Flex Monitoring Team

University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Rural Hospital Closures and Financial Distress

George H. Pink & Brystana G. Kaufman
University of North Carolina
Rural Health Research Center

June 24, 2015 | Flex Reverse Site Visit | Bethesda, MD

Agenda

- The rising rate of rural hospital closures
- Predicting financial distress in rural hospitals
- How can SFCs help CAHs in financial distress?
- What happens after a rural hospital closes?

The Rising Rate of Rural Hospital Closures

Brystana G. Kaufman, Sharita R. Thomas, Randy K. Randolph, Julie R. Perry, Kristie W. Thompson, George M. Holmes, and George H. Pink

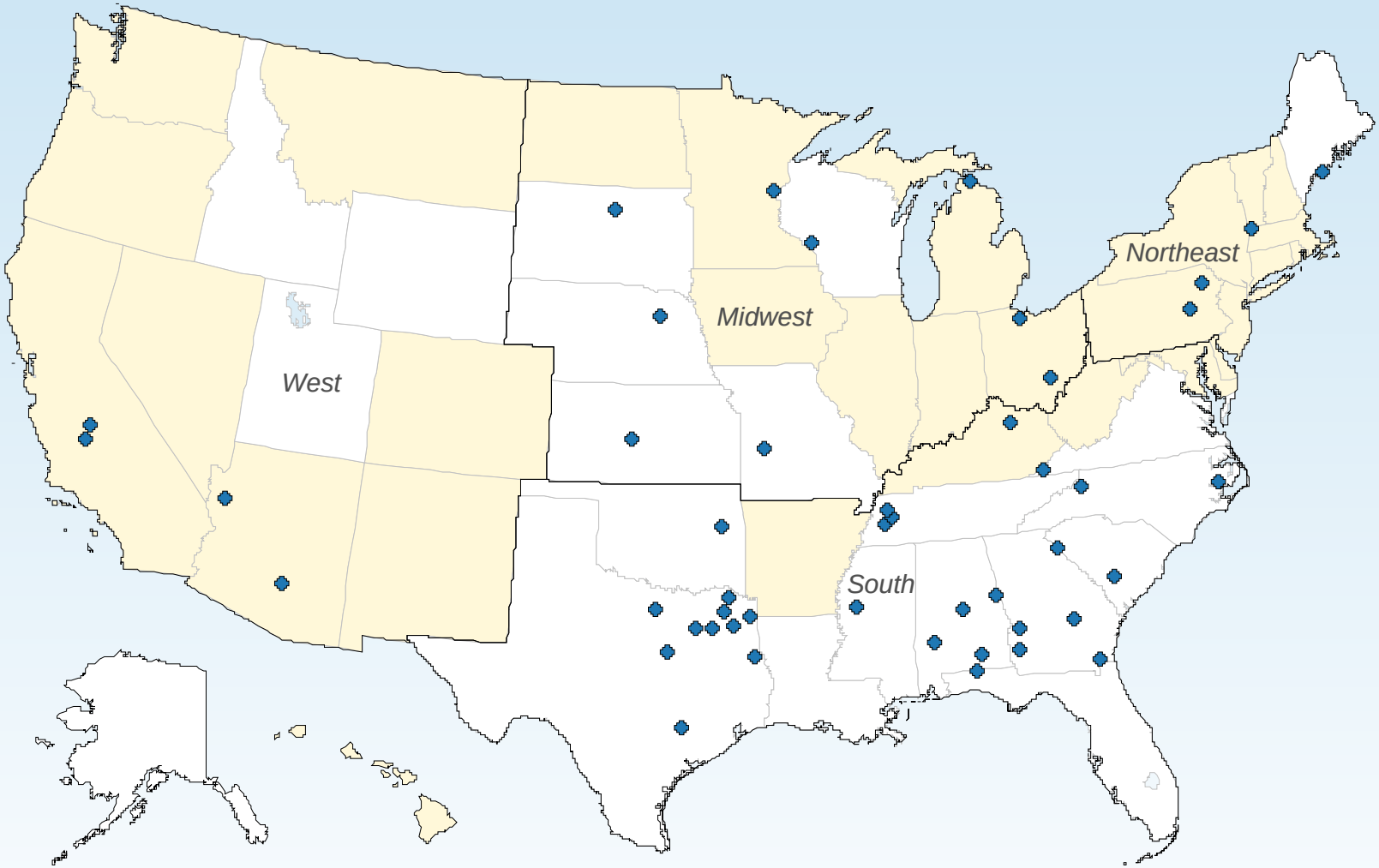
Forthcoming in the *Journal of Rural Health*

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

What is a hospital closure?

- Sometimes difficult to identify because:
  - Open, closed, open, closed
  - No media coverage because it is a community non-event or part of a system reconfiguration
  - Inpatient stays open but ER closes, inpatient closes but ER stays open, and other permutations
  - Hospital is being replaced by a new facility
- For this study, **we defined closure as permanent cessation of acute inpatient care.**

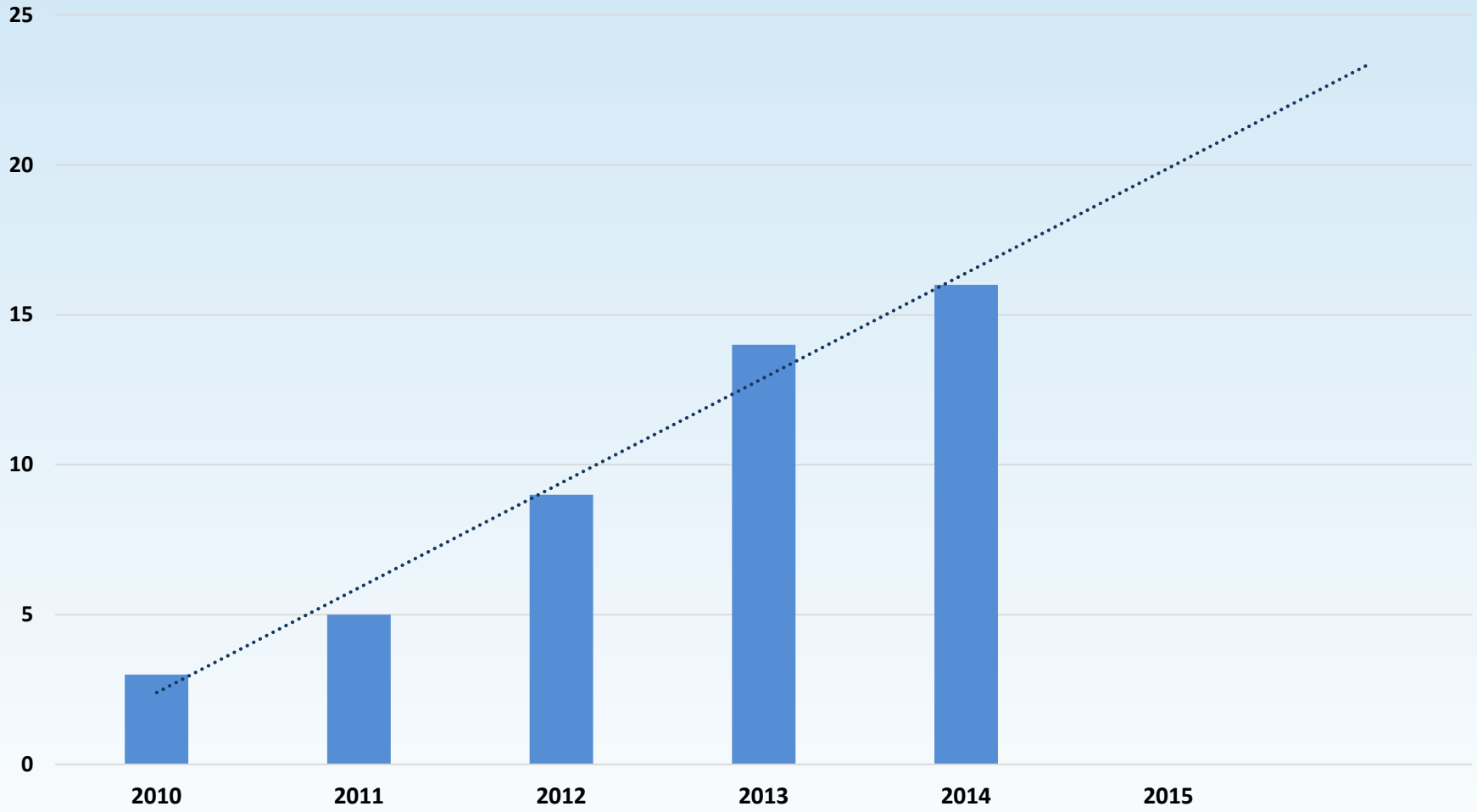
2010-14 rural hospital closures: Where were they?



