STROUDWATER

RURAL HOSPITAL CLOSURE AND STRATEGIC RISK: WHAT WE CAN LEARN FROM INDUSTRY EXPERIENCE 2010–2024

MEET THE SPEAKERS

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Stroudwater is a leading national healthcare consulting firm specializing in mission-critical strategic, operational, and financial opportunities for healthcare leaders' most pressing challenges

ACKNOWLEDGEMENT

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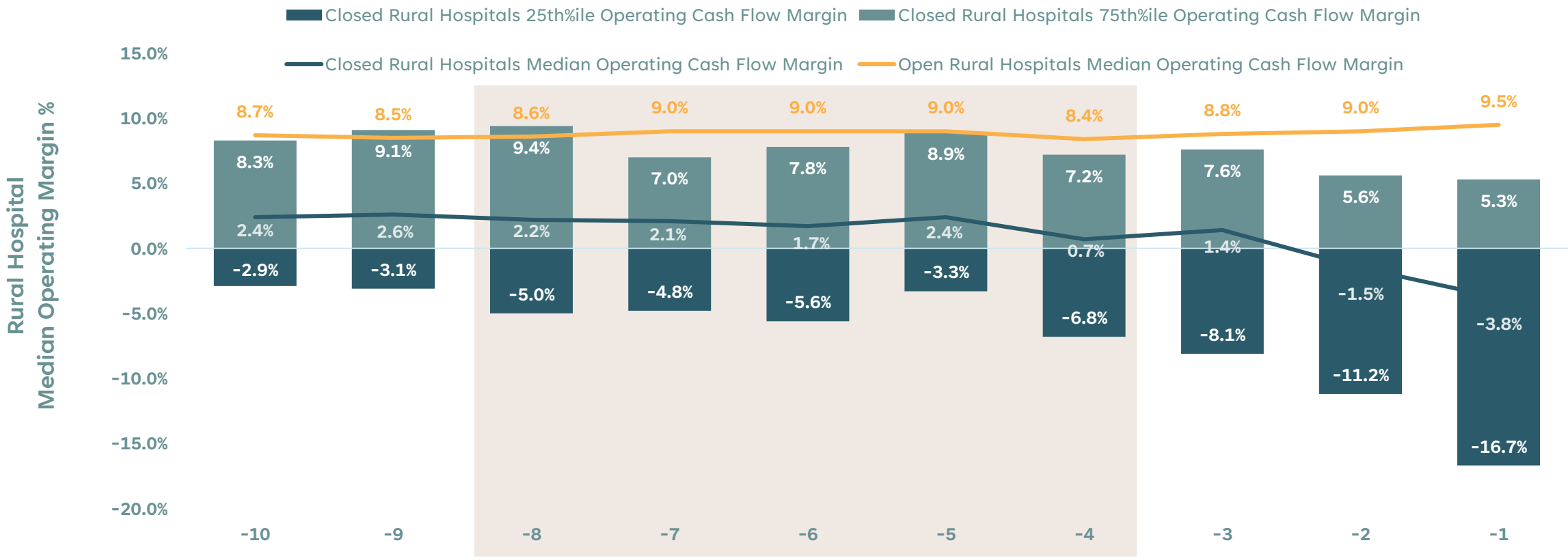
- A bibliography is attached in an appendix to this slide deck

NC RHRP

NC Rural Health Research Program

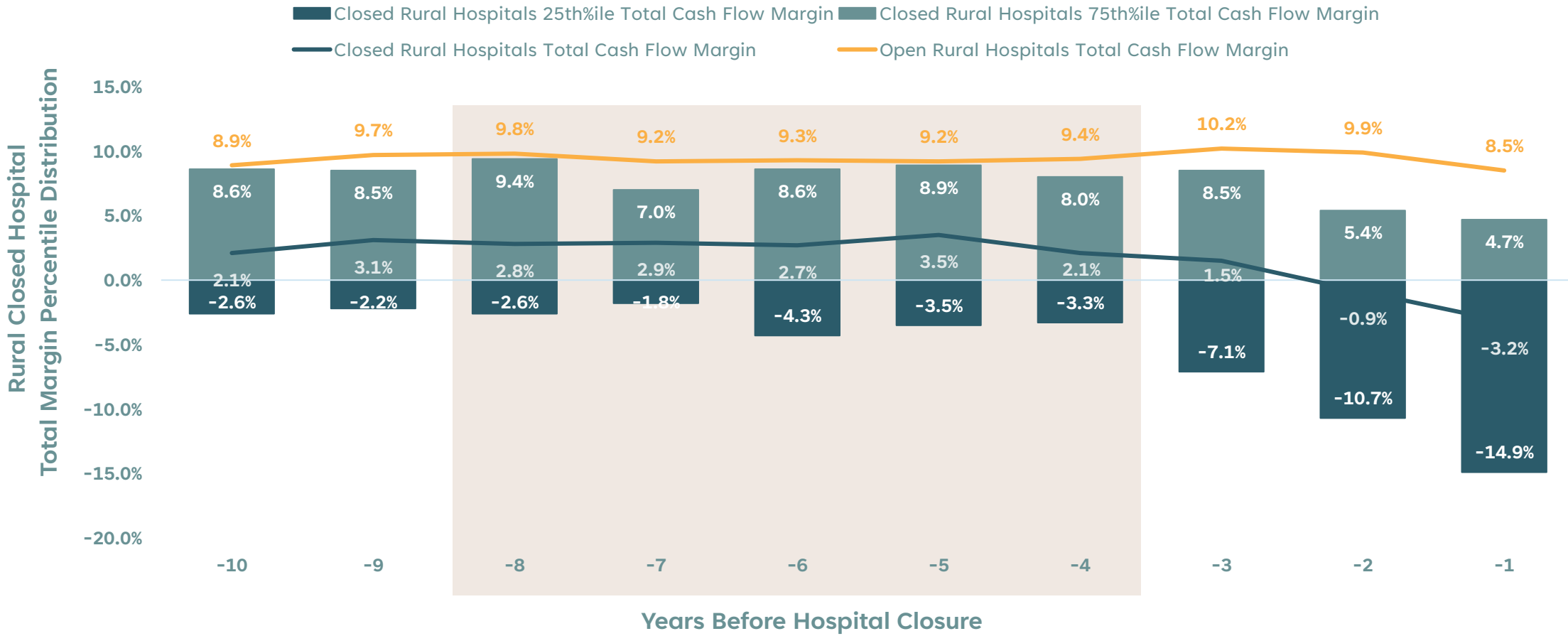
RURAL HOSPITAL **OPERATING CASH FLOW MARGIN** CLOSED VS. OPEN HOSPITALS

- **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%**



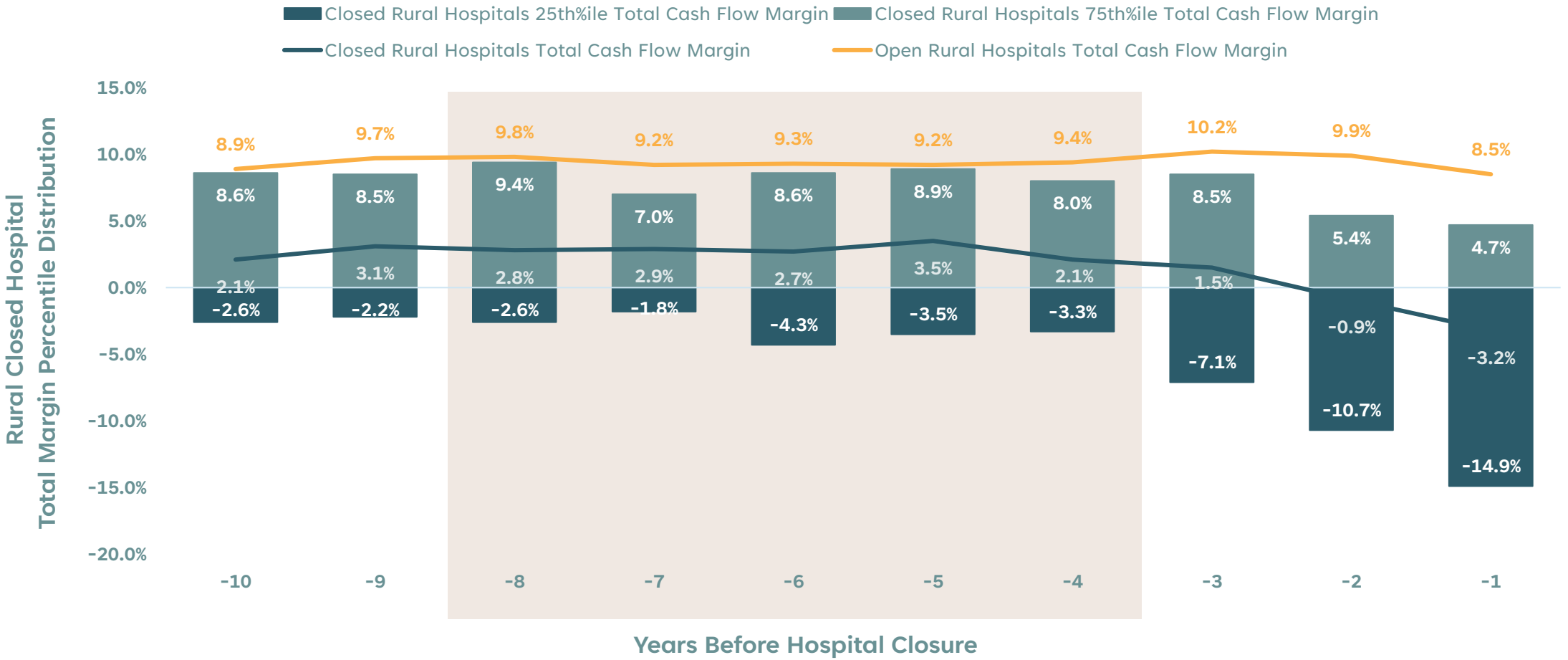
RURAL HOSPITAL **TOTAL CASH FLOW MARGIN** CLOSED VS. OPEN HOSPITALS

- **Closed rural hospitals' median total margin begins an accelerating decline 4 years prior to closure (-4 in the chart below)**
- CAGR between -8 and -4 years prior to hospital closure is -6% due to offsetting non-operating revenues
- Open rural hospitals' median total cash flow margin runs 5.7 to 11.7 percentage points above the median for closed rural hospitals – this gap begins to grow four years prior to closure (-4 in the chart below)



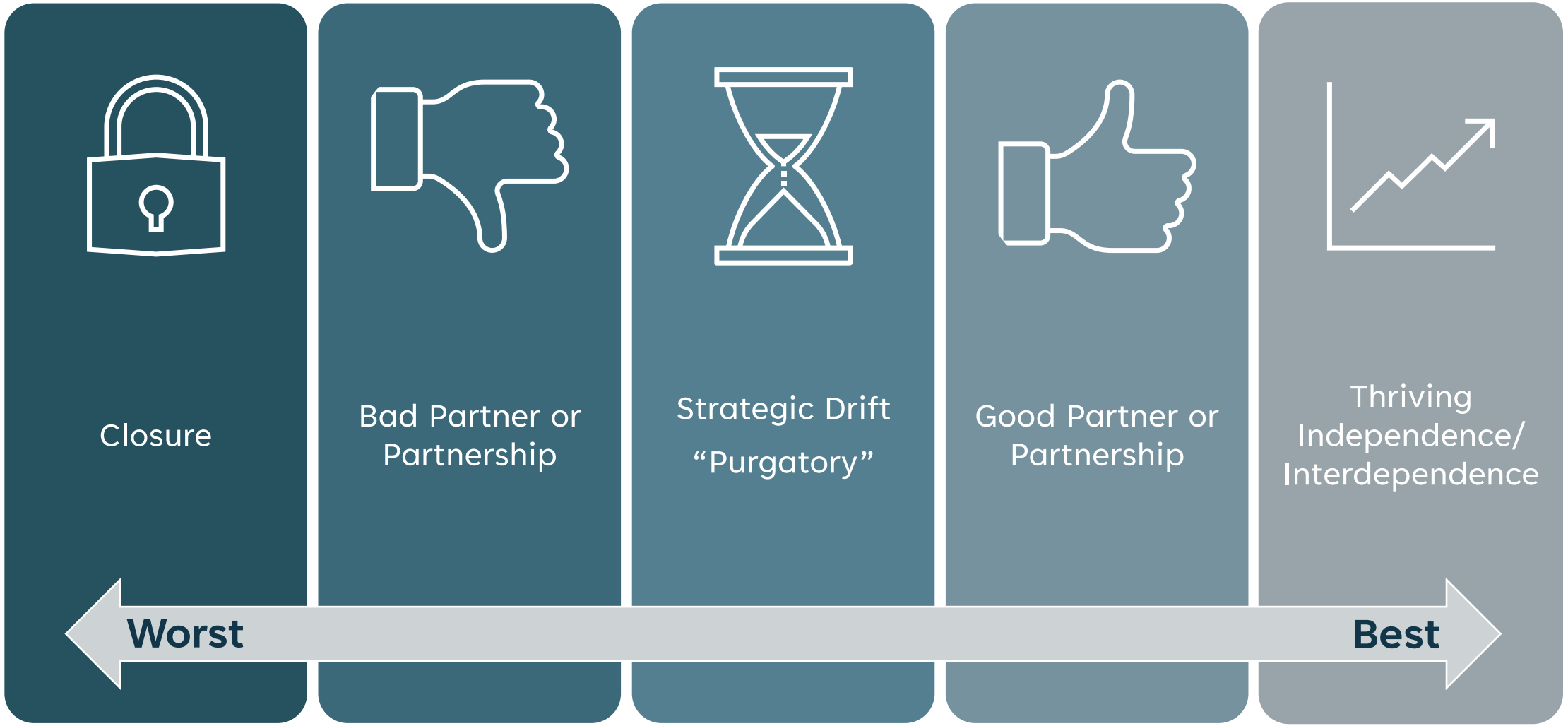
RURAL HOSPITAL TOTAL CASH FLOW MARGIN – **CRITICAL ACTION ZONE** CLOSED VS. OPEN HOSPITALS

- The years between -8 and -4 years prior to rural hospital closure become a critical time for taking action 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**



STRATEGIC CONTEXT

COMMON OUTCOMES FOR RURAL HOSPITALS

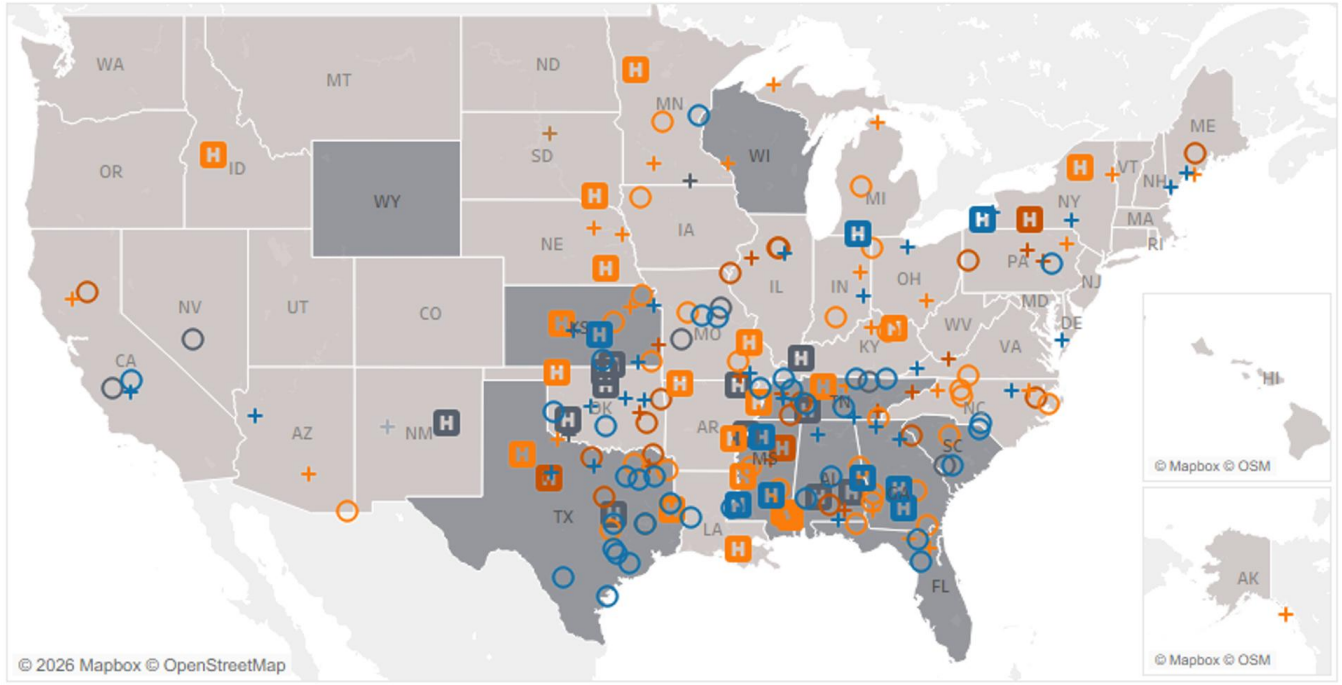


80%+/- of hospitals are within these three options

RURAL HOSPITAL CLOSURES SINCE 2010

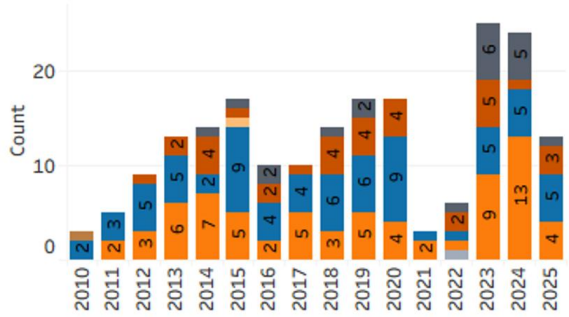
200 Closed or Converted Rural Hospitals

There have been 200 Rural Hospital closures or conversions since 2010 and 243 since 2005, these numbers include **forty-three (43) REH Conversions since 2023**



Year	Hospital Name
2025	REH- Westfield Memorial Hospital-NY
	REH- Landmann-Jungman Memorial Hospit..
	Glenn Medical Center-CA
	Stilwell Memorial Hospital-OK
	REH- Fleming County Hospital-KY
	REH- Smith County Emergency Hospital-MS
	Northern Light Inland Hospital-ME
	Lawrence Medical Center-AL
	Mid Coast Medical Center - Trinity-TX
	REH- Ira Davenport Memorial Hospital-NY
	REH- J Paul Jones Hospital-AL

ST	Count
TX	27
TN	17
OK	13
KS	12
AL	11
MO	11
MS	11
GA	10
NC	8
NY	6
AR	5
CA	5
FL	5
KY	5
MN	5
PA	5
IL	4
ME	4
MI	4
SC	4
AZ	3
IN	3
NE	3
OH	3
IA	2
LA	2
NM	2
SD	2
VA	2
AK	1
ID	1
MD	1
NV	1
WI	1
WV	1



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					1		3
2011	3	2						5
2012	5	3	1					9
2013	5	6	2					13
2014	2	7	4	1				14
2015	9	5	1	1			1	17
2016	4	2	2	2				10
2017	4	5	1					10
2018	6	3	4	1				14
2019	6	5	4	2				17
2020	9	4	4					17
2021	1	2						3
2022	1	1	2	1	1			6
2023	5	9	5	6				25
2024	5	13	1	5				24
2025	5	4	3	1				13
Total	72	71	34	20	1	1	1	200

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
- REH
- Complete Closure
- Convert to Other

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

Updated:1/7/2026

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

STROUDWATER

KEY IDENTIFIED RISK FACTORS

TOP LINE REVENUE & GROWTH

OPERATING PERFORMANCE– MARGIN & CASH FLOW

LIQUIDITY

FUND BALANCE

MARKET POSITION & MARKET SHARE

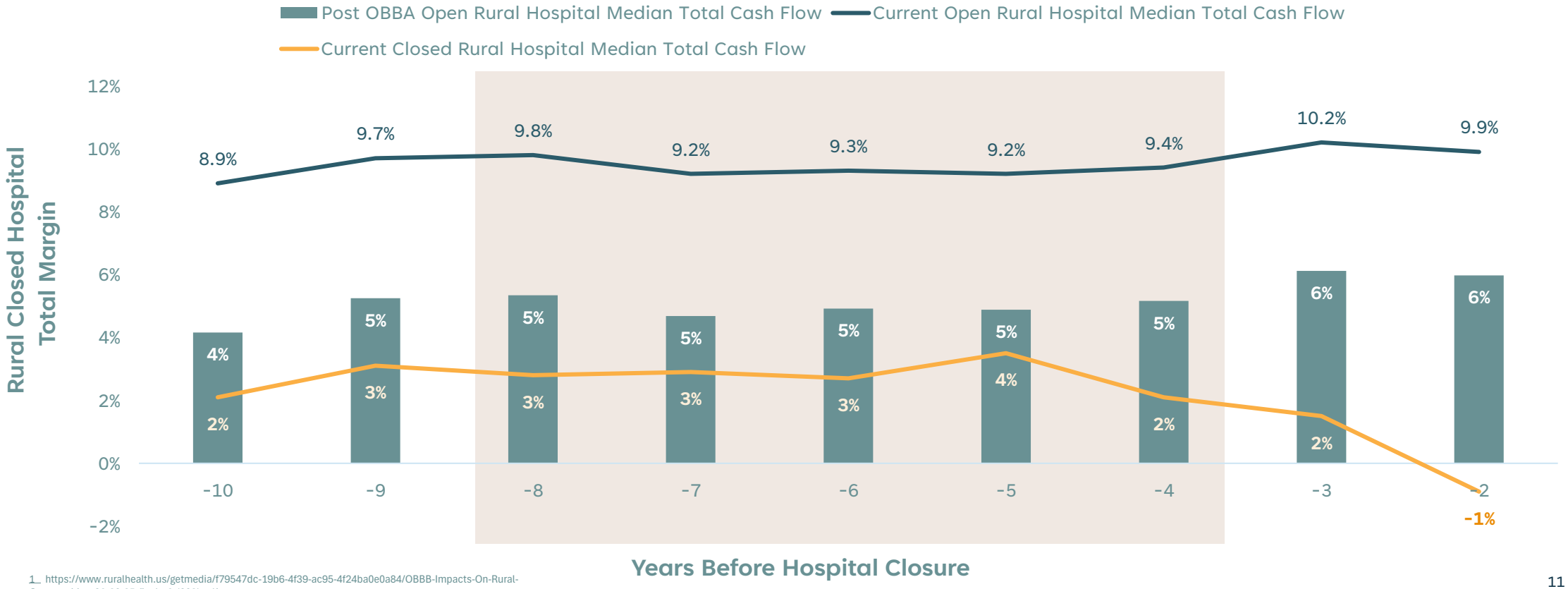
MARKET

POPULATION, MHHI, POVERTY RATE

HOSPITAL CHARACTERISTICS– CAH VS. PPS

RURAL HOSPITAL TOTAL CASH FLOW MARGIN – **IMPACT OF OBBBA** CLOSED VS. OPEN HOSPITALS

- **Many rural hospitals operate on very thin, if not negative, margins, Medicaid restructuring included in the One Big Beautiful Bill Act (OBBBA) will further erode hospital's ability to maintain services and remain open**
- On average, rural hospitals are slated to:
  - Lose 21 cents out of every dollar they receive in Medicaid funding[1]
  - See an increase in charity care and bad debt
- **Rural hospitals may see their total cash flow margins cut nearly in half creating significant financial pressure in rural states, where many hospitals are already at risk of closure**



1_ https://www.ruralhealth.us/getmedia/f79547dc-19b6-4f39-ac95-4f24ba0e0a84/OBBB-Impacts-On-Rural-Communities_06-20-25-final_v3-(002).pdf

