SPECIAL INDUSTRY REPORT

3rd Annual Rural Hospital Replacement Facility Study 2007

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

Prepared and Sponsored by
STROUDWATERASSOCIATES

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National Rural Health Association

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

Left - Community Hospital of Bremen (IN)
Top Right - Bridgton Hospital (ME), Bottom Right - Cottage Grove Hospital (OR)

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Executive Summary

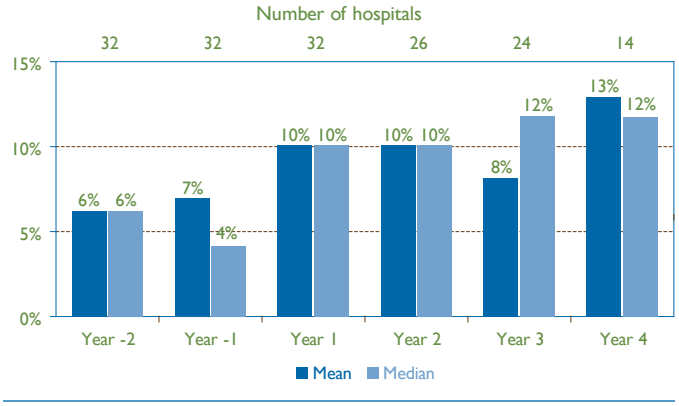
The third year of the Rural Hospital Replacement Facility Study, prepared by STROUDWATERASSOCIATES and RED CAPITAL GROUP, identified measurable changes in the experiences of Critical Access Hospitals (CAH) engaged in the process of facility replacements. Notably, respondents reported improvement in tangible measures of hospital performance, such as faster patient discharge growth and improved operational efficiency. Respondents also reported greater success in physician and staff recruitment and improved customer and employee satisfaction. Other intangible benefits enjoyed by participating hospitals included community economic development, improved work culture and better quality of care.

Survey respondents consisted of CAHs that recently completed facility replacements. As of the date of this report, 90 (7%) of the 1,283 CAHs were in the process of replacement, according to various state offices of rural health and state hospital associations. Of this group, 39 hospitals were eligible for this year's study of which 33 responded to the survey.

With respect to patient volumes, many hospital CEO's reported greater than expected growth following replacement. Eighteen of 30 responding hospital executives reported inpatient growth that exceeded expectations, while 21 of 30 CEOs reported greater than forecasted outpatient growth.

In some cases, unexpected discharge growth strained the capacity of replacement hospitals, giving rise to new capital projects to address these needs. Follow-on projects reported by respondents included clinic and ancillary area expansion and construction of new facilities to house specialty practices. Survey evidence suggests that hospitals will do well to plan for capital projects post-replacement in preparation for subsequent growth in demand for standard and specialty care.

Fig. 1 - Percent Change in Adjusted Discharges by Year



Survey respondents reported an average 10% increase in overall volumes in the first year following replacement and an 11% annualized rate of growth over all years. Moreover, responding hospitals reported an increase in staffing levels after replacement. The median increase of full-time equivalent staff among respondents was 4% in the first year and 4% annualized for all years following replacement.

While staff levels increased when new facilities were completed, higher staff productivity helped to hold down unit operating costs. During the first year after replacement, the ratio of total expenses per adjusted discharge increased 10%; but the ratio declined in each year thereafter. Indeed, even after considering increased capital costs, 52% of responding hospitals reported lower per unit costs than their pre-replacement experience.

Interviews with hospital CEOs found that facilities replacement helped rural hospitals overcome obstacles that hampered staff and physician recruiting. Each of the 30 administrators interviewed felt that hospital replacement had a positive effect on staff recruitment. Fourteen indicated that their facilities were fully-staffed with nursing and technical personnel at the time of the interview, while 29 agreed that replacement had a positive impact on physician recruitment and retention.

In addition to recruiting benefits, facilities replacement produced meaningful quality of care improvements, according to statements from hospital executives. A number of respondents indicated that replacement opened new opportunities to improve clinical processes. The operating room frequently was cited as an area that generated measurable outcome improvements, particularly in reduced incidence of infection. Some indicated that building designs that incorporated patient safety features, like single-occupancy patient suites and strategically located operating rooms, helped reduce infection rates and contributed to enhanced surgical outcomes.

Rural hospital administrators frequently cite as barriers to facility replacement new relocation regulations promulgated by the Centers for Medicare and Medicaid Services (CMS); due to timing the plans of only one hospital responding to the survey were subject to the tightened rules. Each of the hospitals that launched replacement projects prior to the CMS rules believed their new locations would have met these regulatory requirements.

Interviews provided insight into the direct and indirect positive impact of hospital replacement on communities. Administrators also shared their approaches to raising capital and to facilities design. CAH leaders may draw invaluable lessons from these experiences as they consider their own facility capital investments.

STROUDWATERASSOCIATES and RED CAPITAL GROUP encourage leaders to develop plans that rely on strong data, reflect their communities' potential growth, and make the largest possible contribution to community development and better public health. ■

Study Purpose and Scope

The Purpose

When carrying out their fiduciary responsibilities, hospital boards of directors and chief executive officers must strike a delicate balance between attending to the institution's critical short-term demands while planning for its long-term financial and facilities needs. For hospitals with limited financial and managerial resources, this challenge can be daunting. The decision to replace an existing facility is among the most complex challenges a hospital board and management team will ever face.

The purpose of this study was to gather and report data and commentary that decision makers at CAHs may find useful when considering or implementing a hospital facility replacement initiative. The multi-year study focuses on the effects that new replacement facilities have had on patient volumes, treatment outcomes, staff and physician retention and recruitment, operational efficiency and financial performance. The findings are designed to educate community decision makers, as well as local, state and federal policy makers. (Self evaluation questions and action steps are included in Appendix A: Self Evaluation Questions and Action Steps for CEO Initiated Board Education on page 22)

New for 2007

Readers of prior reports will find the following new features in this year's study:

- Participation from new facilities
- New data showing growth in the number of replacement projects in progress
- Analysis of demographic characteristics of communities implementing replacement projects
- Updated volume and quantitative data
- Data on relocation distance and the effects of CMS regulations on recently proposed CAH facility projects
- New quotations from interviewed hospital executives sharing their experiences with facilities replacement projects
- An improved study format offering a single topic per page

Limitations

Each participating hospital is unique, differing by way of market potential, levels of competition, physician support and management experience, among other things. Such differences influence operational outcomes, independent of the "bricks and mortar." The study did not control for differences in historical financial performance, access to capital, fundraising or management team experience.

Participants in this survey were not randomly selected and controlled; therefore, readers should exercise caution in generalizing the results. By the same token, the hospitals that participated in the survey vary significantly by way of community size and the level of services offered and data reflect both positive and negative performance. Interviewees shared both good and bad experiences. By virtue of these variances, rural hospitals across a broad continuum may gain valuable insight from the data and commentary collected in the study.

Readers are encouraged to use the study data to generate discussion with members of the community about possible replacement initiatives. The report may be used as a whole or, alternatively, individual sections may be used in more focused discussions.

Blackford County (IN)

Study Purpose and Scope

The Participants

The Federal Office of Rural Health Policy, state offices of rural health and state hospital associations provided a list of candidate hospitals for the study. STROUDWATERASSOCIATES identified and independently contacted facilities to confirm that the construction project in question was a replacement facility and to solicit their participation in the study. Eligible CAHs include institutions that replaced facilities between January 1, 1998 and January 1, 2007. A total of 39 eligible CAHs were identified. Thirty-three hospitals participated in the study (85%).

Study/Years	1 year +	2 years +	3 years +
2005 Study	20	11	8
2006 Study	24	19	13
2007 Study	33	27	25

In addition to the continued participation of hospitals from the 2006 study, nine hospitals joined the study:

- Meade District Hospital (KS)
- Providence Valdez Medical Center (AK)
- Southern Coos Hospital (OR)
- Adams County Memorial Hospital (IN)
- Abbeville Area Medical Center (SC)
- Community Hospital of Bremen (IN)
- Community Memorial Hospital (OH)
- Lakewood Health System (MN)
- Orange City Hospital (IA)

The number of participants has increased 65% since the inception of the survey.

In the process of conducting the survey, hospitals with replacement projects in progress were identified. A total of 44 projects were being planned, under development, or completed but not occupied by January 1, 2007, making them ineligible for the 2007 survey. As this cohort meets the criteria for eligibility, the depth and power of the annual study will increase significantly.

2007 Rural Hospital Study 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?

Did the hospital relocate?

Any impact of the CMS 75% rule regulating CAH relocations?

Is the hospital pursuing additional capital projects?

Crete Area Medical Center (NE)

Study Purpose and Scope

The Process

The survey collected performance data from periods prior to and following facility replacement. Two years of pre-replacement information for volumes, operating costs and overall profitability, and 1 to 5 years of operating experience in the new facility were analyzed.

Representatives from each participating hospital reviewed data for prior periods and provided 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

Focused interviews with CEOs/CFOs following the data analysis provided additional insight into the underlying conditions that changed volumes, operations, or financial performance. Interviews also solicited opinions on how the projects influenced quality, recruitment and retention and community economic impact, among other topics. Thirty interviews were completed using a standard questionnaire.

The study design was reviewed and endorsed in prior years by an advisory panel which includes government, academic and financial expertise, as well as a national non-profit entity whose mission is to build capacity in rural hospitals. The 2007 study followed the same methodology.

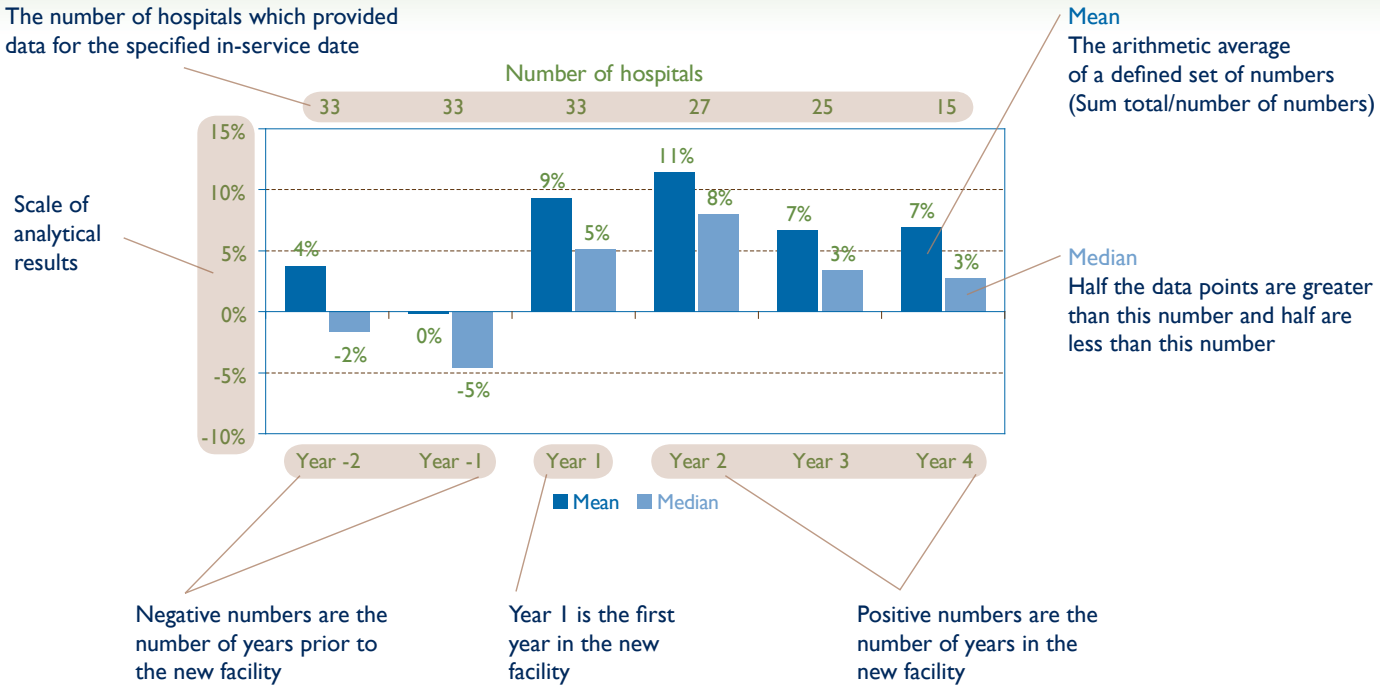
The study design eliminates renovation projects for two primary reasons:

1. Renovations in-place often limit opportunities to expand services and realize efficiencies, which would artificially suppress the overall effects in the study.

