



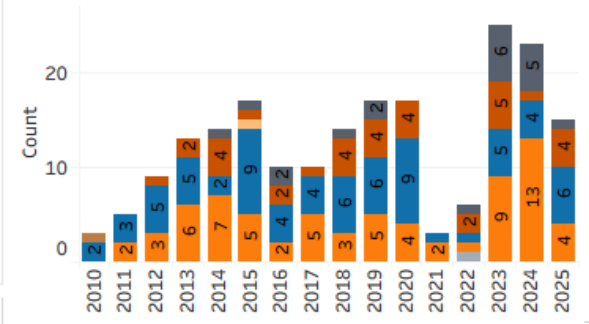
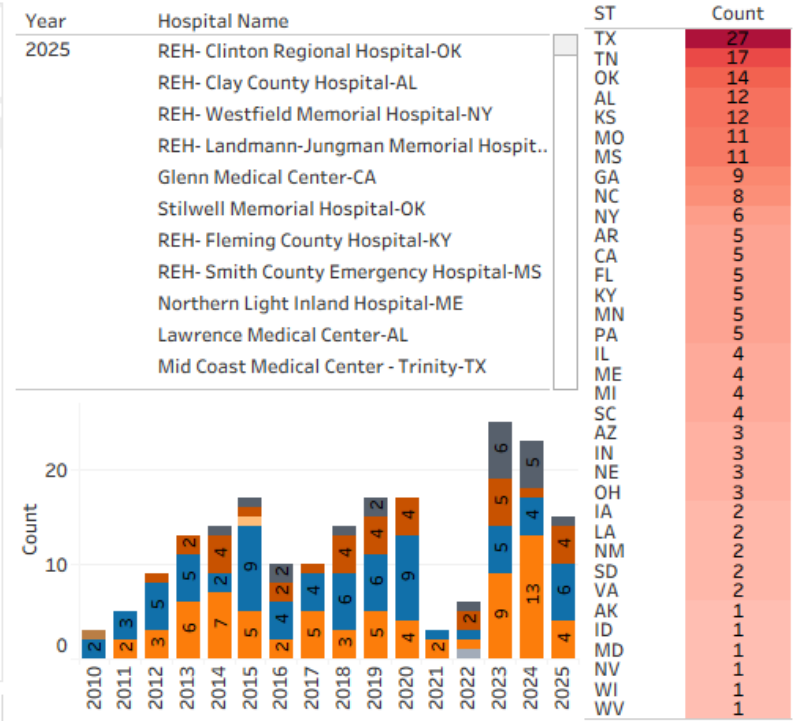
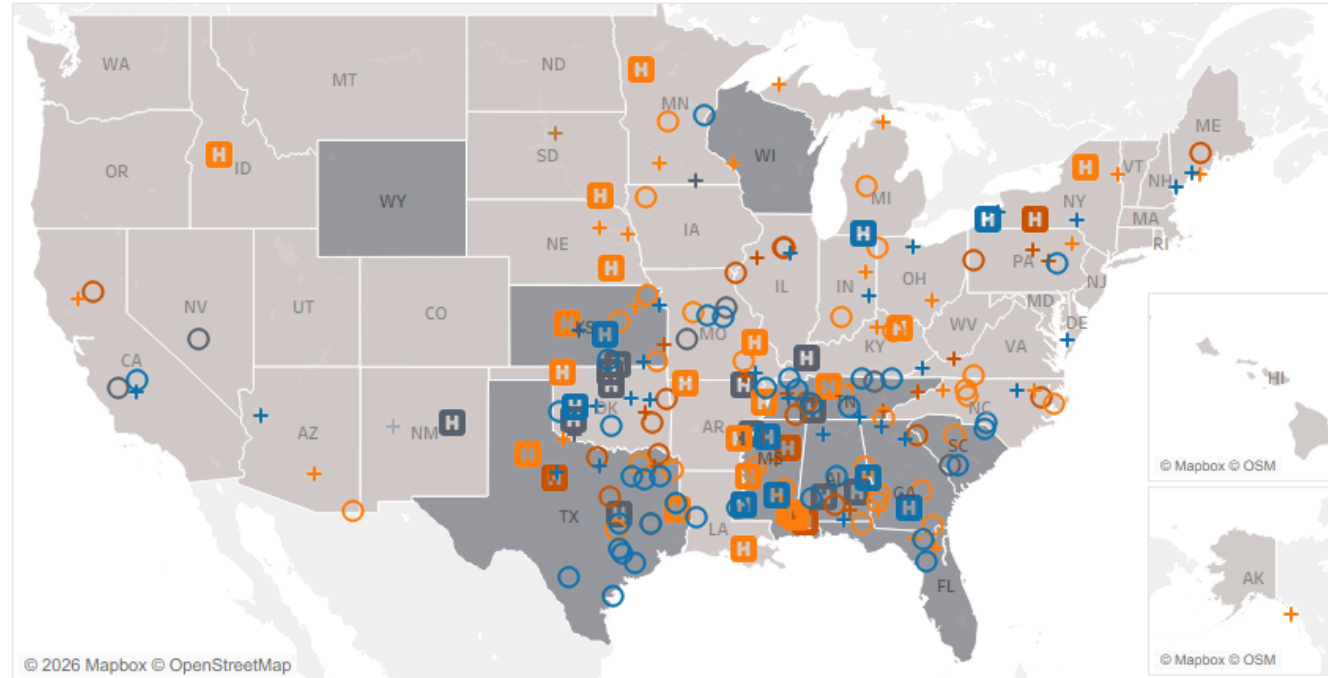
**CAH STRATEGIC RISK: MOVING
FROM VULNERABILITY TO
SUSTAINABILITY**

June 9, 2026

RURAL HOSPITAL CLOSURES SINCE 2010

201 Closed or Converted Rural Hospitals

There have been 201 Rural Hospital closures or conversions since 2010 and 244 since 2005, these numbers include forty-four (44) REH Conversions since 2023