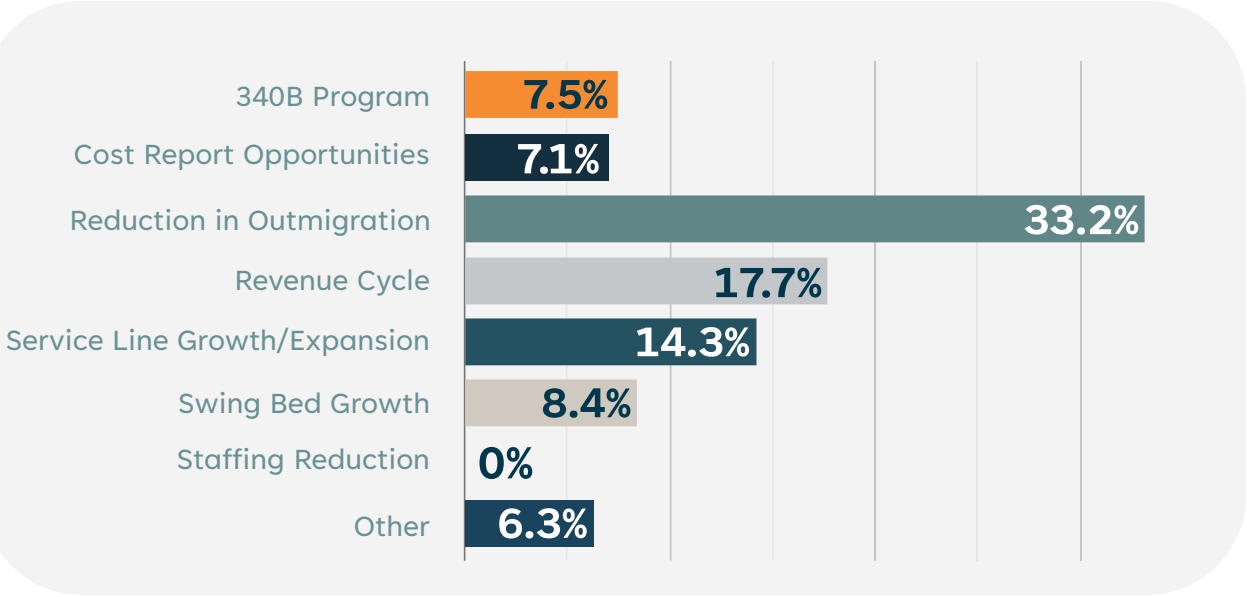
RISK MITIGATION VIA IMPROVED PERFORMANCE

- 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

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%

- These engagements spanned an array of functional areas, with the average share of total improvement realized broken out as follows:



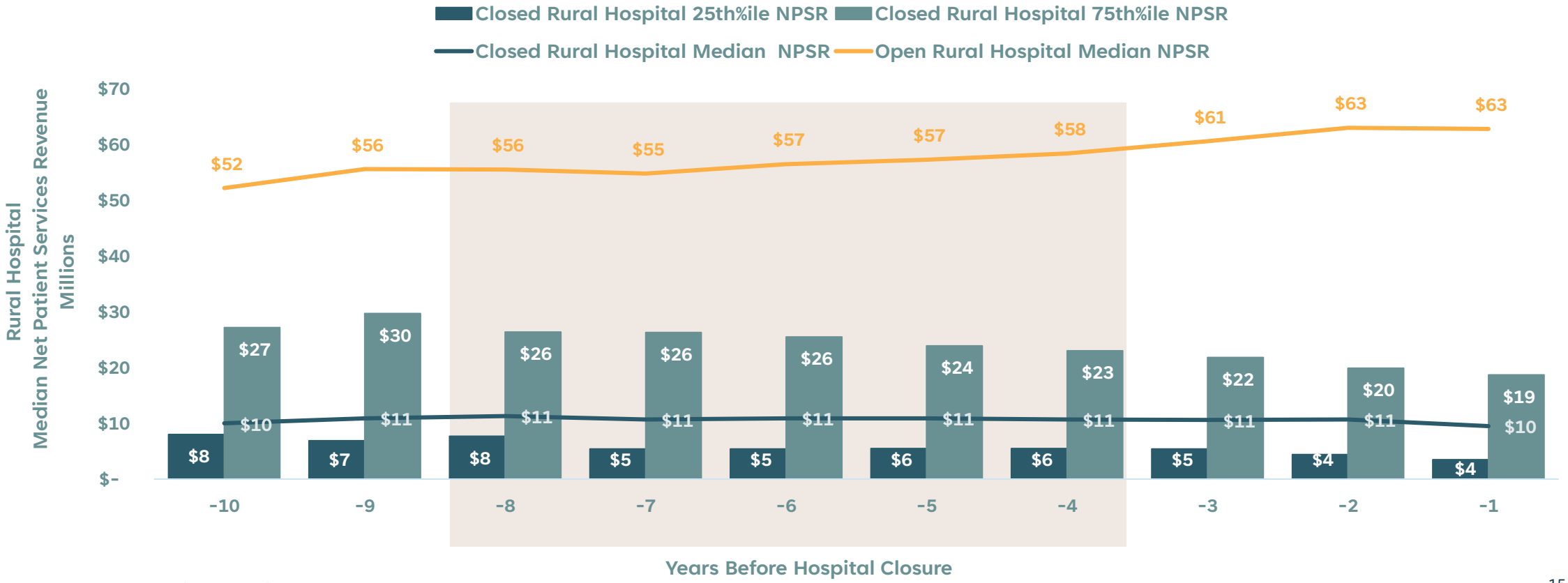
POLLING QUESTION #1

GROWTH TRAJECTORY OVERVIEW

Open vs. Closed Hospitals

RURAL HOSPITAL **NET PATIENT SERVICE REVENUE** CLOSED VS. OPEN HOSPITALS

- Revenue growth is an important component of improving operating results and reducing the overall risk of hospital closure
- Closed rural hospitals have negative net patient service revenue (NPSR) growth in the period between 8 and 4 years prior to closure (as highlighted in the chart below years -8 to -4)
  - A negative 8% CAGR for the 25th%ile NPSR between years -8 and -4 (8 to 4 years prior to closure);
  - A negative 3% CAGR for the 75th%ile NPSR between years -8 and -4 (8 to 4 years prior to closure);
  - A negative 1% CAGR for the median NPSR between years -8 to -4 (8 to 4 years prior to closure)
- Median NPSR for open rural hospitals has a 2% CAGR

