

# Rural Hospital Closures and Finance: Some New Research Findings

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# **Agenda**

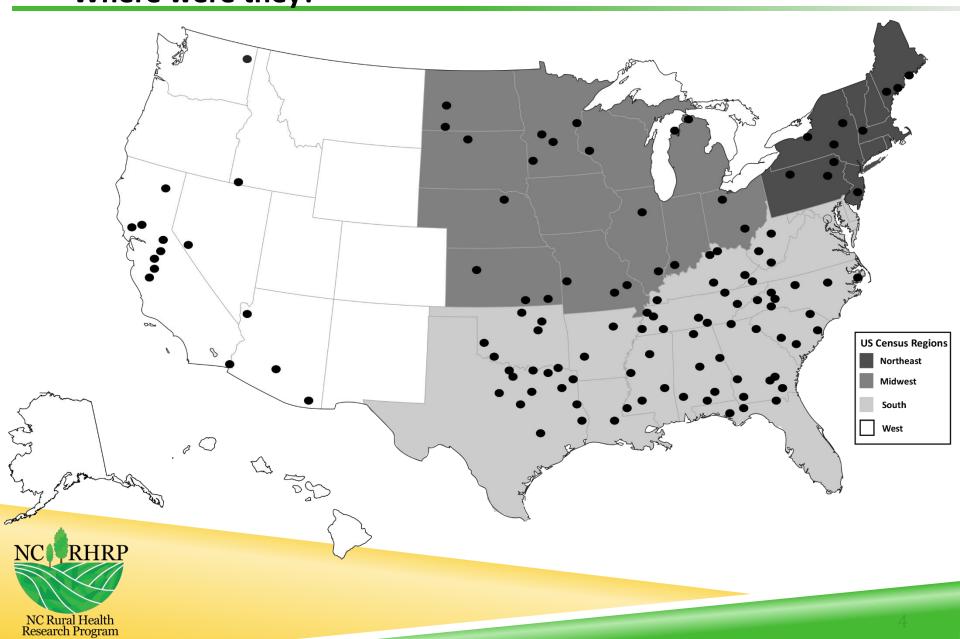
- Rural hospital closures
- Community characteristics and rural hospital closures
- Low Volume Hospital adjustment
- Sole Community Hospital program
- Trends in risk of financial distress