Medicaid Expansion States

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

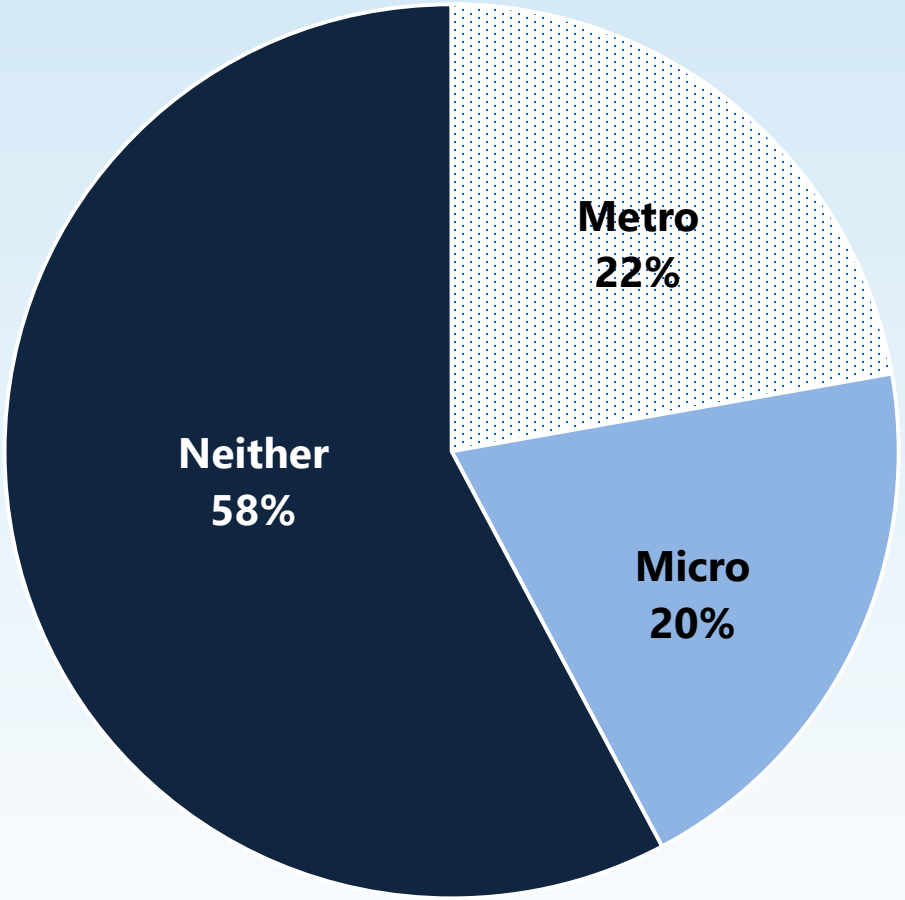
2010-14 rural hospital closures: When did they close?



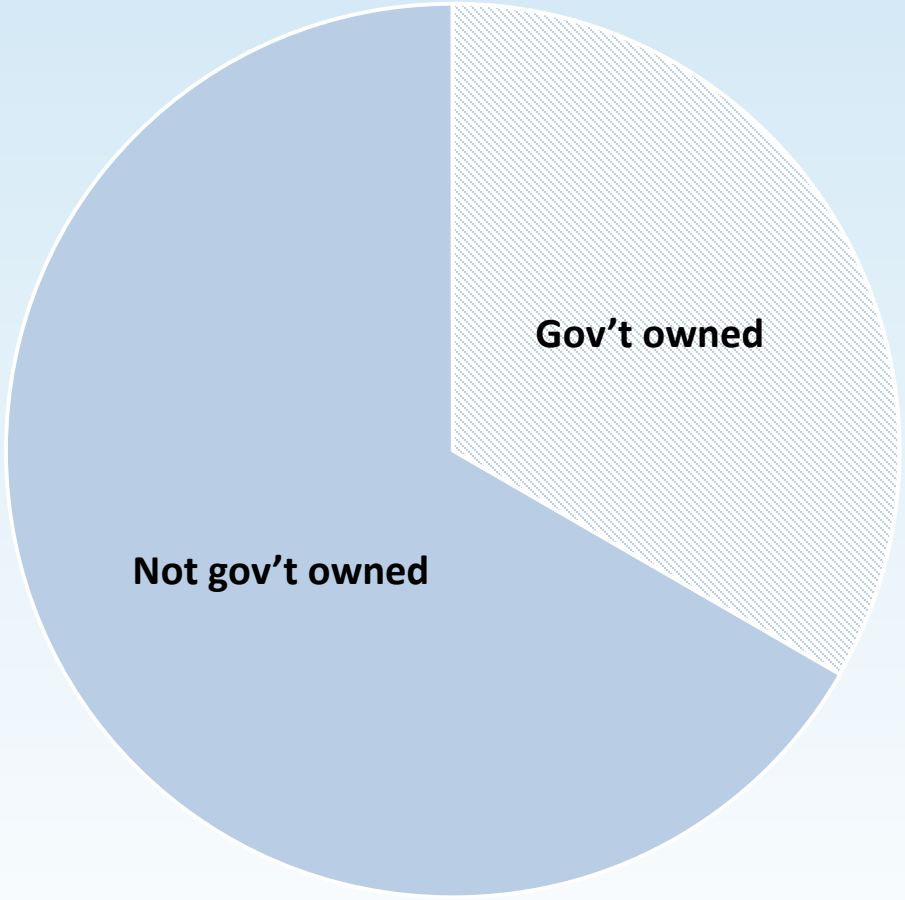
Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

2010-14 rural hospital closures: What types of hospital were they?

