



Modernizing Rural
Hospitals:
CAH Payment
Benefits and Project
Risk Reduction

Executive Summary

This white paper is intended to help Critical Access Hospital (CAH) Board members and executives recognize the opportunities presented by the CAH cost-based payment system and how it mitigates the risks associated with repaying debt incurred for capital investments. It encourages CAHs to consider the evolving healthcare landscape and the potential benefits of capital investment and modernization in addressing community needs and health disparities. The following summarizes the key takeaways from the paper:

- **Historical Underinvestment**
CAH leaders have historically underinvested in modernizing rural healthcare facilities due to a lack of capital and a risk-averse approach.
- **Changing Healthcare Landscape**
Advances in technology have shifted healthcare services from inpatient to outpatient care, creating limitations for CAHs designed for the old inpatient model.
- **Barriers to Access**
Gaps in specialty care, limited services, and concerns about the quality and reputation of local services and doctors are common reasons patients bypass rural hospitals.
- **Benefits of Capital Investment**
The Rural Hospital Capital Study demonstrates that capital investments can enhance services, increase outpatient care volumes, and improve provider and staff recruitment and retention.
- **Understanding the CAH Payment System**
Understanding the CAH payment system is crucial for dispelling the conservative approach to deferred capital investment. CAHs are reimbursed at 101% of their allowable costs, including their annual interest and depreciation costs for treating Medicare and often Medicaid patients, reducing the financial risk associated with capital projects.
- **Payer Mix Impact**
The level of protection from CAH status during the startup period is linked to the proportion of cost-based payment sources. A higher cost-based payer mix provides greater protection against initial debt service payments, and the improved services help attract commercial patients that are critical in the future to improved financial solvency.

Critical Access Hospital (CAH) leaders have underinvested in modernizing their rural healthcare facilities due to a lack of capital and historically risk- and debt-averse strategies. A deeper understanding of the CAH payment system for capital shows that the risk of a well-planned capital project designed to meet a clear community need is lower than initially thought.

Without excess financial resources to put at risk, CAH leaders at the board and management level often opt for a 'do nothing' or 'wait and see' approach to their long-term capital needs. Deferring capital investment is not sustainable for the long term as existing facilities reach the end of their useful life. The alternative approach is based on creating a clear understanding of how CAH capital payments offset ramp-up risks and provide an alternative path for these organizations to 'get past stop' in planning how their facilities, equipment, and infrastructure can be modernized to serve the community more effectively.

Often, we find that rural hospitals built 50-70 years ago were designed for healthcare requiring patients to stay overnight to receive care. Since then, advances in technology have transitioned most of the care to outpatient services and new technologies have emerged requiring different types and sizes of spaces in modernized hospitals. CAH facilities, designed for the old approach to care, are expensive to retrofit to accommodate these changes, which has resulted in service limitations and gaps in access to care. Gaps in specialty care, limited services, and the quality/reputation of local services/doctors were most frequently mentioned by patients in a national study examining why patients bypass rural hospitals.

These trends undermine the important role CAHs play in their community and how, over time, a lack of reinvestment can threaten the financial viability of the local health system as healthcare dollars leave the community.

Over time a lack of reinvestment can **threaten the financial viability** of the local health system.

