Rural Hospital Closures
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The Rising Rate of Rural Hospital Closures

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Original Article

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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.
2005-16 rural hospital closures: Where were they?
Between January 2005 and July 2016, 118 rural hospitals have closed
2005-16 rural hospital closures:
What types of hospital were they?

- Neither: 46%
- Metro: 26%
- Micro: 28%

Gov’t owned
Not gov’t owned
2005-16 rural hospital closures: How far away is the next closest hospital?

A closure in August 2015 (Nye Regional in Tonopah, NV has 114 driving miles to the nearest hospital) is not pictured in the graph.
2010-16 rural hospital closures: Why did they close? (As reported by news media)

Market Factors
- Small or declining populations
- High unemployment (as high as 18%)
- High or increasing uninsured patients
- High proportion of Medicare and Medicaid patients
- Competition in close proximity

Hospital Factors
- Low daily census
- Lack of consistent physician coverage
- Deteriorating facility
- Fraud, patient safety concerns, and poor management

Financial Factors
- High and increasing charity care and bad debt
- Severely in debt
- Insufficient cash-flow to cover current liabilities
- Negative profit margin
2005-16 rural hospital closures:
How bad was their financial performance and condition?

In the year before they closed:

- 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
  - Negative or close to zero net income and net assets
- Most had already closed obstetrics
Most closures in South (60%)

Annual number of closures increasing

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
A Comparison of Closed Rural Hospitals and Perceived Impact

Sharita R. Thomas, MPP; Brystana G. Kaufman, BA; Randy K. Randolph, MRP; Kristie Thompson, MA; Julie R. Perry; George H. Pink, PhD

BACKGROUND

From 2010 through 2014, 47 rural hospitals,\(^1\) ceased providing inpatient services in 23 states across the country (“closed”\(^2\)). Among the 47 closed hospitals, 26 hospitals no longer provide any health care services (“abandoned”), and 21 continue to provide a mix of health services but no inpatient care (“converted”).\(^3\) These closures have affected approximately 800,000 people in the markets with abandoned hospitals and 700,000 people in the markets with converted hospitals. Loss of a rural hospital could impact access to certain necessary health services and is concerning as residents of rural communities are typically older and poorer, more dependent on public insurance programs, and have poorer health status than urban residents.\(^4\) Policy-makers, researchers, and rural residents are concerned and interested in determining why these hospitals are closing, whether the rate will continue to climb, and what effects there could be on local health care providers and the communities they serve.
What did closed hospitals morph into?

<table>
<thead>
<tr>
<th>Urgent Care or Emergency Facility</th>
<th>Skilled Nursing or Rehabilitation Facility</th>
<th>Outpatient or Primary Care Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urgent Care (5 hospitals)</td>
<td>Skilled Nursing (3 hospitals)</td>
<td>Outpatient Care (3 hospitals)</td>
</tr>
<tr>
<td>Operate 12 hours and 5-7 days per week</td>
<td>A range of 46-111 beds</td>
<td>Operate 10-24 hours and 3-7 days per week</td>
</tr>
<tr>
<td>Diagnostic, laboratory and radiology services</td>
<td>Physical, occupational and speech therapy services</td>
<td>Diagnostic and laboratory services</td>
</tr>
<tr>
<td>2 facilities offer outpatient and specialty services</td>
<td>Acute Rehab (1 hospital)</td>
<td>1 facility offers specialty care</td>
</tr>
<tr>
<td>Emergency Care (5 hospitals)</td>
<td>Individuals are transferred from the inpatient unit of a nearby regional hospital</td>
<td>Primary Care (4 hospitals)</td>
</tr>
<tr>
<td>Operate 24 hours and 7 days per week</td>
<td>Operates 8 hours and 7 days per week</td>
<td>Operate 8 hours and 5 days per week</td>
</tr>
<tr>
<td>Diagnostic, laboratory and radiology services</td>
<td>Physical, occupational and speech therapy services</td>
<td>Family medicine and preventative care focused</td>
</tr>
<tr>
<td>4 Facilities offer outpatient and specialty services</td>
<td></td>
<td>1 facility offers urgent care services on weekends</td>
</tr>
</tbody>
</table>

More than half were abandoned - no health care provided in facility.
Demographic Characteristics of the Markets Served by Closed Rural Hospitals

Communities with abandoned hospitals

Abandoned n=26
Skilled Nursing or Rehabilitation n=3
Emergency or Urgent Care n=10
Outpatient or Primary Care n=7

Percent

% 17 or Younger
% 65 or Older
% Black
% non-White
Study Findings

- From 2010 through 2014, 47 rural hospitals ceased providing inpatient services (“closed”). Of the 47, 26 hospitals no longer provide any health care services (“abandoned”) while 21 continue to provide a mix of health services other than inpatient care (“converted”).

- Abandoned rural hospitals served markets with a higher proportion of non-Whites (26%), particularly Blacks (14%), compared to converted rural hospitals (11% and 2%, respectively) and were located farther away from other hospitals.

- Survey respondents from the markets of closed hospitals perceived increased travel distances to health care as a stressor and a risk to the health of those communities.
Impact of closures

- Limited evidence about health outcomes
  - Small sample / power problems?
  - OIG: surveys revealed few reported access problems post-closure
  - Literature suggests some access decrease, but magnitude mixed
  - Joynt et al (2015) found no effect, but mostly urban hospitals

- Some evidence about economic cost
  - Hospital often one of top two employers
  - Magnet effects – hospital closes, providers leave?
  - Loss of the only hospital in a county implies a decrease of about $1300 (today’s dollars) in per capita income (Holmes et al 2006)

- Emerging evidence about health disparities
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
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/
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