Micro/Metro Designation

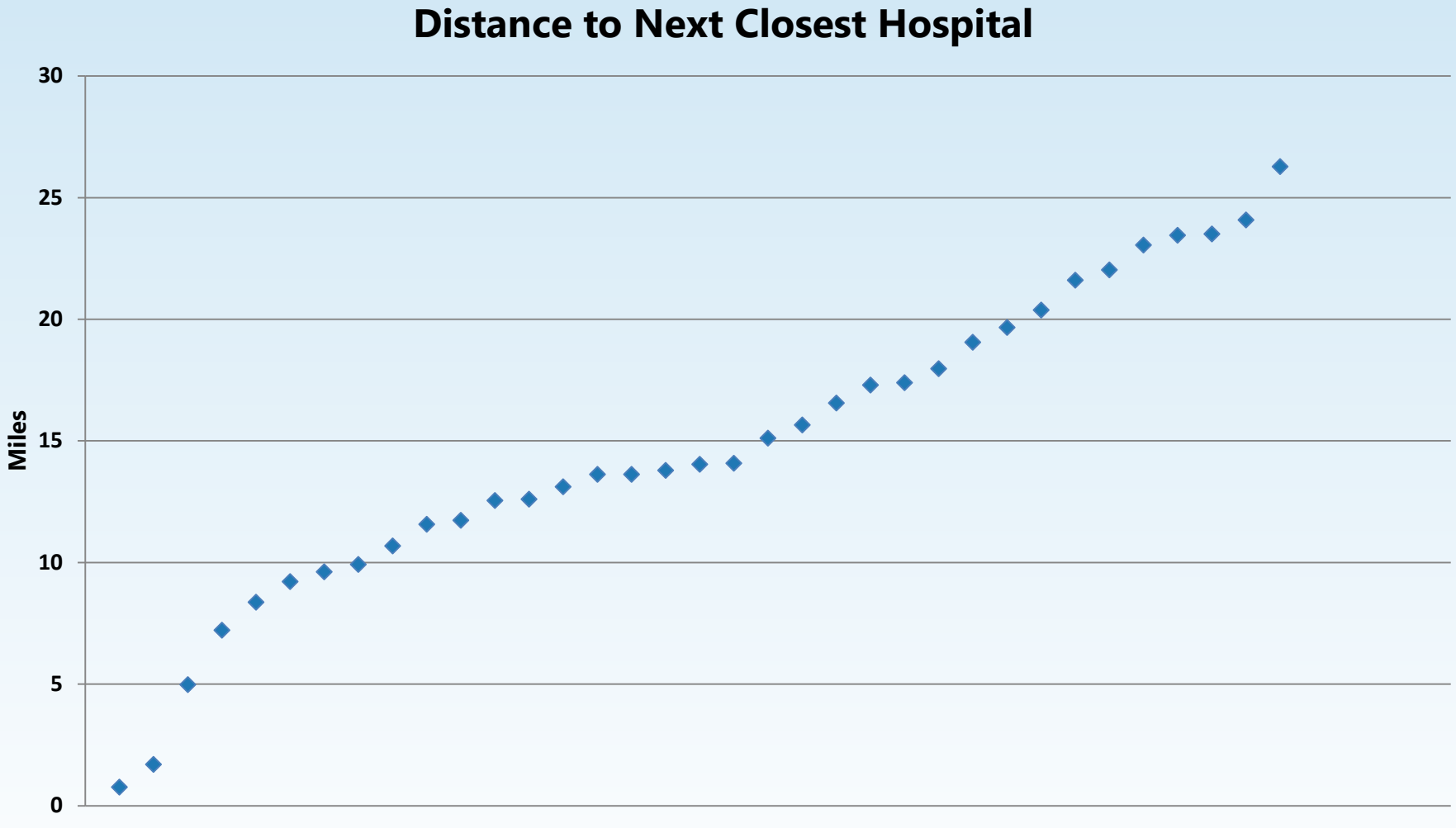


Ownership



Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

2010-14 rural hospital closures: How far away is the next closest hospital?



Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

2010-14 rural hospital closures: Why did they close? (As reported by news media)

Market Factors	Hospital Factors	Financial Factors
• Small or declining populations	• Low daily census, as low as 2.3 patients a day	• High and increasing charity care and bad debt
• High unemployment (as high as 18%)	• Lack of consistent physician coverage	• Severely in debt
• High or increasing uninsured patients	• Deteriorating facility	• Insufficient cash-flow to cover current liabilities
• High proportion of Medicare and Medicaid patients	• Fraud, patient safety concerns, and poor management	• Negative profit margin
• Competition in close proximity		

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

2010-14 rural hospital closures: Summary

- Most closures in South
- Annual number of closures increasing
- Most are CAHs and PPS hospitals (vs MDH and SCH)
- Most are in states that have not expanded Medicaid
- Patients in affected communities are probably traveling between 5 and 25 more miles to access inpatient care
- Most hospitals closed because of financial problems

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Summary: Financial performance and condition of hospitals in the year before they closed

- Financial performance and condition far below benchmark for most hospitals
- Most hospitals were unprofitable, illiquid, and unable to service debt
- Most had less than:
  - 150 FTEs, $10 million in salary expense, and 30% occupancy rate
  - Most had already closed obstetrics
- Data in appendix also shows most had:
  - Negative or close to zero net income and net assets

Predicting Financial Distress in Rural Hospitals

Brystana G. Kaufman, George M. Holmes, and George H. Pink

To be submitted to Medical Care Research and Review

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

http://www.flexmonitoring.org/publications/pb20/

Policy Brief #20
April 2011

A Performance Monitoring Resource for Critical Access Hospitals, States, and Communities

Flex Monitoring Team | University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Risk of Financial Distress Among Critical Access Hospitals: A Proposed Model

Mark Holmes, PhD and George H. Pink, PhD
North Carolina Rural Health Research and Policy Analysis Center, University of North Carolina

Introduction

During the 1980s and 1990s, hundreds of rural hospitals closed their doors across the United States. In response, the Medicare Rural Hospital Flexibility Program created the Critical Access Hospital (CAH) program to help stabilize the finances of rural hospitals and sustain access to needed healthcare services for rural residents. Characterizing the overall financial performance

Key Findings

- A model that uses current financial performance and market characteristics can be used to predict financial distress of Critical Access Hospitals