Year	Prospective Payment System	Critical Access Hospital	Medicare Dependent Hospital	Sole Community Hospital	IHS	Re-based Sole Community Hospital	Rural Referral Center	Total
2010	2	0	0	0	0	1	0	3
2011	2	0	0	0	0	0	0	2
2012	3	0	0	0	0	0	0	3
2013	5	2	0	0	0	0	0	7
2014	2	2	0	1	0	0	0	5
2015	4	2	1	1	0	0	1	9
2016	4	2	2	2	0	0	1	11
2017	4	1	1	1	0	0	1	10
2018	6	3	4	1	0	0	0	14
2019	6	5	4	2	0	0	0	17
2020	6	4	4	2	0	0	0	16
2021	1	2	0	0	0	0	0	3
2022	1	1	2	1	1	0	0	6
2023	5	9	5	6	0	0	0	25
2024	4	13	1	5	0	0	0	23
2025	6	4	4	1	0	0	0	15
Total	72	71	35	20	1	1	1	201

Medicare Payment Type
■ Prospective Payment System
■ Critical Access Hospital
■ Medicare Dependent Hospital
■ Sole Community Hospital
■ Re-based Sole Community Hospital
■ Rural Referral Center
■ IHS

Current Status
H REH
O Complete Closure
+ Convert to Other

Current Status of Medicaid Expansion Decision
 Adopted the Medicaid Expansion
 Not Adopting the Medicaid Expansion at this Time

Updated: 3/25/2026
 Sources: The North Carolina Rural Health Research Program (NC RHRP) at the Cecil G. Sheps Center for Health Services Research & kff.org

WHAT CAN WE LEARN?

- Understand the trajectory of closed rural hospitals during the years prior to closure
- Compare the trajectory of closed rural hospitals to open rural hospitals
- Explore key differentiators/risk factors that signal higher strategic risk/closure risk for rural hospitals
- Define what can be learned from the cohort of rural hospitals that “de-risked” between 2019 and 2024?



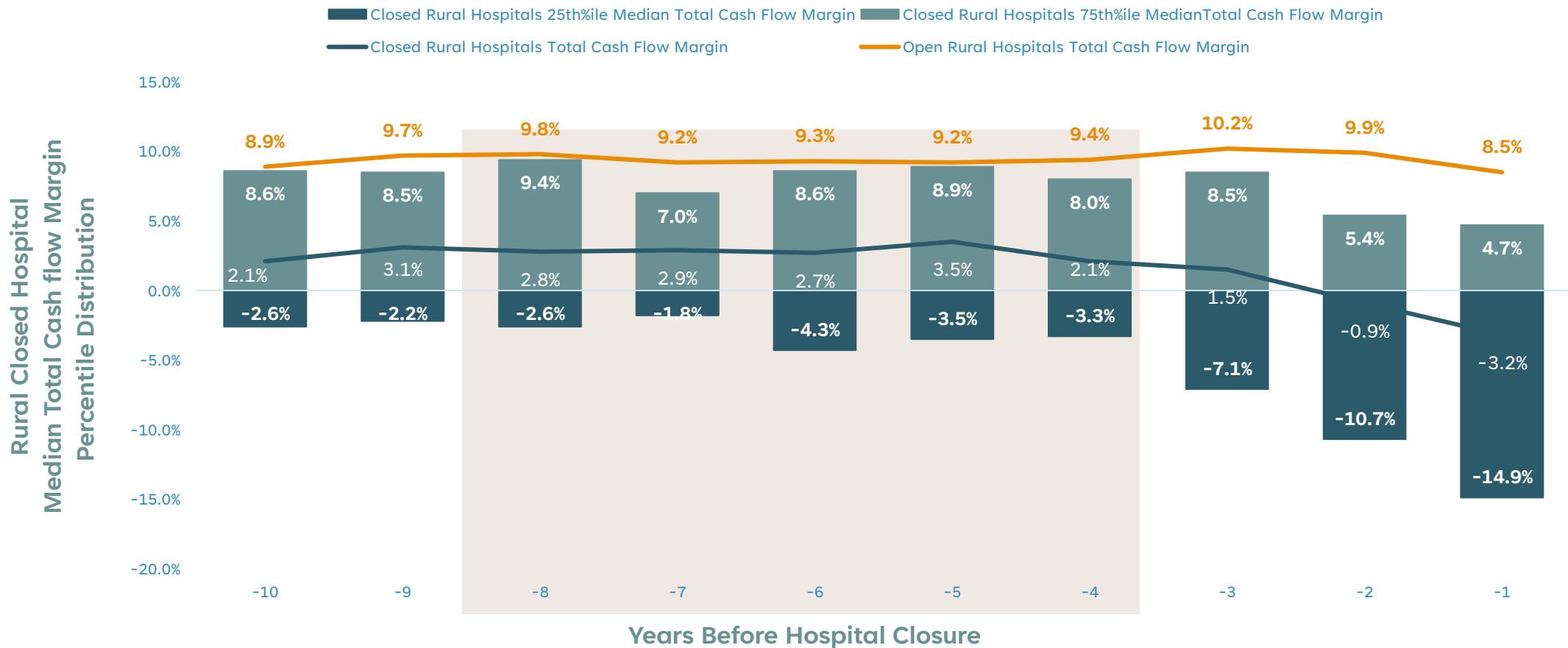
ACKNOWLEDGEMENT

- Stroudwater would like to thank the **North Carolina Rural Health Research Program, especially George Pink, PhD, and Tyler Malone, PhD, for their** collaboration surrounding their research and concepts predicting financial distress and relative risk among rural hospitals
- A bibliography is attached in an appendix to this slide deck