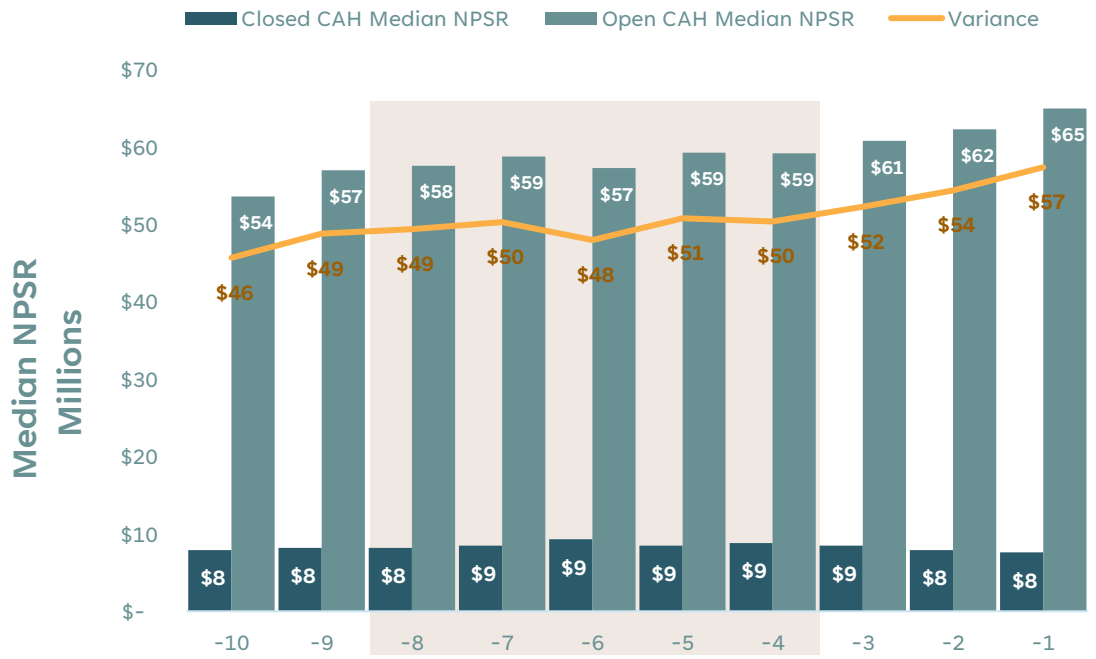


NPSR = Net Patient Service Revenue

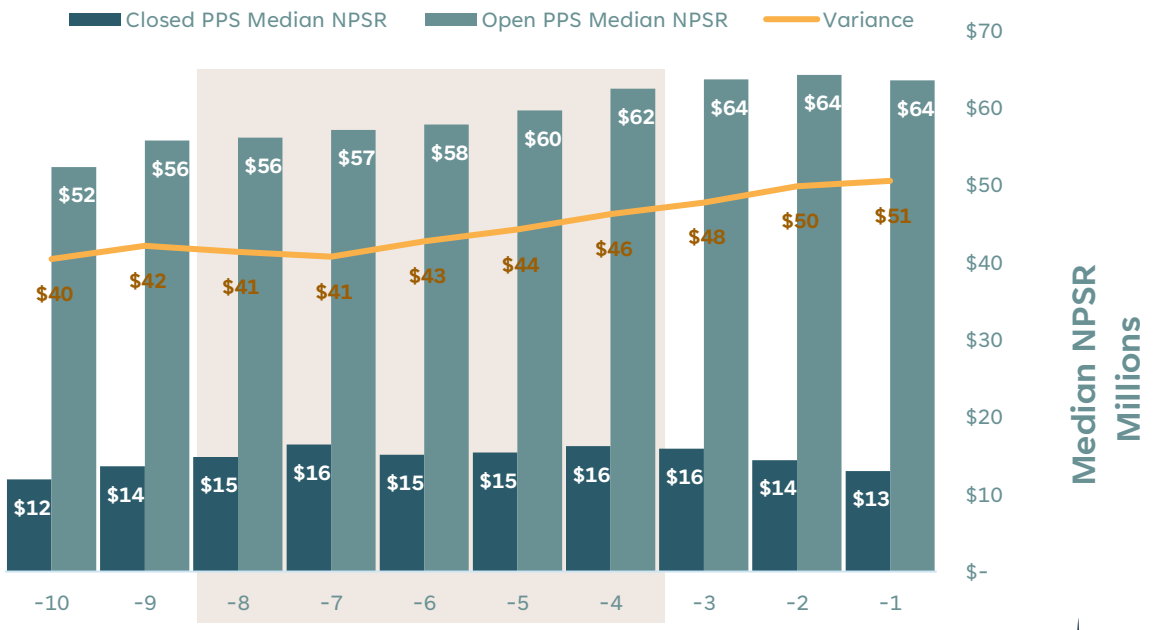
RURAL HOSPITAL **NET PATIENT SERVICE REVENUE**
CAH & PPS HOSPITALS; CLOSED VS. OPEN HOSPITALS

- **Rural closed hospital median NPSR CAGR declined by 1% for CAHs and increased by 1% for PPS hospitals annually during the critical action zone (-4 to -8 years prior to closure), signifying the importance of revenue growth to reducing the risk of hospital closure for CAH and PPS hospitals alike**
- Rural open hospital median NPSR grew 2% annually for both CAH and PPS hospitals
- Median NPSR of closed CAH hospitals is notably lower than that of closed PPS Hospitals, indicative of minimal financial flexibility
- Open hospital Net Patient Service Revenue (NPSR) is similar for CAH and PPS hospitals, with closed CAH hospitals generating less NPSR than closed PPS hospitals

Rural Critical Access Hospitals Median NPSR



Rural PPS Hospitals Median NPSR



Years Before Hospital Closure

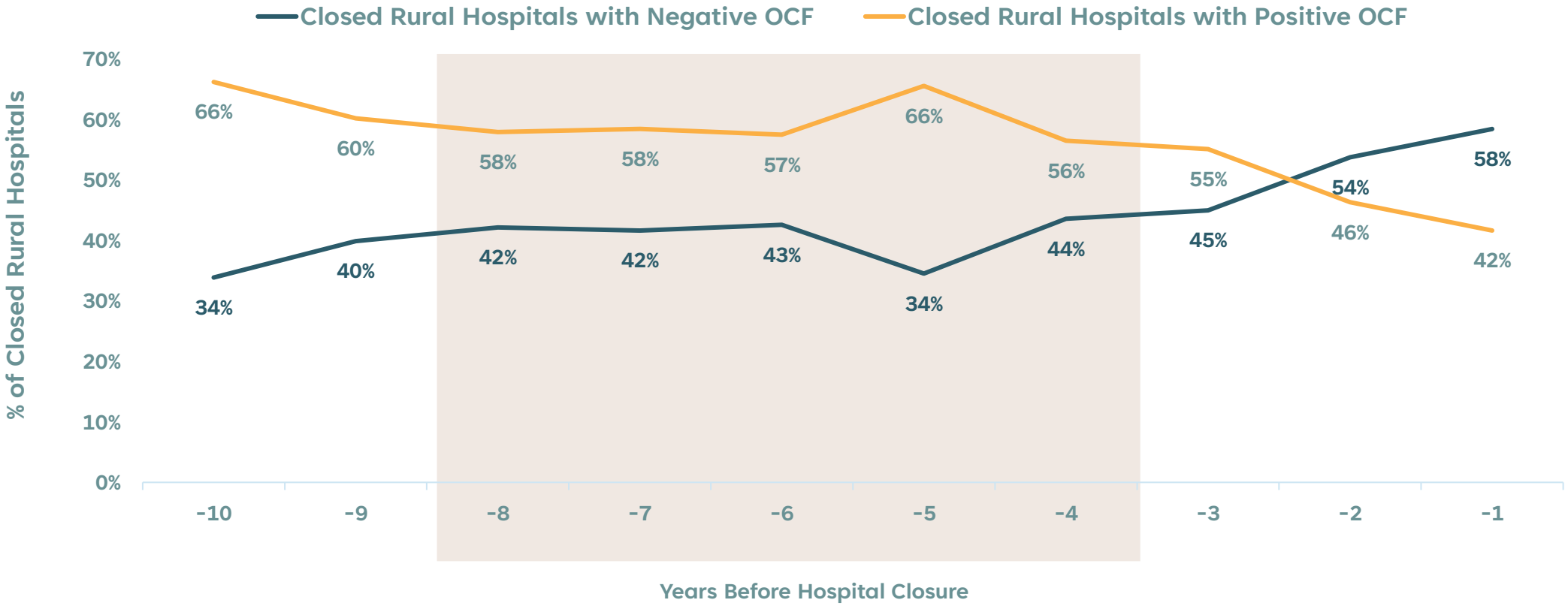
NPSR = Net Patient Service Revenue

FINANCIAL TRAJECTORY OVERVIEW

Open vs. Closed Hospitals

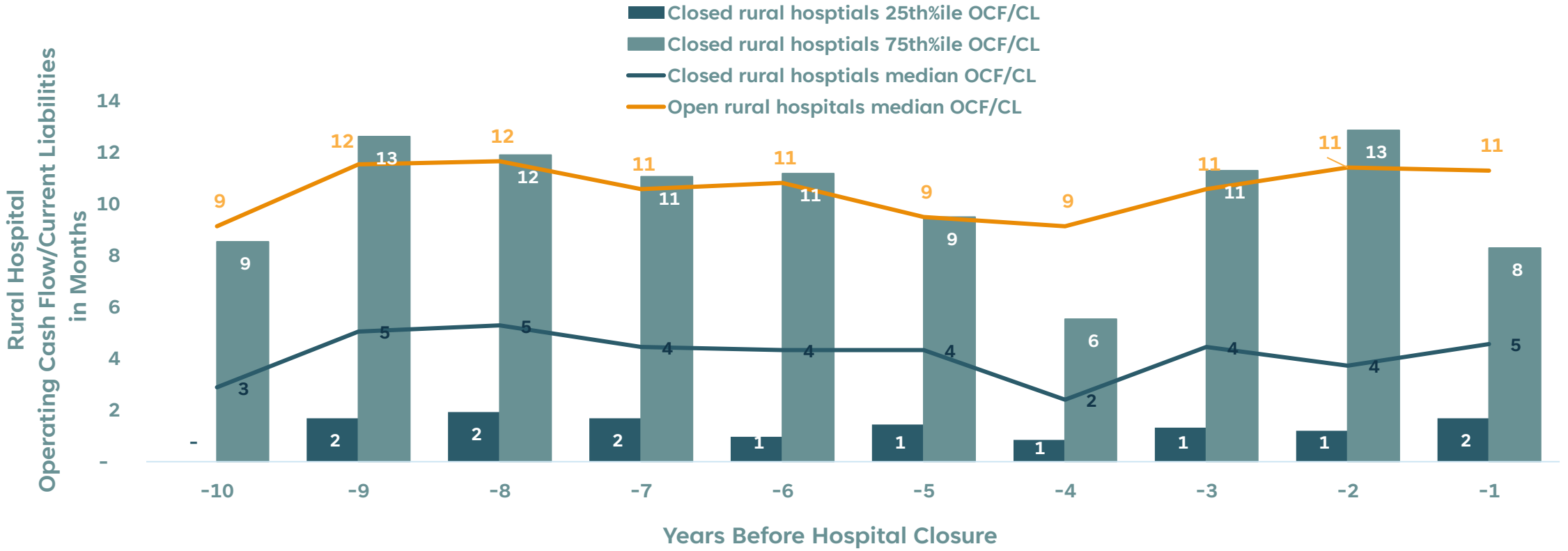
RURAL HOSPITAL **POSITIVE VS NEGATIVE OPERATING CASH FLOW (OCF)** CLOSED RURAL HOSPITALS

- More than half of closed rural hospitals operate with positive operating cash flow during the critical action zone 8 to 4 years prior to closure
- **Adequate cash flow levels are important factors in the risk of rural hospital closure**
- The proportion of closed rural hospitals with positive operating cash flow decreases from 66% to 42% between years -5 to -1
- Closed rural hospitals with positive operating margins declined beginning in year -5 prior to closure



RURAL HOSPITAL **MONTHS OF POSITIVE OPERATING CASH FLOW TO CURRENT LIABILITIES :** CLOSED VS. OPEN RURAL HOSPITALS

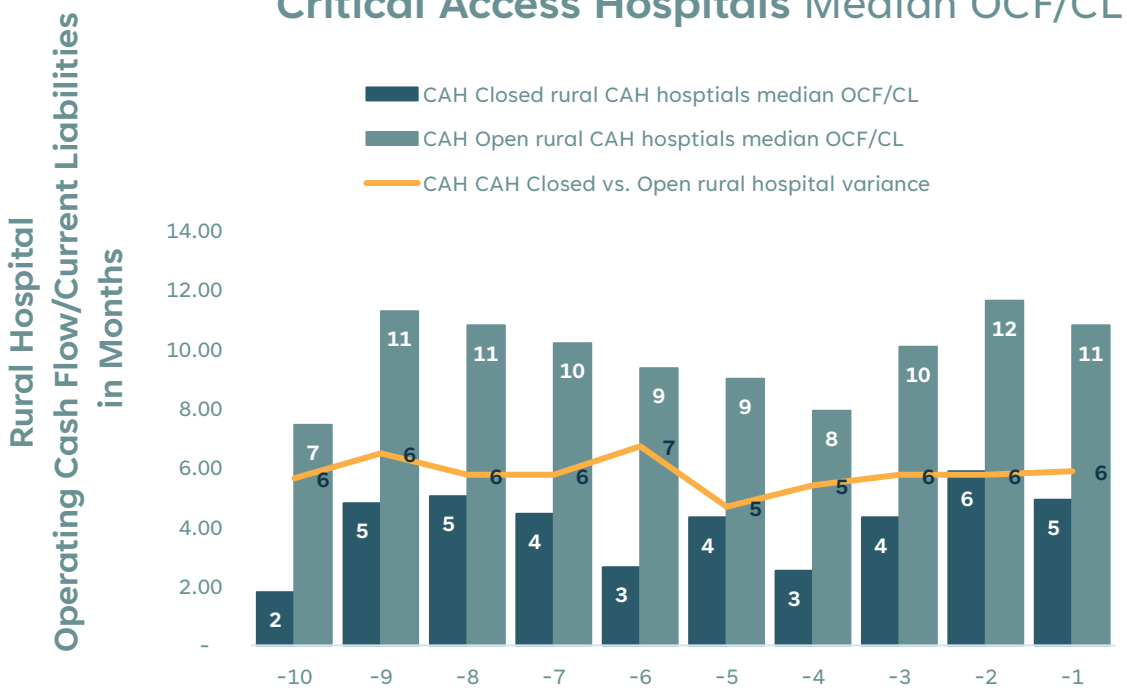
- **Closed hospitals with positive cash flow generated median short-term liability coverage of less than six months, impeding their operational and strategic resilience and capabilities**
- **Open rural hospitals with positive cash flow generated median short-term liability coverage between 9 and 12 months**
  - Operating cash flow to current liabilities (OCF/CL) measures hospitals' short-term financial health and ability to meet their immediate obligations
  - Funding obligations from healthcare operations is fundamentally important to managing working capital, reducing reliance on borrowing, and building balance sheet strength over time



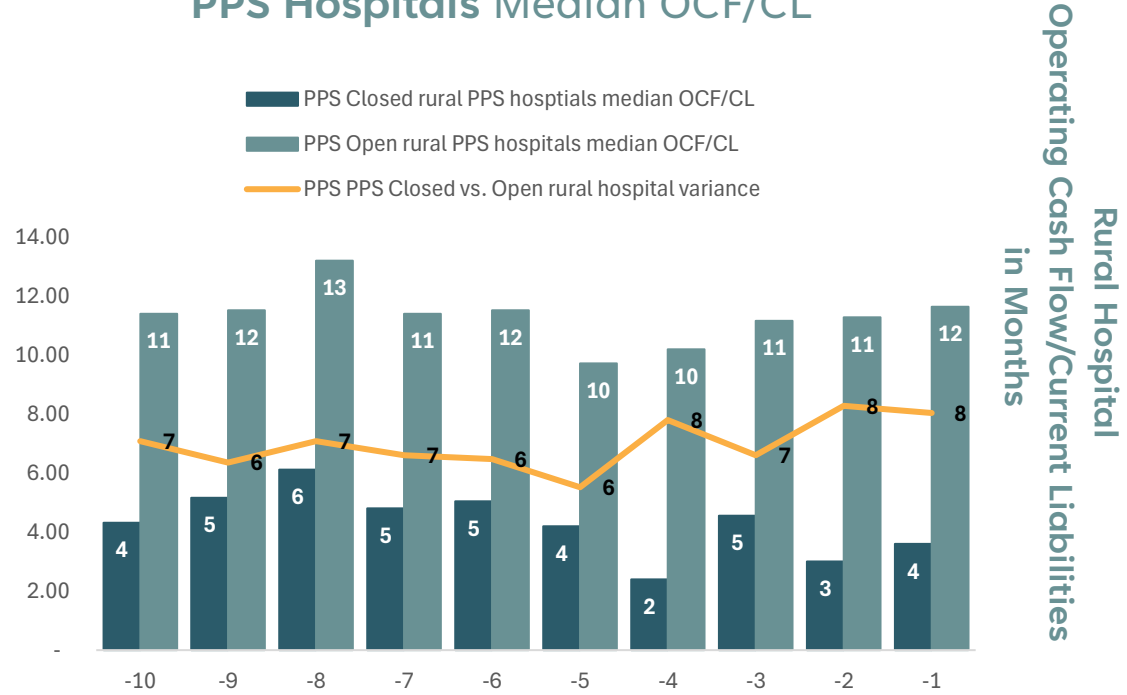
RURAL HOSPITAL **POSITIVE OPERATING CASH FLOW TO CURRENT LIABILITIES** CAH & PPS HOSPITALS; OPEN VS. CLOSED HOSPITALS

- **The median operating cash flow to current liabilities (OCF/CL) for closed CAHs and PPS hospitals is well below the median for open CAHs and PPS hospitals**
- OCF/CL measures hospitals' ability to meet their immediate obligations and also demonstrates a more defined and often tighter cash flow model for CAH hospitals due to the cost-based reimbursement model
- PPS hospitals show a larger variance between open and closed hospital median OCF/CL due to their non-cost-based reimbursement model along with an expected higher current liabilities obligation related to an inherent size difference for PPS as compared to CAH hospitals with 25 or less inpatient beds
- **The ability to manage working capital over time remain important for CAH and PPS hospitals alike**