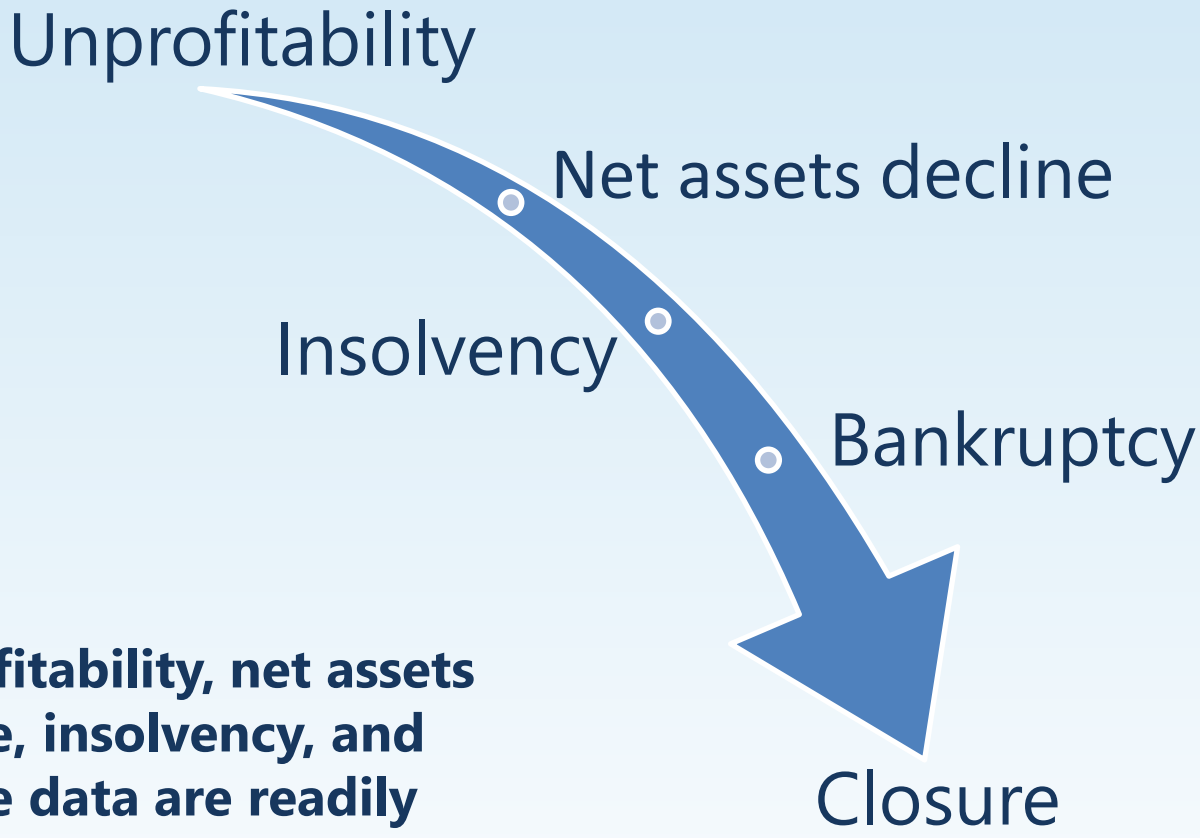
Model of financial distress principles

- Developed specifically for rural hospitals
- Scientific approach: Development and Validation
- Used data publicly available for all rural hospitals
- Goals for the model
  1. Identify hospitals at risk for distress
  2. Model should have high face validity
  3. Model should be parsimonious and easy to understand

Accounting basis of financial distress

- Balance sheet equation:
  - Total assets - Total liabilities = Net assets
- Income statement equation:
  - Total revenue – Total expenses = Net income
- And for a NFP:
  - Net assets (t+1) = Net assets (t) + Net income (t+1)
- Therefore:
  - Profitability ⟶ Growth in net assets
  - Unprofitability ⟶ Decline in net assets

A general process of financial distress



- **Unprofitability, net assets decline, insolvency, and closure data are readily available.**
- **Bankruptcy data are not.**

Financial distress is defined as:

Increasing Signal Strength

Unprofitability:
- 2 years negative operating margin
- Negative cash flow margin

Net assets decline:
- >20% decline in net assets

Insolvency:
- Negative net assets

Closure:
- No longer provides inpatient care

In some circumstances, there may not be financial distress even though the markers suggest otherwise.

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

2013 Rural hospitals in US with financial distress signals

Financial distress signal	Number	Percent
Unprofitability:		
2 years negative operating margin	659	30%
Negative cash flow margin	537	24%
Net assets decline:		
>20% decline in net assets	355	16%
Insolvency:		
Negative net assets	237	11%
Closed:		
No longer provides inpatient care	14	1%

2013 Rural hospitals in US with financial distress signals

Financial distress signals	Number	Percent
0 signals	1,326	58%
1 signal	386	17%
2 signals	313	14%
3 signals	148	7%
4 signals	82	4%
5 signals	2	.1%
Total	2257	100%

Two years ago, could we have predicted hospitals that are under financial distress today?

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Model of rural hospital financial distress

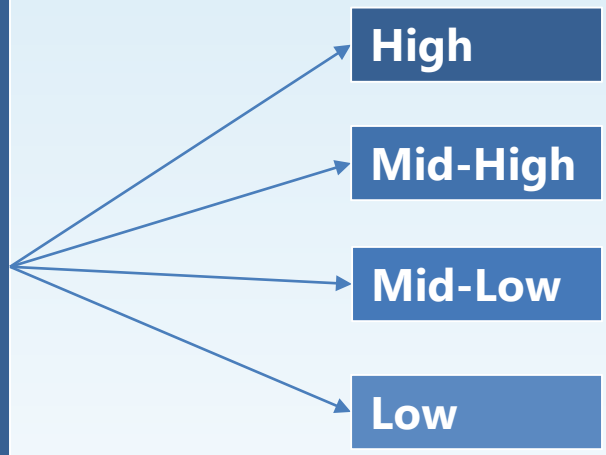
Current Characteristics of Hospital

Financial Performance:
- Profitability
- Reinvestment
- Hospital size
- Benchmark performance

Market Characteristics:
- Competition
- Economic condition
- Market size

Government Reimbursement:
- Medicare
- Medicaid

Risk of Financial Distress in 2 years



Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Predictors of financial distress

- **Financial performance**
  - **Profitability**: total margin, two year change in total margin
  - **Reinvestment**: Retained earnings as a percent of total assets
  - **Hospital size**: Net patient revenue (millions)
  - **Benchmark performance**: Percent of benchmarks met over two years
- **Market characteristics**
  - **Competition**: Log of miles to nearest hospital with > 100 beds and market share (if <25%)
  - **Economic condition**: Log of poverty rate in the market area
  - **Market size**: Log of population in the market area
- **Government reimbursement**
  - **Medicare**: CAH status
  - **Medicaid**: Medicaid to Medicare fee index (KFF)

CAH-specific benchmarks

- "High but attainable financial performance"
- Established by a large sample of informed practitioners
- Focus on absolute vs. relative performance
- Robust enough to apply to all rural hospitals

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Benchmarks in the model

Profitability indicators:

- Total margin >3%
- Cash flow margin >5%
- Return on equity >4.5%
- Operating margin >2%

Liquidity indicators:

- Current ratio >2.3 times
- Days cash on hand >60 days
- Days revenue in accounts receivable <53 days

Benchmarks in the model

Capital structure indicators:

- Equity financing >60%
- Debt service coverage >3 times
- Long-term debt to capitalization <25%

Cost indicator:

- Average age of plant <10 years

2012-13 Rural hospitals in US benchmark performance

Average percentage of benchmarks met in 2012 and 2013	Number	Percent
0%-19%	305	14%
20%-39%	538	24%
40%-59%	724	33%
60%-79%	507	23%
80%-100%	133	6%
Total	2207	100%

