacement of facility	5%	$4.0	$16.2
Health information technologies	3%	$0.6	$ 1.3

The majority of non-loan equipment projects involved radiographic and imaging devices, accounting for half of all non-loan capital equipment costs and half of the capital used to support those projects (Table 15). This is not surprising since the fastest rising hospital cost for the period 2000–2002 was diagnostic imaging.[19]

Table 15
Most Important Non-Loan Capital Equipment Projects (n=52)

	Percent	Project Cost (in Millions)	
		Average Cost	Total Cost
Radiography/imaging (e.g. CT, MRI)	51%	$.45	$11.7
Patient services	8%	$.34	$ 1.4
Physical plant	16%	$.63	$ 5.0
Health information technologies	23%	$.38	$ 4.6
Other	2%	$.30	$ 0.3

Grants and donor contributions represented over two-thirds of the non-loan funding supporting CAH construction projects and 80 percent of their equipment projects (Table 16).

The use of contributions to support construction was expected; however, the reliance on grant funds for equipment projects was surprising. Granting agency guidelines commonly set a limit on the proportion of grant awards that may be devoted to the purchase of equipment. The use of grant funds to purchase equipment under most federal grant programs is often capped at approximately 15 percent unless the program is exclusively devoted to building equipment related capacities. A portion of the funds identified by the CAH administrators for equipment purchases may have come from programs such as the Small Rural Hospital Improvement Grant Program.

Table 16
Non-Loan Project Funding Sources (n=123)

	Construction Projects (n=71)	**Equipment Projects (n=52)**
Grants	30%	55%
Contributions	39%	25%
City, town, municipal	7%	8%
Combination	9%	5%
State/system	8%	2%
Internal	7%	5%

Leasing of Equipment and Space

Leasing equipment and operating space is becoming an increasingly attractive option for many rural hospitals regardless of their financial strength. Hospitals at their limit in terms of debt capacity (due to heavy leverage or financial underperformance) see leases as a less expensive option than purchasing and more likely to be available than a loan. Stronger performing hospitals view leasing as a rational strategy for meeting their technology needs without using large amounts of capital for equipment.

Approximately one-quarter of all CAHs surveyed reported having a leasing arrangement valued over $250,000 while only three percent had similarly priced space leases (the second

most common space lease was the CAH hospital itself). The vast majority (86%) of equipment leases targeted medical imaging technologies such as CT scanners, Magnetic Resonance Imagers, and ultrasound equipment (Table 17). More than half of the space leasing arrangements focused on the use of clinical or ancillary services and most often involved a satellite or Rural Health Clinic (Table 18).

Table 17
Use of Equipment-related Leases (n=128)

CT scan and magnetic resonance imager	71%
X-ray, fluoroscopy, mammography	13%
MIS (computers, digital software)	6%
Clinical (monitoring/telemetry)	3%
Ultrasound	2%
Laboratory	2%
Multiple projects	2%
Physical plant infrastructure	1%

Table 18
Facility/Space-related Leases (n=15)

Clinic/Ancillary (RHC, PT, CT, Optical, Rehab)	53%
CAH Structure	27%
Long-Term Care Facility	13%
Apartments for Contract Labor	7%

Comparisons of leasing activity among CAHs that have obtained a capital loan (n=175) and those that have not (n=299) suggest that CAHs actively engaged in capital markets are more likely to enter into a leasing arrangement than other CAHs (37% versus 21%). This may be due to the results of better financial performance, the immediate financial flexibility resulting from obtaining a loan, or the continued product of strategic planning to improve performance and efficiencies.

Current CAH Capital Needs

CAH administrators were asked to respond to a series of questions focusing on the current capital needs of their facility. Two categories of capital need were identified: 1) project capital needs related to the resolution of existing fire, life and safety (F&L/S) code issues; and 2) capital project needs important for the hospital's financial and operational performance. Although state agencies responsible for hospital safety and code inspections frequently grant waivers of code violations under authority granted to CMS by federal statute, F&L/S issues often represent compelling projects to hospitals beyond plans for improving performance. Therefore F&L/S capital needs were highlighted in the survey to purposefully delineate between required projects and desired projects. Respondents were asked to identify the most critical fire/safety need and as many as two other capital needs they considered to be important for the effective operation of their CAH.