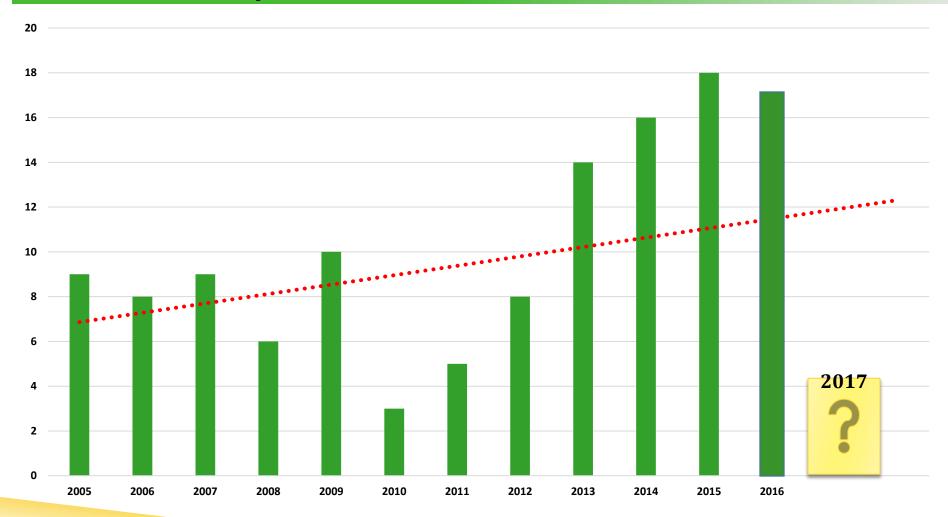
# **Rural Hospital Closures**



# 2005-16 rural hospital closures: Where were they?



# 2005-16 rural hospital closures: When did they close?

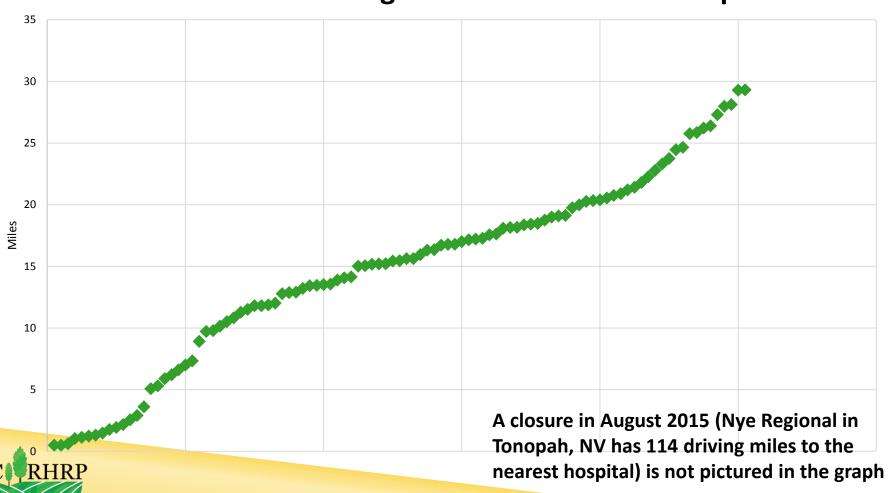




Between January 2005 and December 2016, 122 rural hospitals have closed

## 2005-16 rural hospital closures: How far away is the next closest hospital?

### **Driving Distance to Nearest Hospital**



# 2005-16 rural hospital closures: Summary

- Most closures in South (60%)
- Annual number of closures increasing until 2016
- Most are CAHs (40%) and PPS (40%) hospitals (vs MDH-16% and SCH-4%)
- Most are in states that have not expanded Medicaid (57%)
- Patients in affected communities are probably traveling between 5 and 30 more miles to access inpatient care
- Most hospitals closed because of financial problems



# http://bit.ly/ruralclosures





## THE JOURNAL OF RURAL HEALTH



#### ORIGINAL ARTICLE

### The Rising Rate of Rural Hospital Closures

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# **Key Findings**

- In 2009, CAHs that subsequently closed from 2010 through 2014 had, in general, lower levels of profitability, liquidity, equity, patient volume, and staffing.
- Other Rural Hospitals (ORHs) that closed had smaller market shares and operated in markets with smaller populations compared to ORHs that remained open.
- Although half of the closed hospitals ceased providing health services altogether, the remainder have since converted to an alternative health care delivery model.





#### ORIGINAL PAPER

### To What Extent do Community Characteristics Explain Differences in Closure among Financially Distressed Rural Hospitals?

Sharita R. Thomas, MPP Mark Holmes, PhD George H. Pink, PhD

© Meharry Medical College Journal of Health Care for the Poor and Underserved 27 (2016): 194–203.

# **Key Findings**

Compared with other rural hospitals that were at high risk of financial distress but remained open over the same time period (2005-15), closed rural hospitals:

- Had a smaller market share, despite being in areas with higher population density,
- Were located nearer to another hospital, and
- Were located in markets that had a higher rate of unemployment and a higher percentage of Black and Hispanic residents.



### THE JOURNAL OF RURAL HEALTH



BRIEF REPORT

# How Would Rural Hospitals Be Affected by Loss of the Affordable Care Act's Medicare Low-Volume Hospital Adjustment?

Rebecca Garr Whitaker, MSPH;<sup>1,2</sup> G. Mark Holmes, PhD;<sup>1,2</sup> & George H. Pink, PhD<sup>1,2</sup>

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# **Low Volume Hospital Adjustment**

- 2003 MPDIMA definition of LVH: fewer than 200 total discharges and located more than 25 driving miles from another acute care hospital.
- 2010 ACA definition of LVH: fewer than 1,600 Medicare discharges and located more than 15 driving miles from another acute care hospital.
- After federal fiscal year 2017, the ACA definition expires and reverts to the MPDIMA definition.

2003 Medicare Prescription Drug, Improvement, and Modernization Act 2010 Patient Protection and Affordable Care Act



# **2012-14 Low Volume Hospitals**





In 2015, 487 rural hospitals received \$248 million in LVH adjustments.

# **Key Findings**

- The ACA LVH adjustment significantly improved Sole Community Hospitals' Medicare inpatient margins in the year they received the adjustment, and it had a large but statistically insignificant effect on the profitability margins of other rural hospitals.
- Hospitals that would be the most adversely affected by loss of the ACA LVH adjustment were more likely to be small, located in the South, and in high-poverty markets with higher proportions of black and uninsured individuals.
- Conclusions: Elimination of the ACA LVH adjustment would have differential effects on subgroups of hospitals, and those located in markets serving historically underserved populations would be the most adversely affected.