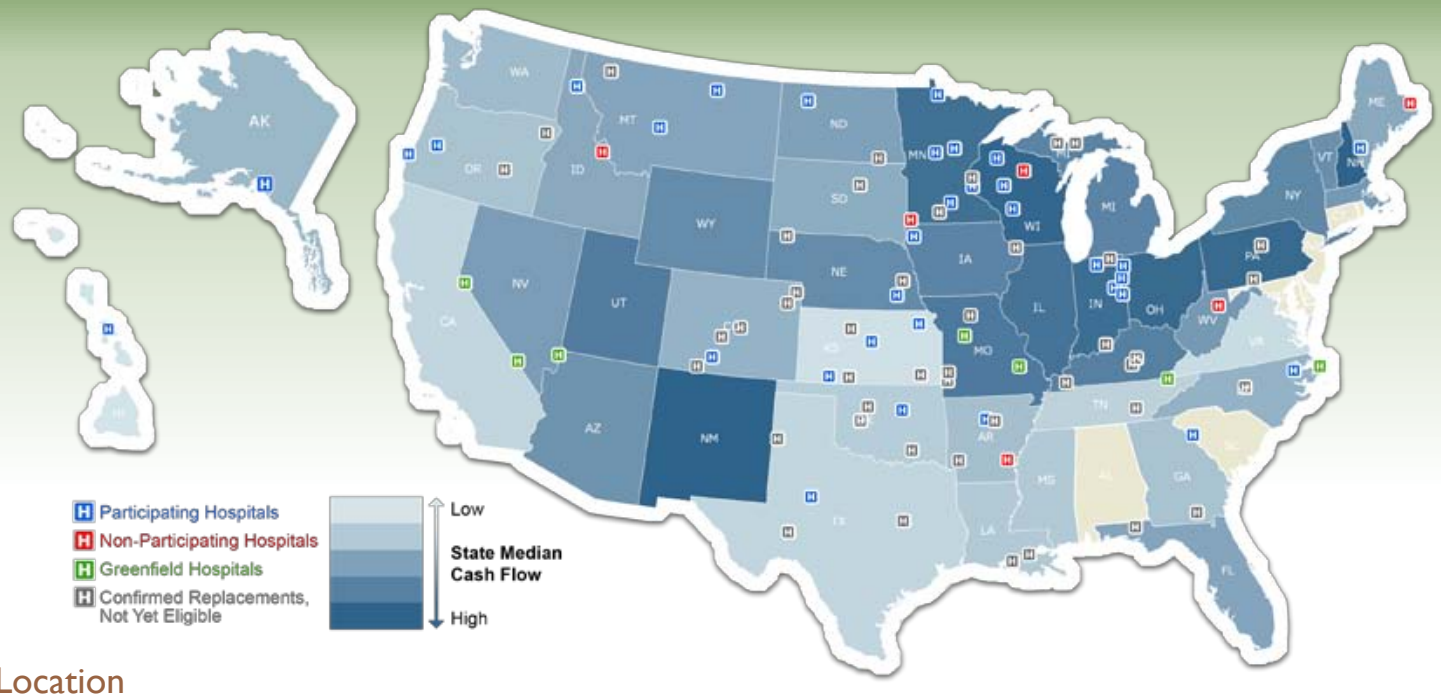
2. Renovation projects typically take longer to complete and are disruptive to operations making pre- vs. post-experience comparisons problematic.

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

How to read the graphs



Study Purpose and Scope



Location

The map indicates the list of known replacement projects, including the 33 hospitals participating in the study (blue). Hospitals which are candidates for this survey are invited to join the study as post-replacement data becomes available. (See contact information inside back cover)

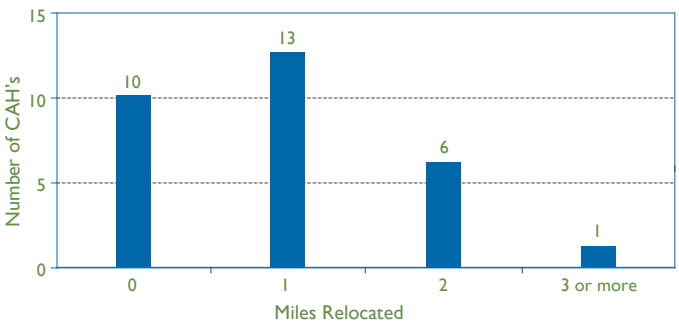
In August 2005, CMS issued new rules for CAHs considering replacement facilities located on new campuses. The regulations require that replacement CAHs meet a "75% rule" to preserve their reimbursement status. This rule requires that the new campus serve at least 75% of the market served by the existing facility, with at least 75% of the same staffing and 75% of the same services. CMS further reserved the right to make determinations of compliance up to one year after the facility was occupied. This introduces uncertainty into the decision-making process, particularly with the potential for eliminating the cost-based Medicare payments from the financials.

This year's study added questions probing the impact of CMS relocation rules on replacement decisions. While only one project was directly affected -- each of the other projects was underway and did not fall under the regulation -- most CAH executives were familiar with the regulations.

One of the concerns cited in the development of the regulations was that a facility may relocate significantly closer to a competing facility while preserving its CAH status. The study's data refutes this concern: ten hospitals remained on the same campus, thirteen moved approximately one mile, six moved two miles and one moved three miles.

Interview responses revealed a surprising finding in light of the potential risks associated with relocation: all of the CEOs believed they would have met the 75% rule and that it would not have been an obstacle to their projects. A recurring theme among responses was the importance of close communication with the CMS Regional Offices during the planning process.

Fig. 2 - Distance CAH Relocated from Former Campus



CEOs on CAH Relocation

"We established relations with CMS early in the process. We were the first hospital to go through this with our regional office. The whole issue may be a bit over-hyped."

Site selection is an important consideration in the development of a successful facility. This is particularly true when the hospital is re-orienting its strategies for outpatient services where access and convenience are driving factors. Many rural hospitals built during the Hill-Burton era are located in residential neighborhoods with limited parking and road infrastructure. These locations limit access and place the facility at a significant disadvantage. ■

Demographics and Service Area

Community Statistics

New to this year's study is an analysis of population demographics in the service areas of known replacement projects. The demographic analysis evaluates the potential that replacement facilities are significantly different than other CAH facilities; differences that may support a position to build a replacement facility.

The known replacement communities were compared in overall population, the percentage of the population over 65, population growth rates and household income. Median values were compared to all other CAHs—excluding the replacement communities—based on the hospital's designation current through June 2007. Population totals were compared for the immediate zip code of the hospital location and for the hospital's broader service area using geographic definitions provided by the Dartmouth Atlas of Healthcare. Data are for 2005 and 2015 as provided by Applied Geographic Solutions and based on census estimates.

Fig. 3 - Demographic Analysis

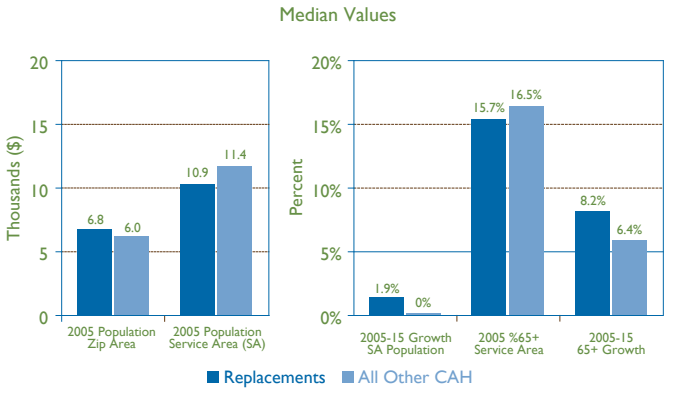
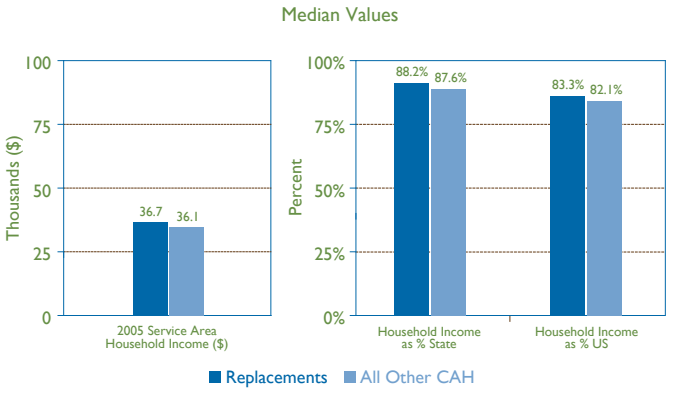


Fig. 4 - Demographic Analysis



The median population in the immediate area, as defined by the zip code, for replacement communities was 6,800 compared to 6,000 in non-replacement CAH communities. At 11,400, the median population of service areas of all other CAHs was slightly larger than the 10,900 median of the replacement hospital communities. The percentage of the population over 65—primary users of rural facilities—is higher in the service areas of existing CAHs than the comparable statistic for replacement service areas at 16.5% and 15.7%, respectively.

Replacement communities showed slightly more growth in the overall population (1.9% vs. 0%) and in the over 65 population (8.2% vs. 6.4%), although tests show these differences are not statistically significant.

The median household income for replacement facility service areas is $36,700. This compares to $36,100 for all other CAHs. The data represent median household incomes that are 88.2% of the state median and 83.3% of the U.S. median for replacement facilities, demonstrating these facilities—similar to all CAHs—serve economically disadvantaged communities. ■

Mitchell County Hospital (TX)

Driving Factors in Replacement Projects

The decision to build a replacement hospital is a difficult one, as often the facility will represent the biggest investment ever made by a rural community. Even upon gaining community approval, holding onto and sustaining later commitment is a challenge because operational and financial pressures may arise over time.

The benefits of a new facility are well-documented in this study, as are many of the potential pitfalls. Leadership's ability to articulate the benefits to community and to address possible risks is critical to building and sustaining support for a proposed project.

Successful completion of a project of this size in a rural community requires strong leadership. Boards and administrators must navigate many perils to realize the vision of a new facility.

Survey participants frankly shared their thoughts about the perceptions and challenges that needed to be overcome in various stages of the development process. Participants reported that hospital leaders must exhibit tenacity to overcome community anxiety about perceived risks and adopt creative approaches to fund raising, facility design and planning.