Fire and Life/Safety Needs

One hundred thirty (28%) of the survey respondents identified critical life/safety needs requiring a total capital investment of approximately $89 million with an average project cost of approximately $679,000 (Table 19). F&L/S projects can be sorted into three categories – prevention, suppression and detection. Almost one-half of the projects involved the prevention and containment of F&L/S events (e.g., general physical plant construction to cover exposed hazards, the creation of fire and smoke barriers, the replacement of dangerous electrical systems, and the modification of patient service areas and rooms). Over one-third of all F&L/S projects focused on the installing or replacement of direct suppression systems such as ceiling sprinklers, water pumps, and pipe systems. Alarm system needs such as smoke detectors, fire detectors, and the installation of alarm boxes were a key need for 13 percent of all CAHs.

Comparisons with CAHs that obtained either loan or non-loan capital during the past several years revealed that more than half of the CAHs identifying a need for fire suppression systems did not obtain a loan during that period raising a concern about the ability of some CAHs to take corrective action on lower cost F&L/S problems.

Table 19
Most Critical Fire & Life/Safety Project Needs (n=131)

	Average Project Cost (in millions)*	Percent of CAH F&L/S Projects	Percent of Funds Related to F&L/S Needs
Suppression systems	$ .18	37%	9%
General physical plant	$ 1.46	18%	36%
Detection systems	$ .19	13%	4%
Fire and smoke barriers	$ 1.47	12%	23%
Electrical	$ 1.32	8%	16%
Patient service areas	$ 1.17	8%	11%
Patient areas	$ .14	4%	1%

*Average project cost based on fewer than 131 projects due to missing data.

Recent changes to the Medicare conditions of participation will require all hospitals, including CAHs, to comply with the 2000 edition of the Life Safety Code of the National Fire Protection Association no later than March 2006. While the statute and regulation stipulates that the new LSC will apply to new construction and renovations it also states that "existing facilities that are extensively renovated must meet the requirements of a newly constructed facility, including the installation of a sprinkler system in non-sprinklered buildings."[20] This will clearly increase CAH activities related to meeting F&L/S codes in the coming year.

Capital Needed for Safe and Effective Operation

In addition to the fire/safety needs, over one-half (57%) of the CAHs identified important capital projects that would make their facility safer and operate more effectively (Table 20). The total cost for these projects was approximately $383 million with an average project cost of almost $1.4 million. Projects focused on the remodeling and expansion of existing physical

space and clinic space, the addition of new patient care areas, updating existing equipment and acquiring new technologies.

Table 20
Most Critical Non-Fire and Life Safety Capital Project Needs (n=272)

	Average Project Cost (in millions)	Percent CAH Projects	Percent Project Funds
General Construction/Remodel	$1.93	35%	48%
Clinic Remodel/Expansion	$1.69	33%	39%
Clinic equipment	$ .66	23%	10%
Health information technology	$ .48	9%	3%

Remodeling and expansion of physical plant space and clinic space accounted for over two thirds of all important capital projects. General building projects averaged approximately $2 million and included activities such as roof replacements, elevator renovations, and updating/ replacing mechanical systems, administrative areas, laundries, cafeterias and storage areas. Clinic space remodeling and expansion targeted activities such as refurbishing, expanding or creating new clinic space, outpatient clinics, emergency rooms as well as therapeutic and diagnostic space. Capital needs for replacing or acquiring clinical equipment was the third most common area of need.