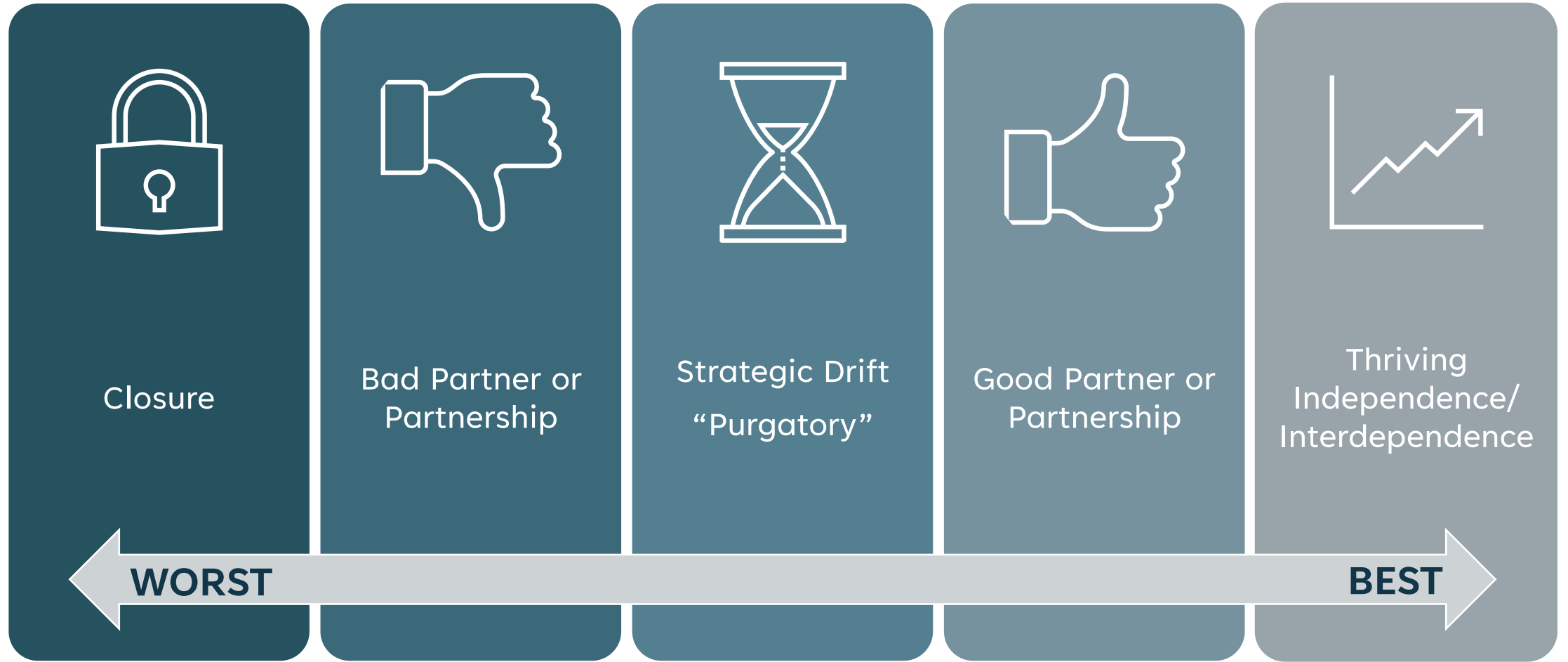


RURAL HOSPITAL TOTAL CASH FLOW MARGIN - CRITICAL ACTION ZONE CLOSED VS. OPEN HOSPITALS

- The years between -8 and -4 years prior to rural hospital closure become a critical time for acting prior to negative trends accelerating
- Time lags in data availability require proactive management of multi-year trends, including cash flow
- Waiting to act on declining trends reduces latitude to maneuver and increases the magnitude of required turnaround



COMMON OUTCOMES FOR RURAL HOSPITALS



80%+/- of hospitals are within these three options



KEY IDENTIFIED RISK FACTORS



TOP LINE REVENUE & GROWTH



OPERATING MARGIN & CASH FLOW



LIQUIDITY



FUND BALANCE



MARKET POSITION & MARKET SHARE



MARKET POPULATION, MHHI*, POVERTY RATE



HOSPITAL CHARACTERISTICS— CAH VS. PPS

**MHHI: Median Household Income*

RISK MITIGATION VIA IMPROVED PERFORMANCE

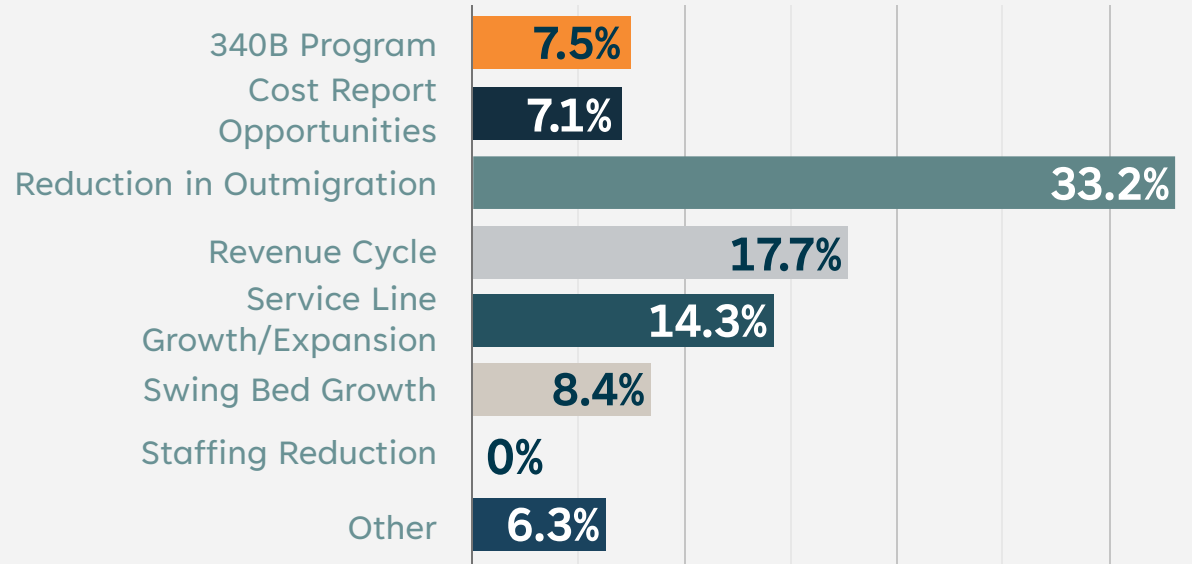
- Nearly 30 rural performance improvement projects led by Stroudwater over a 30-month period delivered a median of \$1.7M in financial improvement per organization, equating to nearly 8% of net patient revenue per organization
- These engagements spanned an array of functional areas, with the average share of total improvement realized broken out as follows:

Total Estimated Impact

25th	\$	1,300,000
Median	\$	1,700,919
75th	\$	3,727,000

Impact % of Net Pt Revenue

25th	4.1%
Median	7.8%
75th	11.1%



POLLING QUESTION #1



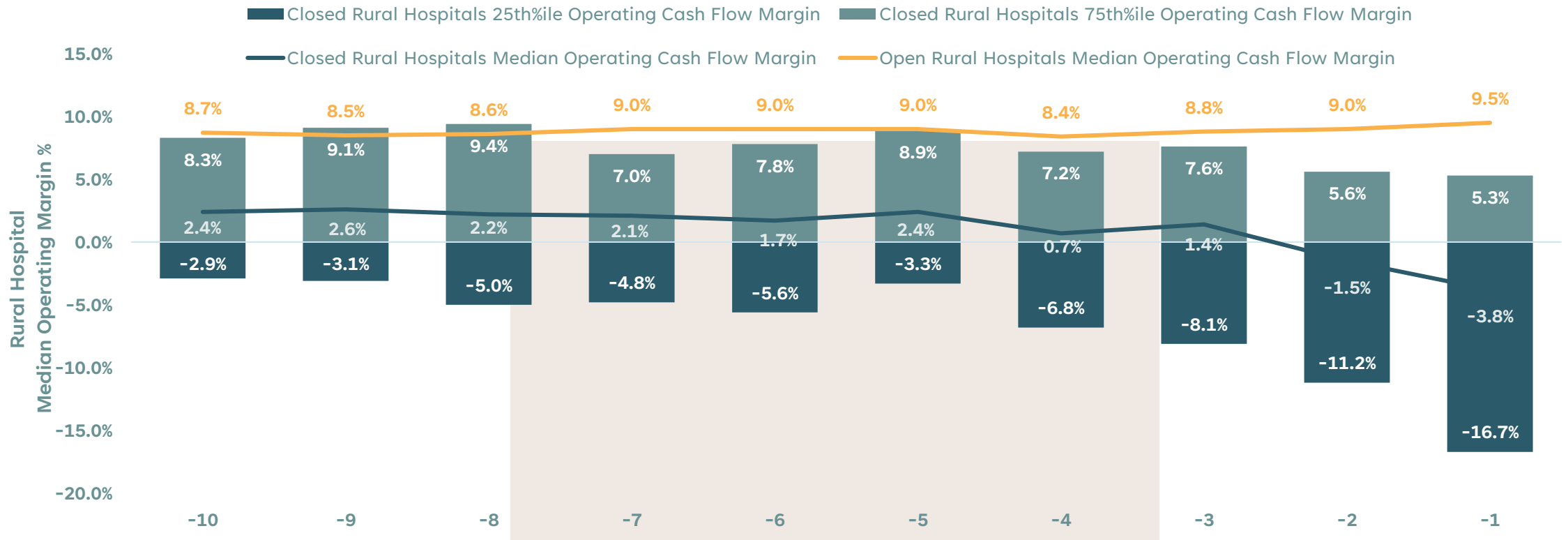


FINANCIAL TRAJECTORY OVERVIEW

Open vs. Closed Hospitals

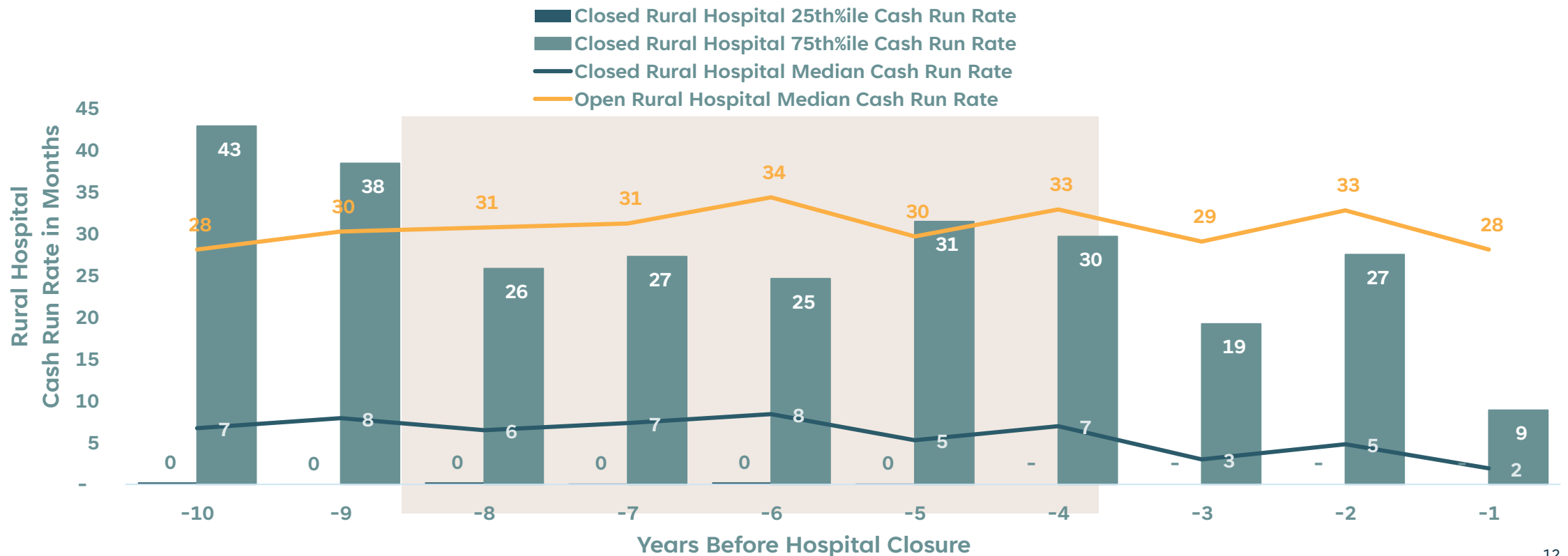
RURAL HOSPITAL OPERATING CASH FLOW MARGIN CLOSED VS. OPEN HOSPITALS

- Long-term, stable, positive operating cash flow lowers a rural hospital's risk of closure
- Levels of modest to negative operating cash flow over time reduce financial resiliency and cumulatively increase strategic risk
- The median operating cash flow of closed rural hospitals begins declining 4 years before closure (year -4 in the chart below)
- The Compound Annual Growth Rate (CAGR) for median operating cash flow for closed rural hospitals between 8 to 4 years prior to hospital closure is -20%



RURAL HOSPITAL TOTAL CASH RUN RATE IN MONTHS FOR NEGATIVE CASH FLOW OPEN VS. CLOSED HOSPITALS

- For hospitals with negative cash flows, understanding **how quickly existing cash and reserves will be depleted** helps to quantify how the combination of poor operating results and a lack of liquidity undermines the organization’s viability
 - Total cash run rate refers to the months a hospital can survive without external funding, as well as how efficiently cash is being spent
 - This total cash run rate analysis is focused on hospitals with a negative EBIDA and is defined as (total available cash & equivalents)/EBIDA
- For closed rural hospitals with negative cash flow, the **median total cash run rate varies between 8 months and 5 months in years -8 to -4** before declining significantly in years -3 to -1
- For open rural Hospitals with negative cash flow, the **median total cash run rate is greater than 2.5 years (30 months) in the years -8 to -4**



COMPARISON OF OPEN & CLOSED MEDIANS

Metric	Year -8 Median	Year -4 Median	CAGR Yrs -8 to -4	Closed Median from Open Median	
				CAGR Yrs -8 to -4 Variance	Yr -4 Variance
NPSR – Open	\$38.8	\$39.7M	0.5%	-1.6% CAGR	-\$29.0M
NPSR - Closed	\$11.3	\$10.7M	-1.1%		
Op Cash Flow Margin – Open	8.6%	8.4%	-0.5%	-20.0% CAGR	-7.7%
Op Cash Flow Margin – Closed	2.2%	0.7%	-20.5		
Total Cash Flow Margin – Open	9.8%	9.4%	-0.8%	-4.8% CAGR	-7.3%
Total Cash Flow Margin – Closed	2.8%	2.1%	-5.6%		
Op Margin – Open	2.5%	2.1%	-3.4%	-7.9% CAGR	-6.2%
Op Margin – Closed	-2.4%	-4.1%	-11.3%		
Total Margin – Open	3.4%	3.8%	2.3%	-13.6% CAGR	-6.7%
Total Margin - Closed	1.7%	-2.9%	-11.3%		
Net Assets – Open	\$19.6M	\$21.1M	1.5%	-6.1% CAGR	-\$19.2M
Net Assets - Closed	\$2.4M	\$1.9M	-4.6%		



OPEN & CLOSED MEDIANS, CONTINUED

Metric	Year -8 Median	Year -4 Median	CAGR Yrs -8 to -4	Closed Median from Open Median	
				CAGR Yrs -8 to -4 Variance	Yr -4 Variance
Cash Run Rate - Open	31 months	33 months	1.3%	+ 1.8%	- 26 months
Cash Run Rate - Closed	6 months	7 months	3.1%		
Cash Flow to Current Liabilities – Open	.57	.56	-0.4%	-27.1%	-.55
Cash Flow to Current Liabilities – Closed	.05	.01	-27.5%		
Market Share - Open	30.8%	29.0%	-1.2%	-4.9%	-16.7%
Mark Share - Closed	16.8%	12.3%	-6.1		
Service Area Population – Open	38.4k	34.9k	-1.9%	+2.8%	-8.5K
Service Area Population – Closed	25.2k	26.4k	0.9%		
Service Area MHHI – Open	\$43.7k	\$47.7k	1.8%	-0.2%	-\$6.2K
Service Area MHHI - Closed	\$38.4k	\$41.5k	1.6%		



HOSPITAL CLOSURE STUDY – KEY FINDINGS

- **There are significant variances between open and closed rural hospital medians across key metrics, except for two cases of median CAGRs**

The top quartile of closed rural hospitals often has results that approach median values for open rural hospitals

- **Relative Size and Growth are critical risk mitigation factors**

Open rural hospitals maintain a median NPSR of \$40M compared with the closed hospital median NPSR of \$11M 4 years prior to closure

For the period 8 to 4 years prior to closure, the median NPSR trend was 0.5% CAGR for open hospitals and -1.1% CAGR for closed hospitals

- **Higher market retention levels and trends reduce a hospital's risk of closure**

Open rural hospitals maintain a median market share of 29% compared with the closed hospital median market share of 12% at 4 years prior to closure

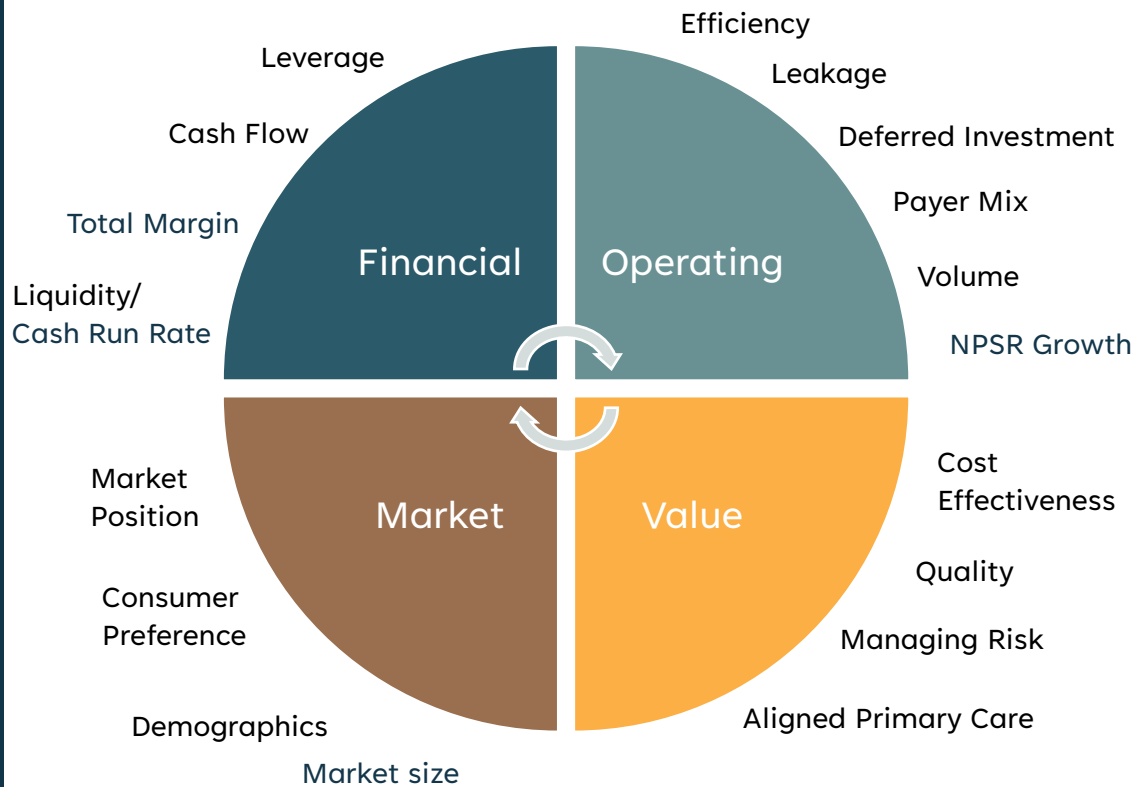
For the period 8 to 4 years prior to closure, the median market share trend was -6.1% CAGR for closed hospitals and -1.2% CAGR for open hospitals





STRATEGIC RISK FRAMEWORK

FACTORS THAT AFFECT STRATEGIC RISK



- The four risk domains depicted to the left describe the major sources of strategic risk in today’s environment
- Poor performance in one domain will have collateral or “spillover” effects on one or more of the other domains
- Key trends within each risk category should be monitored annually, and long-term trends should be quantified. Over time, the cumulative impacts can be very significant.

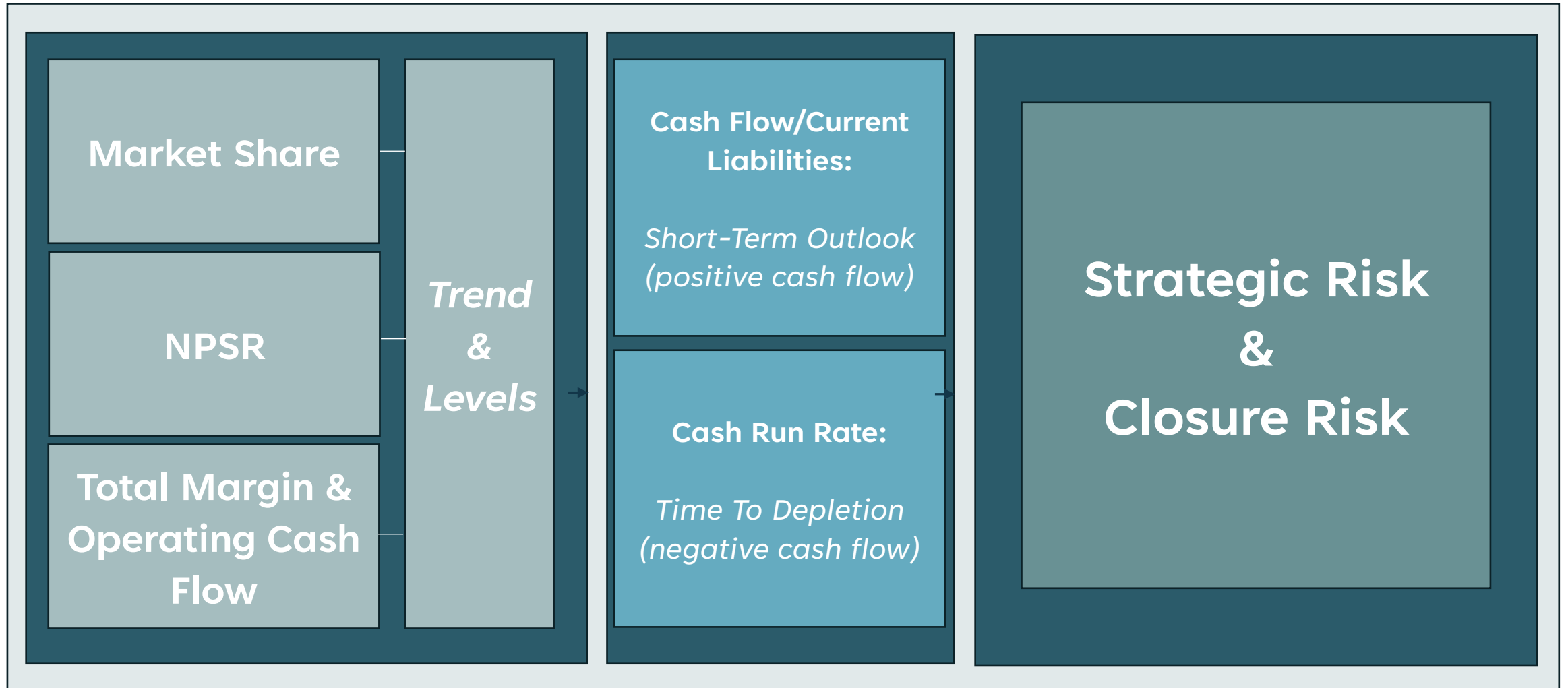
Boards may not appreciate the cumulative effects of changes in risk factors that can take place over several years.