Critical Access Hospitals Median OCF/CL



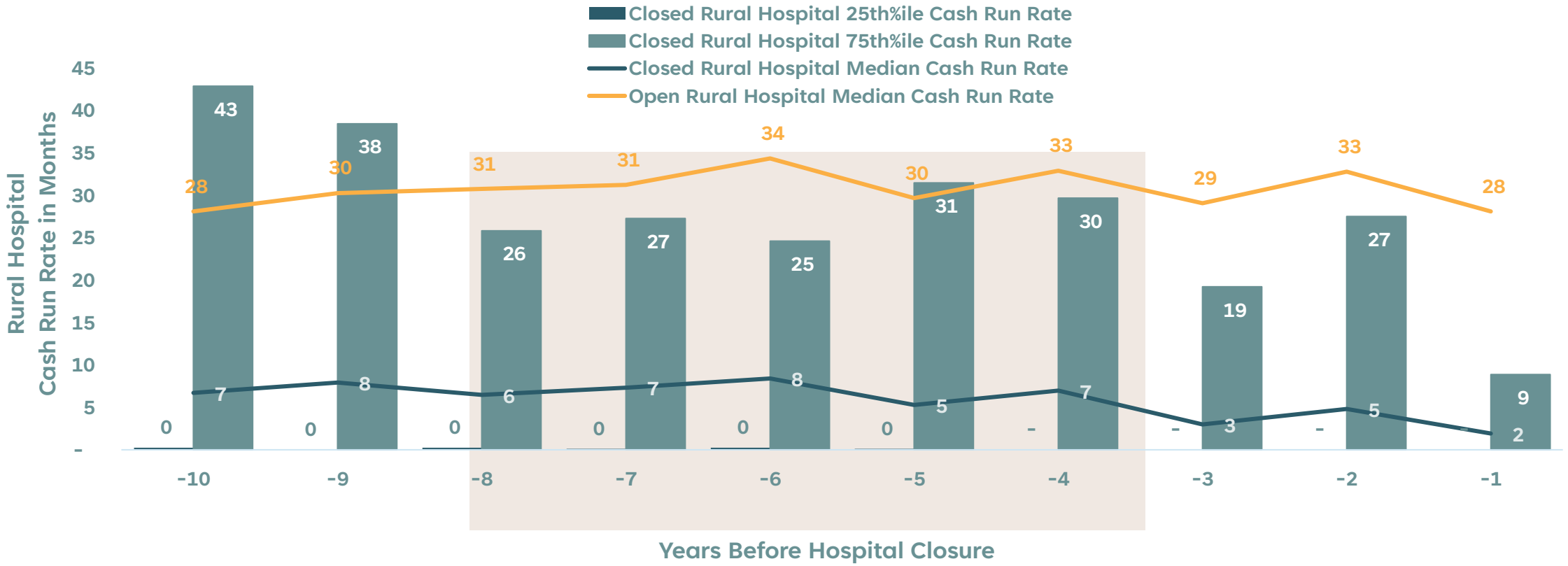
PPS Hospitals Median OCF/CL



Years Before Hospital Closure

RURAL HOSPITAL **TOTAL CASH RUN RATE** IN MONTHS OPEN VS. CLOSED HOSPITALS

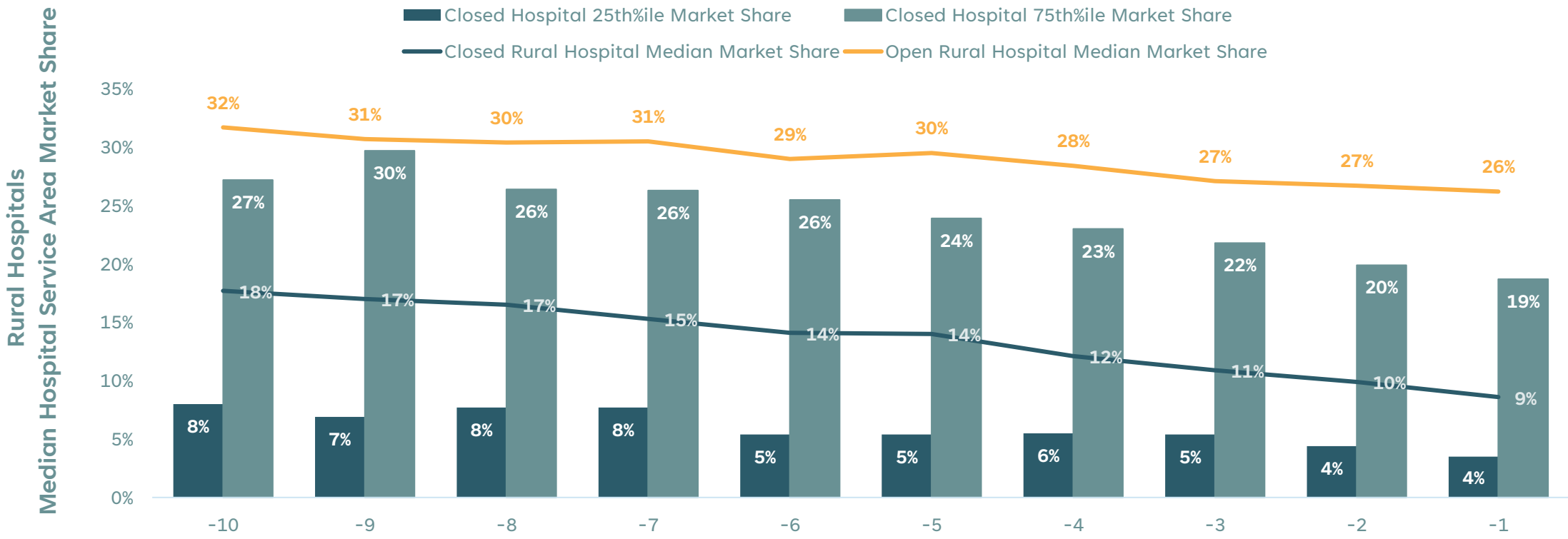
- For hospitals with negative cash flows, understanding **how quickly existing cash and reserves will be depleted** helps to quantify how the combination of poor operating results and a lack of liquidity undermine the organization's viability
  - Total cash run rate refers to the months a hospital can 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, **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, **median total cash run rate is greater than 2.5 years in the years -8 to -4**



MARKET CHARACTERISTICS

RURAL HOSPITAL **MARKET SHARE** TRENDS: CLOSED VS. OPEN HOSPITALS

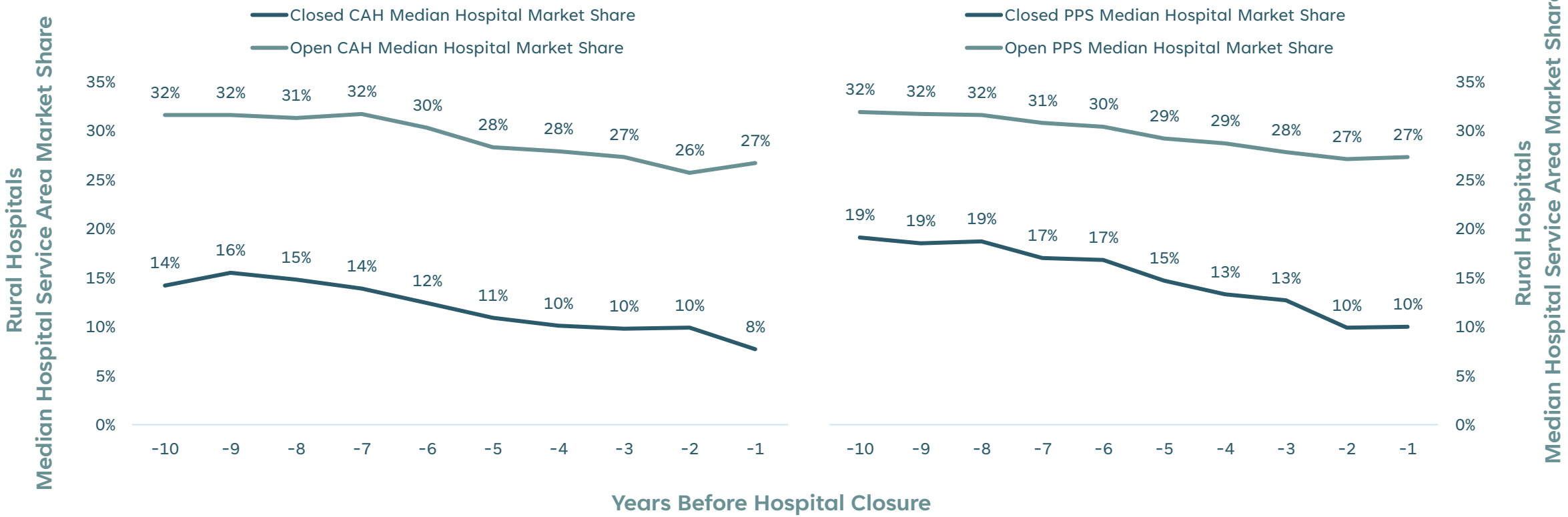
- **Market retention and growth reduce a hospital's risk of closure**
- The closed rural hospital median market share CAGR decreased by 7% annually over the 10 years prior to hospital closure
- The closed rural hospital median market share is consistently lower than the open rural hospital median market share by 14% to 17%
- The median market share of open rural hospitals CAGR declined by 2% annually



Stroudwater defined a hospital's service area for market share purposes by selecting contiguous ZIP Codes from which at least 75% of the hospital's Medicare cases originated, three years prior to closure for closed hospitals and during calendar year 2024 for currently open hospitals.