Health information technologies (HIT) including remote links, teleconferencing, accounting and general computer availability accounted for substantially less capital funding needs as clinic equipment replacement and updating. With the growing reliance on information technologies in the areas of clinical quality and patient safety as well as the increased emphasis being given to this issue by the Department of Health and Human Services, a much higher reported need was expected. CAHs will likely require significant infusion of capital to catch up with their growing information system needs. Since such projects seldom generate new revenue

streams to meet loan obligations, most CAHs will need to rely primarily on grants and contributions to meet their information system needs.

The reported capital needs (not including facility replacement) for surveyed CAHs was $472 million. This total is an underestimate of the total capital needs of CAHs because of the $250,000 minimum for project costs and the limitation of only one important F&L/S project and only two projects important for hospital performance.

Facility Replacement Needs

Almost half of all operating CAHs are more than forty years old. Although many are meeting their capital construction needs on a project-by-project basis, 29 respondents (6%) reported they need to replace their physical plant structure (Table 21). The proportion of CAHs expecting replacement is consistent with the historical trend of new CAH construction. Since the beginning of the Flex Program there have only been 12 facilities that have been designed and built from the ground up as CAHs with at least six more expected to open by March 2006.[21] The anticipated cost of replacing the 29 facilities identified in the 2004 administrator survey is approximately $346 million or 42 percent of the $818 million in total capital needs identified by the survey (i.e., $89 million for fire and life safety, $383 million for immediate capital needs, and $346 million in facility replacements). The demand for CAH facility replacement is likely to increase in the near future as the new F&L/S regulations are implemented and as the current facilities plant continues to age.

Table 21
Facility Replacement Needs (n=29)

	Percent CAHs with Need	Project Cost (in Millions)	
		Average Cost	Total Cost
Total Facility Replacement	6%	$11.93	$346.10

CONCLUSIONS

CAHs have grown in popularity and now represent almost one-half of all rural hospitals operating in the continental United States. Their ability to obtain sufficient capital to maintain safe and effective operations is problematic. Findings of this study suggest that participation in the Medicare Rural Hospital Flexibility Program may provide significant advantages for small rural hospitals in search of capital. However, it also suggests that this advantage is not enough to close the gap in capital needs generated by efforts to control rising health care costs, improve quality, enhance access, and foster greater commitment and effort toward performance improvement for the hospital industry.

The sample surveyed in this study is representative of all CAHs that were operating in the United States as of December 1, 2002 (717 facilities). A conservative estimate of the capital needs of these facilities approaches $1.6 billion including approximately $970 million for general construction, renovation, and expansion of general physical plant and clinical space, $145 million to address fire and life safety issues, and $526 million to cover total facility replacement needs. On average, later converters appear to be performing better financially and more able to obtain additional capital resources than earlier converters. About one-third of all CAHs are using leasing arrangements to expand capacity and address depreciation needs with the vast majority focusing on “high-end” clinical technologies. CAHs have been eclectic in their search for capital. Their use of grants and contributions represents about 20 percent of all capital funds acquired during the study period. They also have been creative in their use of acquired capital frequently bundling grants and loans together to provide the support needed to implement key hospital projects.

Key findings from this study include:

- Critical Access Hospitals have significant capital needs. The magnitude of the need for our study sample suggests that a conservative estimate of their capital need exceeds $1.6 billion.

- CAHs have not been able to adequately address the growing demands for health information technologies. CAHs will likely not be exempt in the long run from the emerging national initiatives related to pay for performance and voluntary reporting. Even if they remain exempt, CAH reputations could suffer from not participating with the rest of the hospital industry in these initiatives.

- Estimated capital needed to address fire and life safety needs are valued at just under $90 million with many of the CAHs that reported fire/safety capital needs having little history of obtaining capital resources over the three year study period.

- Capital loan applications for CAHs have been very successful (88%) indicating a significant shift in loan experiences over the past three years.

- On average, CAHs that converted after May 1, 2001 are in better financial shape and are more able to obtain the capital they need from all markets (i.e., local lenders, private markets, and system partners) than facilities that converted earlier.

