

Special Industry Report

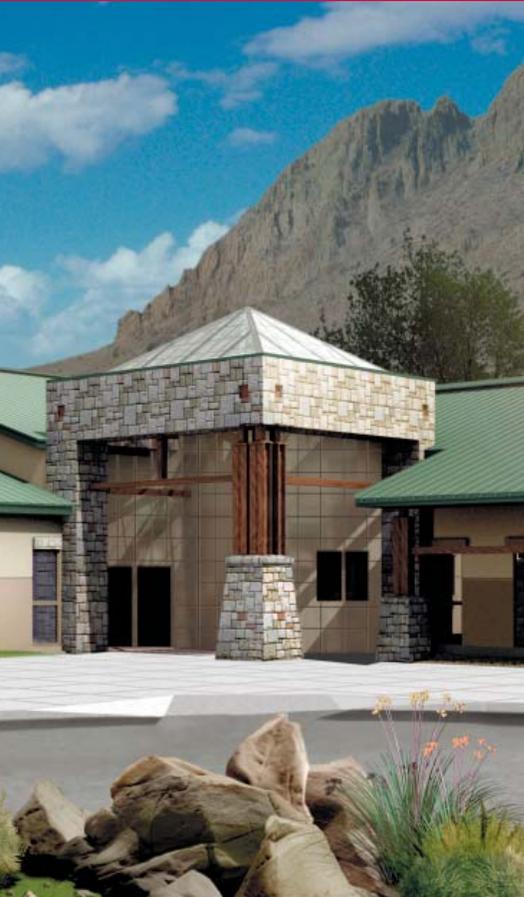
2006 Rural Hospital Replacement Facility Study

How Replacement Facilities
Impact Operations and the Bottom Line:
Findings From the Field

Prepared and Sponsored by
STROUDWATER ASSOCIATES

Sponsored by RED CAPITAL GROUP and
National Rural Health Association

Rural communities that have built a Critical Access Hospital
have pioneered a new era. Find out how replacement
facilities impacted their operations and bottom line.



2006 Rural Hospital Replacement Facility Study

Executive Summary

RED CAPITAL GROUP and Stroudwater Associates evaluated the impact of rural hospital replacements with a first-of-its-kind study in 2005, now updated and improved with additional information in 2006. The study analyzes performance data to determine volume, efficiency, and profitability of replaced facilities. Interview findings are reported to explore the perceived impacts on physician recruitment, quality and patient safety, and economic impacts to communities, among other topics.

The evidence of the positive impact on both internal operations and the general community has strengthened. Replacement facilities participating in the study are sustaining volume gains on average and are generally increasing the number of staff to accommodate higher use and/or new programs. Enhanced services, and the increased staff to support those services, are reported to be key contributors to local economic development.

Leadership continues to report positive effects of facility replacement on quality of care, patient safety and staff and physician satisfaction. The impacts on physician and staff recruitment are particularly noteworthy for hospitals in the study, with hospitals reporting additional primary care, specialist, and nurse availability.

Improvements in physician and staff satisfaction are being reported even as the facilities become much more efficient—standby time is decreasing with higher volumes. Overall, the majority of replacement facilities have documented that expenses are lower (on a unit cost basis) than their pre-replacement experience. This suggests that the facility investment payback is offsetting incremental capital costs.

Volumes, staffing, efficiency, and overall financial performance vary by individual hospital. While overall experiences have improved on average, the range of post-replacement changes in outpatient services, for example, indicate annualized changes ranging from 1% to 28%. Hospital-specific data is presented in the study to recognize these variances and assist leaders using the study for benchmarks.

Rural hospitals are often 40-50 years old, landlocked within residential areas, and oriented heavily toward inpatient services. For those working within the facilities, the need for capital investment may be self-evident. In this study, hospital leaders build the case for replacement using both strategic and operational constraints as justification. For some, the new hospital was simply the only way to meet licensure requirements, while others considered new service development and retention of market share as key drivers.

Now numbering almost 1,300, Critical Access Hospitals' (CAHs) access to capital is improved through Medicare reimbursement at 101% of eligible costs. For capital projects, this includes annual depreciation and interest expenses, and results in a leveraging effect of the resources that are available for funding debt service. This has enabled an increasing number of communities to consider renovation versus replacement facility options. While a replacement project may not be indicated in every case, this study does not include incremental renovation projects.

Communities replacing their hospitals are not randomly selected and likely differ in important ways from other rural communities; however, geographic proximity to competitors, the service area population, and project size varied widely among participating hospitals suggesting that rural hospitals across a broad continuum will gain insights from this study.

There is new evidence presented in the study that some of the replacement projects are contributing to overall economic growth in their communities. Together, the benefits to both the hospital and the community create a compelling rationale for action.

As experiences accumulate and are shared, the call for pursuing a new, preferred vision of rural hospitals is also strengthened. In addition, RED CAPITAL and Stroudwater encourage policy makers to take note of these findings. Not only is facility development reported to be positive for communities, but it also demonstrates more efficient hospital operations that may stabilize the infrastructure for years to come.

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Study Purpose and Scope

The Purpose

The purpose of the study is to determine the impact associated with a new facility by evaluating the experiences of small, rural hospitals that have been replaced. Studies of larger urban hospitals have concluded that replacement hospitals resulted in improved volume, efficiency, and profitability in excess of industry averages. This study details the rural experience in order to educate community decision makers, as well as local, state, and federal policy makers.

The Participants

The list of replacement facilities was compiled based on information gathered by the Federal Office of Rural Health Policy and supplemented with additional information provided by State Offices of Rural Health and/or state hospital associations. Eligible facilities were identified as Critical Access Hospitals that replaced their facility between January 1, 1998 and January 1, 2006. A total of 30 facilities were identified with 24 participating in the study (80%). Each of the participating hospitals are identified herein.

In addition to the continued participation of hospitals from the 2005 study, four additional hospitals were welcomed to the study: Blackford Community Hospital (IN), Hudson Hospital (WI), Drumright Regional Hospital (OK), and Moloka'i General Hospital (HI). These additions, along with updated data from first-year hospitals, strengthened the study and generated new points of observation, comparison, and analysis.

The CAHs that financed and constructed new facilities can be considered part of the vanguard in rural hospital replacement. Each hospital may differ in significant ways including service area, physician support, and management experience, for example. Such differences influence the replacement outcomes of any operation, independent of the “bricks and mortar.”

While not randomly selected, the replacement hospitals represent considerable diversity in the size of the community and in their operations. Some are isolated geographically, while others are in competitive markets. The population basis and service areas also differ in size. These factors translate into a wide variety of project sizes, suggesting that rural hospitals across a broad continuum will gain valuable information from the insights of hospitals participating in the study.

The Process

The study focuses on pre- and post-replacement differences to quantify the impact of the new facility. Stroudwater analyzed two years of pre-replacement information for volumes, operating costs, and overall profitability, and 1 to 7 years of post-replacement operating experience. Analysis is presented relative to replacement facility in-service dates (e.g., Year -1 is the year before the new facility and Year 1 is the first year in the new facility).

Representatives from each participating hospital reviewed data for prior fiscal years and supplemented with current year information. The analysis examined both the study group and hospital-specific experience for the following:

- Volumes: discharges, patient days, outpatient visits, adjusted discharges
- Operating efficiency: gross FTEs, and FTEs and operating expense per adjusted discharge
- Financial: operating margin, EBITDA, and days cash and investments on hand

Interviews with the hospital CEOs, CFOs or both following the data analysis provided additional insight into the “stories” of how the projects have been completed. The interview questions are indicated on the following page and selected responses from the participating hospitals’ senior managers are presented throughout this report.



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Bridgton Hospital
Bridgton, Maine
John Carlson, CEO
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Interview Topics

- How did the organization access capital?
- What were the goals of the replacement facility?
- What barriers to initiating the project were overcome?
- Is the facility meeting the expected volumes? Any impact on Payer Mix?
- Has the new facility supported performance improvement initiatives?
- Did the new facility have an effect on provider or staff recruiting/retention?
- What would you change about the facility if you could?
- What would you recommend to other organizations considering replacement?
- What was the economic impact of the replacement hospital?

The 2005 study design was reviewed and endorsed by an advisory panel. (see left) The 2006 study followed the same methodology. Incremental renovation projects are not included in the study for two primary reasons:

1. Opportunities to expand services and realize efficiencies are often sub-optimal, which would end up suppressing the overall effects in the study, and
2. Renovation projects typically take longer to complete and are disruptive to operations making pre- versus post-experience comparisons problematic.

Exclusion of incremental renovation projects from the study does not imply decisions to renovate are in error; the results of the replacement hospital study may be relevant to renovation projects in whole or in part.

Rural Hospital Study Advisory Panel

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Pre- and Post-Replacement Volume Experiences

The 2005 study indicated that most participating hospitals reported being ahead of pre-replacement internal expectations, most often due to a conservative approach in forecasting future volumes. Without utilization of benchmarks, such as those first provided in this study in 2005, the conservative approach is to estimate modest (if any) growth in volumes. Underlying this is the incentive for management to control expectations so that it does not appear the project is being justified on unrealistic assumptions.

The driving factors behind this study were understanding what the experience has been of replaced facilities and being able to provide this data to managers and Board members. While a hospital may be satisfied with reaching their goals of modest growth, data in the study may suggest unrealized potential for organizations that set low targets.

"We exceeded all business plan goals within a few months of opening the new facility."

"Exceeded all volume growth projections. We have already exceeded our 5 year goals in 2½ years."

"We increased from 36.6% inpatient market share in the county to 50.7%."

Because volumes are linked to financial debt capacity, the analysis of volume potential is more than an academic exercise. This is particularly true for hospitals that have limited resources.

"Real growth occurred on the OP side. We currently don't have enough OP space."

"We ran out of space as soon as we opened. Because of limited capital, we built for the now and not for the future."

Overall trends and average performance are presented below while more specific hospital-level experience is presented in Appendix A.

Acute and Swing Bed Discharges

Figure 1 shows the change in discharges pre- and post-replacement; the median increase for the first year was 7% (24 hospitals reporting). Median annualized growth for all hospitals was 6% per year over each year post-replacement. For hospitals with two or more years of experience (19 total), the annualized change varied from a 31% increase to a 10% annual loss. Fifteen of the 24 hospitals bettered their pre-replacement discharge trends in their new facility (see Figure 1a in Appendix A).