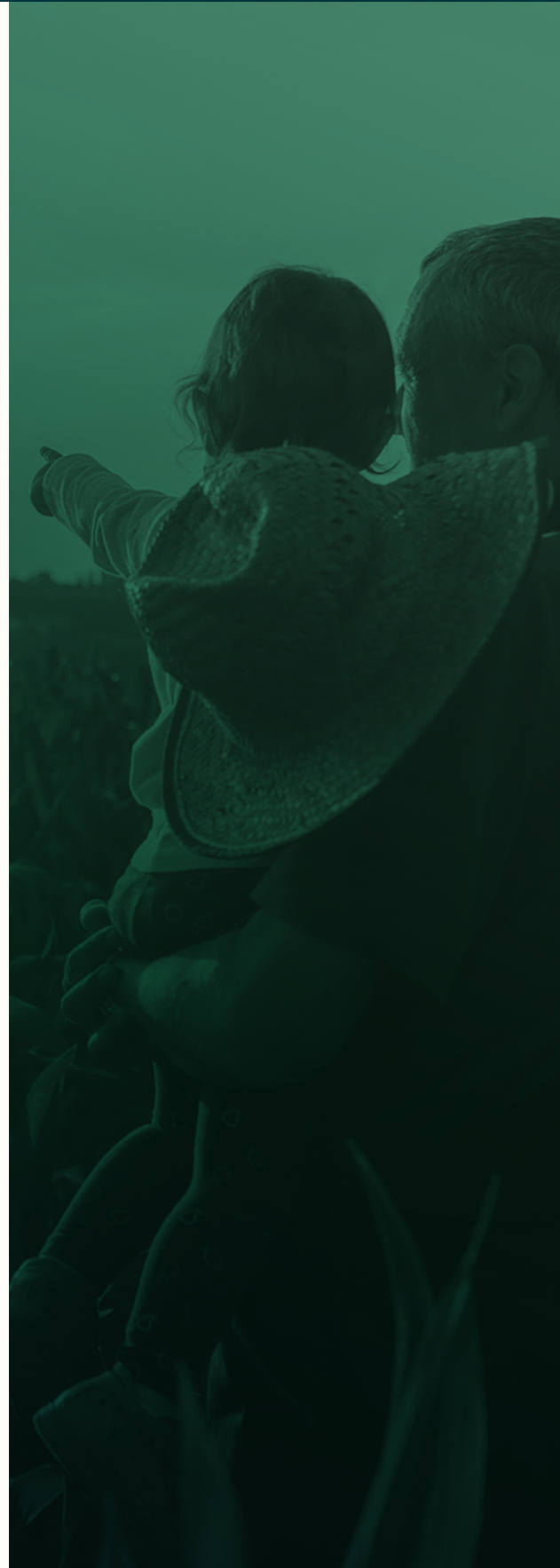
The Rural Hospital Capital Study¹ has demonstrated that capital investments in rural health projects provide an opportunity for enhancing services to the community and typically result in increased volumes for outpatient care as the gaps in care are eliminated. This is the result of both the improvement of existing services and the creation of the capacity to expand the services provided to the community. In addition to outpatient volume increases, CAHs reported increased effectiveness in recruiting providers and other staff and improved efficiencies over time resulting from the capital.

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Unfortunately, the capital needs for many CAHs are more pressing. Many rural facilities are beyond their 'useful life' and require capital to address wear and tear and functional obsolescence. The challenge is how to address these needs with capital reinvestment before they turn into a critical failure and impact the ability to continue providing services to the community. A fire resulting from the 70-year-old electrical system turned one CAH's facility upgrade from a 'good idea' into a 'must have.'

Understanding how the CAH payment system offsets the risks of incurring debt is the first step to dispelling the overly conservative approach of deferred capital investment. The key is understanding how much of the debt expense is offset by the cost-based payments provided to CAHs. 'Cost-based' reimbursement for capital projects is calculated at 101% of the annual interest and depreciation costs for patients covered by cost-based sources, so an organization that serves its community and sees 45% of its total patients in these groups will have 45% of the annual capital costs fully reimbursed.

¹ The Rural Hospital Capital Study is prepared by Stroudwater Associates and examines the impact of capital investments in the 243 Critical Access Hospital replacement facilities nationally. The study was originally completed in 2005 and has been updated seven times. Copies of prior versions of the study can be found at stroudwatercapital.us



Annual debt payments are based on principal and interest payments like any other type of loan.

Because principal payments are lower in the first years of repayments compared with annual depreciation expense, the pass-through capital reimbursements cover most of the debt payments in the early years of the project. The following tables show the calculation of this strategy for a typical CAH:

The table shows that a CAH financing a \$20M project will have annual debt payments of \$1,228,000 and will receive CAH reimbursements totaling \$1,058,000 as a result of the project, reflecting 86% of the total debt service payments reimbursed as a CAH. These payments are passed through on the cost report and are not based on volumes or the impact of the project.

CAH capital payments offsetting 86% of the total payments reduce the project risk to the remaining 14% of the debt service payments, totaling \$170,000 in the example above. The organization's planning is then focused on how enhanced services from the project will cover this gap in the initial years of the project.

Over time, as the loan is repaid and interest costs decline, CAH reimbursements decline, and the gap of 170,000 in debt service payments not covered by CAH reimbursement widens making more and more of the total debt service payment at risk. This funding gap is then covered by the continued returns from enhanced services and the project's support in recruiting additional providers and staff to meet the community's needs over time. The reduced startup risk from CAH payments allows for this recruitment to happen over time without the immediate pressure to reduce results to pay the long-term debt.