- More than one-quarter of all CAHs are using leasing arrangements to expand their capacity to meet local health care needs. Virtually all of the leasing arrangements target the use of advanced clinical technologies such as digital x-ray, CT scan, and MRI equipment.

- Capital funds obtained through grants, contributions and fundraising have become a significant strategy for supporting major CAH projects and are often bundled with loan capital to implement large projects.

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Appendix 1

Capital Programs Available to CAHs Supported by State Specific Resources*

	2004			2001		
State	**Program Name/Agency**	**Capital Vehicle**	**Reason for Change**	**Program Name/Agency**	**Capital Vehicle**	**Additional Information**
Arkansas	None	None	Dropped during past legislative session; pursuing re-introduction	Hospital Health Services Revolving Fund	Grant	--
Arizona	Hospital Capital Project	Grant	Program inactive in 2004	Hospital Capital Project	Grant	One time appropriation per legislature interest
California	None	None	Shift in council priorities overseeing program/lack of advocacy	Rural Development Capital Grant Program	Grant	Funded from 1999 through 2003
Colorado	State Department of Local Affairs	Grant	Found support to fund program through Community Development Block Grant and Energy Impact funds; could be one time program	None	None	--
Florida	Rural Hospital Capital Improvement Program	Grant	No change	Rural Hospital Capital Improvement Program	Grant	Supported through state appropriations
Minnesota	Rural Hospital Improvement Grant Program	Grant	State budgetary concerns reduced available funding from $4.8 million to $1.8 million	Rural Hospital Improvement Grant Program	Grant	--
Minnesota	MN Primary Care Loan Fund Capitalization Pool	Loan	No change	MN Primary Care Loan Fund Capitalization Pool	Loan	--
Minnesota	None	None	Program repealed for budgetary reasons and merged into planning and transition grant program	Sole Community Hospital Program	Grant	--
Minnesota	MN Rural Hospital Planning and Transition Grant Program	Grant	Combined with Sole Community Hospital Program (combined grant pool total of $450,000 reduced to $300,000)	MN Rural Hospital Planning and Transition Grant Program	Grant	--

Appendix 1 (continued)

	2004			2001		
State	**Program Name/Agency**	**Capital Vehicle**	**Reason for Change**	**Program Name/Agency**	**Capital Vehicle**	**Additional Information**
Mississippi	Enterprise Corporation of the Delta	Loan	No change	Enterprise Corporation of the Delta	Loan	--
Montana	MT Capital Assistance Program	Grant	No change	MT Capital Assistance Program	Grant	--
New Mexico	NM Hospital Loan Equipment Program	Loan	No change	NM Hospital Loan Equipment Program	Loan	--
Nevada	NV Rural Hospital Project Revolving Loan Program	Loan	No change	NV Rural Hospital Project Revolving Loan Program	Loan	--
New York	Rural Health Care Access Development Program	Grant	No change	Rural Health Care Access Development Program	Grant	--
Oregon	None	None	Program not funded because of state budgetary concerns; CAH capital needs assessment conducted and plans to re-introduce in next year's legislature	Rural Health Viability Program	Grant	One time appropriation
Pennsylvania	Health Link Grants to Small Rural Hospitals	Grant and Loan Guarantee	No activity in 2004 but expected in 2005; in legislative budget discussions	Health Link Grants to Small Rural Hospitals	Grant and Loan Guarantee	Until funds expire
South Carolina	SC Rural Health Revolving Loan Fund	Loan	No change	SC Rural Health Revolving Loan Fund	Loan	--
Texas	Capital Improvement Program	Grant	No change	Capital Improvement Program	Grant	Funded with tobacco settlement money interest
Wyoming	WY Farm Board	Grant	No change	WY Farm Board	Grant	--
Wyoming	WY Farm Board	Loan	No change	WY Farm Board	Loan	--

*The following states were not included in the table because they had no state supported capital programs in 2001 or in 2004: Alabama, Alaska, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Missouri, Nebraska, New Hampshire, North Carolina, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia and Wisconsin.