Acute and Swing Bed Days (Inpatient Days)

Figure 2 shows a median year one increase of 5%, slightly less than the increase in discharges. Of the 19 hospitals with two year post-replacement experience, inpatient days increased an additional 7% on average. It is noteworthy that nine hospitals have annualized increases in days totaling 10% or greater. Four hospitals have experienced net reductions of inpatient days post-replacement (see Figure 2a in Appendix A). Both increases and decreases indicate that external factors, including community perceptions and physician stability, continue to be strong influences on volume.



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Crete Area Medical Center
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Figure 1

Average % Change in Discharges by Year

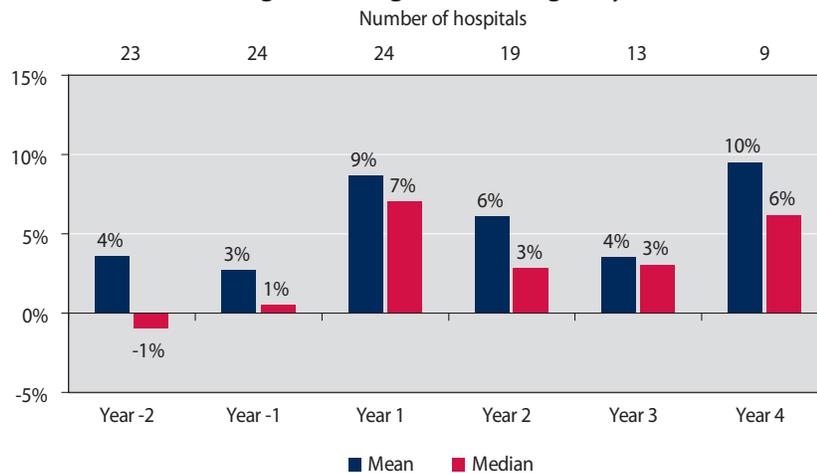
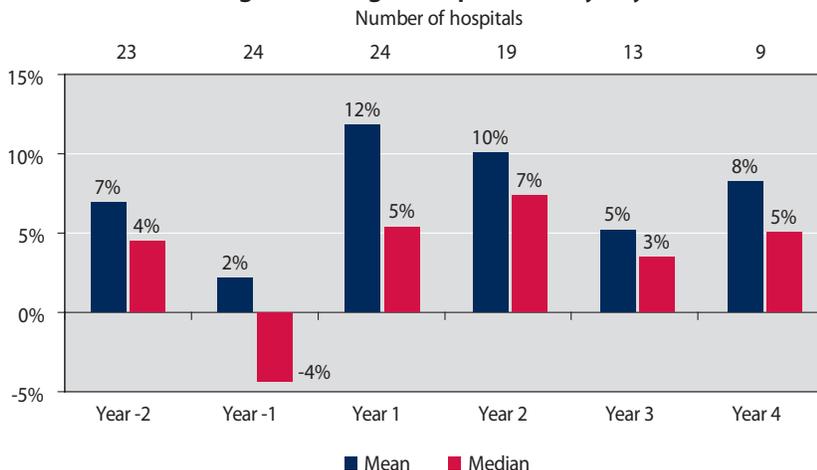


Figure 2

Average % Change in Inpatient Days by Year





Drumright Regional Hospital
 Drumright, Oklahoma
 Daryl Morris, CEO
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Ellsworth County Medical Center
 Ellsworth, Kansas
 Roger Pearson, Administrator
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Outpatient Visits

Hospital growth in outpatient visits increased on average by 10% (median) in year one of the replacement, as shown in Figure 3. This was followed up by another average increase of 9% in year two. Prior to the replacement facility, outpatient services were growing moderately. Growth in outpatient visits was positive among all hospitals in the study; however, experiences varied widely. For hospitals with two or more years of experience, average annualized growth ranged from 1% to 28% (see Figure 3a in Appendix A).

Adjusted Discharges

Figure 4 shows the average percent change in adjusted discharges was 9% for year one (median); the “adjustment” combines inpatient and outpatient activity into a standard measure of performance for comparison between facilities with varying inpatient-outpatient mix. Median annualized growth for all hospitals was 12% per year over each year post-replacement. As an aggregate, the average pre- and post-replacement experiences are consistent with inpatient and outpatient data reported previously. Seventeen hospitals realized higher annualized post-replacement growth compared to their pre-replacement average (see Figure 4a in Appendix A).

Figure 3

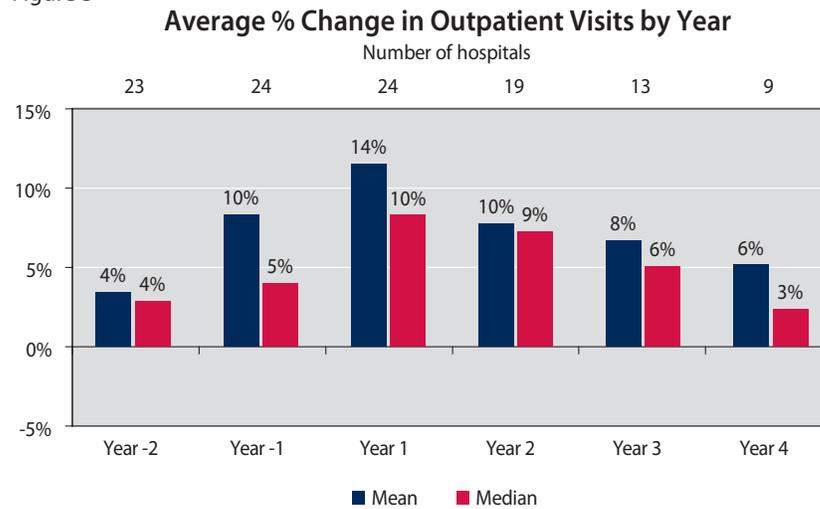
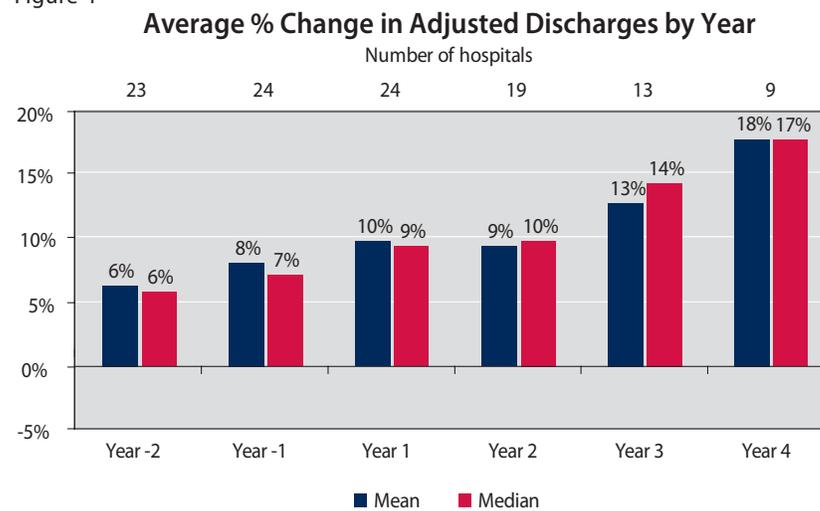


Figure 4



Growth of inpatient and outpatient services was significant in the 2005 study of replacement hospitals, although to varying degrees. A key finding in the 2006 replacement facility study is that volume growth is being sustained beyond the initial years post-replacement. Also, the new hospitals participating in the study experienced similar gains to those included in the 2005 study. Due to many other environmental factors at play, the study cannot attribute the growth in volumes solely to the new facility. Factors beyond the scope of analysis could include changes in the community size and makeup and management team experience, for example.

Interview findings underscore the importance of determining potential volume growths. Specifically, many of the facility problems reported by leaders were related to a lack of space to accommodate growth.

We should have...

"...built more beds. Last thing we would have expected but it's what the docs and nurses want."

"...built larger clinical space including ICU beds, waiting rooms, and outpatient areas. Since the new facility, we've added 7,000 SF for specialists."

"...made a larger outpatient area – we are currently overflowing."

"...anticipated larger growth – we are already at capacity."

"...built more procedure space in radiology."

"...built additional office and storage space."

"...built a medical office building at the same time."

Experienced leaders understand the important role of physicians in supporting local utilization. The qualitative analysis indicates evidence that provider supply—at both the primary care and specialty physician levels—is a driving factor for growth. Twenty of 23 hospitals reported a positive impact on provider recruitment and retention.

"We added specialty clinics. Being able to bring a doctor to a brand new building creates a whole new impression of resources and potential."

"One doctor came specifically because of the new facility."

"Before we couldn't recruit a single physician here. Now we have an FP, a new pediatrician, and two orthopedic surgeons."

"Since we moved into the new facility, we have recruited an FP, Midlevel, and 2 board certified ER docs."

"It's a delight to show off the new facility when recruiting providers."

"We brought in a new active general surgeon because of the plans for a new facility."

"We have been able to successfully recruit specialty physicians to staff our clinics. We now have two cardiologists that generate \$5M in revenue."

"We have added two PAs and one internist in the past 12 months. We have also added specialty clinics including Neurology, Urology, GI, and Ophthalmology."

"Can't recruit new physicians. 24 of 36 CAHs in the state have been recruiting without success."



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Hudson Hospital
Hudson, Wisconsin
Marian Furlong, CEO
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Quality and Performance Improvement

Increases to volume and reported improvements to provider recruitment were accomplished along with improved quality, according to leaders interviewed. The quality issue is of particular importance given increased national attention on public reporting, patient safety, pay-for-performance, and the possibility that quality will become a key factor in where patients seek care.

When asked about the impact of the new facility on quality and performance improvement, responses were consistently positive. Some leaders indicated designing the hospital around quality was a specific design principle, while others indicated the positive impact of the new facility in support of the performance improvement culture.

“This new facility has provided an atmosphere of quality improvement.”
 “With the new facility, staff is more attuned to quality. Recently, surveyors reported that they had never experienced a hospital staff so focused on quality and patient safety.”
 “The new facility has created a ‘can do’ attitude.”

Facility development is considered an opportunity to re-think processes leading to better outcomes, as reflected in the study.