POLLING QUESTION #2



KEY MARKERS FOR STRATEGIC AND CLOSURE RISK



RURAL HOSPITAL RISK STRATIFICATION FINDINGS

22% of rural hospitals are at high risk of hospital closure due to:

- Negative operating and total margins
- Negative cash flow
- Minimal revenue growth
- Declines in market share
- Negatively trending equity

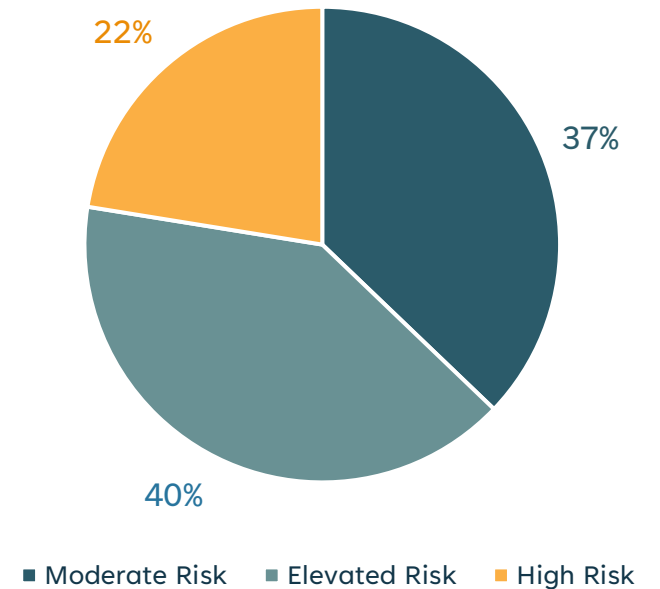
40% of rural hospitals are at elevated risk of hospital closure due to:

- Modest operating and total margins
- Low or slightly negative cash flow
- Moderate revenue growth
- Nominal changes to market share
- Stagnant equity trends

37% of rural hospitals are at moderate risk of hospital closure due to:

- Positive operating and total margins
- Positive cash flow
- Revenue growth trends above 3.1%
- Market share growth
- Equity retention and growth

Rural Hospitals at Strategic Risk of Hospital Closure

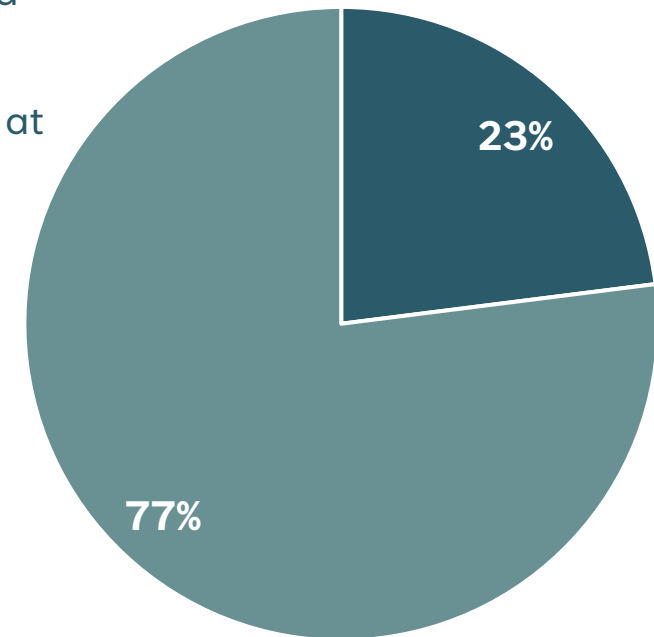


RISK CAN BE MITIGATED: LESSONS LEARNED FROM HOSPITAL TURNAROUND

- Open rural hospitals with less than 300 beds were examined for strategic risk/risk of closure between 2019 and 2024
 - 39.5% of rural hospitals examined had negative operating margins in 2024
- **23% of hospitals were successful in mitigating their risk trajectory between 2019 and 2024³**
- **77% of rural hospitals could not materially reduce their strategic risk/risk of closure during the study period**

Rural Hospitals at Strategic Risk of Hospital Closure

- Successfully Modified Risk
- Remain at Risk



1. Successful risk reduction is based on improved operating margin from 2019 to 2024, indicating lower overall financial and operational distress



POLLING QUESTION #3





RURAL HOSPITALS THAT DE-RISKED

Mahaska Health Partners Case Study

A STRATEGIC DILEMMA



- Mahaska Health Partnership is a County-owned critical access hospital in Southeast Iowa
- Like many rural health systems, Mahaska Health was struggling in 2016/2017
- Mahaska had a choice: Given its challenges, play it safe and pull back as a possible path to sustainability, or be taken over by a health system and lose independence
- Nationally, the norm and expectation were for a rural health system to cut back or close services
- Later, with the onset of the pandemic and significant headwinds facing rural health systems, why not bank the PPP/Covid relief funds?