CEOs on Decision Making

"The Board didn't see how we could afford to do this and also how we could afford not."

"Conservative Board members were used to fixing up what they had on their farms and in their own businesses."

"If we didn't replace the hospital, we wouldn't be here today. We were not competitive."

CEOs on Renovation vs. Replacement

"The more I looked at new construction, renovation didn't make sense, even for re-using the old space."

"It would have cost more to renovate the existing facility than to build new."

CEOs on Planning

"We started with a master site plan to set the vision."

"You need to develop a strategic plan and link it to the financial plan."

"To reach our goal we identified six success factors to build new and focused on them."

CEOs on Community Impact

"The community rallied around the project, learned to work together, sensed accomplishment and are now doing other projects in the community."

"Home Health and Hospice recently came to town. The town has just approved a new high school. The mindset in the town has changed. People now believe in setting goals and getting to them."

"We needed to assure the community that the project didn't depend on new taxes."

"The re-use of the old building was a key question. It's being leased to other non-profits in the community."

Orange City Municipal Hospital (IA)

CEOs' Hindsight Advice

"Life cycle cost are important, Invest in energy efficient mechanical systems."

"Select an architect with experience in small healthcare facilities."

"Use a construction manager ... ours eliminated $2,000,000 in costs."

"To lower costs, consider building three separate buildings, clinical, business office and support services and connect with fire walls and corridors."

"You need to get out and see other facilities versus just listening to the architects."

The advice offered by the participating hospitals in the study indicates that the facility development process does not happen in a vacuum. It requires strategic vision and careful planning. ■

Pre- and Post-Replacement Volume Experiences

Overall Improvements to Volume

The most common—and often most difficult—question pondered by hospital leaders is how a new facility will affect patient volumes. The forecast of post-replacement inpatient and outpatient volumes represents the most important factor influencing facility design, size and financing. Estimates of no volume growth limit financing capacity and may result in construction of under-sized facilities, while the risk of projecting too much growth could lead to construction of facilities that are larger than the community can support financially.

A major goal of this study is to quantify changes in patient volume experienced by replacement hospitals. To address the issue of relative size, growth is reported on a percentage change basis, rather than using absolute numbers of inpatient and outpatient visits.

CEOs on Volumes

"From our original feasibility study, we are exceeding all projected numbers".

"We surpassed 5 year expected targets 2 years into the new facility."

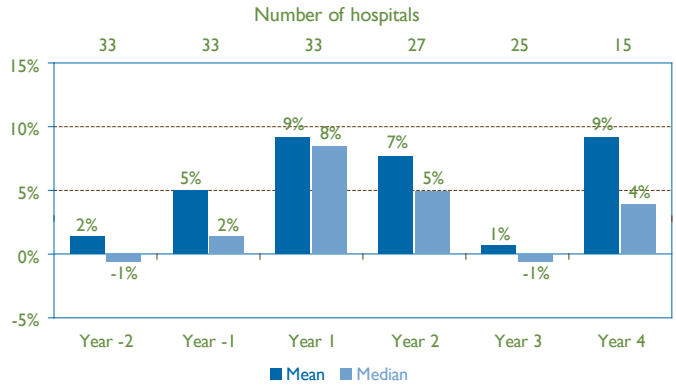
"We exceeded all business plan goals within a few months."

Acute and Swing Bed Discharges

Among reporting hospitals, the median increase in discharges for the first year was 8%. Over all post-replacement years, the median annualized compound rate of growth was 3.8% per year.

For all hospitals, the annualized change varied from a 32% increase to an 11% decline. Patient volume decreases were most commonly attributed to unplanned reductions of physician supply. Nineteen of the 33 hospitals bettered their pre-replacement discharge trends in their new facility.

Fig. 5 - Percent Change in Discharges by Year



See Appendix B - Fig. 5a: Annualized Percent Change in Discharges.

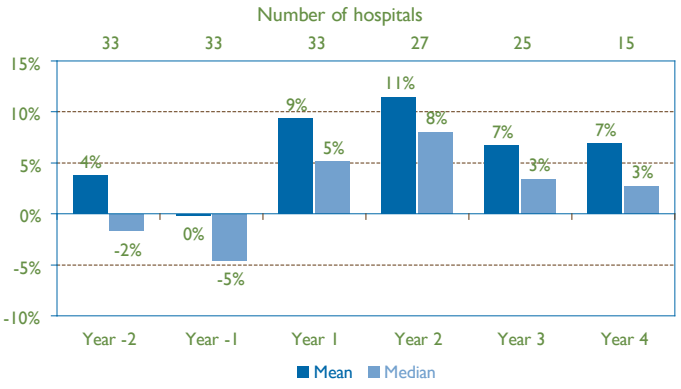
As illustrated in Figure 5, replacement hospital inpatient growth, as measured by discharges, slows in year three, however; as displayed in Figure 6, growth in patient days continues through years three and four. This anomaly indicates longer lengths of stay at replacement hospitals than in the facilities they replaced. In view of the fact that a four-day limit typically applies for acute-care stays, this implies a growth in skilled-level swing bed volume.

Acute and Swing Bed Days (Inpatient Days)

The median year one increase in inpatient days was 5%, slightly less than the discharges increase. Of the 27 hospitals with two years of post-replacement experience, the median increase of inpatient days was an additional 8%.

Six hospitals experienced net reductions of inpatient days post-replacement. The most common reason cited was a re-emphasis on outpatient services.

Fig. 6 - Percent Change in Inpatient Days by Year



See Appendix B - Fig. 6a: Percent Change in Days – Annualized Since Replacement.

CEOs on Inpatient Growth

"We're exceeding our inpatient goals, but we are not where we want to be on outpatient. We're competing with a physician-owned surgery and a diagnostic center."

Pre- and Post-Replacement Volume Experiences


Hudson Hospital (WI)

Outpatient Visits

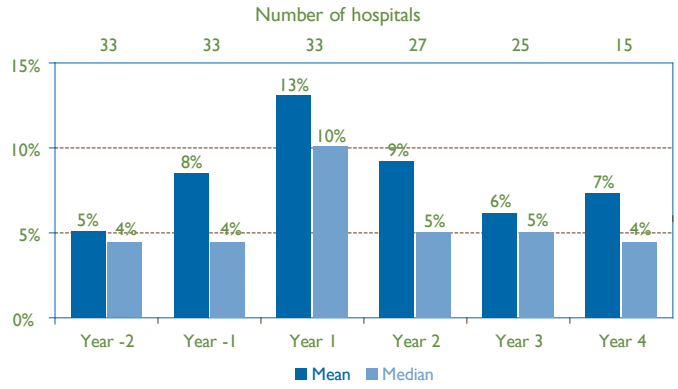
The median increase of outpatient visits was 10% in year one of the replacement process. This was followed by median growth of 5% in year two. The average growth in years one and two of the process was 13% and 9%, respectively. Annual growth statistics are illustrated in Figure 7.

Growth in outpatient visits was positive among all hospitals participating in the study. Experiences varied significantly, however; annualized growth ranged from 0% to 43%. The median annualized growth was 7%.

Adjusted Discharges

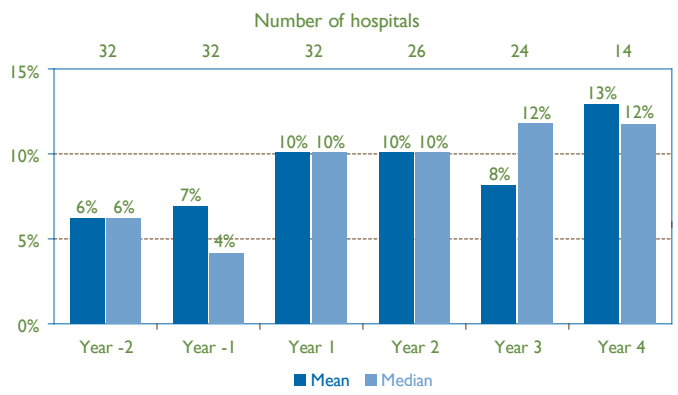
Median and average percent increases of adjusted discharges for year one were 10%. Adjusted discharge statistics combine inpatient and outpatient activity into a standard measure of performance for comparison between facilities with varying inpatient-outpatient mix. Median annualized growth of adjusted discharges for all hospitals was 11% per year over each year post-replacement. Twenty of the 33 hospitals realized higher annualized post-replacement growth compared to their pre-replacement average. ■

Fig. 7 - Percent Change in Outpatient Visits by Year



See Appendix B - Fig. 7a: Change in Outpatient Visits – Annualized Since Replacement.

Fig. 8 - Percent Change in Adjusted Discharges by Year



See Appendix B - Fig. 8a: Change in Adjusted Discharges – Annualized Since Replacement.

CEOs on Outpatient Growth

"Outpatient (growth) is clearly above targets. We just went over 100 surgeries a month and are setting volume records in ancillary departments every month."

"Outpatient surgical volume has increased 50%. We designed our surgical department like a surgical center in an effort to streamline patient flow."

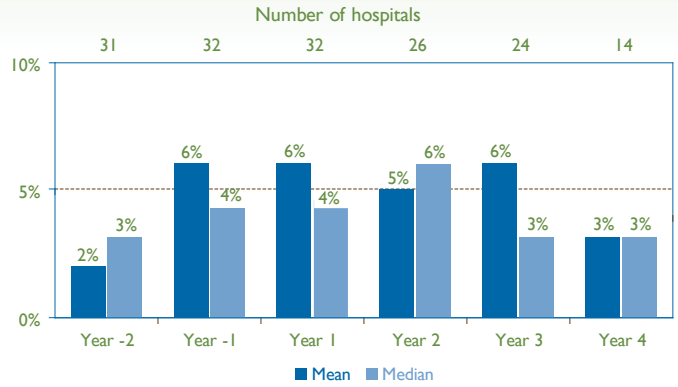
CEOs on Growth

"There's a growth in surgical volume. We now have an orthopedic surgeon doing knees and have brought in an urologist who is doing cases. We also expanded radiology volume with all new technology."

Recruitment and Efficiency

The average increase in overall staffing (FTEs) totaled 6% in year one and 5% in year two post-replacement. Staffing increases were reportedly due to increases in volume or expanded services. Median annualized growth for all hospitals was 4% per year over each year post-replacement. For all hospitals, the annualized change varied from a 25% increase to a 7% annual decrease. Twenty-six of the 33 hospitals experienced a net increase in staff post-replacement.

Fig. 9 - Percent Change in FTE's



See Appendix B - Fig. 9a: Change in FTE's – Annualized Since Replacement.

The ability to recruit for staffing is a common concern among rural hospitals, yet all 30 hospitals interviewed reported a positive impact of the new facility on the ability to recruit and retain staffing. Of those, 14 of the participating hospitals reported no open staffing positions and a waiting list for nursing. Despite the reported positive impact, some hospitals report on-going difficulties, including the loss of key staff who found new opportunities by virtue of skills gathered through the experience of the replacement project.

CEOs on Recruitment

"It is very difficult to recruit in our area. We have been able to keep staff we would have lost."

"We have nurses knocking on our doors."

"Currently no open nursing positions. We spent over $300K year on agency nursing before the new facility."