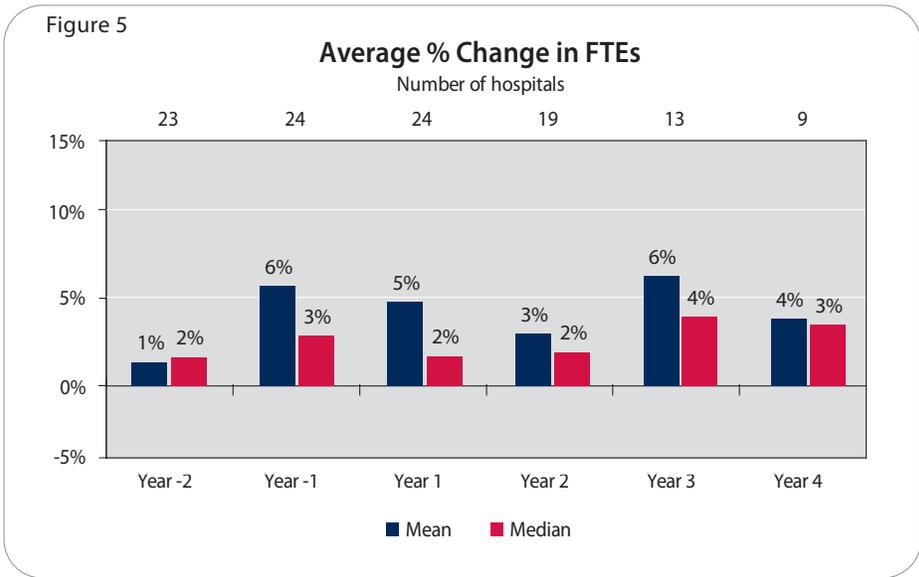
“We designed from the inside out – all initiatives are based on patient safety.”
 “More efficient operation has improved staff information sharing, staff sharing, and ultimately patient flow.”
 “We no longer worry about daily upkeep and maintenance of structure. Focus is now on real quality, safety, and process initiatives.”

The replacement facilities are well-recognized for supporting quality; however, leaders also utilized a comprehensive systems approach.

“The new facility was part of our organizational maturation to realize that we needed to implement a full spectrum of quality initiatives to be a quality organization.”
 “QI environment has changed. More departments are involved in comprehensive QI/PI processes.”
 “With the new facility, quality became a key priority. The IHI quality initiatives became the focus. We are now a IHI mentor hospital for other CAHs.”

Pre- and Post-Replacement Cost/Efficiency Experiences

Figure 5 shows the average change in overall staffing (FTEs) totaled 5% in year one and 3% in year two post-replacement. Median annualized growth for all hospitals was 3% per year over each year post-replacement. For hospitals with two or more years of experience (19 total), the annualized change varied



from a 13% increase to a 5% annual decrease. Fourteen of the 24 hospitals exceeded their pre-replacement staffing trends in their new facility (see Figure 5a in Appendix A).

Overall FTE increases were utilized to accommodate increases in patient volumes, staff new programs, or in some cases, specifically for quality initiatives. Hospital leaders report differences in staff attitude, satisfaction, and turnover.

“Even the State surveyors commented on the improvement in staff attitudes.”
 “Our staff loves the new building. It has rejuvenated them. We have not used a contract nurse in 3 years.”
 “We have the lowest turnover rate in the region/State.”
 “We have the highest employee satisfaction in the system.”
 “We’ve increased the number of specialists and added 24 FTEs due to OP growth and adding home health services.”

Similarly, the new facility was cited as a positive factor in recruitment of staff for 19 participating hospitals.

“With improved financial performance, we have been able to employ a full time QI coordinator.”
 “RN vacancies filled within 30 days. We received an abundance of quality applications.”
 “We used to have 5 FTE contract nurses – none for 3 years.”
 “Our image has helped make recruitment much easier.”
 “Not a measurable impact [on retention], but it is a much more enjoyable environment.”

While overall reductions to FTEs were not common, they were reportedly planned as part of the facility-enabled flexibility in sharing staff between areas, such as the Emergency Room and acute floor.

“We have 33% fewer staff than in the old hospital because of efficiencies in the new facility.”
 “We designed the hospital to be very efficient. We were able to reduce our nursing staff by 20% when we moved into the new facility. With only limited volume growth, we continue to meet our bottom line targets because of the staffing efficiencies.”



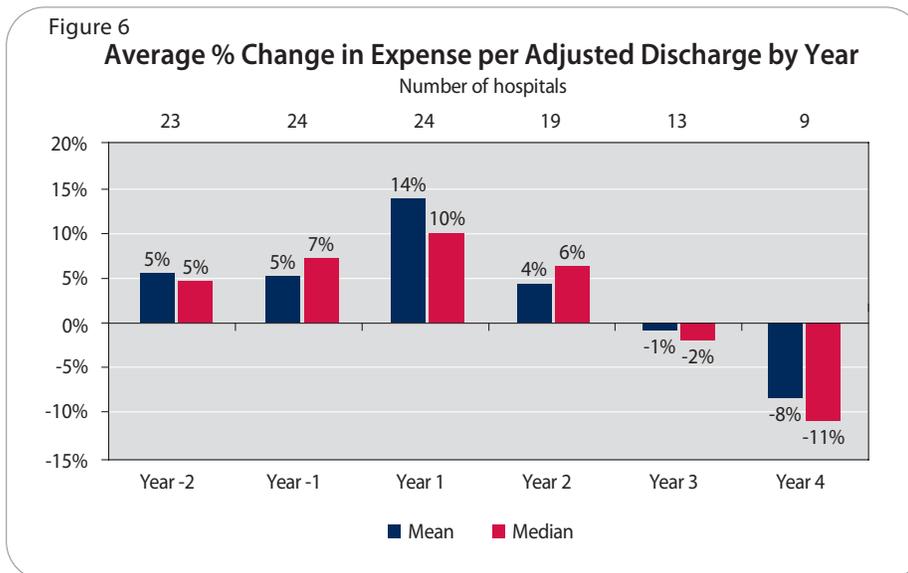
Lakewood Health Center
 Baudette, Minnesota
 SharRay Palm, CEO
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Mitchell County Hospital
 Colorado City, Texas
 Linda Mize, CEO
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Operating Expenses

Figure 6 shows the average percent change in operating expenses per adjusted discharge (“unit costs”). The year one median increase is 10% for the 24 hospitals studied and the average annualized increase overall was 4%. For the subset of hospitals with multiple years of experience, the combined effect of volume





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Mountainview Medical Center
 White Sulphur Springs, Montana
 Katharine Ann Campbell, CEO
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growth and efficiency gains shows average decreases in unit costs beginning in year 3. When compared to the rate of increase prior to replacement, 14 of the hospitals realized average rates of change that were lower in the new facility (see Figure 6a in Appendix A).

This indicates that the facility investment is generating a positive payback by placing the organization on a lower cost trajectory. This finding was also noted in the 2005 study.

"The new facility gave us the ability to add technology and space, which allowed us to improve efficiency and effectiveness."

Representing over half of operating expenses, staffing is an important driving factor behind improvements to efficiency. While employing more staff, the volume increases have reduced

staff standby capacity or downtime. Figure 7 shows the median decrease in staff per unit of service was 5% (post-replacement year one, FTEs per adjusted discharge). A decrease in this measure reflects improved efficiency. Only 2 of the 24 hospitals showed an annualized increase to the staffing per adjusted discharge since replacement (see Figure 7a in Appendix A).

Financial Impact

Profitability

Figure 8 shows the average total margin by year where total margin is net income as a percent of total operating revenues. As indicated, the pre- and post-replacement averages do not vary significantly. Although averages remain

Figure 7
Average % Change in FTEs per Adjusted Discharge by Year

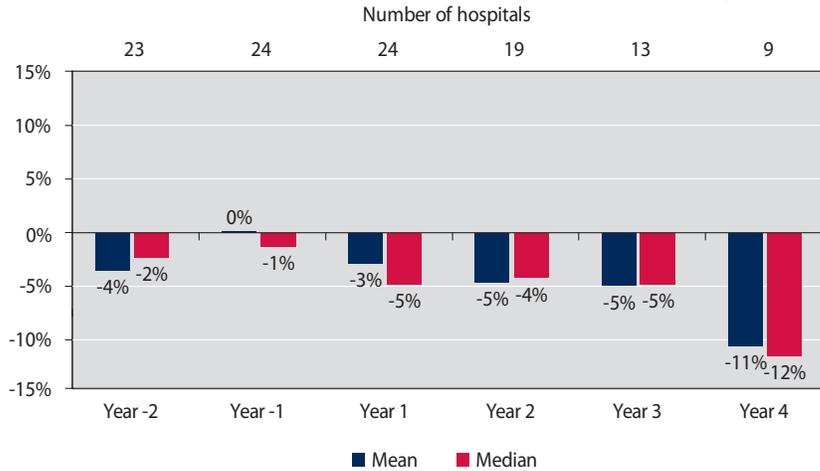
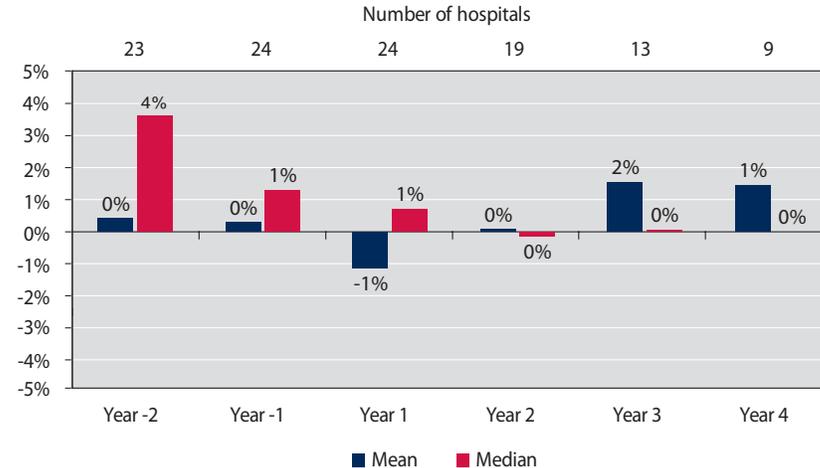


Figure 8
Average % Total Margin by Year



largely unchanged, individual hospital performance documented a wide range of profitability—from a 25% to -25% for hospitals with two or more years in the study (see Figure 8a in Appendix A).

The median growth in EBITDA margin (Earnings Before Interest Taxes Depreciation and Amortization as a percent of total operating revenues) was 15% in year one of the facility versus 8% pre-replacement, as shown in Figure 9. This analysis eliminated differences in pre- and post-replacement capital costs, as reflected in EBITDA, and reflects both the increased Medicare capital payments and the impact of volume increases. Year one and year two performance is positive for the majority of hospitals in the study (see Figure 9a in Appendix A).