MAHASKA HEALTH: 2019 TO 2024 SNAPSHOT

• Pre

- Gross Rev: \$110M
- NPSR: \$52M
- Op margin: (7.0)%
- Net assets: \$9.6M
- Market share trend: -3.5%
- On the USDA's "Red List", in need of a turnaround

2019



• Post

- Gross Rev: \$194M
- NPSR: \$95M
- Op margin: 5.6%
- Net assets: \$44.6M
- Invested in growth; did not use PPP/Covid relief funds to temporarily pad the bottom line. Instead, provided a \$5/hour increase to all 200 nurses
- Recruited 84 providers in eight years across primary care and multiple specialties
- Supporting growth; building infrastructure to improve operational performance
- Informatics: optimizing data and analytics; partnering with clinicians to prioritize; deploying multiple AI initiatives in the revenue cycle and provider charting

2024



MAHASKA: KEYS TO ITS STRATEGY



Getting the right people on the bus

Director-level buy-in and leadership
Not everyone was ready and willing; some tough changes were needed



Created a new culture: physician and nurse led

18 medical directors
Nurse leaders participate in the executive team
Admin listens to these leaders, front lines, and those taking care of patients; Physician and nurse leaders identify needed services and improve care planning workflows



Investing in people (greatest asset): building trust

Retained all employees during the pandemic
Filled all 26 open positions with local talent available due to other hospital furloughs
200 nurses got \$5 per hour raises



Focus on top line revenue growth not cutting the way to sustainability



Expanding service lines

Only hospital with employed OB/GYNs in SE Iowa; 11 hospitals around Mahaska closed L&D
Employed a medical oncologist; created own tumor board; seeking accreditation by the Commission on Cancer – will be the only CoC-accredited CAH in Iowa



THE FUEL FOR THE TRANSFORMATION



Biggest transformation: culture and reputation

- Highest employee satisfaction at the 96th percentile; Top 100 out of 4,600 healthcare organizations (Press Ganey)
- Labeled by Press Ganey as “**Not Normal**”
- Awarded Top 100 Critical Access Hospital in 2026 (Chartis)



KEYS TO MAHASKA'S CULTURAL TRANSFORMATION



Reversed organizational chart

Board and leadership at the bottom
Patients and families at the top
Servant-hearted leadership: a cultural change
Mahaska implemented in 2018



Employee goodwill gets amplified in community

Empowering people and talent
Partnering with clinicians who feel valued
Accessible leaders: serving is the art and act of focusing on someone else's interest instead of your own



Creating real alignment with physicians and nurses

Executive team taking notes on changes suggested by physicians and nurses and turning ideas into action.



MAHASKA HEALTH: LOOKING AHEAD

Challenges

- Need to level set: maximize provider investments
- Medicaid Directed Payment Program funds to build financial resilience
- Need to add OR capacity
- Need additional space for clinics and providers
- Medicaid cuts
- Wellmark/BCBS pays less than Medicaid (40% of charges vs. 42% for Medicaid)
- Insurers using AI to increase denials; Mahaska investing in systems to identify and anticipate factors behind denials

Opportunities

- Awarded a grant as a Center of Excellence for OB, cancer, cardiology
- Awarded a grant for new PET CT
- Rounding out OB: 2 midwives; 5 FPOB; 1 OBGYN; 300+ deliveries
- 3 general surgeons
- 2nd medical oncologist being recruited; 1 of 10 surgical oncologists in IA to run tumor board
- 2nd urologist being recruited
- Continued turmoil at regional FP competitor
- Mahaska is a refuge for employees and providers from hospitals cutting services
 - 11 L&D programs have shut in region





KEY TAKEAWAYS

THE KEY LESSONS LEARNED FROM HOSPITAL CLOSURES



OPERATIONAL PERFORMANCE IS ESSENTIAL TO MITIGATING STRATEGIC RISK AND PRESERVING STRATEGIC OPTIONS



TIME IS NEVER A NEUTRAL FACTOR; TWO YEARS IS NEEDED TO EXECUTE A TURN AROUND



KNOW RISK PROFILE; RISK MARKERS FOR CLOSURE ARE EVIDENT 4-5 YEARS PRIOR TO CLOSURE



THERE ARE NO RISK-FREE STRATEGIC OPTIONS; SOUND OPERATING RESULTS ARE ESSENTIAL



EARLY ACTION SAVES HOSPITALS; THE SOONER YOU ALTER COURSE, THE LESS DRASTIC THE COURSE CORRECTION REQUIRED



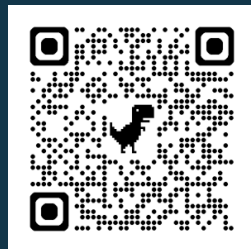


COMMITTED TO INCREASING THE IMPACT OF RURAL AND COMMUNITY HEALTHCARE.

Our team of rural and community healthcare experts support the leadership of hospitals, health systems with a rural footprint, and the groups and clinics that form an essential care network across the 97% of the US that is defined as rural.



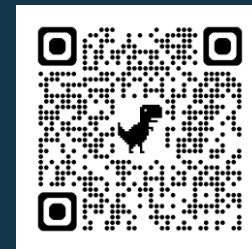
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BIBLIOGRAPHY: NORTH CAROLINA RURAL HEALTH RESEARCH PROGRAM

Details of the UNC rural hospital research can be found in the following publications at www.shepscenter.unc.edu/programs-projects/rural-health:

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- *Thomas SR, Pink GH, Reiter KL. Geographic Variation in the 2019 Risk of Financial Distress among Rural Hospitals (April 2019). FB 152*
- *Richman ED, Pink GH. Characteristics of Communities Served by Hospitals at High Risk of Financial Distress (December 2017). FB 141*
- *GM Holmes, BG Kaufman, GH Pink. Predicting Financial Distress in Rural Hospitals. Journal of Rural Health, Summer 2017;33(3):239-249*
- *Kaufman BG, Randolph R, Pink G, Holmes M. Trends in Risk of Financial Distress among Rural Hospitals (October 2016). FB 133*
- *Kaufman B, Pink G, Holmes M. Prediction of Financial Distress among Rural Hospitals (January 2016). FB 126*