RURAL HOSPITAL **MARKET SHARE TREND**
CAH & PPS HOSPITALS; CLOSED VS. OPEN HOSPITALS

- **Open rural CAH and PPS hospitals maintain median market share above 25%**
- Open rural CAH and PPS hospitals' median market shares are at similar levels and decline similarly over time
- The median market share of closed rural CAHs declines less than that of closed rural PPS hospitals 10 years prior to closure
- **Median market share for closed PPS and CAHs is lower and decreasing faster than median market share for open rural hospitals**

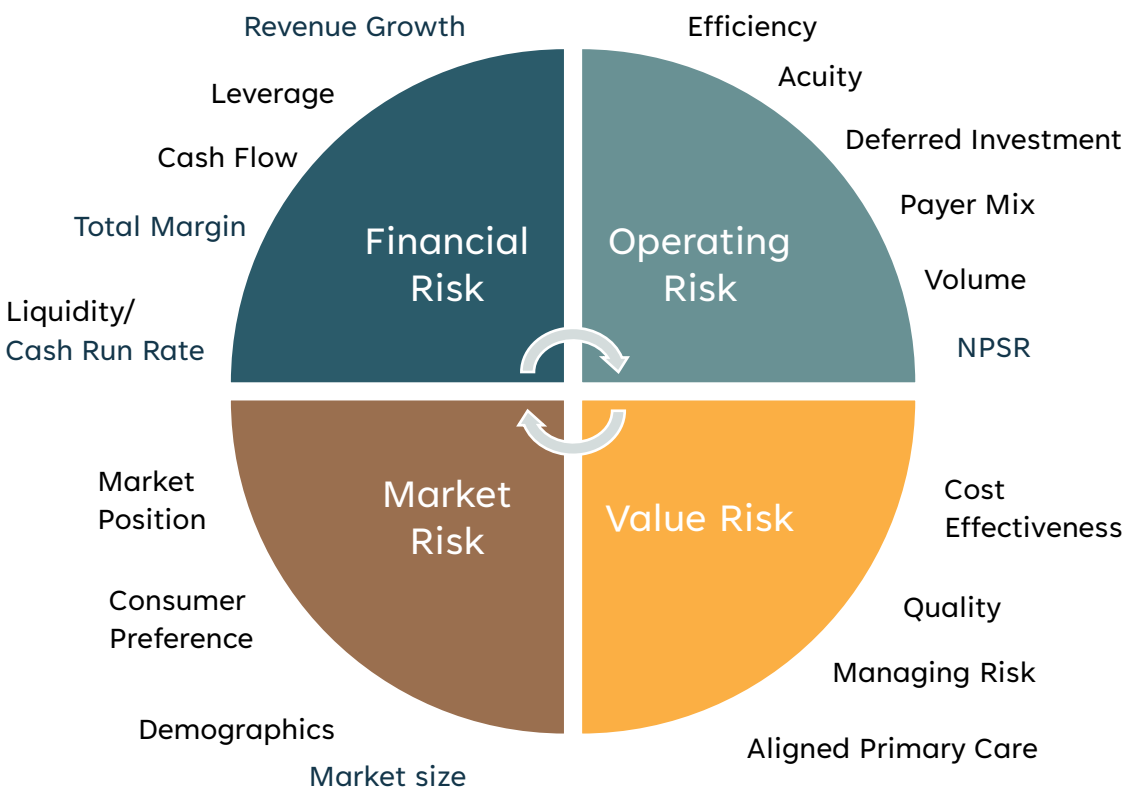


Stroudwater defined a hospital's service area for market share purposes by selecting contiguous ZIP Codes from which at least 75% of the hospital's Medicare cases originated, three years prior to closure for closed hospitals and during calendar year 2024 for currently open hospitals.

POLLING QUESTION #2

STRATEGIC RISK ANALYSIS

FACTORS THAT AFFECT RISK

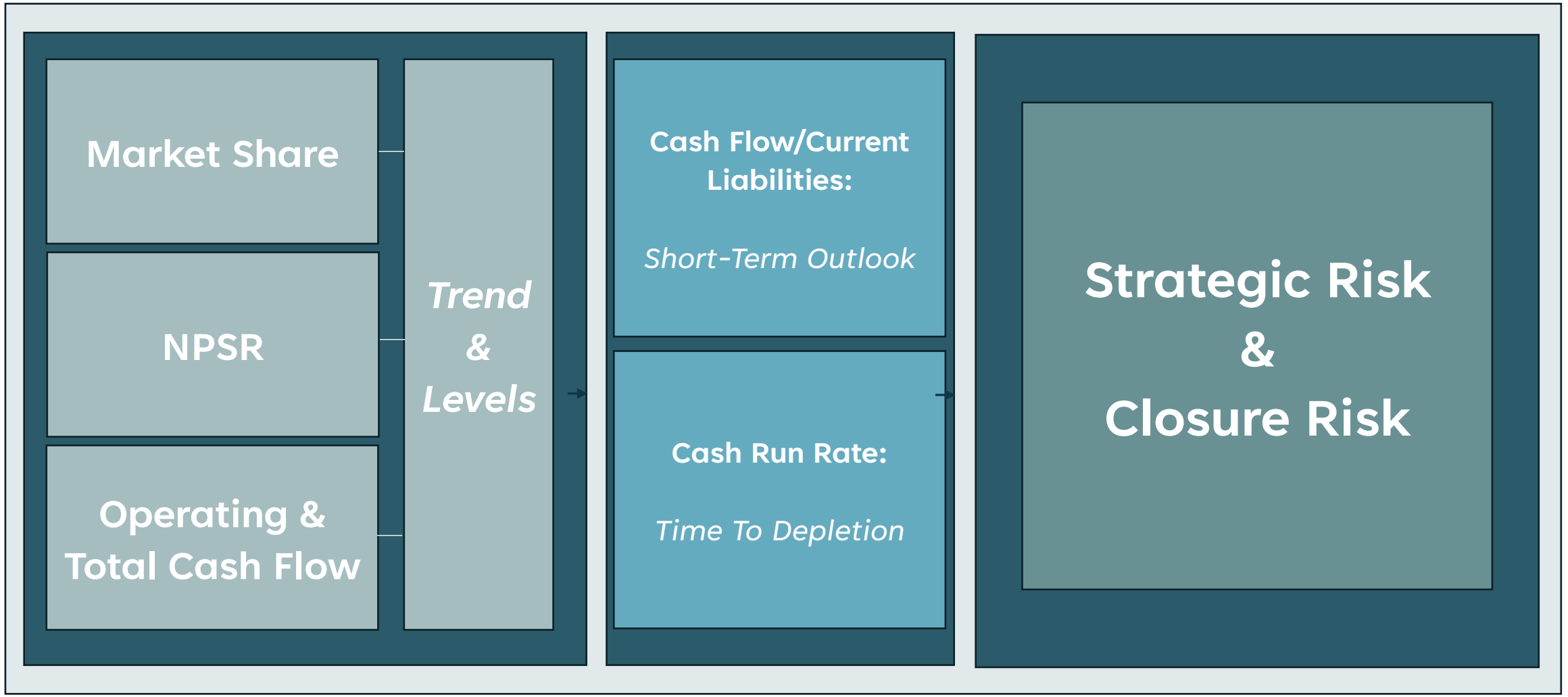


- The four risk domains depicted to the left describe the major sources of strategic risk in today's environment
- Poor performance in one domain will have collateral or "spillover" effects on one or more of the other domains
- Key trends within each risk category should be monitored annually, and long-term 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.

KEY TAKEAWAYS

KEY MARKERS



KEY PERFORMANCE FINDINGS

- Stroudwater identified key **differences in performance indicators** between closed and open rural hospitals
  - Generally, financial challenges became more acute starting four or more years prior to rural hospital closure
    - This “critical action zone”* recognized the importance of taking action before the climb to sustainability becomes too steep
      - **The comparison of open and closed rural hospitals validates the significance of performance trending and benchmarking to reduce the overall risk of hospital closure**

*This critical action zone is between 8 and 4 years prior to closure which is displayed as -8 to -4 years in this presentation

POLLING QUESTION #3

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 YOUR VALUE AND 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

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THANK YOU

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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:

- *Thomas SR, Pink GH, Reiter KL. Trends in Risk of Financial Distress among Rural Hospitals from 2015 to 2019 (April 2019). FB 153*
- *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*

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