Days Cash and Investments on Hand

Figure 10 shows the average amount of cash and investments on hand to cover daily operating expenses of the hospital, excluding depreciation and amortization, expressed in terms of days cash. The pre-replacement median of 70 days decreased to 68 days in the first year post-replacement and then dipped further to 53 days by year three before increasing to 82 days in year four. The strength of this finding is mitigated by a lower sample size for the number of facilities in year three (13) and year four (9) of the study.



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Figure 9

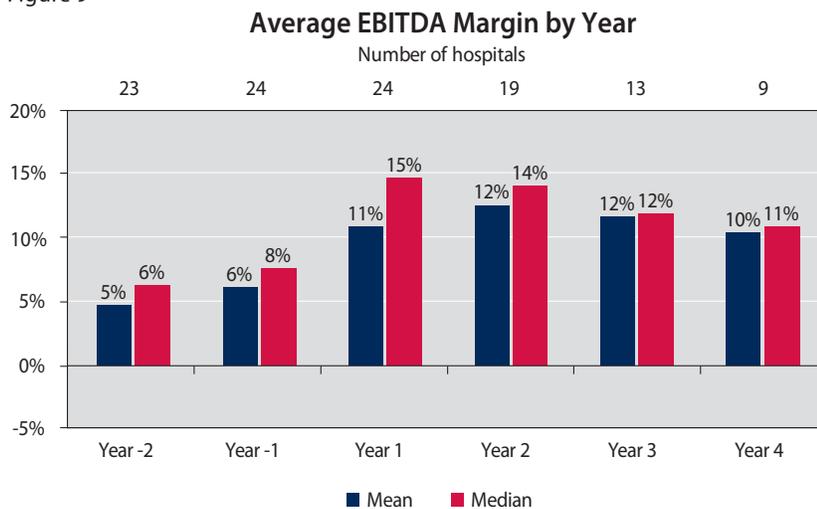
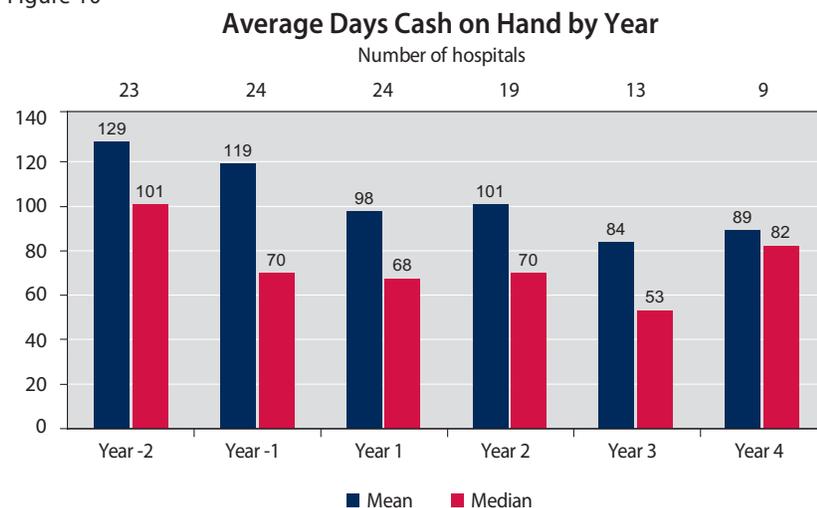


Figure 10





Our Lady of Victory Hospital
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Cynthia Eichman, CEO
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Ozark Health
Clinton, Arkansas
Kirk Reamey, CEO
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As a new measure for the 2006 study, the decline in cash balances raises an important consideration in funding the projects—what is the right mix of equity (in the form of cash) vs. debt?

Noted decreases in liquidity as a result of being at the front end of the capital cycle are indicated as a risk suggesting that strategies for preserving working capital must be considered. Thirteen of the 21 hospitals reported their cash reserves (as measured by Days Cash on Hand) have experienced a decline since the facility was placed in service (see Figure 10a in Appendix A). As indicated in this study, a number of organizations have continued to invest in capital to accommodate higher than expected growth, and to the extent that such improvements are funded through operations, cash balances will decline.

Access to Capital

Findings

Each of the hospitals interviewed used a different mix of internal and external capital, as shown below:

- **Guarantee from System:**
9 hospitals accessed capital through their affiliated system relationship, most often as part of a larger bond package;
- **Guarantee from County/City:**
4 hospitals used County/City backing to issue and or guarantee the debt; and
- **FHA/USDA/Private Placement:**
8 hospitals used a variety of available programs to access capital independently.

Those CAHs that accessed capital independently often used a number of different programs to improve the hospital's credit. The programs most frequently cited were: FHA 242 mortgage insurance, USDA community facilities direct loan, USDA community facilities guaranteed loan, and USDA rural electric zero interest loans. Alternative models for financing have since emerged in the market and will be discussed in future studies as reported by participating hospitals. All programs evaluate debt capacity using a mix of historical financial ratios and future projections.

Nearly all CAHs held major fundraising capital campaigns to supplement external capital. Many reported exceeding their fundraising goals, and one facility was able to raise enough money from the local community to fund the entire project. In planning for how much capital is needed and in comparing funding sources, hospitals are advised to focus on the "all in" costs (including up-front and on-going fees), as well as interest rates (with special attention to the risks of floating rate structures), timing, reporting requirements, and other covenants.

Self Evaluation Questions

- How does the historical financial status rate on commonly used financial ratios?
- What is the debt capacity for capital investment based on historical operations?
- What financial improvement opportunities exist to increase debt service?
- Are there unexplored options for partnering to increase access to capital?
- As project costs are developed, do they reflect "all in" costs or only construction?

Action Steps

- Identify debt service prior to design and update often as new information is developed.
- Determine operating improvements that can prepare the organization for a large capital investment.
- Ensure the financing plan integrates with the strategic and facility plans.
- Evaluate multiple programs and options for the financing team.

Driving Factors in Facility Development

Findings

The commitment to build a replacement hospital is a difficult one: the costs often represent the biggest investment a rural community has ever made and the risks of making a mistake loom large. This has led to a slow, conservative approach to decision-making. The "wait-and-see" approach is often linked to the status quo, but in reality, an organization that defers capital investments often falls further behind.

The costs of inaction are also accumulating in terms of construction. Cost pressures for materials were exacerbated by hurricanes Katrina and Rita, and demand for qualified contractors has increased.

How did hospitals in the study successfully justify their facility project? Participating hospitals cited aging facilities most commonly as the driving indicator. Action was forced because the 40-50 year old facility was beyond repair or lacked basic patient amenities.

“We had a shaky infrastructure and small double rooms that shared bathrooms.”

“We were landlocked and the current facility could not meet patient needs.”

“Because of life safety deficiencies, we could not provide the desired level of quality care to meet the community needs.”

Some organizations also used the project to support strategic or operational goals, such as re-focusing on outpatient services. These hospitals evaluated opportunities and developed new services.

“It’s important for the community to understand how much services are limited by the old facility.”

“The new facility supported two major goals: improve access to services and improve appearance and functionality.”

“We wanted a better design to increase surgical care and grow outpatient areas. We also wanted all of our physicians at one location.”

“We had a 64 bed facility that had not seen the census exceed 20 in years...and was not efficient.”

“We have added endoscopies, specialty clinics, added a new CT scanner, and expanded radiology.”

Self Evaluation Questions

- What is the remaining useful life of the building? Major mechanical equipment? Medical equipment?
- How much investment and maintenance of an old facility is anticipated?
- Is the current facility limiting inpatient or outpatient growth?
- Is the current facility able to be staffed efficiently?
- Are costs incurred by staffing multiple units or departments that could be consolidated?
- What do healthcare professionals say about the adequacy of facilities?

Action Steps

- Solicit input from staff and physicians on the facility questions; encourage “outside the norm” thinking about what would be possible without facility constraints.
- Develop a quantitative picture of facility assets, the remaining useful life, and the amount of investment needed.
- Communicate the facility needs with the Board and community decision-makers.
- Develop specific goals for facility improvements.

Impact to the Local Economy

Findings

The national Rural Health Works program has documented the economic impact of the local healthcare system for numerous communities. Economic impact is generated from the direct contributions in terms of employment, often as the major employer. In addition, an indirect economic benefit is generated as healthcare-related dollars are re-circulated throughout the community creating the “multiplier” effect.

The adequacy of the local hospital has been shown to be important to retirees and young families. In many areas it is also a primary consideration in business site selection. Participating hospitals provided many examples of how the economic impact of the replacement hospital has been observed in their communities.



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Riverwood Health Center
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Michael Hagen, CEO
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“We built on the edge of town, now we’re surrounded by a new Wal-Mart, car dealers, and a housing development. A home health agency and hospice have moved into town. We built in a field – now we are close to town.”

“New employer located in town because of the hospital and a second plant is pending. The new hospital was THE competitive advantage for the plant. Also, a 1,600 bed federal prison is coming to town.”

“A manufacturer is considering our community, with an important input being our new facility.”

“We built on 28 acres outside of town. Now a housing development, a state behavioral health office, a dentist office, and an assisted living center have located adjacent to us.”

“Not yet. But as developers and employers come to town, it keeps coming back to the new hospital.”

“Because we are seen now as a more stable entity, former residents are actually returning to the community.”

“None directly [i.e., new businesses], but the community has retained residents because they now perceive a stable and current healthcare system.”

Self Evaluation Questions

- What is the direct and indirect economic impact of the existing hospital?
- How much would the new hospital increase the economic impact?
- What opportunities for local economic development may be created with a new hospital?

Action Steps

- Engage local stakeholders on the impact of healthcare to the community’s economy.
- Frame the facility initiative as an “investment” with both a direct and indirect benefit.
- Participate with the local Chamber of Commerce in community-wide economic development.

Hospital and Community Leadership

Findings

Participating hospitals consistently reported a long development process. This requires

strong leadership to maintain a focus on the stated goals of the project. In some cases, holding on to a decision is more challenging than the initial decision to move forward. Leadership from internal and external stakeholders plays a key role in keeping the project on track and successfully seeing it through to completion.

“It took us 4 years to plan the new facility and 5 years to get the necessary political support from the community.”

“We had to convince the community that we could afford the project by raising awareness of both the need and ability to pay.”

“Must start with one or two community/ Board leaders and have them champion the project.”

“Make sure every important community stakeholder is on board with project.”

Leadership’s ability to articulate a compelling vision of “what is possible” motivates people to support facility projects. The advice offered by the participating hospitals in the study indicates that the facility development process is an important time to develop a new long term vision. A number of the study hospitals researched and integrated best practices in design and operations.

“Spend time talking to other CAHs and communities that have replaced their hospitals and learn from them.”

“Insist that the architect [and other advisors] have rural experience.”

“Look ahead. Build for what you need in the future.”

“Listen to your clinicians concerning patient flow and patient safety.”

Some facility projects are derailed because the project that is designed cannot be afforded. Another critical function of leadership is to establish priorities and make trade-off decisions.

“Get good financial advice. Consider as many creative financing methods as you can. Get creative.”

“Understand both what you can afford and community needs.”

“Pay attention to the little stuff from a cost perspective – it adds up quickly.”

CAH leaders offer very practical advice for “doing homework” prior to committing resources in the capital project. The rationale: it saves money and improves the outcome. Early planning work should put a strong emphasis on data analysis, including:

- A. Understanding the community needs;
- B. Demographic and technological trends as they affect future needs;
- C. Current utilization compared to potential utilization in the service area; and
- D. Development of facility options, such as renovation vs. replacement and site location.

When an oversight or error can cost hundreds of thousands of dollars in construction costs or lost revenue, the process must incorporate financial projections and operational plans. To the extent that such expertise is not available internally or within a system relationship, interviewees recommend retaining experts with an important caveat: resources with rural experience are necessary for planning, design, and financing.

“Create a master facility plan that considers future expansion potential.”

“Outpatient needs are greater than expected...we added an additional 9,000 square feet in specialty clinic space.”

“We have recently converted business office and IT space to outpatient space to meet continued volume growth.”

Self Evaluation Questions

- How would a facility investment help meet or expand the current vision?
- What patient safety and quality practices could be improved?
- What does the community know about the status of the facility? About the costs to improve?
- How is the community being engaged in the facility project? Who is responsible for community education?
- Have all facility options been explored? Is the preferred facility option defensible to the community?

Action Steps

- Identify influential people and groups and establish accountabilities to engage them in support of the initiative.
- Seek broad participation involving constituencies, including administration, physicians, line managers, and community representatives.
- Utilize focus groups and other data to validate designs and get feedback on priorities.
- Guide the analysis of facility options using a Steering Committee of eight to ten representatives.
- Engage technical assistance for specialized expertise.

Conclusions

This analysis of rural hospital experiences on a pre- and post-facility replacement basis builds on the 2005 study and improves the information available to other rural communities. With additional years of experience and new hospitals participating in the study, the cumulative insight into the replacement hospital experience has been strengthened. The 24 hospitals that participated in the study are a small fraction of the Critical Access Hospital total. From the research perspective, these communities are not randomly selected and may differ in important ways from other rural communities; however, geographic remoteness to competitors, a larger population basis, and project size all varied, suggesting that rural hospitals across a broad continuum will gain insights from hospitals participating in the study.

The evidence is compelling that a new facility positively impacts operations and is best illustrated by growth increases experienced beyond expectations. Year one and two (post-replacement) median increases in adjusted discharges are 9% and 10%, respectively. Also reported were median annualized increases of 6% in discharges, 5% in inpatient days, 9% in outpatient visits, and 12% in adjusted discharges. Post-replacement growth in adjusted discharges exceeded pre-replacement average in 17 hospitals.



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Staffing increased for higher volumes and/or new services, with a gross FTE annualized increase of 2%. At the same time, there is increasing evidence of reductions to unit costs with a year one median increase of 10% declining to 6% by year two, and years three and four data showing further decline (sample size is smaller). Importantly, 14 facilities had better annualized unit cost experiences with a new facility than pre-replacement averages in their old facility.

Similar to the 2005 study, financial performance remains mixed with improvements only partially affected by the impact of a new facility on volumes and efficiency. Overall, 1% and 0% average total margins were reported in the first and second years, respectively, with a wide variation in experience. After eliminating the impact of the increased capital costs, the financial performance improved 8% and 14% on average in first and second years, respectively, as measured by EBITDA. An annualized decrease of 2% in days cash and investments on hand is reported, underscoring the importance of balancing debt and equity in financing decision.

The advice of hospital leaders offers insight into the replacement experience that can't be measured in numbers, as summarized below.

- Evaluate access to capital early and utilize operations and/or partnerships to improve.
- Determine facility plan based on what the community needs.
- Pursue ways capital investment can support new performance improvement initiatives.
- Plan for how capital investments will improve provider and staff recruitment.
- Communicate benefits of facility development in terms of both healthcare services and economic impact.

Building a new facility is a once in a lifetime experience for most rural hospital CEOs, CFOs and Board members, and likely represents the single greatest investment in one project for most communities. This study offers rural leaders a unique look into what has happened at other hospitals and is useful as a guide for planning and decision-making.

As experiences accumulate and are shared, the call for pursuing a new, preferred vision of rural hospitals is also strengthened. In addition, RED CAPITAL and Stroudwater encourage policy makers to take note of these findings. Not only is the facility development good for communities, but it also demonstrates more efficient hospital operations and improved quality and patient safety that stabilize the infrastructure for years to come.

Acknowledgements

RED CAPITAL and Stroudwater wish to thank the participating hospitals for their commitment to this project. We also wish to thank those who advised us on this project, for their contributions made this a better study.

RED CAPITAL and Stroudwater are available to answer any questions regarding the study or in encouraging rural communities considering a replacement facility.

For questions or additional information contact:

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Eric Mestemaker has 16 years of experience in financial reporting and analysis, investments and banking. His primary responsibilities are supervision of processing, underwriting, documentation and closing transactions for small and rural hospitals. Eric joined RED CAPITAL in 2001 and worked for RED's predecessor entity, from 1995 to 1999. During the interim period, he was Senior Vice President of McDonald Investments' Structured Finance Group. Previously he was an Investment Analyst where his responsibilities included investor relations, financial reporting, stock and bond issuances, cash management and strategic investments. Eric has structured taxable and tax-exempt bonds, asset-backed and mortgage-backed securities, bank and commercial paper lines of credit, asset purchases/sales and subordinated debt. He has a NASD Series 7 license and a Bachelor's Degree in Finance from the University of Dayton.

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NRHA

The National Rural Health Association, a member association of more than 10,000, is *THE* voice of rural health, promoting leadership, communication, education, research, and advocacy since 1978.

Figure 1a

% Change in Discharges - Annualized Since Replacement

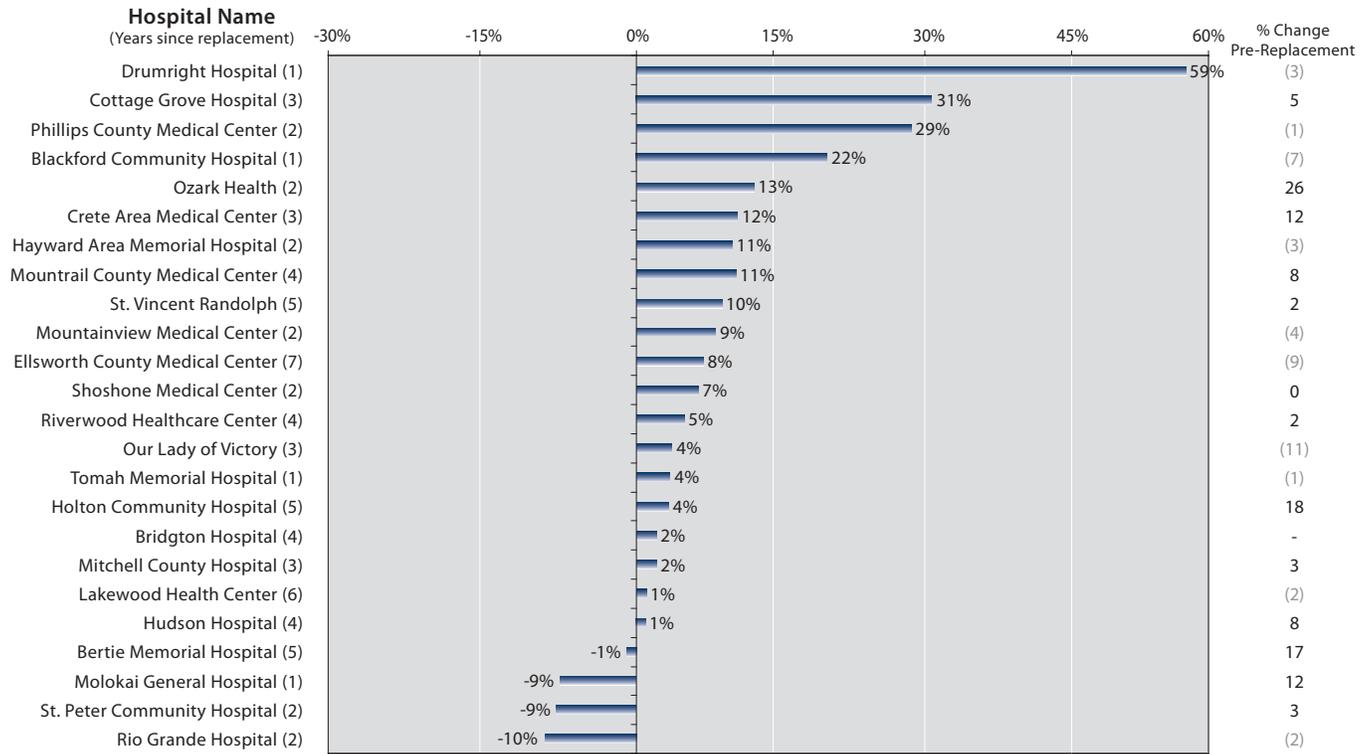


Figure 2a

% Change in Inpatient Days - Annualized Since Replacement

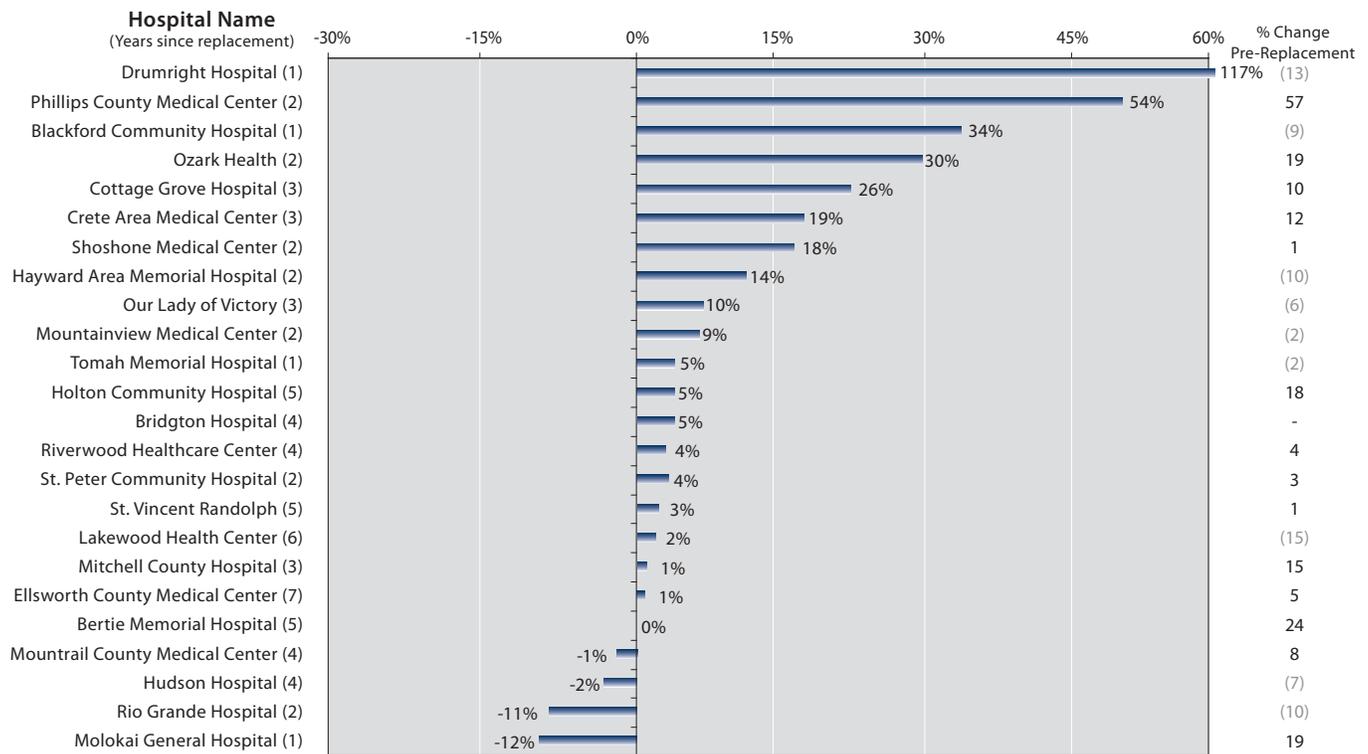


Figure 3a

% Change in Outpatient Visits - Annualized Since Replacement

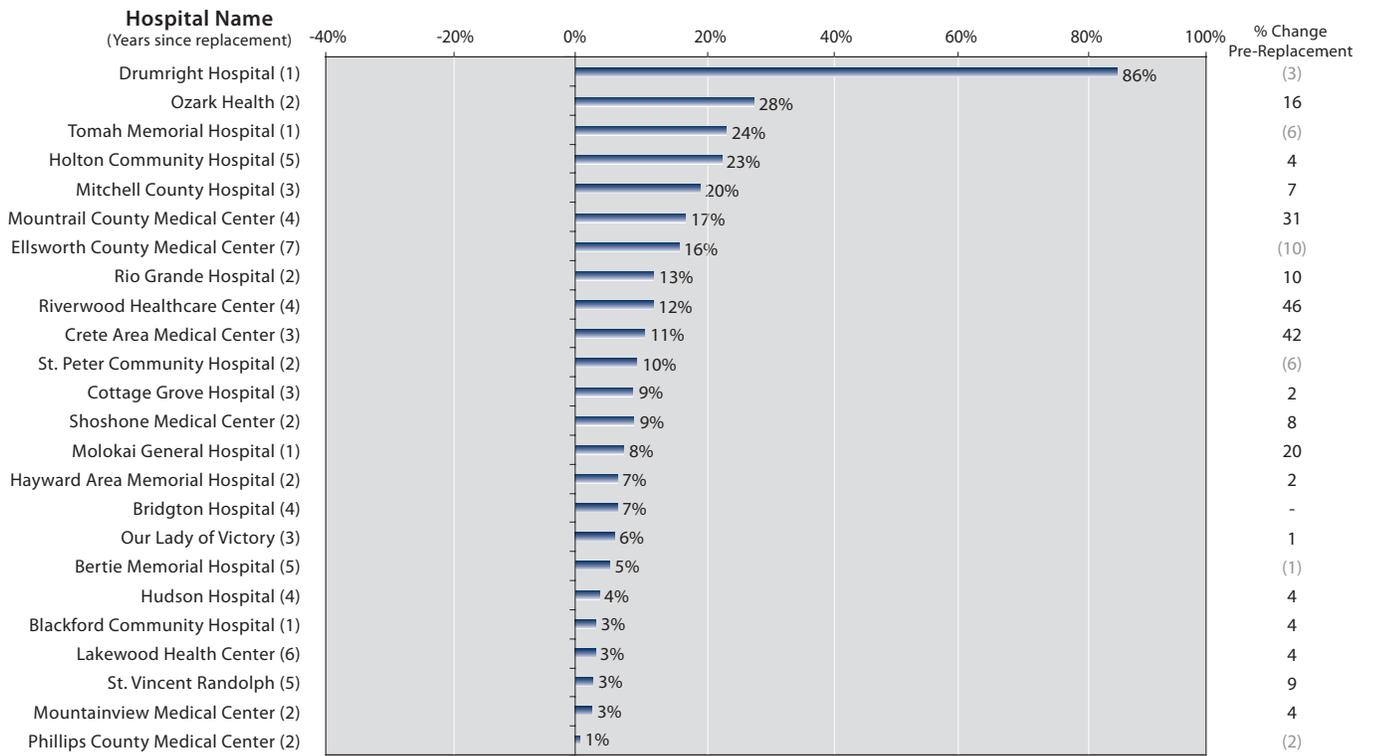


Figure 4a

% Change in Adjusted Discharges - Annualized Since Replacement

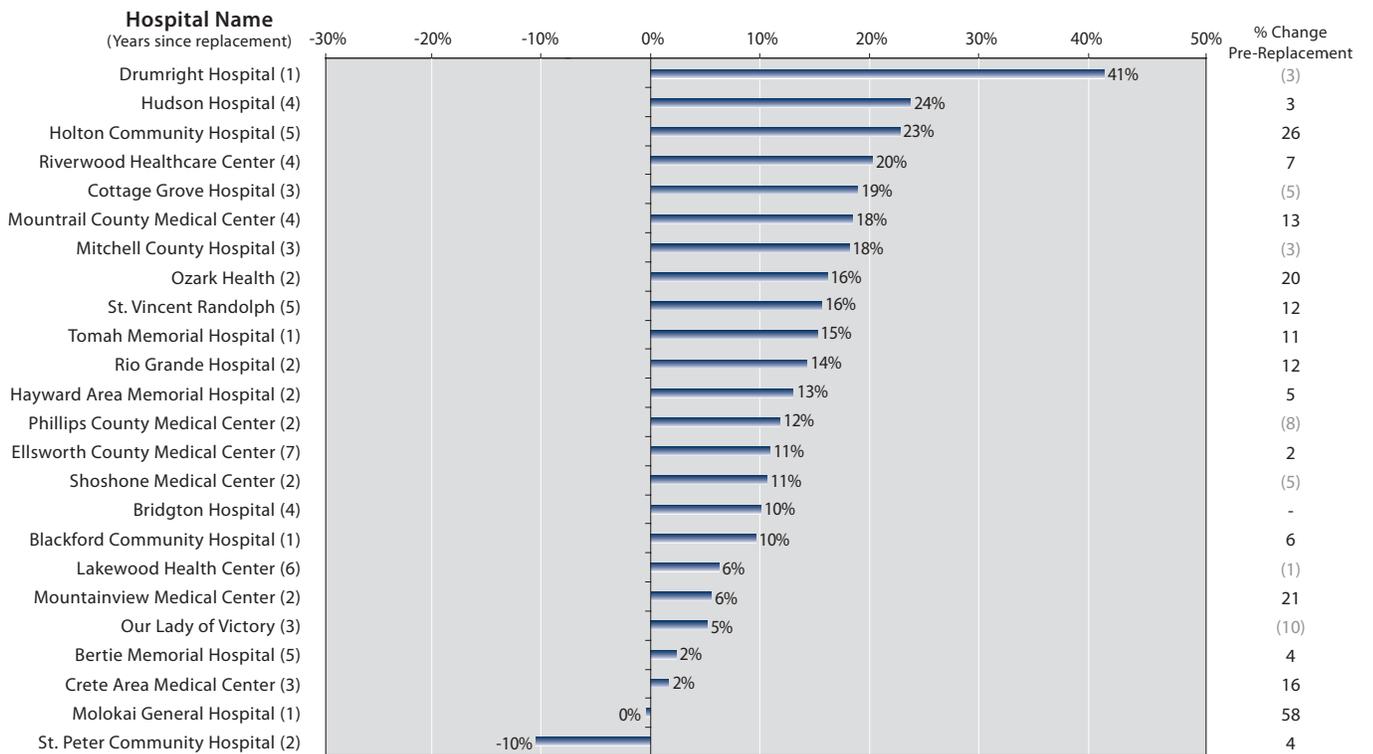


Figure 5a

% Change in FTEs - Annualized Since Replacement

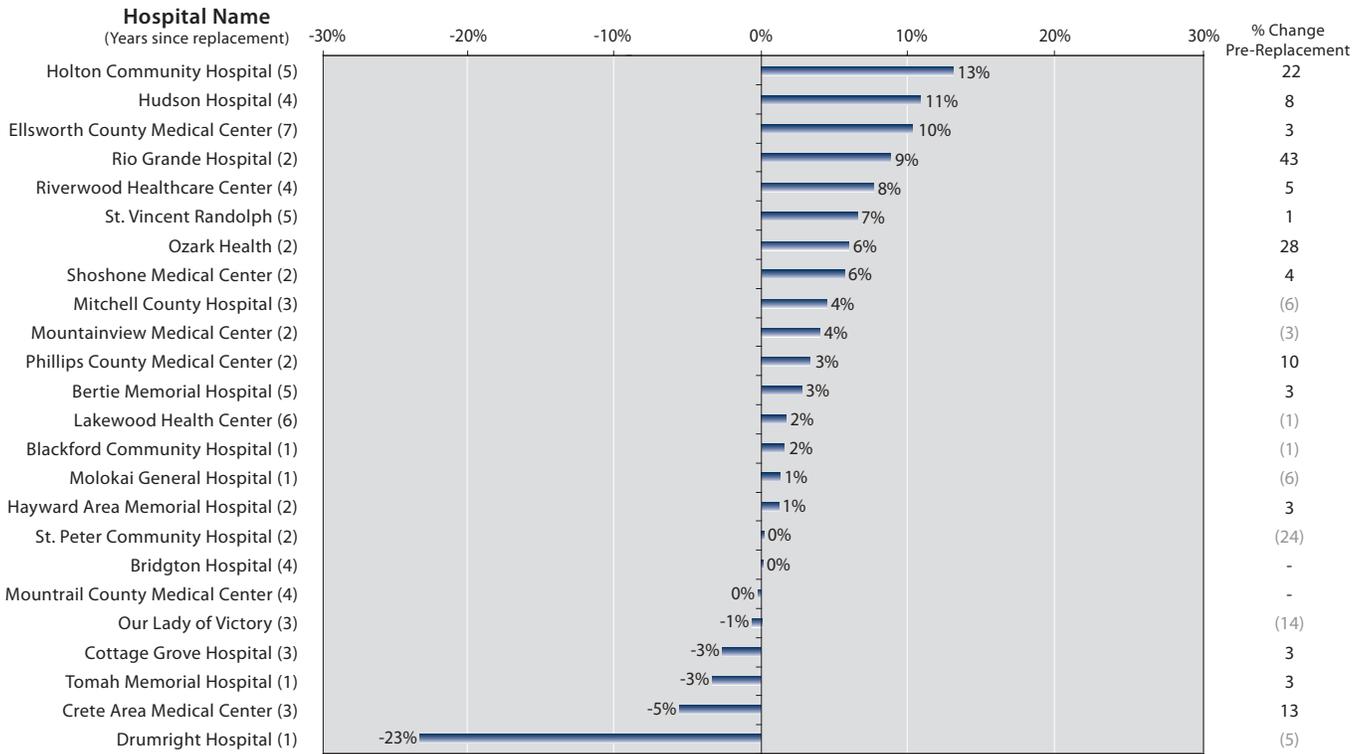


Figure 6a

% Change in Expense/Adjusted Discharge - Annualized Since Replacement

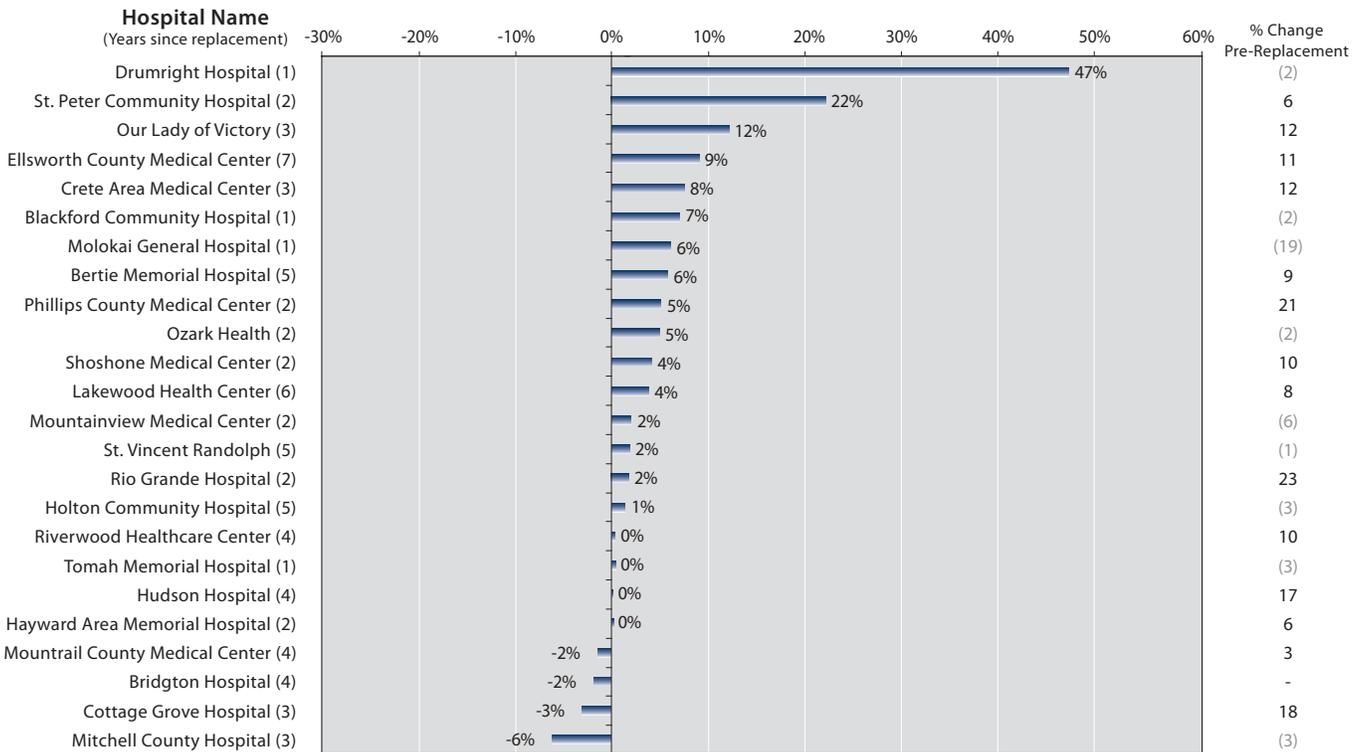


Figure 7a

% Change in FTEs/Adjusted Discharge - Annualized Since Replacement

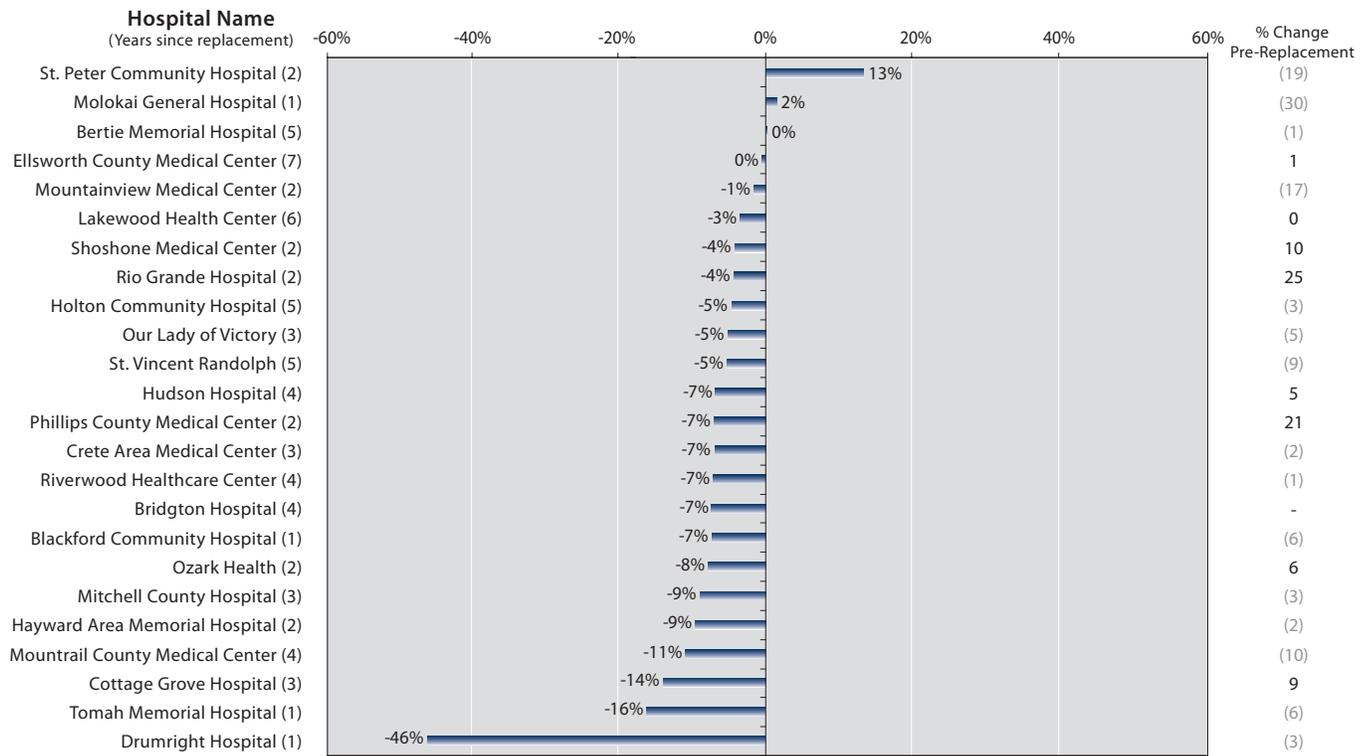


Figure 8a

Year One and Year Two Total Margin

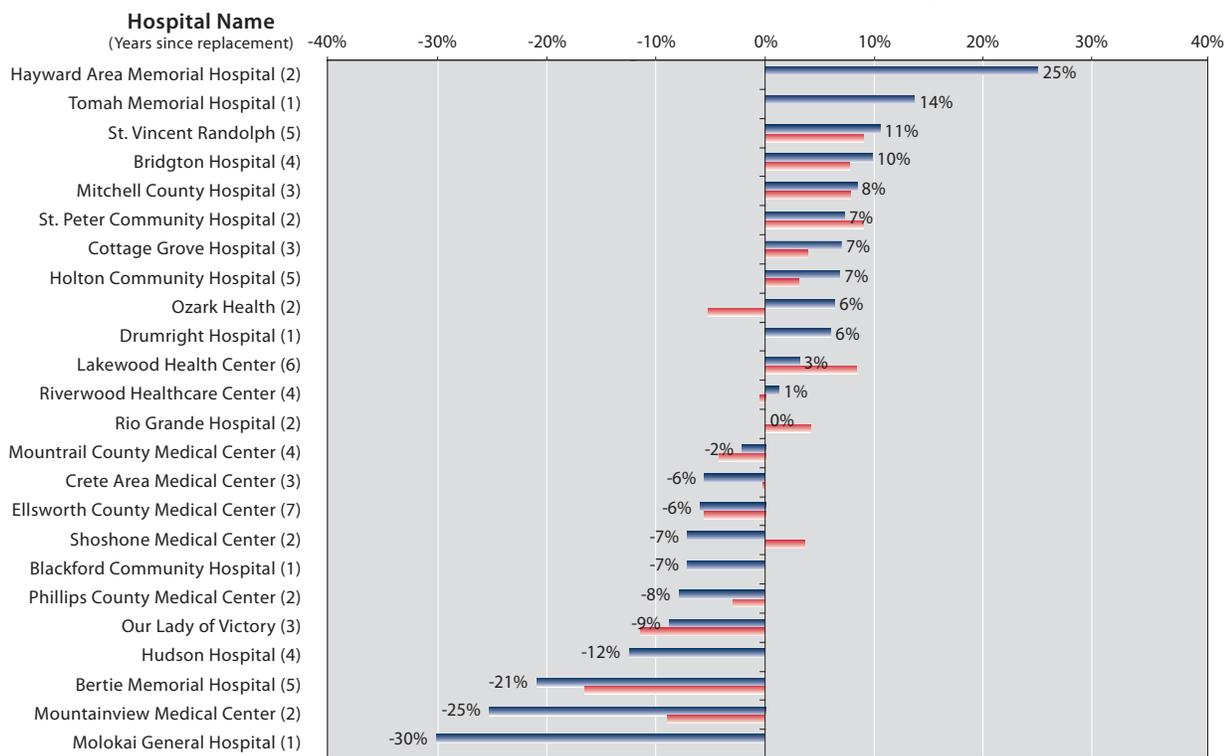


Figure 9a

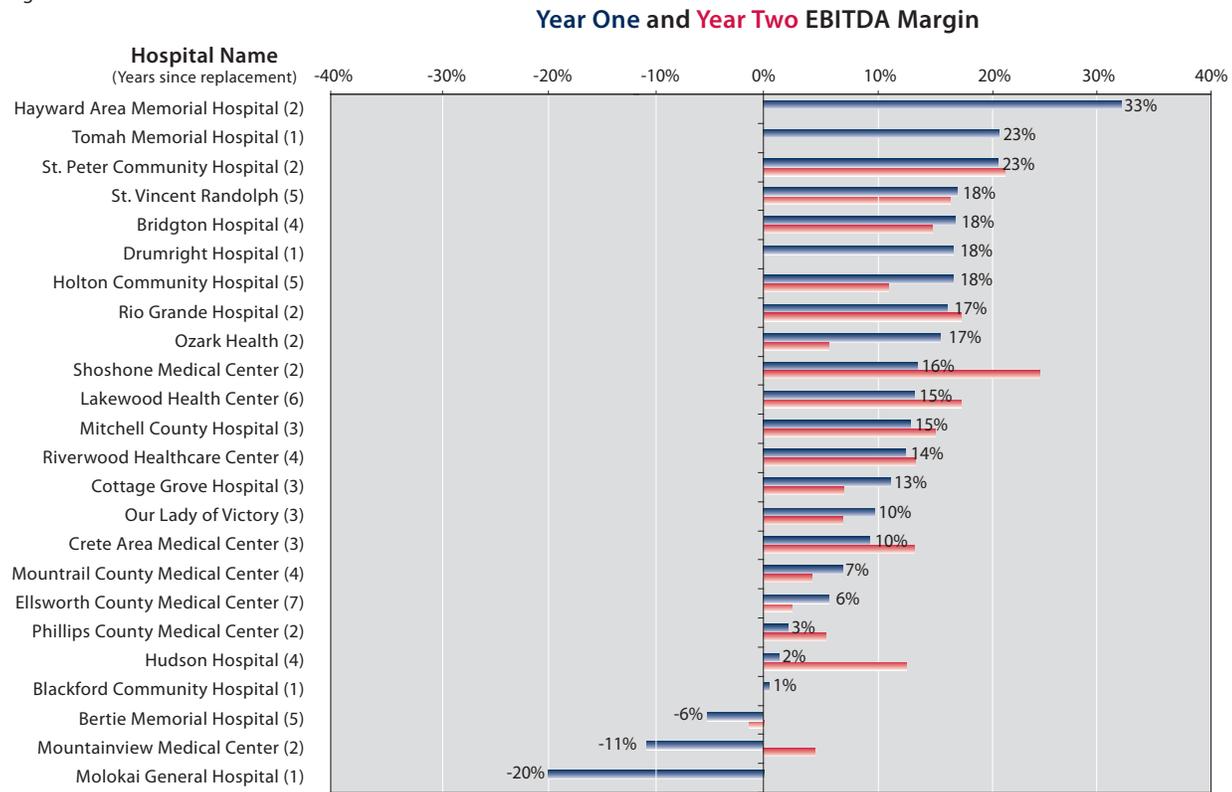
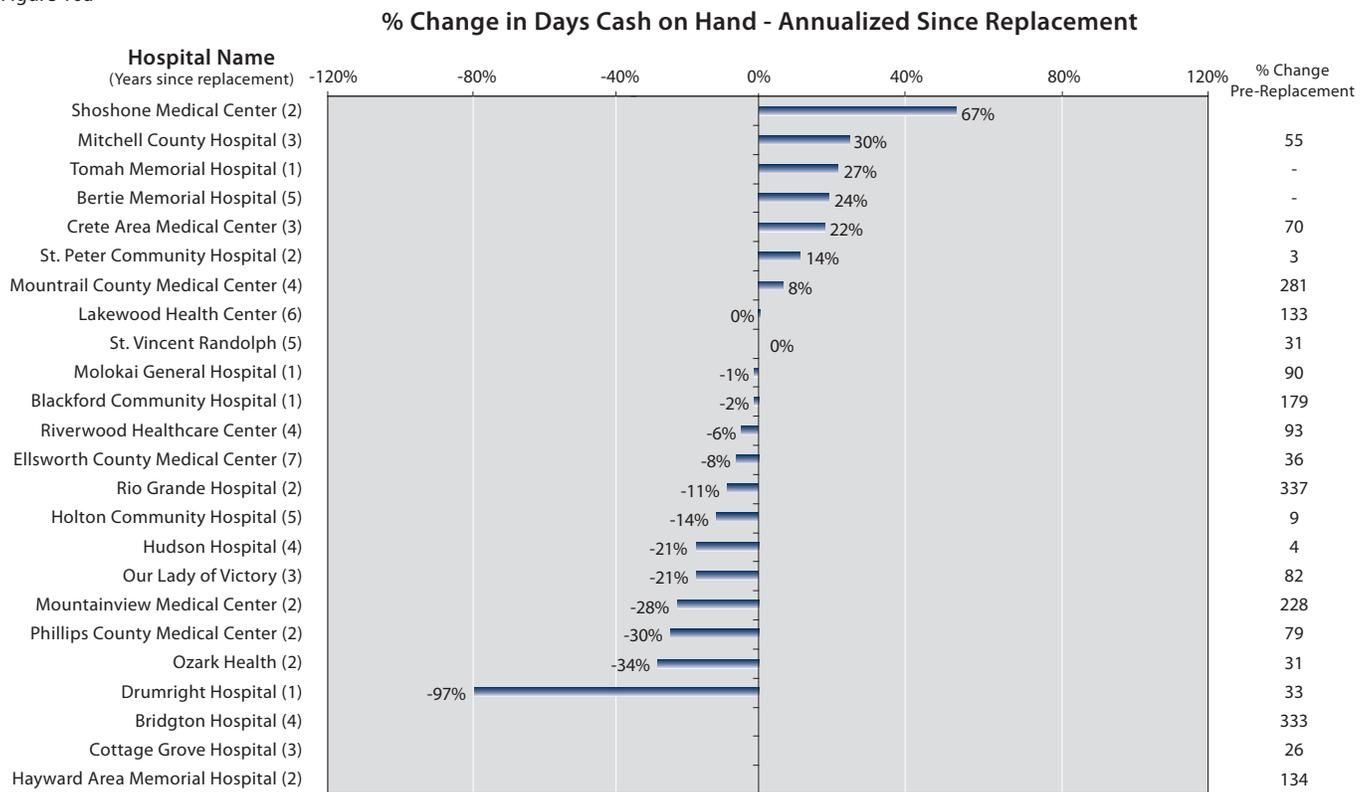


Figure 10a



Access to Capital

Self Evaluation Questions

- How does the historical financial status rate on commonly used financial ratios?
- What is the debt capacity for capital investment based on historical operations?
- What financial improvement opportunities exist to increase debt service?
- Are there unexplored options for partnering to increase access to capital?
- As project costs are developed, do they reflect “all in” costs or only construction?

Action Steps

- Identify debt service prior to design and update often as new information is developed.
- Determine operating improvements that can prepare the organization for a large capital investment.
- Ensure the financing plan integrates with the strategic and facility plans.
- Evaluate multiple programs and options for the financing team.

Driving Factors in Facility Development

Self Evaluation Questions

- What is the remaining useful life of the building? Major mechanical equipment? Medical equipment?
- How much investments and maintenance of an old facility is anticipated?
- Is the current facility limiting inpatient or outpatient growth?
- Is the current facility able to be staffed efficiently?
- Are costs incurred by staffing multiple units or departments that could be consolidated?
- What do healthcare professionals say about the adequacy of facilities?

Action Steps

- Solicit input from staff and physicians on the facility questions; encourage “outside the norm” thinking about what would be possible without facility constraints.
- Develop a quantitative picture of facility assets, the remaining useful life, and the amount of investment needed.
- Communicate the facility needs with the Board and community decision-makers.
- Develop specific goals for facility improvements.

Impact to the Local Economy

Self Evaluation Questions

- What is the direct and indirect economic impact of the existing hospital?
- How much would the new hospital increase the economic impact?
- What opportunities for local economic development may be created with a new hospital?

Action Steps

- Engage local stakeholders on the impact of healthcare to the community’s economy.
- Frame the facility initiative as an “investment” with both a direct and indirect benefit.
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Hospital and Community Leadership

Self Evaluation Questions

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Action Steps

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- Guide the analysis of facility options using a Steering Committee of eight to ten representatives.
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Special Industry Report

2006 Rural Hospital Replacement Facility Study

How Replacement Facilities Impact Operations and the Bottom Line: Findings From the Field

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