Model of rural hospital financial distress

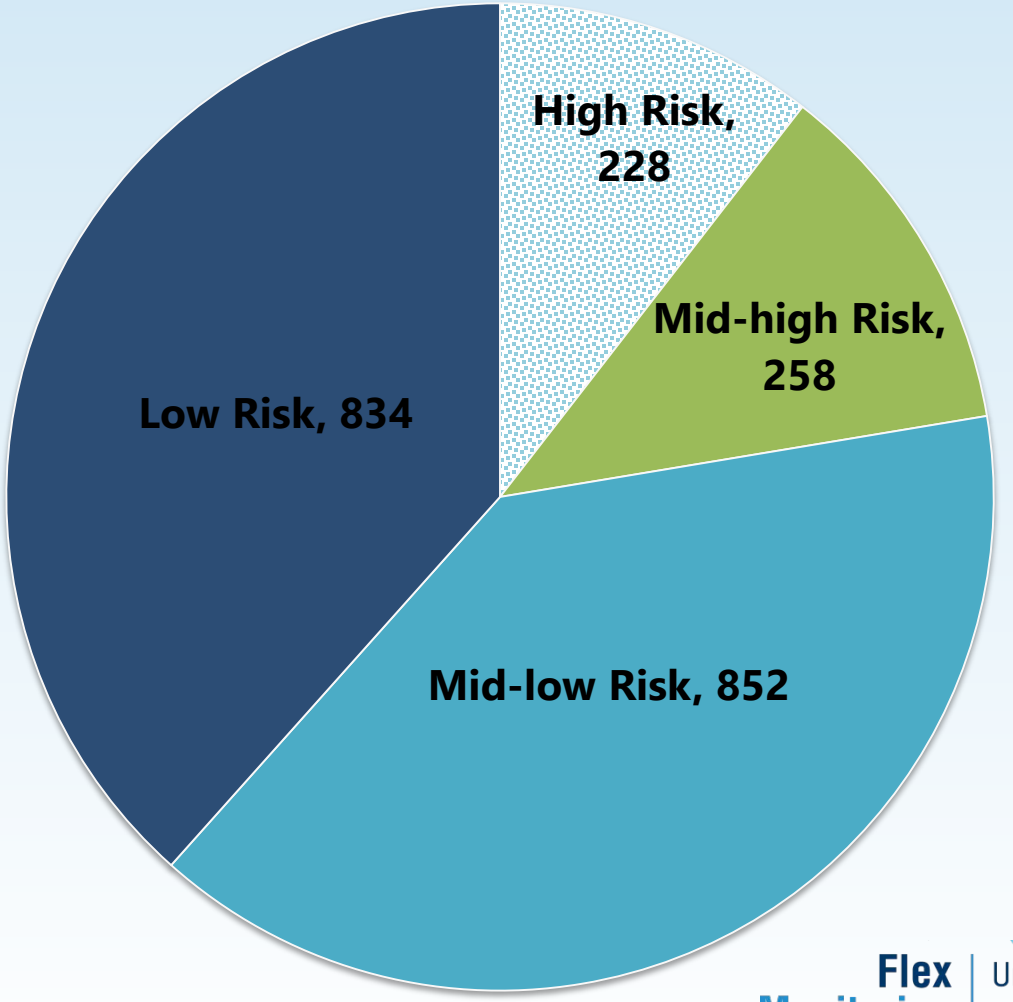
- Distress is specified as a uni-dimensional index, with the probability of each event independent conditional on the index.
- Given a value of the "Financial distress index"(FDI) the probability of each event differs only due to a constant determined by the overall prevalence of the event.
- The equation is specified as

$$\Pr(y_{kh,t+2} = 1) = f(X_{ht}\beta + \phi_k)$$

where *y* is an indicator variable that equals one or zero depending on the value of one of the 5 markers of financial distress (indexed by *k)*.

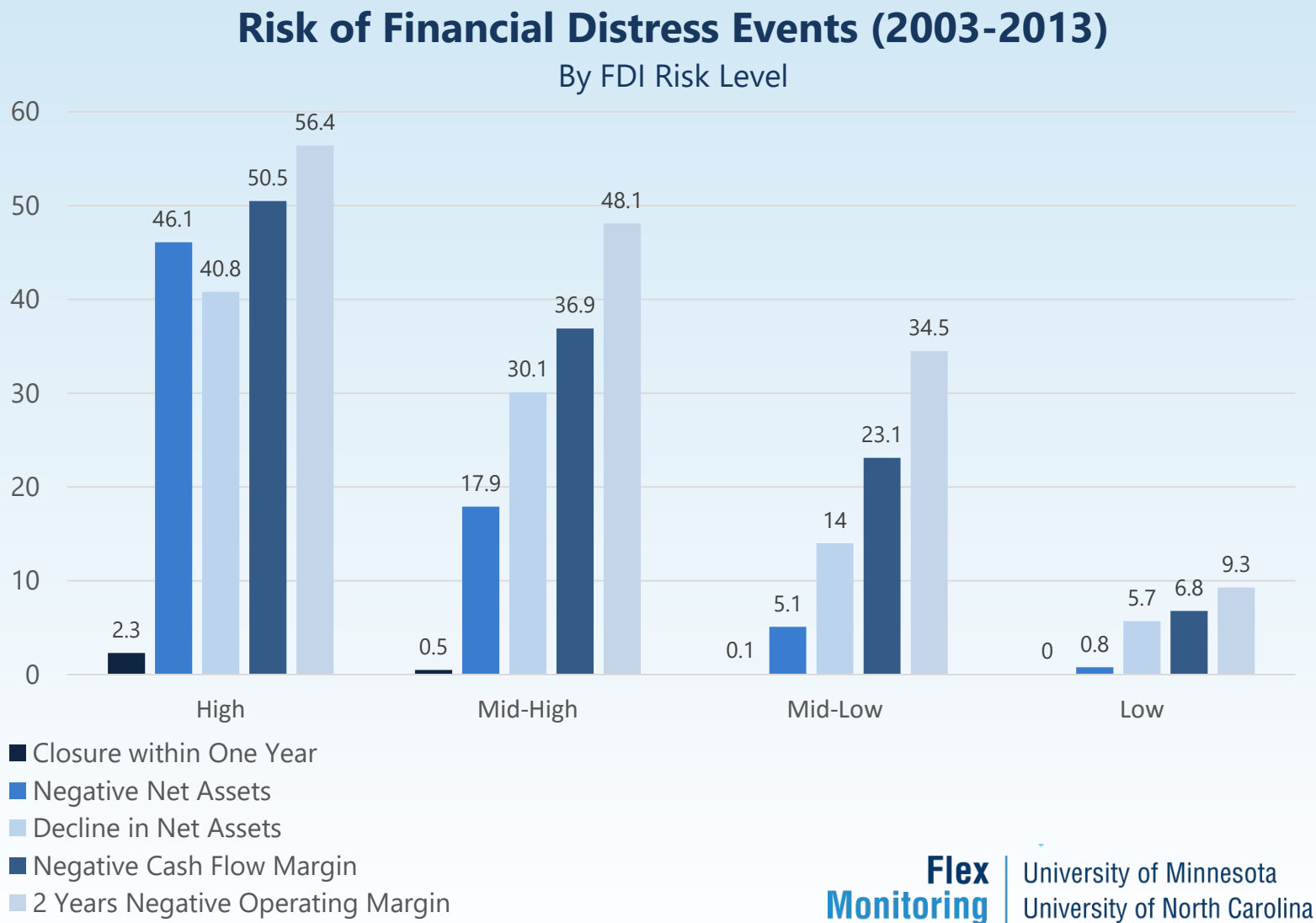
Preliminary results

Hospitals by Risk Level (2013)



Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Preliminary results



Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Model results

- You have been given envelopes with preliminary results of the model: the CAHs in your state that are at mid-high and high risk of financial distress
- Face validity tests – let us know whether the model results reflect reality in your state
- Final model results will be incorporated in next version of the *CAH Financial Indicators Report*

What happens after a rural hospital closes?

Sharita R. Thomas, Brystana G. Kaufman, Randy K. Randolph, Julie R. Perry, Kristie W. Thompson, George M. Holmes, and George H. Pink

bit.ly/1QFEVo0

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Conversion Models

- Urgent Care Clinic or Emergency Center
- Skilled Nursing Facility or Acute Rehabilitation Center
- Outpatient Facility or Primary Care Clinic

Urgent Care Clinic or Emergency Center

Urgent care clinic (5 hospitals):

- Operate 12 hours and 5-7 days per week
- Provide diagnostic, laboratory, and radiology services
- 2 facilities provide additional outpatient and specialty services

Emergency center (5 hospitals):

- Operate 24 hours and 7 days per week
- Provide diagnostic, laboratory, and radiology services
- 4 facilities provide additional outpatient and specialty services

Skilled Nursing Facility or Outpatient Rehabilitation Center

Skilled nursing facility (3 hospitals):

- Have a range of 46-111 beds
- Provide physical, occupational and speech therapy

Acute rehabilitation center (1 hospital):

- Individuals are transferred from the inpatient unit of nearby regional campus location
- Operate 8 hours and 7 days per week
- Physical, occupational and speech therapy

Outpatient Facility or Primary Care Clinic

Outpatient facility (3 hospitals):

- Operate 10-24 hours and 3-7 days per week
- Provides diagnostic and laboratory services
- 1 offers specialty care like cardiology and women's services

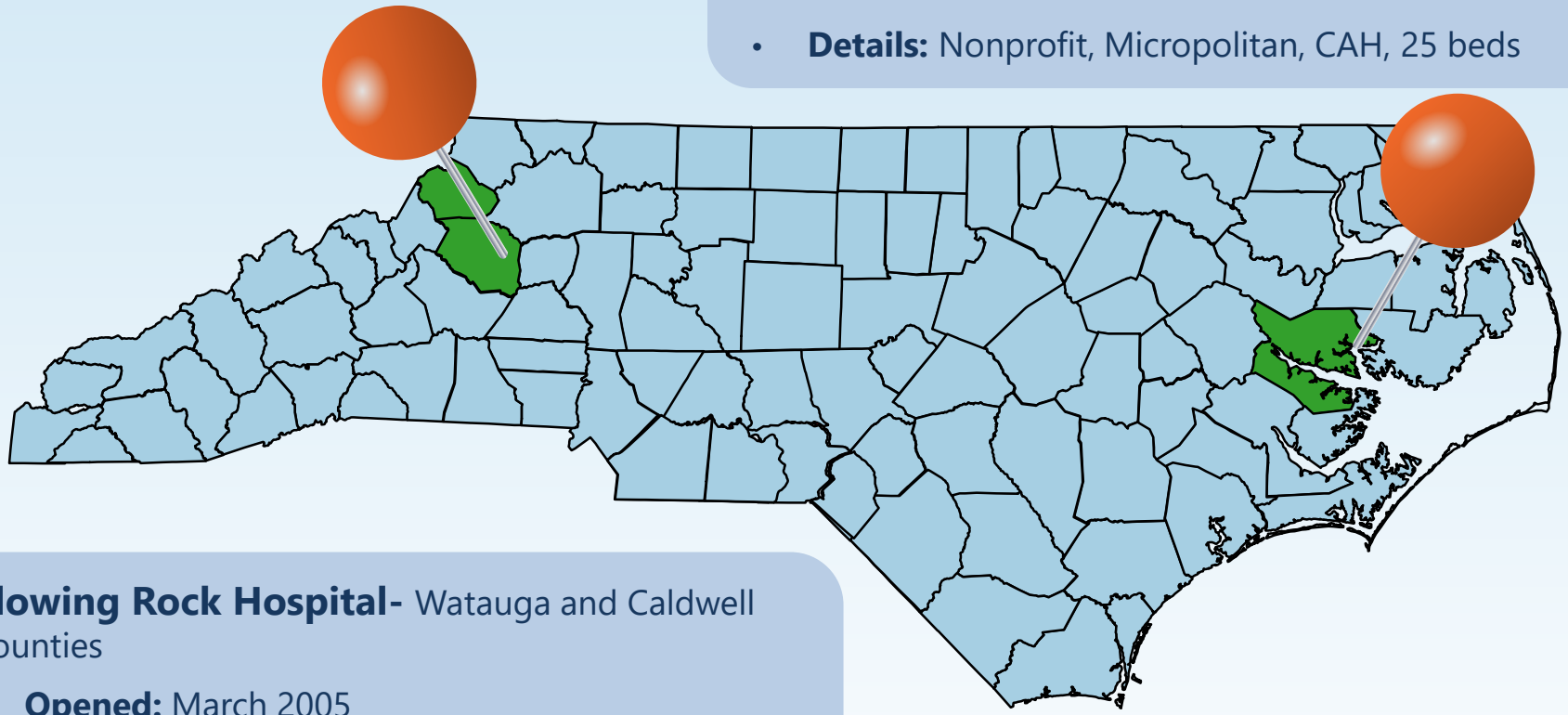
Primary care clinic (4 hospitals):

- Operate 8 hours and 5 days per week
- Focus on family medicine and preventive care
- 1 offers urgent care services on weekends

A Tale of Two Cities

Vidant Pungo Hospital- Beaufort and Hyde Counties

- **Opened:** February 2002
- **Closed:** June 2014
- **Details:** Nonprofit, Micropolitan, CAH, 25 beds