### Findings Brief NC Rural Health Research Program

November 2016

# The Financial Importance of the Sole Community Hospital Payment Designation

Sharita R. Thomas, MPP; Randy Randolph, MRP; G. Mark Holmes, PhD; George H. Pink, PhD

#### **BACKGROUND**

In 1983, Congress created the Sole Community Hospital (SCH) program to support small rural hospitals for which "by reason of factors such as isolated location, weather conditions, travel conditions, or absence of other hospitals, is the

#### **KEY FINDINGS**

- Since 2009, more SCHs are reimbursed at the hospital-specific rate (HSR) rather than the federal inpatient prospective payment system (IPPS) rate.
- Between 2006 and 2015, only 58 SCHs were reimbursed by the IPPS rate, and 112 by the HSR in every year; the remainder switched between the two rates at least once

sole source of inpatient hospital services reasonably available in a geographic area to Medicare beneficiaries."

A hospital qualifies as a SCH by meeting the following criteria:

- 1) It is located at least 35 miles from a similar hospital; or
- 2) It is between 25 and 35 miles from a similar hospital, and meets one of the following criteria:
  - No more than 25% of its total inpatients or 25% of Medicare inpatients admitted are also admitted to similar hospitals within a 35 mile radius; or

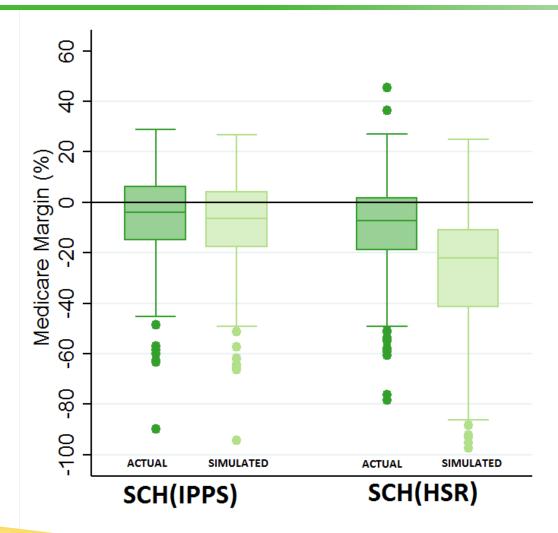


# SCHs by Payment Type, 2006-15

Year	SCHs paid at federal IPPS rate: # of Cost Reports	SCHs paid at HSR: # of Cost Reports	Total SCHs: # of Cost Reports	Percent of SCHs Paid at HSR
2006	245	225	470	48%
2007	241	212	453	47%
2008	241	205	446	46%
2009	195	254	449	57% (HSR Rebase
2010	110	339	449	76%
2011	104	337	441	76%
2012	119	335	454	74%
2013	134	321	455	71%
2014	165	290	455	64%
2015	122	310	432	72%



## 2015 Medicare Margin With and Without SCH Program





# **Key Findings**

- If the SCH program had not existed in 2015 that is, if Medicare inpatients and outpatients in all SCHs had been reimbursed at the IPPS and OPPS rates, respectively – there would have been an estimated reduction in 2015 Medicare margin of 2.47% for SCHs that were reimbursed at the federal IPPS rate and 14.6% for SCHs that were reimbursed at the HSR.
- SCHs in the South would be less affected by cessation of the SCH program because more SCHs are already paid at the federal IPPS rate whereas SCHs in the Midwest and Northeast would be more affected because more SCHs are paid at the hospital-specific rate.





### Findings Brief NC Rural Health Research Program

October 2016

### Trends in Risk of Financial Distress among Rural Hospitals

Brystana G. Kaufman, MSPH; Randy Randolph, MRP; George H. Pink, PhD; G. Mark Holmes, PhD

#### **OVERVIEW**

From January 2005 to July 2016, 118 rural hospitals have closed permanently, not including seven others that closed and subsequently reopened. The number of closures has increased each year since 2010, and in the first half of 2016, the closure rate surpassed two closures per month. Hospital closures impact millions of rural residents in communities

