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Samantha Ramacher

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Evaluating the Success of the Flex Program in Reaching Vulnerable Rural Hospitals

By

Samantha Ramacher

Ian McCarthy

Adviser

Department of Economics

Ian McCarthy

Adviser

Michelle Lampl

Committee Member

David Howard

Committee Member

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Samantha Ramacher

Ian McCarthy

Adviser

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Abstract

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Rural hospitals in the United States are at high risk of closure, and federal funding to support them is limited. The Flex Monitoring Program and accompanying critical access hospital designation is a federal program that aims to support low-volume rural hospitals and prevent them from closing through its cost-based reimbursement and state grants. Evidence supports the Flex Program's success in improving the financial status of those hospitals which receive critical access designation. But the question still remains as to whether the most vulnerable, most financially unstable rural hospitals are receiving critical access designation. Low-volume, rural control hospitals were compared against critical access hospitals, specifically in the years before their designation. A fixed effects linear regression was run on financial indicators such as operating margin and current ratio, using an outcome variable of critical access status. Results indicate that hospitals with lower operating margins, higher current ratios, lower net income, and fewer total operations were more likely to become critical access hospitals. Therefore, the critical access hospital designation is, on average, targeting the most vulnerable rural hospitals. The Flex Program is successfully supporting those hospitals most at risk of closure and proves to be a both effective and efficient policy.

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EVALUATING THE SUCCESS OF THE FLEX PROGRAM IN REACHING VULNERABLE RURAL HOSPITALS

SAMANTHA RAMACHER

APRIL 2025

1 Introduction

The United States has a large population living in rural regions; as of 2020, 66.3 million residents live in Census-defined rural areas, which is approximately 20% of the total population. The United States has a large population living in rural regions; as of 2020, 66.3 million residents live in Census-defined rural areas, which is approximately 20% of the total population ([Sanders and Cromartie](#)). While the overall rural population is declining, the age group over 65 is increasing as more older individuals move to rural areas to retire, and younger individuals move out of rural areas for work ([Miller and Vasani](#)). These rural populations have especially poor health outcomes when compared to their urban counterparts. Rural residents are 8.6% more likely than urban residents to have diabetes and 38.8% more likely to have coronary heart disease ([O'Connor and Wellenius](#)). They have the lowest life expectancy of any region in the US ([Miller and Vasani](#)). There are many causes for this heightened health

risk. Poverty remains a pressing issue that has overall poor implications for rural health. Behavioral risk factors, such as lower activity levels, substance use (especially alcohol and tobacco), and poor diet are significantly more common in rural communities than urban communities (O'Connor and Wellenius). The prevalence of poor diet is mainly due to geographic challenges, as rural residents have limited access to fresh food. Urban residents are four times more likely than rural residents to live near a source of fresh food, such as a grocery store (Miller and Vasan). Residents living in food deserts, or areas without fresh food, cannot access the food necessary for maintaining their health and are more at risk for disease. These factors, coupled with an increasingly older rural population, generate poor health outcomes and put excessive strain on the rural healthcare system.

Unfortunately, rural healthcare infrastructure is insufficient to support its residents. Rural regions have the lowest hospital density of any region in the US (Haggerty et al.). Since 2005, 195 rural hospitals have closed down and fewer have opened, resulting in a net loss of rural hospitals (for Health Services Research). 413 additional rural hospitals are on the brink of closure due to over 50% of them having negative margins of operation (Topchik et al.). This makes it challenging for residents to reach hospitals in a timely manner, both in times of medical crisis and to access preventative care. Rural areas also lack public transportation systems that can deliver patients to medical facilities in a timely manner (Haggerty et al.), (Hunsaker and Kantayya). Rural residents are less likely to be able to transport themselves due to having more poverty and infirmity than their urban counterparts (Hunsaker and Kantayya). Even when residents are able to reach hospitals, they may struggle to receive care due to physician shortages. Over three quarters of rural regions in the US have a shortage of healthcare professionals, and physicians are the primary source of this shortage (Goodwin and Tobler). In the US south in 2014, urban areas had 370 physicians per 100,000 residents, while rural areas had only 68 per 100,000 residents (Meit et al.). More doctors are leaving the rural healthcare workforce than entering it, and as a result, there is an increasingly significant rural physician shortage. Current rural physicians are aging out of their work, and new physicians are less inclined to work in rural healthcare due to longer

work hours and reduced compensation ([Hunsaker and Kantayya](#)). These combined factors make it challenging for rural residents to access healthcare when they need it.