Annual debt service payments (\$20M loan at 4.5% interest over 30 years)

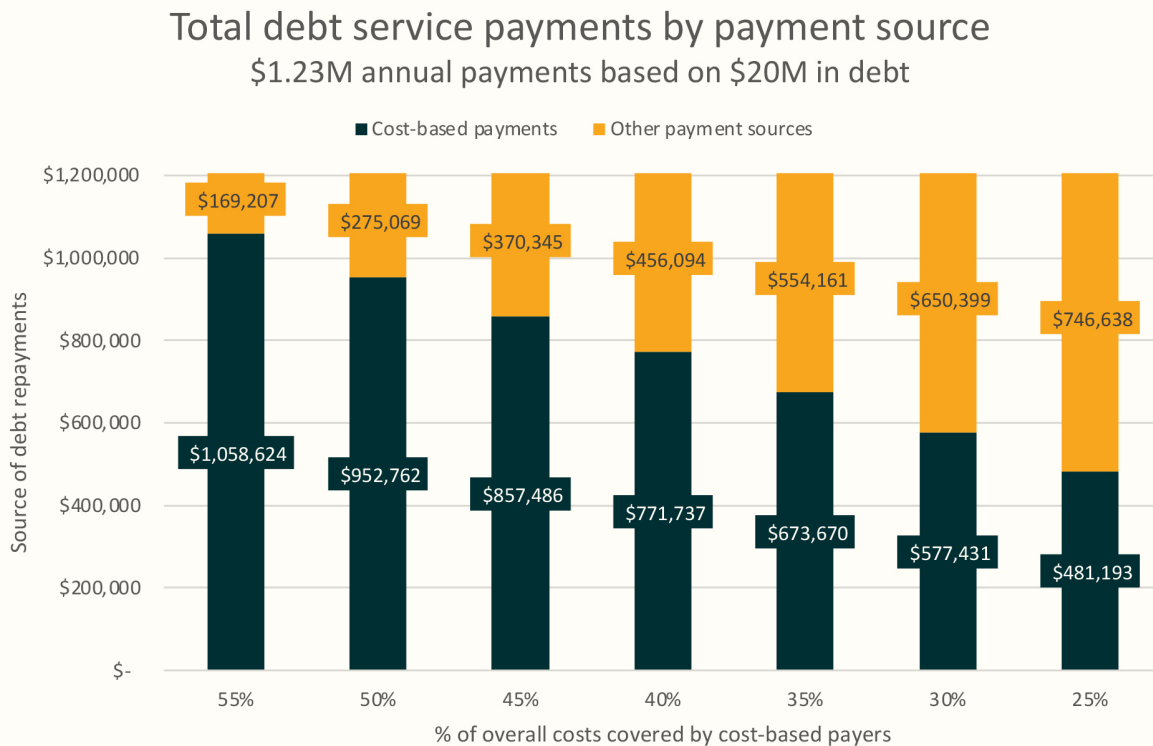
Total annual debt service payments

Interest expense	\$900,000
Principal payments	\$328,000
Total annual debt service payments	\$1,228,000

CAH Reimbursement as a % of Debt Payments

Total CAH reimbursement	\$1,058,000
Total annual debt service payments	\$1,228,000
% of debt payments covered by CAH reimbursement	86%
Debt payments not covered by CAH	\$170,000

The level of protection from CAH status during the startup period is directly related to the overall proportion of cost-based payment sources in the CAH; the higher the cost-based payer mix, the higher the level of protection. The following chart shows the impact of the amount of the debt payments covered through cost report payments based on the organization’s cost-based payer mix:



The chart reflects that the amount of the debt covered by cost-based payments for CAH status declines as the percentage of patients covered under this payment system declines, as one would expect. As described above, a CAH that has 55% of its overall payer mix in cost-based payments will have 86% of the first-year debt service payments (\$1,058,624 of the \$1.23M annual payment) covered through the reimbursement system and, therefore, not dependent on the impact of the project. If the cost-based reimbursement share is 50% overall, then it would cover 78% of its debt service payments initially (\$952,762 of the \$1.23M annual payment).

The core purpose of investing in capital infrastructure is to ensure a modernized infrastructure exists to meet the community’s needs well into the future. CAH leaders manage many competing demands for resources and must balance short- and long-term priorities to serve the community, eliminate the gaps in care, and address health disparities. Understanding the impact of how CAH payments offset the perceived risk of long-term capital investment can help both the Board and management make a more informed decision going forward and help these needed projects get past stop.