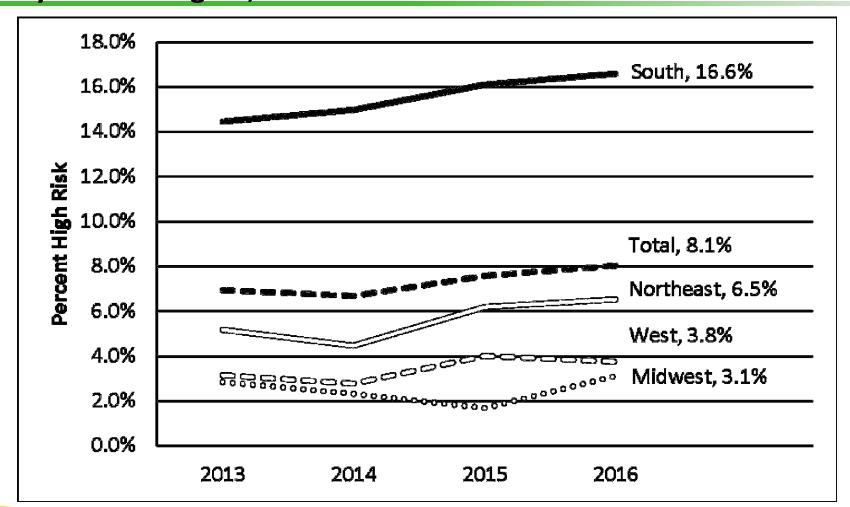
#### **KEY FINDINGS**

 Consistent with previous research, the South census region has the largest percentage of rural hospitals at high risk of financial distress over the period 2013 to 2016. that are typically older, more dependent on public insurance programs, and in worse health than residents in urban communities.<sup>2,3,4</sup> Identifying hospitals at high risk of closure and assessing the trends over time may inform strategies to prevent or mitigate the effects of closures.

In a previous Findings Brief, we described the Financial Distress Index (FDI) model, which assigns hospitals to high, mid-high, mid-low or low risk levels for 2016 using 2014 Medicare cost report and Neilsen-Claritas data summed to

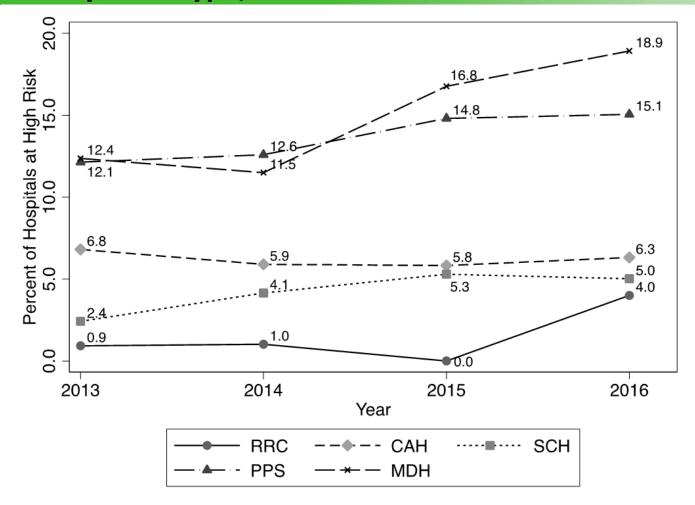


### Percentage of Rural Hospitals at High Risk of Financial Distress by Census Region, 2013-2016





# Percentage of Rural Hospitals at High Risk of Financial Distress by CMS Payment Type, 2013-2016





# **Key Findings**

- The proportion of rural hospitals at high risk of financial distress has increased from:
  - 7.0% in 2015 to 8.1% in 2016, with the largest increases in the South and Northeast census regions (2.2 and 1.3 percentage points respectively).
  - 13% to 19% among Medicare Dependent Hospitals (MDH) and from 1% to 4% among Rural Referral Centers over the period 2013 to 2016.



## Summary

- Hospital closures will continue and occur relatively more frequently in disadvantaged communities.
- If the ACA LVH expires after FFY 2017, hospitals serving disadvantaged communities will be the most adversely affected.
- The SCH program is particularly important to rural hospitals in the mid-west and northeast.
- Number of rural hospitals at high risk of financial distress is growing, and MDH and PPS are at highest risk.



# North Carolina Rural Health Research Program

### **Location:**

Cecil G. Sheps Center for Health Services Research

University of North Carolina at Chapel Hill

Website: <a href="http://www.shepscenter.unc.edu/programs-projects/rural-health/">http://www.shepscenter.unc.edu/programs-projects/rural-health/</a>

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### Resources

### North Carolina Rural Health Research Program

http://www.shepscenter.unc.edu/programs-projects/rural-health/

### **Rural Health Research Gateway**

www.ruralhealthresearch.org

### **Rural Health Information Hub**

www.ruralhealthinfo.org/

### **National Rural Health Association**

www.ruralhealthweb.org

### National Organization of State Offices of Rural Health

www.nosorh.org