Rural health systems are in desperate need of support. Public health policymakers are aware of this issue, and have developed measures to protect and expand rural healthcare infrastructure. But federal funding is limited, and the burden of rural health is massive. Every amount of funding invested into rural healthcare infrastructure needs to be optimized in order to have the greatest impact on rural health outcomes. Therefore, new rural health measures must be not only effective, but efficient. Effective policy improves hospital financial viability and prevents hospitals from closing at the individual level. Meanwhile, efficient policy has the greatest efficacy while using the least amount of spending and keeping the greatest number of hospitals from closing. Evaluating rural health programs will help rural health policymakers understand whether or not they should continue developing and investing into them, or if they should create new policies. These investigations are crucial for building the most effective rural health network with the given amount of federal funding, in order to generate positive rural health outcomes.

2 Background

One high-impact legislative measure targeting rural healthcare is the Medicare Rural Hospital Flexibility (Flex) program. The Flex program was established by the Balanced Budget Act of 1997 and introduced the critical access hospital (CAH) designation. The CAH designation provides low-volume rural hospitals with financial support to improve their viability and prevent them from closing. The support comes through two separate channels: cost-based federal reimbursement for services and state grants from State Offices of Rural Health (SORHs) ([Dalton et al.](#)). Under cost-based reimbursement, hospitals are compensated for the services they provide to publicly-insured patients based on 101% of their costs. These payments are responsive to costs, unlike payments under the traditional Medicare prospective

payment system (PPS). PPS reimburses a set amount per service that the hospital provides, regardless of how much that service actually costs ([Dalton et al.](#)). Hospitals struggling to keep their costs per procedure down, such as rural hospitals with low patient volume, benefit much more from cost-based reimbursement than PPS. The second channel of support, the grants, are used for developing networks around CAHs, with those hospitals as the center point of the networks.

Hospitals themselves must apply to their SORHs for critical access designation, making the process self-selective. The application is reviewed by the hospital's SORH and then the Center for Medicare Medicaid Services. Hospitals applying for CAH designation must meet a list of criteria including, but not limited to, the following:

- The hospital must be in a non-metro county, or a metro county but in a rural area
- The hospital must be further than 35 miles from any other hospital
- The hospital must have a maximum of 25 inpatient beds, 10 of which can also be used for swing patients
- The hospital must provide emergency services 24 hours a day, 7 days a week
- The hospital must have an average acute inpatient length of stay less than or equal to 96 hours
- The hospital must, at all times, be staffed with a doctor of medicine or osteopathy ([CMS](#)).

Each state was responsible for passing and implementing the Flex program through its newly created SORH. Each SORH established unique requirements for CAH designation, and implemented the Flex program in their respective states independently. As a result, CAH designation was not available to all rural hospitals at the same time, and each state's program has different nuances in their requirements that are not standardized. These nuances

between states lie mainly in the requirements above that define rural areas and distance from other hospitals. 5 states never implemented the Flex program: Connecticut, Delaware, Maryland, New Jersey, and Rhode Island. Therefore, they do not have the CAH designation available. Table 1 below indicates the year that each state implemented the Flex program.

Table 1: Year of Flex Program Implementation by State

State	Year								
AK	2000	IA	2000	MI	1999	NM	2000	TN	2000
AL	2002	ID	1999	MN	2000	NV	2000	TX	1999
AZ	2001	IL	1999	MO	1999	NY	1999	UT	2002
AR	1999	IN	1999	MS	2000	OH	2001	VA	2001
CA	2000	KS	1998	MT	1999	OK	1999	VT	2000
CO	1998	KY	2000	NC	1999	OR	2000	WA	1999
FL	2000	LA	1999	ND	1999	PA	2001	WI	1999
GA	1999	MA	2001	NE	1999	SC	2001	WV	1999
HI	2001	ME	1998	NH	2001	SD	1999	WY	2001

There are currently 1,362 operating CAHs that were allocated \$53.6 million worth of federal funding in FY 2024 alone. \$32.7 million was used for cost-based reimbursement, while \$20.9 million was issued through grants (?). The program is costly, so it is important to ensure that it is both effective and efficient in strengthening rural healthcare infrastructure.

2.1 Literature Review

Previous studies have established the efficacy of the Flex program in supporting individual hospitals that obtain CAH designation. Once designated, CAHs were found to have better quality of care, and more of other factors that contribute to this high quality, than other rural

hospitals (Baernholdt et al.). CAHs also perform better in some patient safety measures, such as having lower post-surgical infection rates and fewer surgical accidents (Li et al.). The Flex program was also shown to improve the economic standing of hospitals after designation, with CAHs seeing a growth in profit margin while other hospitals experienced shrinking margins over the same time period (Bai et al.). Areas with newly designated CAHs were found to benefit economically following the designation, indicating how communities are uplifted by CAHs in ways extending beyond health (Ona and Davis). Overall, the CAH program has been shown to effectively improve rural hospitals and their communities. However, many of these studies comparing CAHs to other rural hospitals are limited in scope geographically and in the amount of data used, and require further investigation. Additionally, while the Flex program is shown to successfully support individual hospitals, there is not enough evidence to determine if it is achieving its intended goal of reaching hospitals on the brink of closure. The Flex program criteria is potentially too restrictive for rural hospitals with low financial stability and weak infrastructure. These hospitals may not have the extra staff needed to both send in the CAH application and make the necessary changes to their hospitals, so it could be difficult or impossible for them to gain CAH designation. In order to be an efficient policy, Flex program funding needs to reach those hospitals with the worst financial status in order to keep them open. If CAH designation is primarily going to more stable rural hospitals, then the program funds are not being efficiently allocated because those hospitals are less in need of extra financial support. With current research, it is unclear whether or not the program effectively supports the most at-risk rural hospitals. The aim of this study is to compare financial and utilization characteristics of currently operating CAHs with comparable, CAH-eligible, low-volume rural hospitals, in order to determine if those hospitals with worse financial standing are receiving the designation.