Blowing Rock Hospital- Watauga and Caldwell Counties

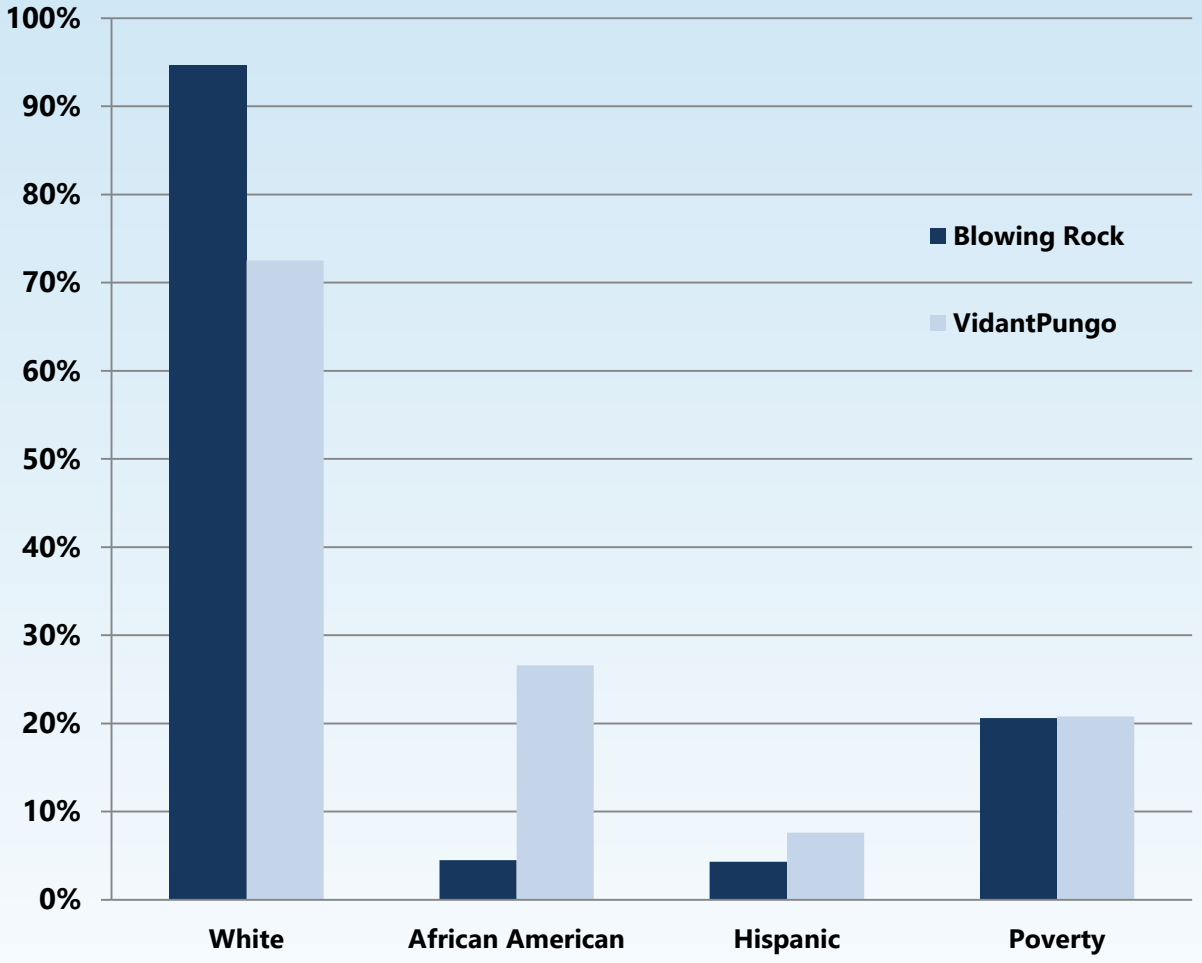
- **Opened:** March 2005
- **Closed:** October 2013
- **Details:** Nonprofit, Micropolitan, CAH, 25 beds

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Demographic Comparison

Total Population*

- Blowing Rock: 133,728
- VidantPungo: 53,513



*Sources:2012 Small Area Income and Poverty Estimates (SAIPE) State and County Estimates. U.S. Census Bureau. 2013

SAIPE 2012, Census Bureau. 2013

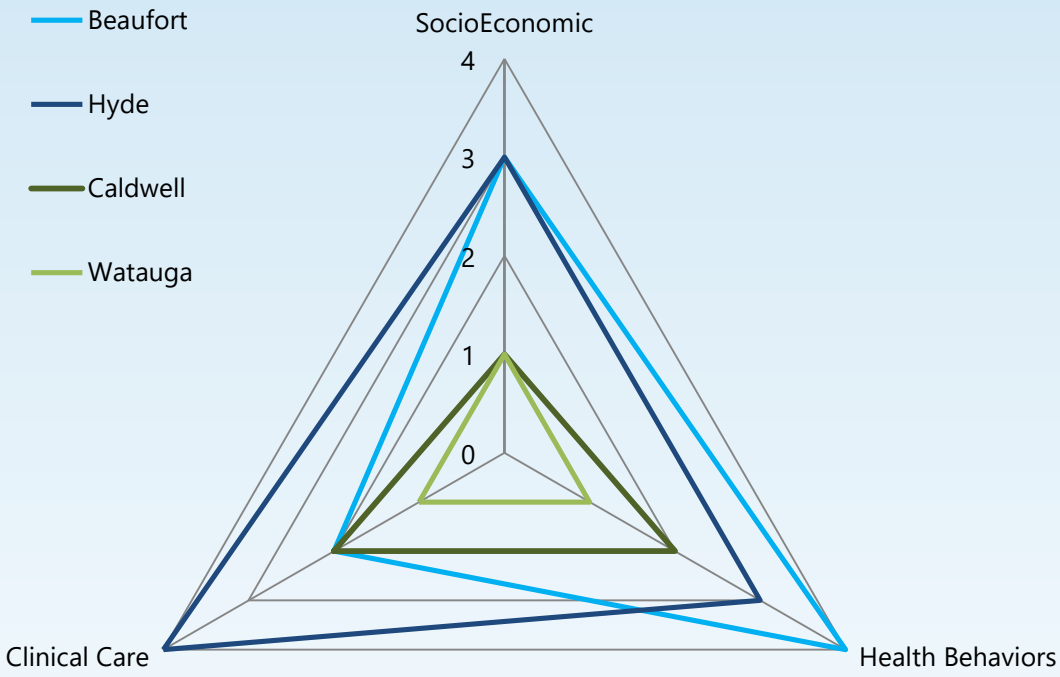
Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2010 to July 1, 2013, U.S. Census Bureau. 2014

2013 Population Estimates, Census Bureau. 2014

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Health Status Comparison

- Socioeconomic
  - Education
  - Employment
  - Income
  - Violence
- Clinical Care
  - Uninsured
  - Health Services
  - Quality of Care
- Health Behaviors
  - Tobacco/Alcohol
  - Obesity Factors



1 = Top quartile, low need area
4 = Bottom quartile, high need area

Data from County Health Rankings, 2013

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Timeline and Status

Blowing Rock

- **2007** ARHS buys financially distressed Blowing Rock Hospital
- **2009:** ARHS makes multi-year plan to transition the hospital to a post-acute care facility
- **October 2013:** Blowing Rock Hospital discontinues Emergency Department and acute care services.
- **June 2014**: Construction began on Chestnut Ridge at Blowing Rock: a $20 million dollar, 68-acre, 112 bed post-acute care facility, planned to open 2016
- Watauga Medical Center is less than 7 miles away

Vidant Pungo

- **2012:** Vidant buys financially distressed Pungo District Hospital
- **Sept 2013:** Vidant announced Pungo Hospital would close in 6 months
- **December 2013:** Vidant purchased 19.4 acres to build $4.2 million dollar multi-specialty clinic to replace hospital
- **March, 2014:** Beaufort County promised $2 million and Vidant offered $1 million in support
- **August 2014:** Belhaven Title VI complaint accepted against Vidant and Pantego Creek LLC
- **September 2014**: HHS investigates Pungo.
- Washington County Hospital is 30 miles away

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Social Context: Blowing Rock

Community Involvement

- **Transparency:** early community involvement
  - Town hall meeting minutes
  - Chamber of Commerce and community leaders actively involved
- **Social Action:** 2012 capital campaign to raise $10 million
  - Town pursued grants ($1.2 million water and sewer)
  - NC Transportation Secretary helped secure road grant ($2.58 million)
  - NC Rural Economic Development Center awarded town grant ($586,000)

Media Coverage

- "transition," "closing soon"

"It's a great day for Blowing Rock."