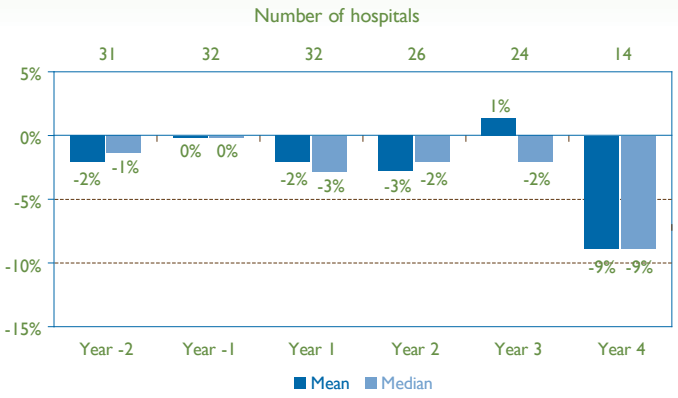
"No staff vacancies, turnover is limited. We have not had to rely on agency nurses for a long time."

"Prior to the new facility, we had six open nurses positions. We now have no open slots."

"Professional positions fill immediately. We currently have no openings for nursing or technical staff."

Even with overall increases to staffing FTEs, efficiency increased. A standard measure of staff efficiency is the ratio of staff-per-unit-of-service. The median decrease in staff-per-unit-of-service was -3%, post-replacement year one. Twenty-two of the 33 hospitals showed improved staffing efficiency since replacement. Improvements are the result of increased patient volumes, which reduced standby capacity. In addition, the facility design offered greater flexibility in sharing and/or reduction of staff. ■

Fig. 10 - Percent Change in FTE's per Adjusted Discharges by Year



See Appendix B - Fig. 10a: Change in FTE's per Adjusted Discharge – Annualized Since Replacement.

CEOs on Efficiencies

"Having a single nurses' station facilitated a reduction of 20% in nursing staffing needs."

"If possible, design a single, multi-use nurses' station."

"We integrated the nurses' station with the nursing home to share staff which resulted in savings."

Provider Recruitment

Positive Impact on Recruitment

Facility investments and provider recruitment strategies are closely linked. Twenty-nine of 30 hospitals interviewed indicated a positive impact of the new facility on provider recruitment. The facilities offer modern amenities, but more importantly in many cases, the increased investments in technology and appropriate clinical space for physicians and mid-levels allowed them to practice more effectively.

CEOs on Provider Recruitment

"Neighboring hospitals with older plants can't compete for practice opportunities. We get first pick of providers."

"New facility has facilitated growth in Medical Staff which reduces their on call commitment and improves their quality of life."

"In the past year, we have been able to recruit an internist and two nurse mid-wives."

"Internal Medicine candidate commented that he never expected to find a facility like this in a rural community."

"We have signed two new physicians in the past 12 months – a general surgeon and a Family Practice physician."

As the primary care base stabilizes and grows, hospitals also report an increased presence of specialty physicians. ■

CEOs on Specialty Recruitment

"Huge impact. Since the replacement, we have added 2 general surgeons, orthopedics and a gynecologist surgeon."

"With our old facility we had 3 specialty clinics. We have been able to develop growth strategies. We now have 25 specialty clinics and have recently recruited 2 new primary care providers."

"We've expanded our surgery program with the new facility - we now have active orthopedics, urology, general surgery and ophthalmology."

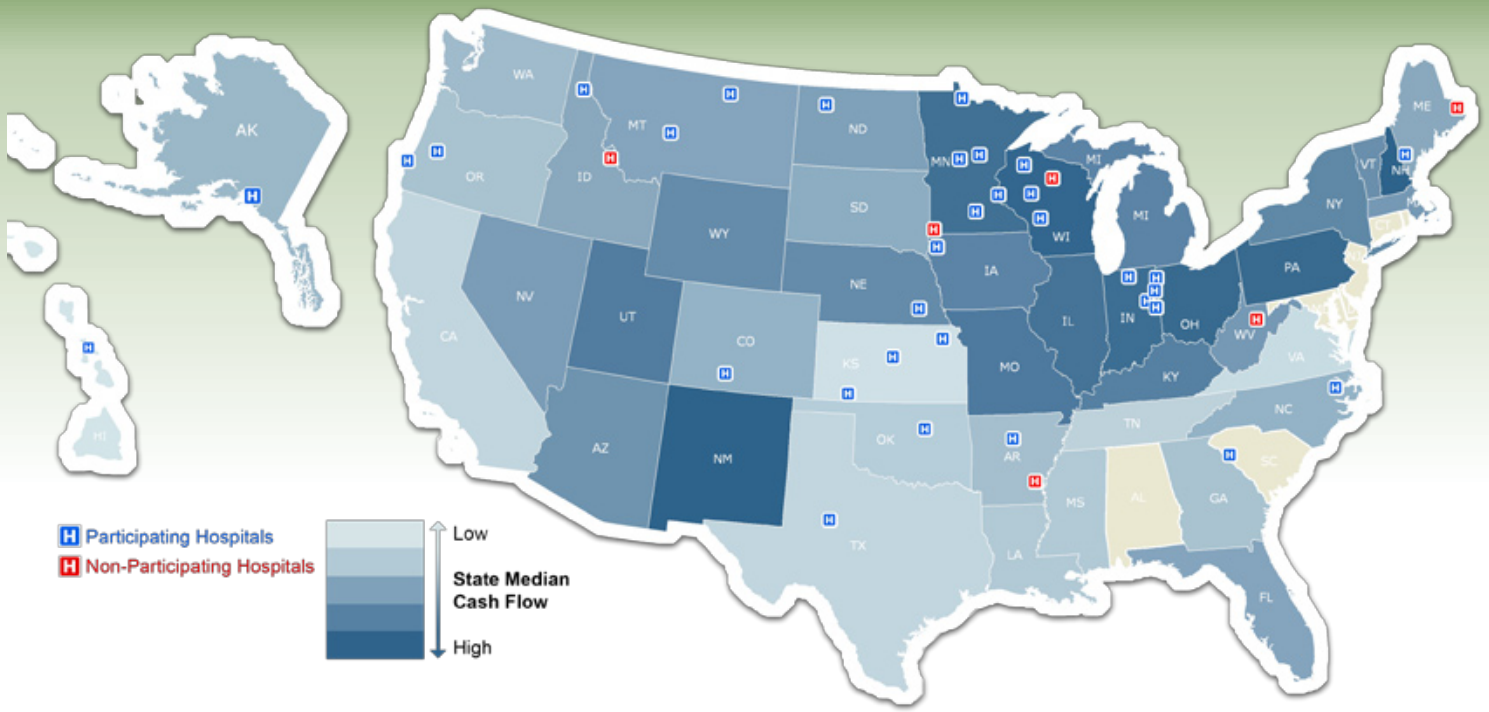
"The part time general surgeon is now converting to full time; he fell in love with the space."

"In the last year, we have added an OB/GYN, a general surgeon, .66 FTE urologist and additional part time orthopedics."

"In the last 12 months, we have added Internal medicine and Occupational medicine. We've added specialty clinics including general surgery, OB/GYN and urology. Orthopedics will begin doing minor cases."

Tomah Memorial Hospital (WI)

Participant Directory



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208 North Columbus
Hicksville, OH 43526
Mel Fahs
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Cottage Grove Hospital
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Cottage Grove, OR 97424
Randall Mee
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Crete Area Medical Center
2910 Betten Dr.
Crete, NE 68333
Carol Fiesien
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Drumright Hospital
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Drumright, OK 74030
Daryl Morris
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Ellsworth County Medical Center
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Ellsworth, KS 67438
Roger Pearson
785.472.3111

Hayward Area Memorial Hospital
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Hayward, WI 54843
Barbara Peickert
715.934.4244

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Participant Directory

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Marian Furlong
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SharRay Palm
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Staples, MN 56479
Tim Rice
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Colorado City, TX
Linda Mize
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Molokai General Hospital
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Kaunakakai, HI 96748
Janice Kalanihuia
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Mountainview Medical Center
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White Sulphur Springs, MT 59645
Jan Kilgard
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Mountrail County Medical Center
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Orange City, IA 51041
Martin Guthmiller
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Philips County Medical Center
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Riverwood Health Center
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Aitkin, MN 56431
Michael Hagen
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Shoshone Medical Center
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David Selman
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Peter, MN 56082
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Philip J. Stuart
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Not Pictured:

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260.724.2145

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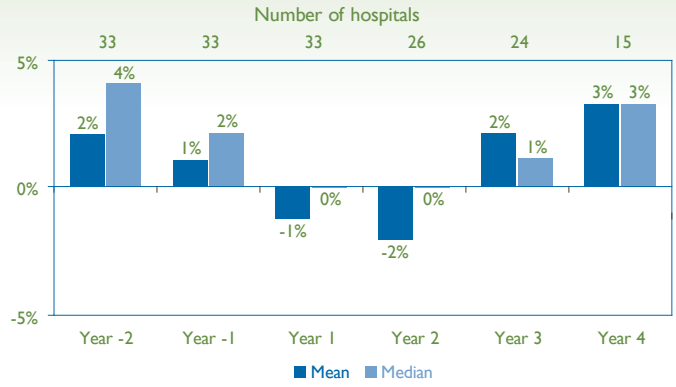
Michael Thomas
620.873.2141

Varying Financial Results

Hospitals reported mixed results with regard to total margin[1] in the two years following facility replacement. Figure 11 reveals that the median total margin was 2% in the year prior to replacement, versus 0% in the two years following replacement. Relative underperformance in the two years following replacement was largely attributable to increased capital costs.

Fig. 11 - Percent Total Margin by Year



An analysis of EBITDA margin (Earnings before Interest, Taxes, Depreciation and Amortization as a percent of total operating revenues) reveals a healthier financial picture as EBITDA eliminates differences in pre- and post- replacement capital costs. The average and median margin rose from 8% in the year prior to replacement to 12% and 14%, respectively, in the first year post replacement and 11% and 12%, respectively in the second year following replacement. Increased Medicare capital payments and volume growth contributed to the advance.

Fig. 12 - Percent EBITDA Margin by Year

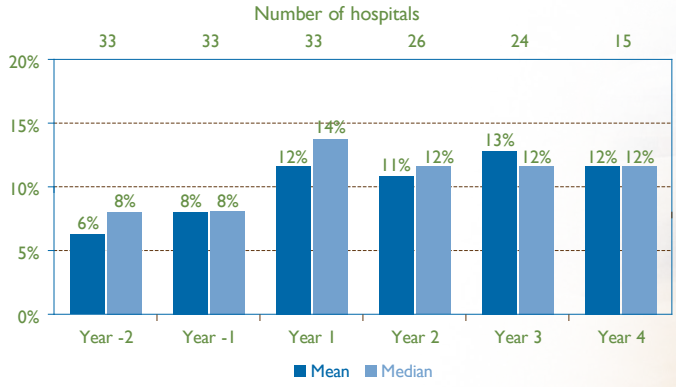
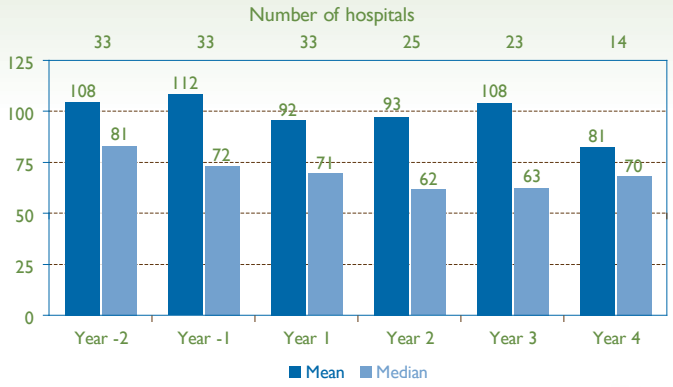


Figure 13 displays the average days cash (the average amount of cash and investments on hand to cover daily operating expenses of the hospital, excluding depreciation and amortization) by year. The pre-replacement median of 72 days remained relatively unchanged at 71 days in the first year post-replacement. The metric fell to 62 and 63 days in years three and four, respectively. ■

Fig. 13 - Average Days Cash by Year



CEOs on Financials

"Our improved financial position has enabled investment and focus in quality and patient safety."

"With extra financial capacity, our focus changed to quality. We now have a full electronic medical record. All medications are bar coded."

"Our financial stability has enabled both investment in technology and quality. We have added PACS and medication towers."

1. Total margin is defined as net income as a percent of total operating revenue.

Access to Capital

Financing Sources

Participant hospitals sought out a variety of internal and external capital sources, as shown below:

- **Guarantee from System:** Nine hospitals accessed capital through their affiliated system relationship, most often as part of a larger bond package.
- **Guarantee from County/City:** Five hospitals used County/City backing to issue and guarantee the debt.
- **Private sources:** Three hospitals used Private Placement.
- **Bonds:** Ten hospitals used a variety of available programs to access capital independently.

CEOs on Financing

"We moved to a formal affiliation with another facility to support the new hospital."

"We developed a realistically optimistic plan and leveraged it."

"Borrow every nickel you can and put it into the facilities."

"Access to capital was a barrier. We were able to afford half the hospital we needed."

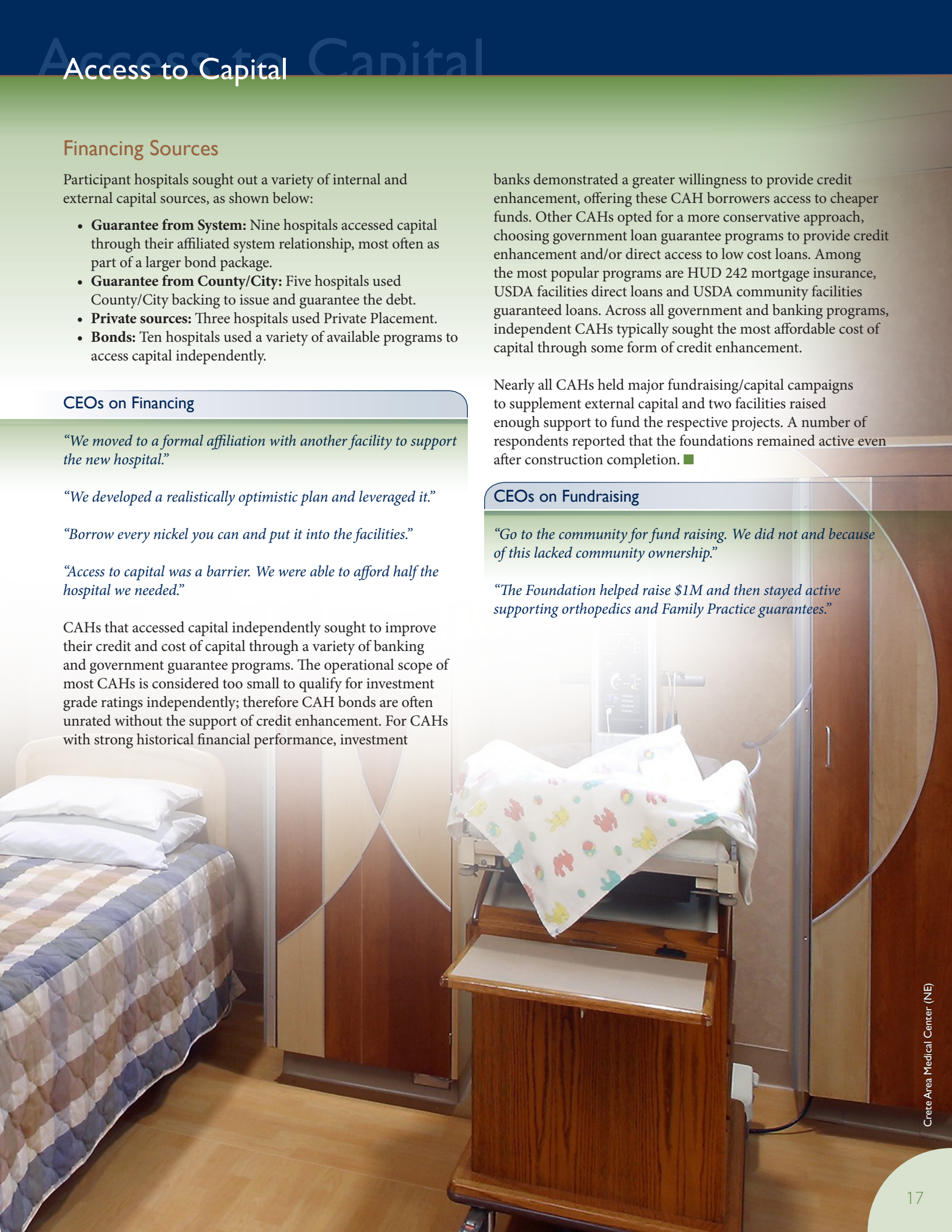
CAHs that accessed capital independently sought to improve their credit and cost of capital through a variety of banking and government guarantee programs. The operational scope of most CAHs is considered too small to qualify for investment grade ratings independently; therefore CAH bonds are often unrated without the support of credit enhancement. For CAHs with strong historical financial performance, investment banks demonstrated a greater willingness to provide credit enhancement, offering these CAH borrowers access to cheaper funds. Other CAHs opted for a more conservative approach, choosing government loan guarantee programs to provide credit enhancement and/or direct access to low cost loans. Among the most popular programs are HUD 242 mortgage insurance, USDA facilities direct loans and USDA community facilities guaranteed loans. Across all government and banking programs, independent CAHs typically sought the most affordable cost of capital through some form of credit enhancement.

Nearly all CAHs held major fundraising/capital campaigns to supplement external capital and two facilities raised enough support to fund the respective projects. A number of respondents reported that the foundations remained active even after construction completion. ■

CEOs on Fundraising

"Go to the community for fund raising. We did not and because of this lacked community ownership."

"The Foundation helped raise $1M and then stayed active supporting orthopedics and Family Practice guarantees."



Crete Area Medical Center (NE)

Payback Over Time

When considering facility replacement, planners should adopt a long-term perspective. It is important to consider changes in technology, staffing requirements and employee efficiency.

CEOs on Facility Design

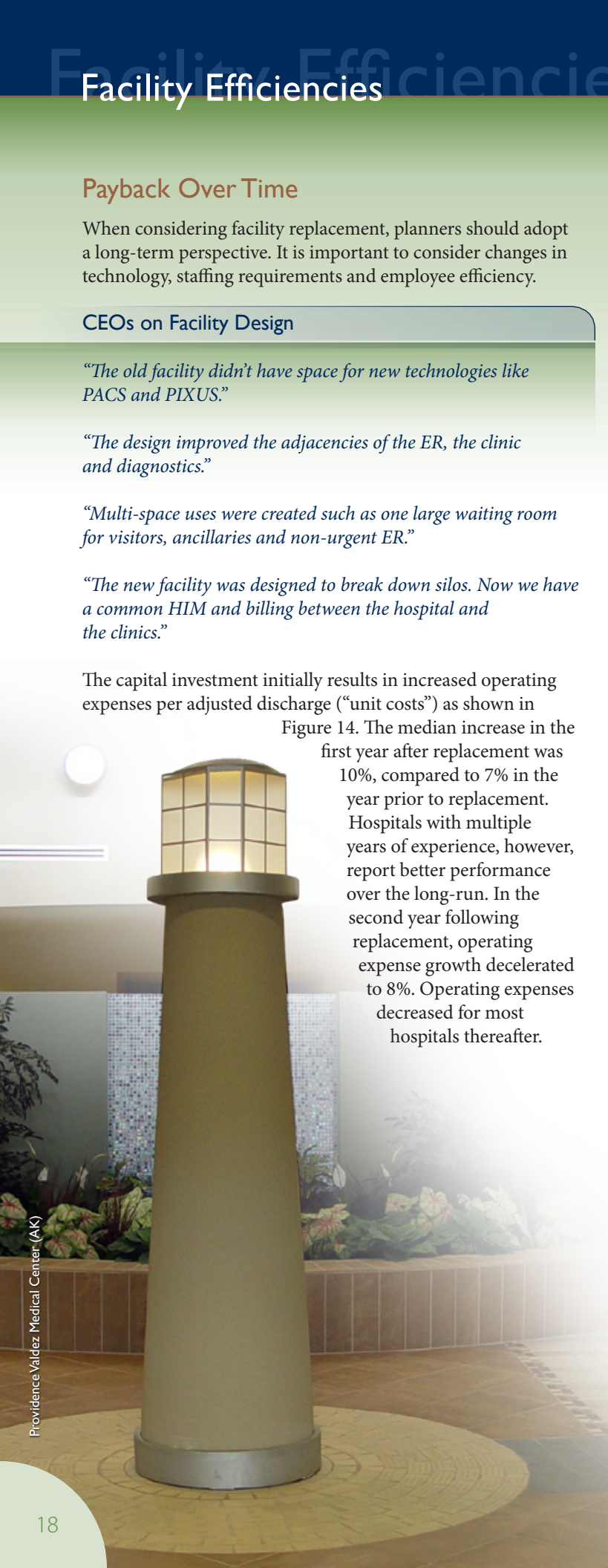
"The old facility didn't have space for new technologies like PACS and PIXUS."

"The design improved the adjacencies of the ER, the clinic and diagnostics."

"Multi-space uses were created such as one large waiting room for visitors, ancillaries and non-urgent ER."

"The new facility was designed to break down silos. Now we have a common HIM and billing between the hospital and the clinics."

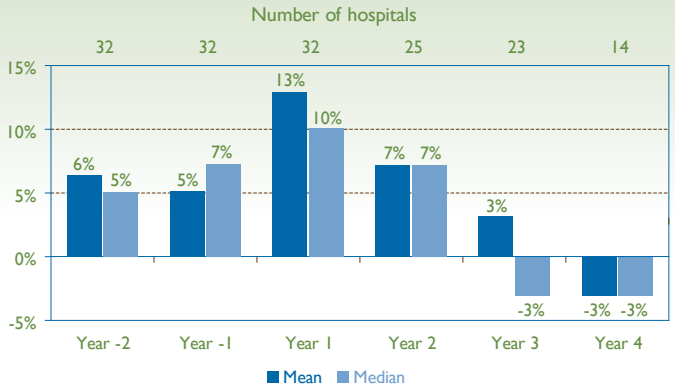
The capital investment initially results in increased operating expenses per adjusted discharge ("unit costs") as shown in Figure 14. The median increase in the first year after replacement was 10%, compared to 7% in the year prior to replacement. Hospitals with multiple years of experience, however, report better performance over the long-run. In the second year following replacement, operating expense growth decelerated to 8%. Operating expenses decreased for most hospitals thereafter.



Providence Valdez Medical Center (AK)

With growth in services and efficiency, many facilities are considering follow-up projects.

Fig. 14
Average Change in Expense per Adj Discharge by Year



See Appendix B - Fig. 14a: Change in Expense/Adj Discharge by Year – Annualized Since Replacement.

CEOs on Continued Facility Development

"We're planning expansion to double the clinic, add outpatient surgery, increase beds, expand the ER and add a Wellness Center."

"A new 6,000 sf Medical Office Building has opened."

"Evaluating 8,000 sf new clinic and physical therapy gym, both were part of the original plan."

"Building a 16,000 sf expansion for clinic and rental space."

"We need more space for outpatient services but don't have debt capacity yet."

Long-term decreases in operating expenses per unit of service indicate that facility investment generated positive payback by placing organizations on a lower cost trajectory. Interviews suggest that many hospitals are planning significant additions to their facilities, re-investing financial gains realized by the initial project. The experience gained through the replacement process is valuable in planning and executing follow-up projects. ■

Quality and Performance Improvement

Better Quality Reported

New facilities often resulted in improved quality of care. Better lighting, more space and new safety features were among the upgrades that enhanced quality.

CEOs on General Quality

"Having adequate space and separation supports process improvement."

"Patient safety features have been designed into the new facility including replica rooms, obstetrics adjacent to surgery, etc."

"We incorporated operational change elements in advance knowing we were going to move and adapted ahead of time."

The operating room was most commonly cited as the area with the most direct and measurable differences in quality, attributable to the new facility.

CEOs on Operating Room Quality

"Quality improved even with more advanced cases such as joint replacement."

"Our post-operative surgical infection rate is essentially zero due partially to single rooms and the layout of the surgical area."

"OR has private pre-and post-operative rooms to enhance privacy and patient safety."

There is reason to believe that improved quality will translate to a direct return on investment. This is particularly true in an environment of consumer directed healthcare where greater attention is paid to reportage on patient safety. In addition, CMS and other third party payers are linking reimbursement to quality. ■

CEOs on Quality Recognition

"We are recognized as an Institute for Healthcare Improvement mentor hospital. With the new facility, we are able to work a lot smarter."

Community Hospital of Bremen (IN)

Impact to the Local Economy

Direct and Indirect Benefits

The national Rural Health Works program documented how local health care systems generate economic impacts for their communities. Direct benefits result from hospital operations as well as facility construction. Indirect benefits are realized as healthcare-related dollars are re-circulated throughout the community. This creates a multiplier effect.

Hospital executives noted that the new facility bolstered economic development activity. The hospital was often cited as a key factor in attracting businesses to relocate or expand in the local community.

Participating hospitals provided examples of direct and indirect economic impacts as well as instances of positive economic development activity. ■

CEOs on Economic Impacts to the Community

"Hospital construction was positive. The use of local contractors was encouraged through RFPs."

"An ethanol plant picked our community due to the new hospital."

"Within the past three years, land adjacent to the hospital has been developed with: housing, a behavioral health facility, an 80 bed nursing home and businesses."

"The community is getting a new school and combined with the new hospital ensures key ingredients are set for economic growth."

"Our town is beginning to grow in leaps and bounds and the new hospital is an important contributing factor."

"Retirees continue to locate here specifically because of the hospital."

"Community economic development was part of planning, especially with banks and businesses."

Replacement Study Findings

The findings of the third annual Rural Hospital Replacement Facility Study add to and enrich the collective lessons learned in previous years. The study tells us a great deal about the benefits of replacing aging facilities and shares considerable insight into the experiences of CAHs that are undergoing this process. Although the sample was relatively small and was not randomly selected, the key characteristics of the participants (remoteness to competitors, population base and project size) varied widely, suggesting that rural hospitals across a broad spectrum may benefit from the incorporated data and commentary.

The study identified several key benefits from facility replacement. First, changes in patient discharge volume after replacement were largely positive. The median rate of increase of adjusted discharges, a measure of overall growth, was 10% in the first year and 11% for all post-replacement experience.

At the same time, staffing levels increased and technical staff and physician recruiting and retention improved. Indeed, each responding hospital reported that new facilities and equipment enhanced staff development efforts, often becoming an integral part of physician recruitment strategies.

By the same token, staff efficiency and treatment outcomes improved. While hospital FTE counts increased post-replacement, patient volume accelerated at a faster rate, producing lower staff-per-unit-of-service and combined capital and staff costs per patient ratios. Executives reported improved treatment outcomes as well. Advances in the quality of care were attributable to the addition of new diagnostic equipment and patient safety enhancements and the introduction of better equipped and located operating rooms.

In a number of cases, patient volumes increased beyond expectations, giving rise to new space and service needs. Some hospitals that achieved above-forecast performance after replacement reinvested the proceeds in new clinic space for physicians and ancillary area expansions. Others introduced new specialty service practices.

Replacement hospital financial performance remained mixed. Flat total margins were reported in the first and second years following replacements, with a wide variation of experience among respondents. A majority of hospitals reported decreased cash and investment balances, underscoring the importance of reserving adequate funding, particularly for the early years of the project. Conversely, the median growth in EBITDA (Earnings before Interest, Taxes, Depreciation and Amortization) was positive in year one and year two, largely reflecting increased Medicare capital payments and the impact of patient volume growth.

Building a new facility is a once in a lifetime experience for most rural hospital CEOs, CFOs and board members and represents the single greatest investment in one project for most communities. It is an exciting yet daunting challenge. This study, with its unique look into the experiences of hospitals and communities undergoing facilities replacements, can be an invaluable guide for decision-making and planning for rural leaders considering the same path. ■

The advice of hospital leaders offers insight into the replacement experience that can't be measured in numbers. These insights are summarized with six best practices:

Establish a call to action

"Community had lost confidence in the old facility."

Set vision and strategies

"Seven years of planning. We identified six critical success factors and went after each one."

Link the vision to your debt capacity

"Develop the most realistic, optimistic plan and leverage it for financing."

Be flexible

"Build facility growth into the design and site plan, multi-use space."

Link the plan to quality and performance initiatives

"Pride in the new facility and functional efficiency has allowed many new Performance Improvement initiatives."

Recruit providers

"We wouldn't have the number of providers today without the new facility."

Appendix A: Self Evaluation Questions and Action Steps for CEO Initiated Board Education

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 investment in 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.
Discuss results within the Board and community with decision-makers.
Develop specific goals for facility improvements.

Hospital and Community Leadership

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 defendable 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, Include 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.

Appendix B: Hospital-level Detail on Charts of Annualized Performance

Fig. 5a: Percent Change in Discharges - Annualized Since Replacement

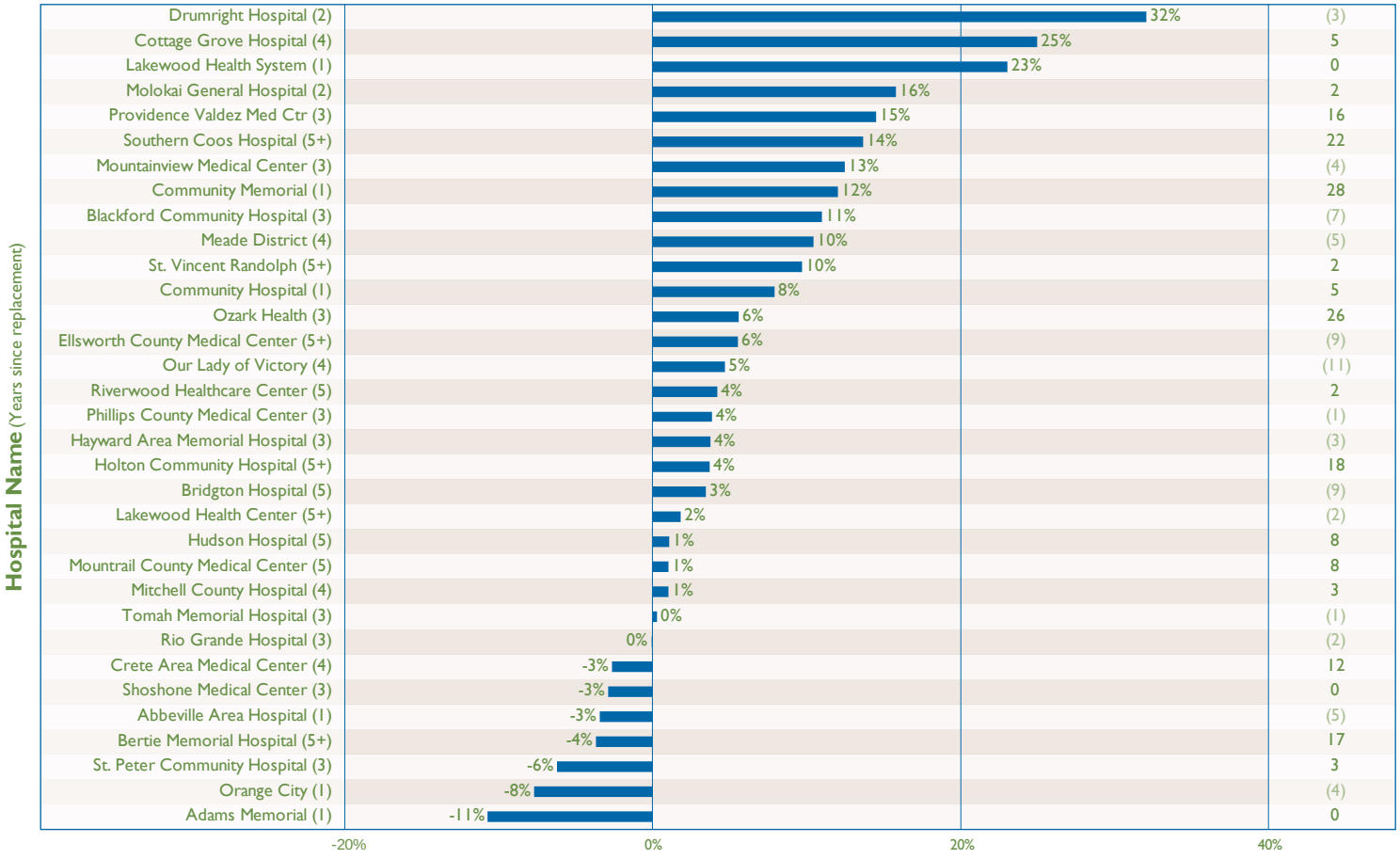
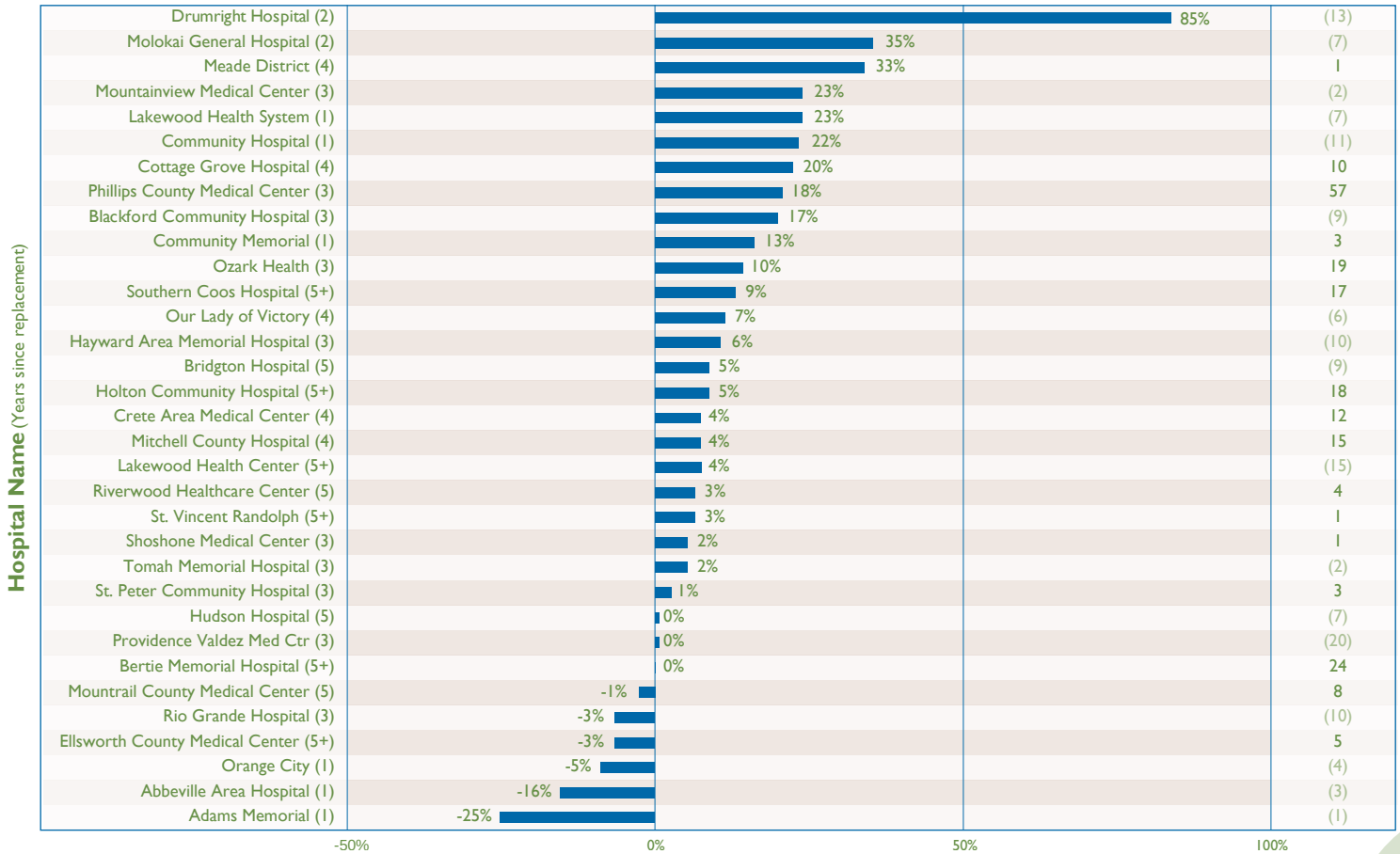


Fig. 6a: Change in Days - Annualized Since Replacement



Appendix B: Hospital-level Detail on Charts of Annualized Performance

Fig. 7a: Change in Outpatients Visits - Annualized Since Replacement

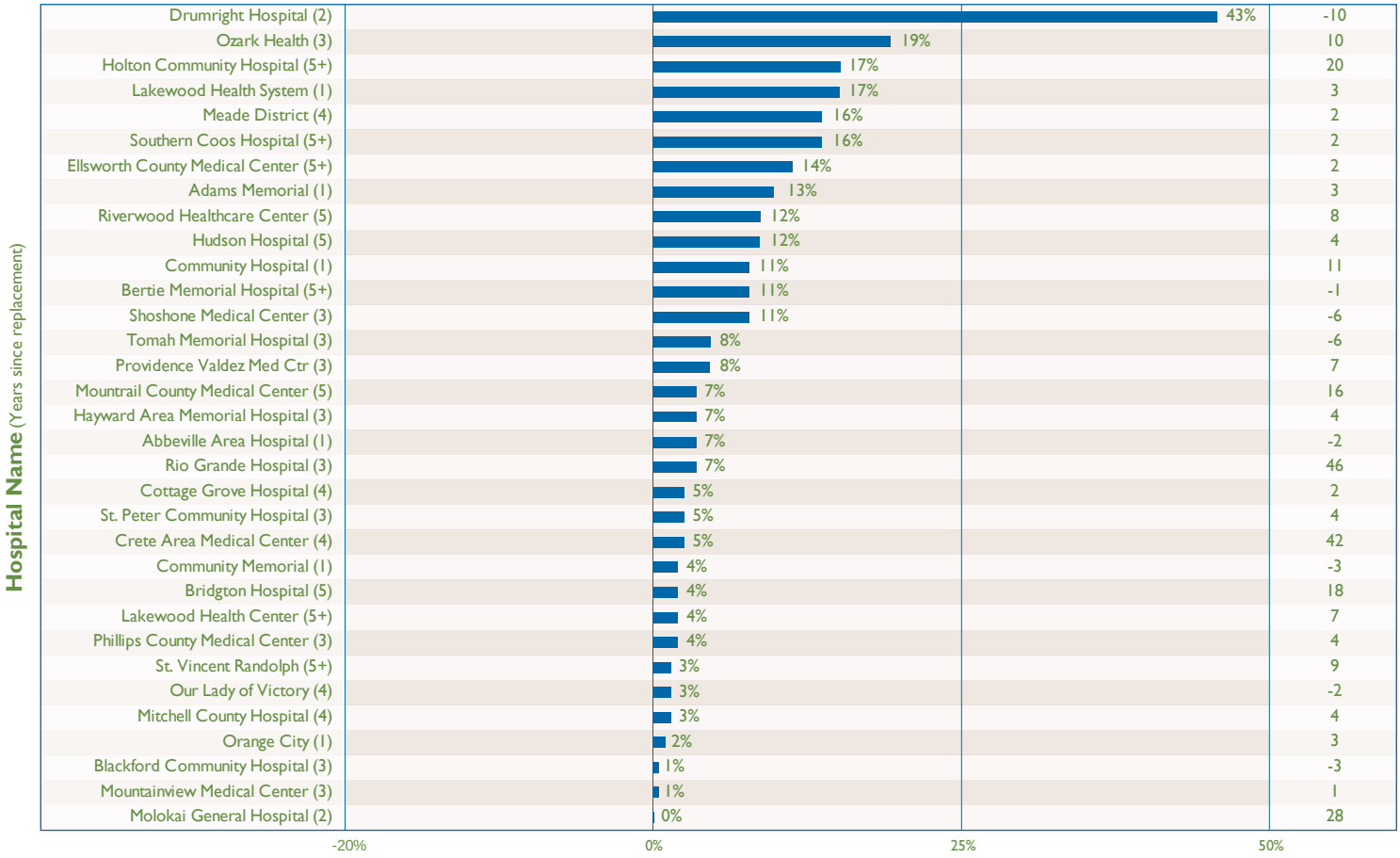
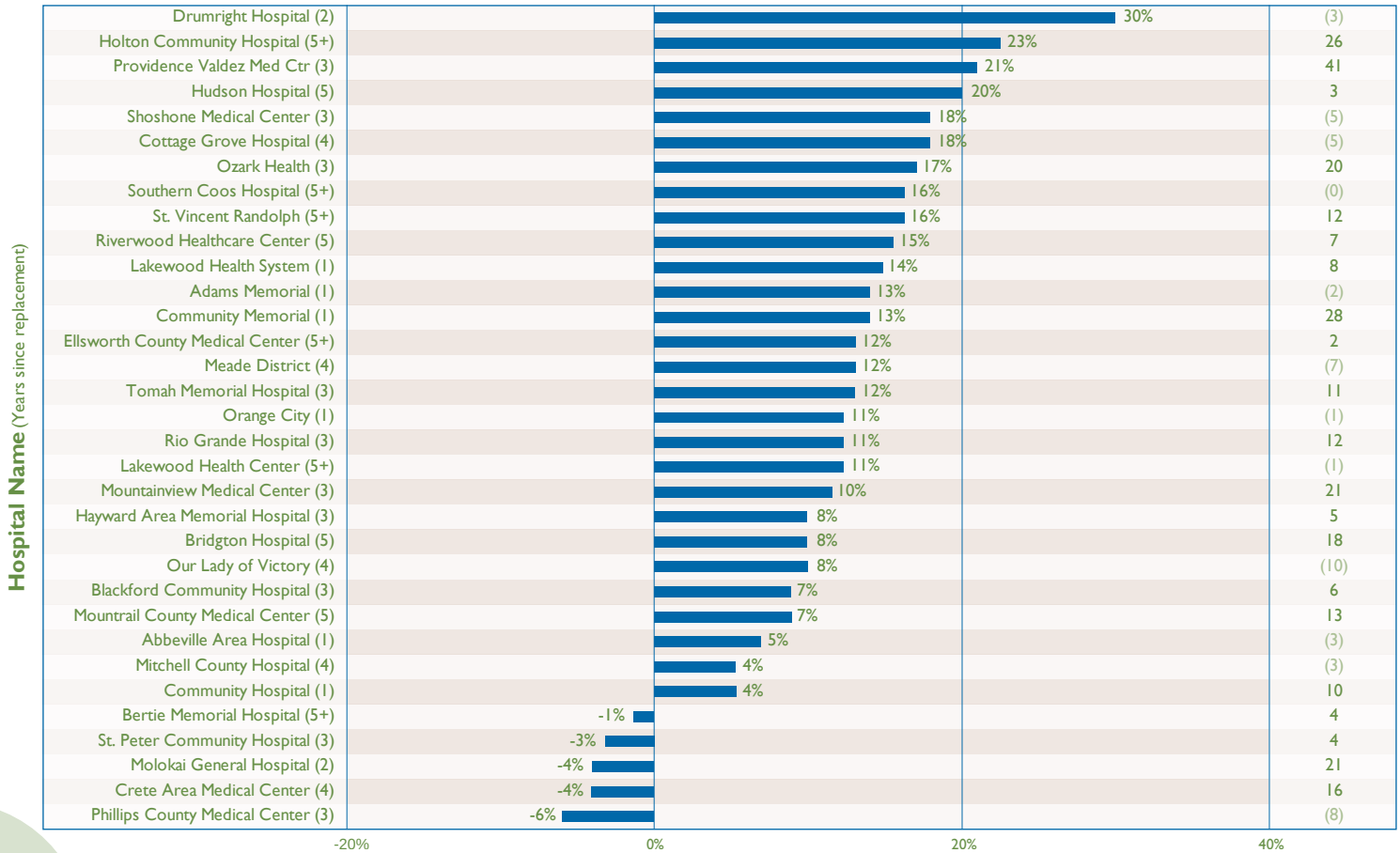


Fig. 8a: Change in Adjusted Discharges - Annualized Since Replacement



Appendix B: Hospital-level Detail on Charts of Annualized Performance

Fig. 9a: Change in FTE's - Annualized Since Replacement

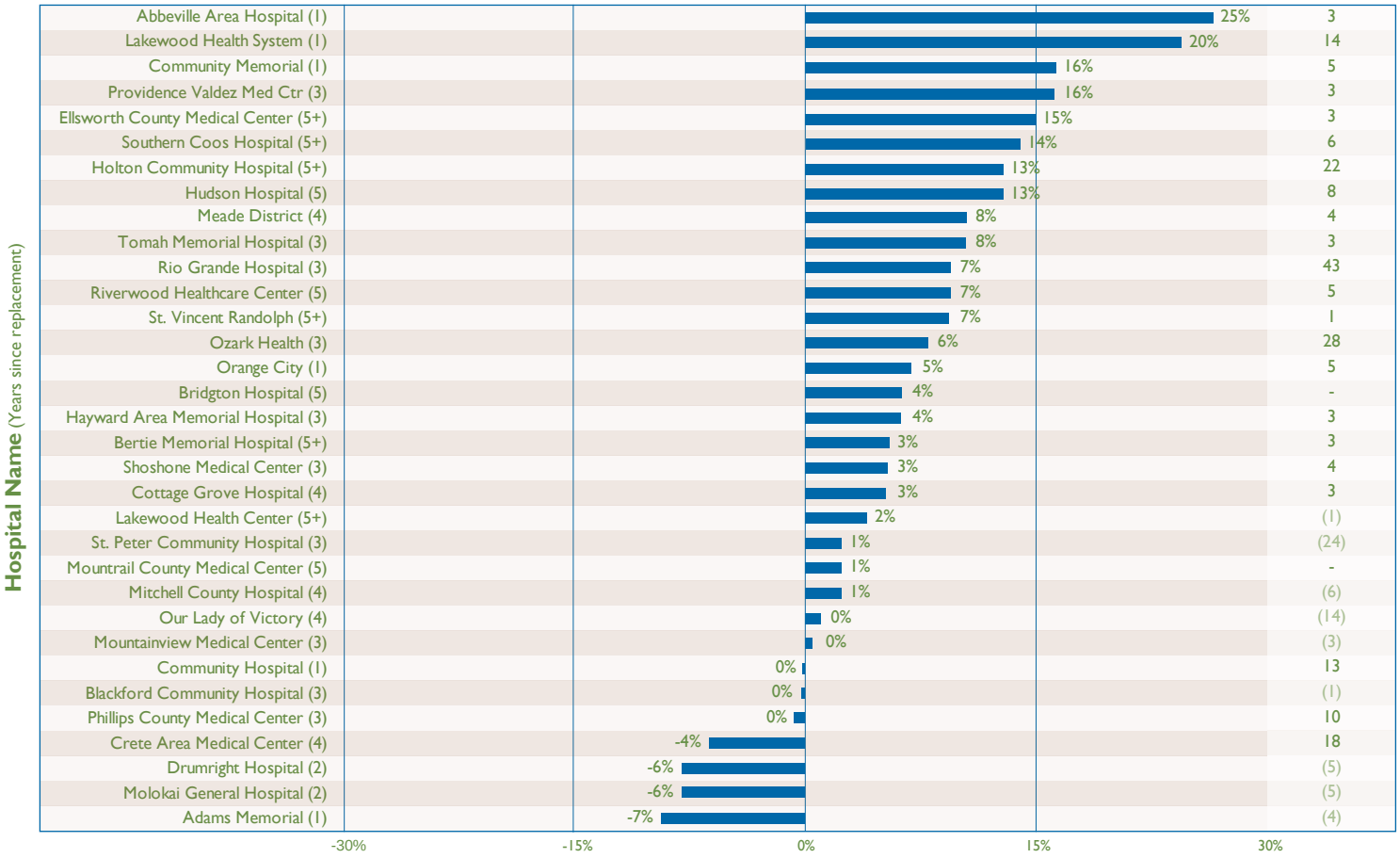
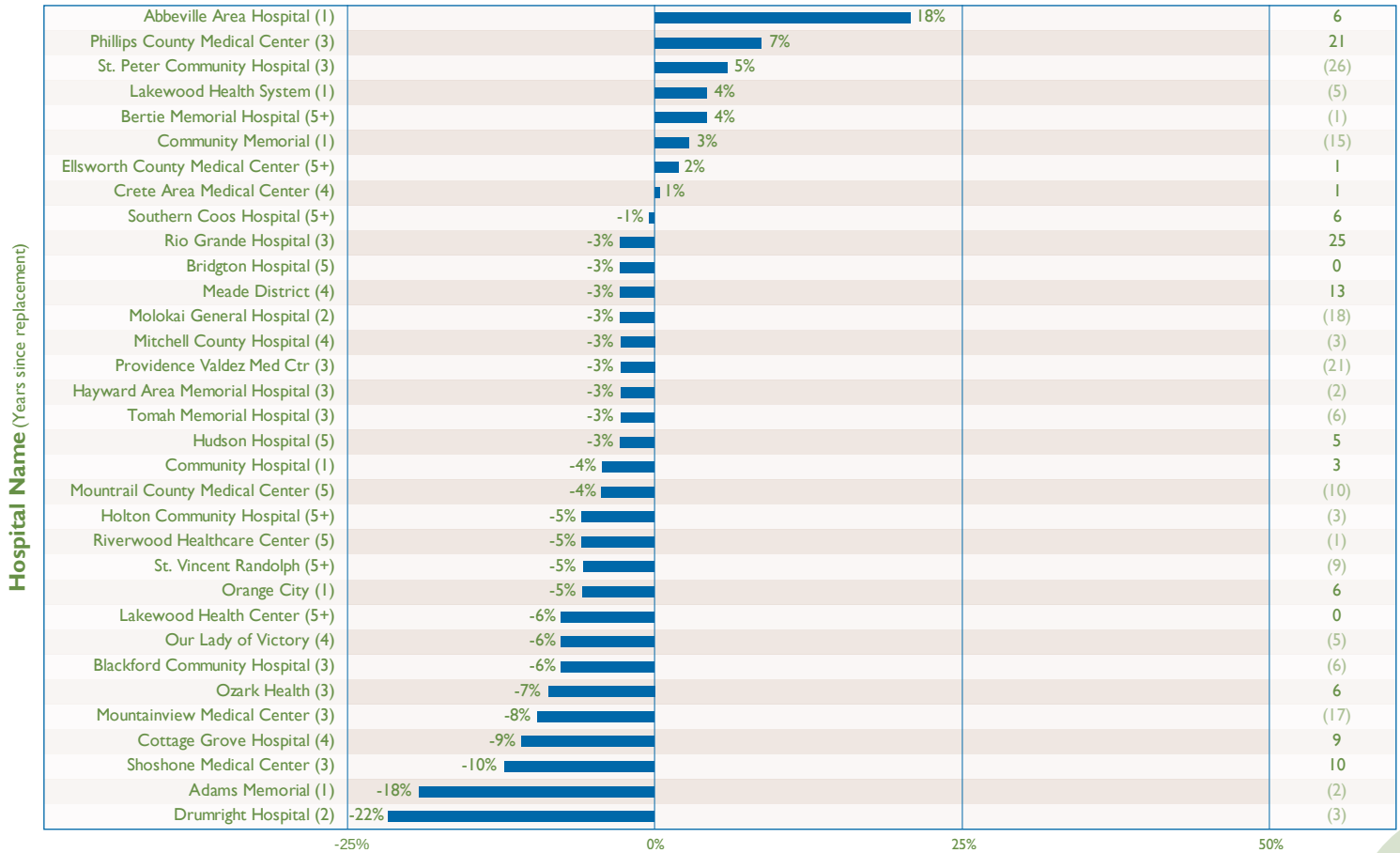
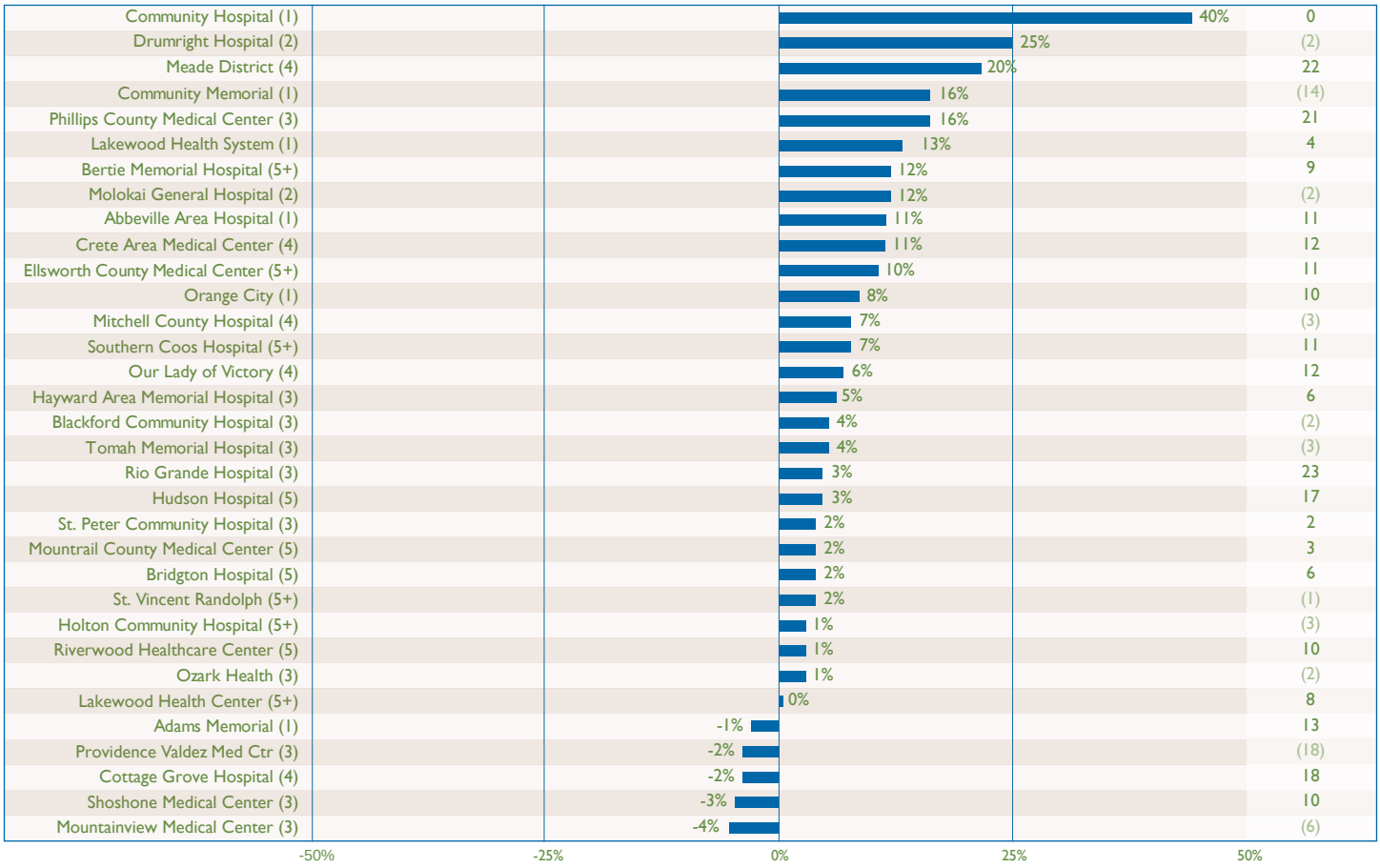


Fig. 10a: Percent Change in FTE's per Adjusted Discharges - Annualized Since Replacement



Appendix B: Hospital-level Detail on Charts of Annualized Performance

Fig. 14a: Change in Expense/Adj Discharge by Year - Annualized Since Replacement



Melissa Memorial Hospital (CO)

Acknowledgements

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

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SPECIAL INDUSTRY REPORT

3rd Annual Rural Hospital Replacement Facility Study 2007

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

Prepared and Sponsored by
STROUDWATERASSOCIATES

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National Rural Health Association

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

Left - Community Hospital of Bremen (IN)
Top Right - Bridgton Hospital (ME), Bottom Right - Cottage Grove Hospital (OR)