3 Data

This investigation compared financial and utilization characteristics of hospitals that would acquire critical access designation against other eligible control hospitals, specifically looking at the years prior to designation. The data was sourced from two different sources: the Hospital Cost Report Information System (HCRIS), and the American Hospital Association (AHA) Annual Survey data. The HCRIS data set is a comprehensive dataset of hospital financial and utilization characteristics. Data collection for this set began in 1998 and is collected annually. All Medicare-certified hospitals are required to submit annual cost reports to HCRIS. This investigation sourced data from the Hospital 2552-1996 form for data years 1998-2009, and sourced data from the Hospital 2552-2010 form for data year 2010. The AHA Annual Survey dataset has additional utilization and demographic information on hospitals, and was important for identifying control hospitals for this study. As the name implies, this data is also collected annually. Together, these datasets help provide a full picture of the state of hospitals before they decide whether or not to apply for critical access status.

The years of data included in this study ranged from 1998-2010. While some hospitals were designated in 1998, they could not be used in this study. Because HCRIS data collection did not begin until 1998, and this study looks at the years before designation, there was not available data for hospitals designated in 1998. The upper limit was chosen to be 2010 because only 117 CAHs (8.5% of total) were designated after 2010. A shorter period of examination helps eliminate some confounding factors across time, such as the implementation of the Affordable Care Act. In this study, CAH data was compared against data for a control set of hospitals. These control hospitals were identified using variables from the AHA dataset. The inclusion criteria for control hospitals were that they must be rural, low-volume, and within the states that allow CAH designation. Rural location was identified using the “rural” classification variable, and low-volume was defined as having an average daily census (ADC) at or below 15 patients ([Dalton et al.](#)). ADC is the average number of inpatient stays for a day

in a hospital over the course of a year. The CAHs involved in this study have a median acute average daily census of 16, making this measure appropriate for a control comparison group. Finally, the control hospitals could not be located in Connecticut, Delaware, Maryland, New Jersey, or Rhode Island, because these states have not implemented the Flex program. After filtering out data that had missing values for the variables of interest, there were 873 unique critical access hospitals and 463 unique control hospitals. Table 2 illustrates the number of hospitals included in the study by state, stratified by CAH status.

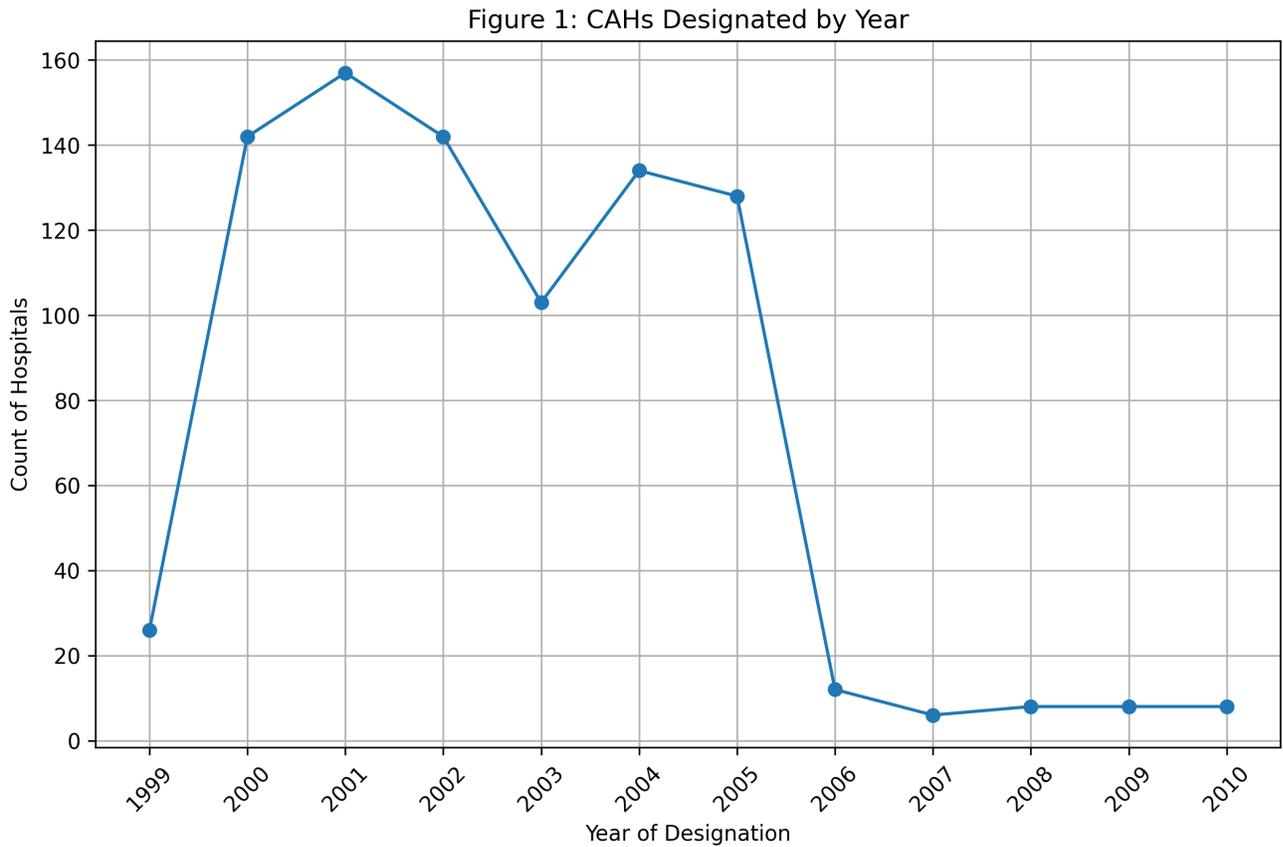
Table 2: Unique Hospitals per State

State	CAH	Control	State	CAH	Control	State	CAH	Control
Alaska	6	0	Iowa	48	4	Michigan	29	12
Alabama	7	24	Idaho	24	5	Minnesota	45	5
Arizona	10	6	Illinois	47	3	Missouri	33	9
Arkansas	21	7	Indiana	31	17	Mississippi	15	7
California	31	9	Kansas	25	18	Montana	24	2
Colorado	22	6	Kentucky	25	2	North Carolina	17	5
Florida	11	8	Louisiana	24	59	North Dakota	27	0
Georgia	26	12	Massachusetts	9	4	Nebraska	42	3
Hawaii	3	0	Maine	15	2	New Hampshire	13	0

State	CAH	Control	State	CAH	Control
New Mexico	6	6	Tennessee	11	23
Nevada	6	2	Texas	27	91
New York	12	3	Utah	10	9
Ohio	32	17	Virginia	5	2
Oklahoma	23	30	Vermont	8	0
Oregon	23	2	Washington	34	4
Pennsylvania	12	9	Wisconsin	49	6
South Carolina	4	10	West Virginia	14	2
South Dakota	24	10	Wyoming	13	4

As shown in the table, some states had many more eligible control hospitals than CAHs. This could indicate that some states do not have the most efficient Flex programs, and aren't able to reach all eligible low-volume hospitals.

Figure 1 demonstrates the number of CAHs designated by year included in the study.



As mentioned earlier, there are no hospitals included in this study designated in 1998, even though 24 hospitals (1.7% of total) were actually designated in this year. There is also an artificial dip in hospitals designated in 1999 in this study compared to the true number of hospitals designated. This is because there was limited data availability in the HCRIS dataset for years before 1999, so many hospitals designated in 1999 could not be used in this analysis.

The financial variables used for comparison in this study were operating margin, current ratio, and net income. These variables were all sourced from the HCRIS dataset. A hospital's operating margin shows how much profit is generated on each dollar of patient care reimbursed. The equation to calculate operating margin is total patient revenue minus to-

tal patient costs, all divided by total patient revenue. A higher operating margin indicates better financial performance for the hospital. Current ratio assesses a hospital's short-term liquidity, or its ability to pay its current liabilities with its current assets. It is calculated by dividing each hospital's current total assets by their current total liabilities. A hospital's assets are their cash, marketable securities, accounts receivable, and current inventory, while their liabilities are their accounts payable, accrued expenses, notes payable, and short-term debt (Marr). A higher current ratio up to a certain threshold of 5 indicates better financial performance. This is because a current ratio greater than 5 indicates inefficiencies, and that the hospital has too many stagnant assets that could be put to use. Finally, net income represents a hospital's total profit from reimbursed patient care. It is calculated by subtracting total patient costs from total patient revenue. Higher net income indicates better financial performance for a hospital. The utilization variable used in this analysis was total outpatient surgical operations. It was sourced from the AHA dataset. It shows how many outpatient operations are performed by each hospital. Because CAHs are designed to provide primarily emergency care, it is an appropriate metric of analysis in this study. Utilization metrics can provide valuable information on financial stability because higher utilization typically indicates more stability. If operating margins are positive, more profit is generated as the hospital performs more procedures.

The data alignment strategy for this study used a stacked cohort design. Because each CAH has a different year of designation, the years before designation needed to be standardized and converted to event time. This involved setting the designation year as event time = 0, then the year before designation to time = -1, etc. for every hospital. Once these values were assigned, the cohorts were stacked based on these event time values in order to align all the years prior to designation and conduct an appropriate analysis. Because the control hospitals do not have a designation year around which to assign event time values, their assignment was slightly different. For control hospitals, event time was assigned by creating a cohort for every year of CAH designation, which was 1999-2010, and then assigning time values based on the year of data relative to the cohort. This strategy ensured that control

data sets were being created for every year of critical access hospital data, in order to run a proper analysis. Table 3 shows the summary statistics of each variable for the years of hospital data analyzed in the 2001 cohort, stratified by critical access status.

Table 3: Summary Statistics of 2001 Cohort

Metric	Current Ratio			Operating Margin		
	CAH	Control	Total	CAH	Control	Total
N	456.00	478.00	934.00	456.00	478.00	934.00
Mean	7.27	7.03	7.15	0.25	0.38	0.32
Min	-49.04	-27.20	-49.04	0.00	0.01	0.00
Q1	3.71	2.58	3.21	0.17	0.30	0.22
Median	6.51	5.44	5.89	0.25	0.37	0.31
Q3	9.39	9.09	9.22	0.32	0.47	0.41
Max	55.53	70.15	70.15	0.64	0.70	0.70
SD	6.18	8.20	7.28	0.12	0.13	0.14

Metric	Total Surgeries			Net Income		
	CAH	Control	Total	CAH	Control	Total
N	456.00	478.00	934.00	456.00	478.0	934.0
Mean	581.56	1515.99	1059.78	76182.63	107579.2	92250.7
Min	22.00	1.00	1.00	-5769167.00	-17296594.0	-17296594.0
Q1	285.50	394.50	333.00	-282323.75	-366234.2	-324630.2
Median	468.50	787.00	607.00	1681.50	84810.5	37682.0
Q3	759.00	1404.75	1051.25	300460.25	613364.2	481987.0
Max	2509.00	20939.00	20939.00	11945037.00	12650256.0	12650256.0
SD	414.96	2534.71	1893.95	1318989.23	2076145.8	1747103.0

The following 4 graphs show the averages of each variable stratified by critical access status in the 5 years prior to designation. The event time leads from left to right, with the time value of 5+ indicating data for years 5 or more before designation, and the time value of 0 indicating the year of designation. The shaded regions show 95% confidence intervals for the true average values at each time value. Figure 2 shows the operating margin in pre-designation years. Figure 3 shows the current ratio in pre-designation years. Figure 4 shows the total surgical operations in pre-designation years. Figure 5 shows the net income in pre-designation years.

Figure 2: Operational Margin in Pre-Designation Years by CAH Status

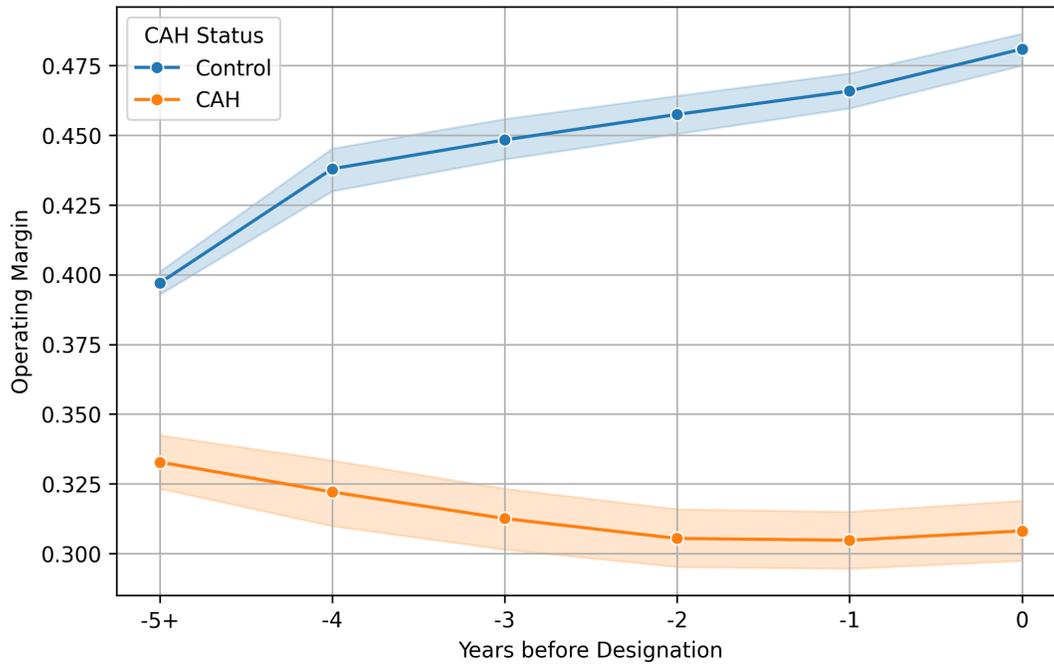


Figure 3: Current Ratio in Pre-Designation Years by CAH Status

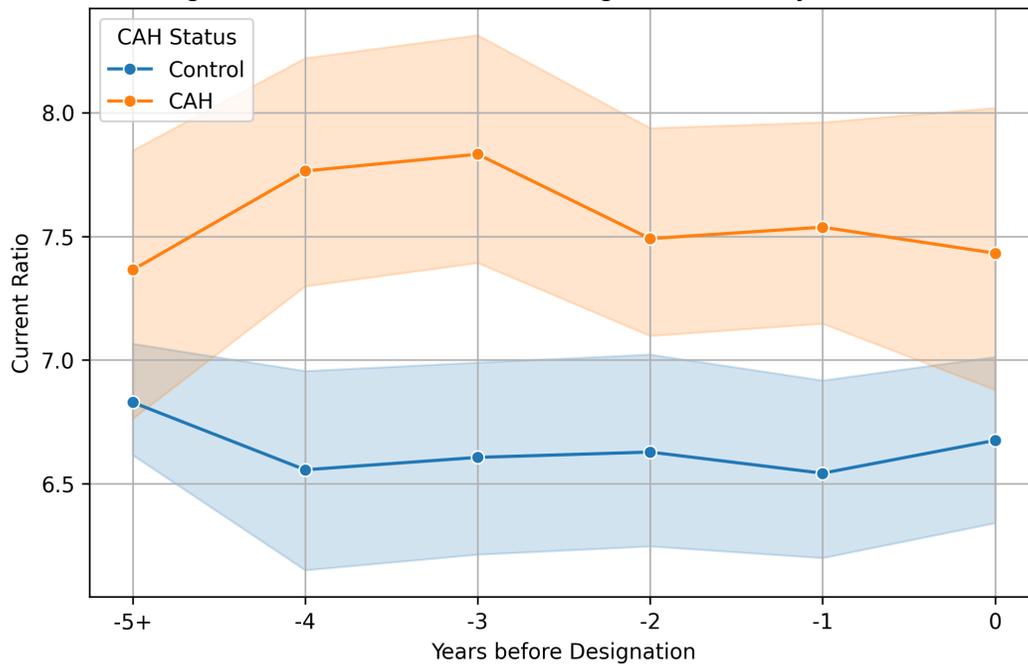


Figure 4: Total Surgical Operations in Pre-Designation Years by CAH Status

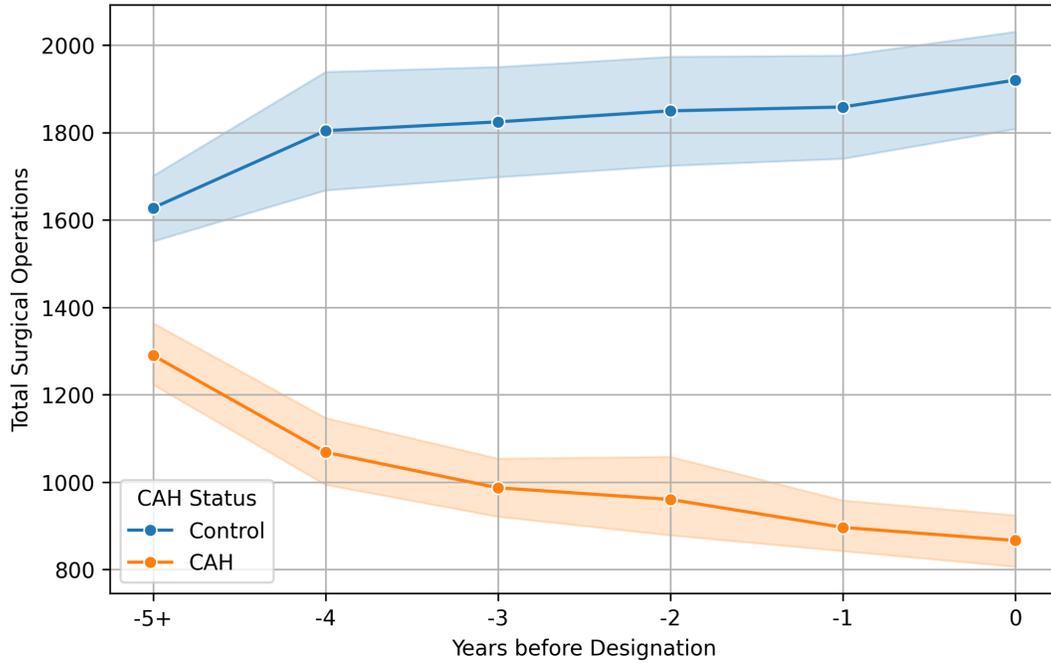
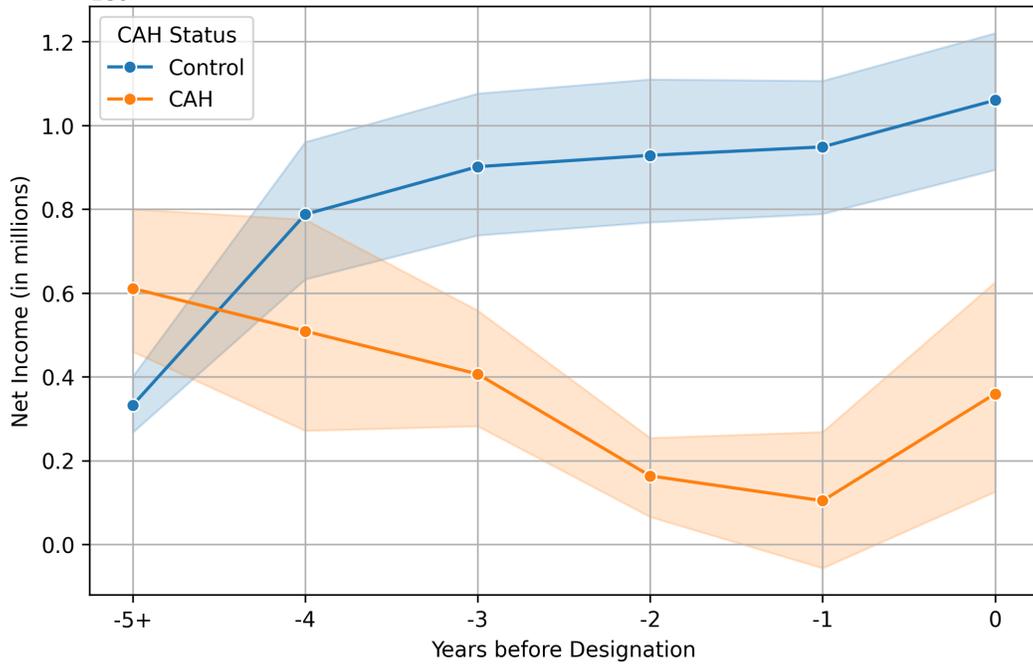


Figure 5: Net Income in Pre-Designation Years by CAH Status



These figures display relevant trends for each variable. Control hospitals have an average

operating margin that is larger than that of CAHs at each time value. CAHs have an average current ratio that is higher than that of the control hospitals for each time value. The average current ratios for both groups are larger than the “5” threshold, indicating that neither group has especially efficient asset-to-liability ratios. The graph of total surgical operations looks fairly similar to that of operating margin; control hospitals have an average number of total surgical operations that is larger than that of CAHs at each time value. Finally, control hospitals have higher net income than CAHs in every time value except for 5+ years before designation.

4 Methods

The significance of these trends needed to be tested in order to determine if they are truly relevant. To do this, a fixed-effects multiple linear regression model was run to test significant differences and trends between CAHs and control hospitals for all variables of interest together. Critical access status, a binary variable, was used as the outcome variable. A value of 0 indicated that it was a control hospital, while a value of 1 indicated it was a critical access hospital. Operating margin, current ratio, total outpatient procedures, and net income were used as the predictor variables. Cohort and event time values were used as fixed-effects variables. Including fixed-effects removed variation across different time and cohort values from the model, allowing results to only capture the variation within each time and cohort group. This further standardized the results and ensured the appropriate trends were captured by the model. The fixed-effects multiple linear regression model only tests for correlations; it is not sufficient for establishing causality and does not claim to do so. Additionally, because some of the predictor variables may be correlated, individual fixed-effects simple linear regression models were run to capture each variable’s individual correlation with CAH status.

The fixed-effects multiple linear regression model is as follows:

$$CAH_{it} = \beta_0 + \beta_1 CR_{it} + \beta_2 OM_{it} + \beta_3 TO_{it} + \beta_4 NI_{it} + \alpha_i + \gamma_t + \epsilon_{it} \quad (1)$$

The fixed-effects simple linear regression models are as follows:

$$CAH_{it} = \beta_0 + \beta_1 CR_{it} + \alpha_i + \gamma_t + \epsilon_{it} \quad (2)$$

$$CAH_{it} = \beta_0 + \beta_1 OM_{it} + \alpha_i + \gamma_t + \epsilon_{it} \quad (3)$$

$$CAH_{it} = \beta_0 + \beta_1 TO_{it} + \alpha_i + \gamma_t + \epsilon_{it} \quad (4)$$

$$CAH_{it} = \beta_0 + \beta_1 NI_{it} + \alpha_i + \gamma_t + \epsilon_{it} \quad (5)$$

Where:

- i = unique values of event time
- t = unique cohorts
- CAH = CAH status
- CR = current ratio
- OM = operating margin
- TO = total outpatient operations
- NI = net income
- α = cohort fixed effect
- γ = event time fixed effect
- ϵ = error term capturing unobserved factors

5 Results

Table 4 shows the results of the fixed-effects multiple linear regression, and the fixed-effect simple linear regression.

Table 4: Fixed Effects Regression Results

term	estimate	std.error	statistic	p.value	model
Current Ratio	0.001	0.000	8.68	0.000	FE-MLR (All Variables)
Operating Margin	-0.539	0.126	-4.28	0.008	FE-MLR (All Variables)
Total Surgeries	0.000	0.000	-3.17	0.025	FE-MLR (All Variables)
Net Income	0.000	0.000	6.74	0.001	FE-MLR (All Variables)

term	estimate	std.error	statistic	p.value	model
Current Ratio	0.002	0.000	4.38	0.007	FE-SLR
Operating Margin	-0.536	0.135	-3.98	0.011	FE-SLR
Total Surgeries	0.000	0.000	-3.41	0.019	FE-SLR
Net Income	0.000	0.000	-0.15	0.887	FE-SLR

The main values of interest in these tables are the coefficient estimates and the p-values. Significance exists if the p-values are below 0.05, which is the case for all of the variables when analyzed together in the multiple linear regression. The estimates represent the change in probability of being a critical access hospital for a one unit increase in the explanatory variable. The estimates for total surgeries and net income are so small because of the large magnitude of these variables, and because critical access status is a binary variable that takes the values 0 and 1. Meanwhile, values for current ratio and operating margin are smaller, so their estimates show some effect on critical access status and properly reflect the trends that they have on critical access designation. Because the estimate for operating margin is negative and significant, it means a lower operating margin is significantly correlated with

being designated critical access. Similarly, the positive estimate for current ratio alongside the small p-value indicates that higher current ratio is significantly correlated with being designated critical access. Determining these trends for total outpatient surgeries and net income requires looking at figures 4 and 5. The graphs show that fewer total operations is significantly correlated with critical access designation, and lower net income is significantly correlated with critical access status. These established trends in these graphs are significant due to the p-value results from the multiple linear regression.

The differences between the simple linear regression and multiple linear regression indicate a few key findings. Current ratio and net income have differences between their two regressions, indicating that their effects were overestimated in the simple linear regression and their true effects on critical access status are smaller. Net income saw a drastic change in significance from the simple linear regression to the multiple linear regression, meaning it is only significant in explaining CAH status when controlling for other variables.

5.1 Discussion

The results indicate that hospitals that are most financially vulnerable, meaning they have lower operating margins, higher current ratios over the threshold of 5, fewer total operations, and lower net income are more likely to become critical access hospitals, on average. This has very positive implications for the Flex program. Because those hospitals with worse financial standing are more likely to acquire the designation on average, the program is successfully reaching hospitals that are on the brink of closure and keeping them open.

The Flex program is helping to strengthen rural healthcare infrastructure by reaching the most vulnerable hospitals and keeping them from closing down. This protects the already poor patient access to healthcare in vulnerable rural communities from getting worse. Therefore, federal funding should continue to be put towards the program. Additional measures could be implemented so the program can reach even more of the eligible low-volume hospi-

tals, especially in states that have few critical access hospitals compared to eligible control hospitals. The self-selective designation may still be a hindrance for hospitals in some states. This process could be tweaked so that more low-volume hospitals have access to the designation without needing to apply for it. However, these changes are not entirely necessary due to the success of the program already.

There are few limitations to this investigation that could prompt further research. The analysis could include more financial variables in order to paint a fuller picture of each hospital's financial standings, which would help generate a more accurate conclusion. Additionally, if the analysis used a different dataset that had data for years before 1998, more years of previous data could be used for 1999 and 2000 designated critical access hospitals, which would further contribute to an accurate dataset. Finally, these results prompt future research on the state level in order to see where specific states may fall short in reaching eligible low-volume rural hospitals.

6 Conclusion

Rural hospitals are vulnerable and benefit from federal support and programs that provide financial cushion through difficult periods. But federal funding is limited, and each program must be both effective and efficient to produce the best results in rural healthcare. The Flex program and accompanying CAH designation have been shown to successfully reach hospitals with extreme financial vulnerability and save them from closure. Therefore, it efficiently allocates funds to hospitals and has the greatest possible impact on rural infrastructure. Because previous studies also showed the efficacy of the Flex program in improving hospital financial viability, the program is proven to be a both effective and efficient policy. The Flex program and accompanying CAH designation should continue operating as an avenue of support for vulnerable rural hospitals.

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