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Image source: http://blowingrocknews.com/golden-shovels-move-mountains-blowing-rocks-chestnut-ridge/

Social Context: Vidant Pungo

Community Involvement

- **Transparency:** discrepancy on community and public officials involvement:
  - Mayor says they were not informed or involved prior to the decision
  - Vidant says consulted with: Pungo Director's Council (residents of Beaufort and Hyde, no regulatory voice) twice, and:lease holders, Pantego Creek, LLC
  - Pungo voting board has no members that reside or hold a practice in Beaufort or Hyde counties
- **Social Action:** Grassroots efforts
  - Committee
  - Social media
  - March to D.C.

Media Coverage

- "closing" "outrage," "rally," "save," "economy. . ."

"Vidant's leadership is immoral. You don't make $100 million and close a critical access hospital."

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Image source: http://www.wnct.com/story/25980495/belhaven-mayor-to-walk-to-dc-to-save-vidant-pungo-hospital

Finally

- We have presented a lot of data and discussed hospital closures in a detached and analytical way, but…
- Hospital closures affect people – patients and their families, practitioners, hospital staff, local businesses, and the community at large
- It is important to keep the human cost of hospital closures at the front of the discussion

If you hear of an actual or probable closure…

- Go to: http://bit.ly/ruralclosures/
- You can get up-to-date data and information
- Submit information for possible inclusion in our database

How can SFCs help CAHs in financial distress?

Assist, facilitate, advise CAHs about survival strategies and tactics.

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

System affiliation

Hancock Regional Hospital in Greenfield IN has remained independent but cut costs by maintaining relationships with larger Indianapolis systems for services such as cardiac and cancer care as well as some primary care services.

(http://www.fiercehealthcare.com/story/why-affiliation-may-not-be-answer-struggling-rural-hospitals/2015-02-06)

Merger/acquisition

At **Mother Frances Hospital-Winnsboro** in TX, the CAH is using its relationship with a larger system, Trinity Mother Frances, to grow its outpatient service offerings. After performing a community needs assessment and mapping out its area's future healthcare needs, the hospital added an orthopedic program using TMF specialists. "Over the past four years we've experienced growth every year in volumes."

(http://www.beckershospitalreview.com/hospital-management-administration/how-to-put-critical-access-hospitals-in-positions-of-strength.html

Partnering with other organizations

NRHA's Outstanding Rural Health Organization Award winner, **Sakakawea Medical Center and Coal Country Community Health Center**. "This CAH and community health center serving patients in rural North Dakota have combined efforts resulting in a higher quality of care and improved financial gains. This success story demonstrates what can come from strong leadership, innovation and collaboration."

Form an alliance

- **Tucson Medical Center** is expected to announce Monday June 22 that it is the hub and founding member of the fledgling not-for-profit Southern Arizona Hospital Alliance.
- Hospitals in the new partnership want to remain independent, nonprofit and locally governed,
- By banding together, hospitals in the Alliance hope to leverage resources and gain advantages in purchasing, grant-writing and physician recruitment, as well as improved patient access to specialty care and more coordinated clinical care.

http://tucson.com/news/science/health-med-fit/tmc-rural-hospitals-form-partnership-to-fight-closures/article_400396d0-d148-599c-a1d7-03d4de9cf581.html

Fundraising campaigns

Bankruptcy protection

- *Reorganization bankruptcy* (Chapter 13): debtors restructure their repayment plans to make them more easily met.
- *Liquidation bankruptcy* (Chapter 7): debtors sell certain assets in order to make money they can use to pay off their creditors.

Bankruptcy protection

Monroe Hospital, a 32 bed medical center in Bloomington IN filed for Chapter 11 bankruptcy protection citing debts over $100 million, while owning only $50 million in assets. Several months after the hospital went bankrupt, there was a sale approval to Prime Healthcare Services, a group that owns and runs a large network of health care facilities throughout the country.

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

http://valuehealthcareservices.com/education/hospitals-that-filed-for-bankruptcy-in-2014/

State and county government

"I think there is a growing awareness that with 5 percent of the rural hospitals having closed over the course of the past 24 months … funding them differently and adequately is important. It is a priority for me, and in the House we have taken steps to secure their reimbursements for the next biennium," he said.

– Rep. Four Price, a member of the Texas budget-writing House Appropriations Committee.

http://lubbockonline.com/local-news/2015-03-21/area-rep-says-lawmakers-have-awareness-rural-hospitals-critical-needs#.VWdvvkYepch

Turnaround consultants

Cimarron Memorial Hospital (CMH), a 25-bed CAH in Boise City OK was experiencing severe financial hardship due to an annual operating loss of approximately $700,000. CMH engaged NewLight Healthcare to manage their hospital. Ralph Warren, Board Member of CMH, said "Even though they have only been here a short time they have found us a CEO and a CFO who are not only helping us financially, but in relationships with employees and the general public as well."

http://newlighthealthcare.com/casestudies/hospital-turnaround

Other strategies and tactics

- Inform the community – not all may know of a crisis.
- Work with lenders – reschedule debt, ST financing.
- Solicit local business support – contracts, donations, CoC.
- Approach foundations – grants.
- Make board / management changes – does someone or some people need to be fired?
- Assess whether a hospital should transition to a new role.
- Finally, if the writing is on the wall, help the community to find new sources of hospital care and help the hospital staff find new jobs.

Next session: 1000-1045

- "SFC strategies to help CAHs in financial distress"
- Learn from other state Flex coordinators about how they are helping CAHs in financial distress
- Identify relevant strategies to help financially distressed CAHs in your state

North Carolina Rural Health Research Program

Location:
Cecil G. Sheps Center for Health Services Research
University of North Carolina at Chapel Hill

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

Email: ncrural@unc.edu

Colleagues:

Mark Holmes, PhD
George Pink, PhD
Kristin Reiter, PhD
Ann Howard
Brystana Kaufman, MSPH
Denise Kirk, MS
Julie Perry
Randy Randolph, MRP
Sharita Thomas, MPP
Kristie Thompson, MA

NC RHRP
NC Rural Health Research Program

Flex Monitoring Team
University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine