Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

HOSPITAL CLOSURE: 1997



JUNE GIBBS BROWN Inspector General

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EXECUTIVE SUMMARY

PURPOSE

To describe the extent, characteristics, reasons for, and impact of hospital closure in 1997.

BACKGROUND

The closure of hospitals in past years has generated public and congressional concern. We released a report in May 1989 describing the nationwide phenomenon of hospital closure in 1987. Subsequently, we issued annual reports for hospital closures from 1988 through 1996.

The findings from all the OIG studies of hospital closures are similar. The hospitals that closed were small and had low occupancy rates. When the hospitals closed, few patients were affected. Most could get medical care nearby.

FINDINGS

Our inspection of hospital closures in 1997 produced findings similar to those previously reported for 1987-1996.

- ! Thirty-eight general, acute care hospitals closed -- 0.8 percent of all hospitals. One more hospital closed in 1997 than in each of the previous two years. Two new general, short term, acute care hospitals opened in 1997, and one hospital that had previously closed reopened in 1997.
- ! Ten of the closed hospitals were rural and 28 were urban. A higher percentage of urban hospitals (1.1%) closed in 1997 than did rural hospitals (0.5%).
- ! Closed hospitals in both rural and urban areas were smaller on average than the national averages.

Rural hospitals that closed had an average of 48 beds as compared to an average of 68 beds for all rural hospitals nationally.

Urban hospitals that closed had an average of 122 beds as compared to an average of 222 beds for all urban hospitals nationally.

! Occupancy rates for closed rural and urban hospitals were lower on average than the national averages.

Rural hospitals that closed had an average occupancy rate of 26.9 percent as compared to an average of 32 percent for all rural hospitals nationally. The average daily census in the year prior to closure was about 13 patients.

Urban hospitals that closed had an average occupancy rate of 38.8 percent as compared to an average of 48 percent for all urban hospitals nationally. The average daily census in the year prior to closure was about 47 patients.

! Medicare utilization in closed hospitals was higher than the national average for rural hospitals, and lower for urban hospitals.

In rural areas, the average Medicare utilization among hospitals that closed was 65.6 percent compared to an average of 59 percent for all rural hospitals nationally. About nine Medicare patients were in the hospital on an average day in the year prior to closure.

In urban areas, the average Medicare utilization among hospitals that closed was 40.5 percent compared to an average of 48 percent for all urban hospitals nationally. About 19 Medicare patients were in the hospital on an average day in the year prior to closure.

! Medicaid utilization in closed hospitals was lower than the national average for rural hospitals, and higher for urban hospitals.

In rural areas, the average Medicaid utilization among hospitals that closed was 7.2 percent as compared to an average of 12 percent for all hospitals nationally.

In urban areas, the average Medicaid utilization among hospitals that closed was 17.1 percent as compared to an average of 14 percent for all urban hospitals nationally.

- ! No single factor or event caused hospitals to close. Hospitals closed because of the interrelated factors of declining occupancy, lagging revenues, and rising costs. Hospital viability depends on the stability of all three factors. The weakening of any one of these factors may begin a chain reaction eventually leading to hospital closure.
- ! Although residents in a few communities had to travel greater distances for hospital care, most had emergency and inpatient medical care available within 10 miles of a closed hospital.
- ! At the time of our inspection, 25 of the 38 closed hospital facilities (66 percent) were being used for health-related services. Also, plans were being made to use 2 of the remaining 13 vacant hospitals for health-related services.

TABLE OF CONTENTS

PAG	\mathbf{E}
XECUTIVE SUMMARY	L
NTRODUCTION	1
INDINGS	3
Extent and Characteristics of Closed Hospitals	3
How Many Closed	3
Where They Were	3
What They Were Like	4
Reasons for Hospital Closure	7
Impact of Hospital Closure	7
How Many Patients Were Affected	8
What Inpatient Care and Emergency Services Are Available	8
What the Building Is Used for Now	0
PPENDICES	
Methodology	-1
Number of Hospital Closures by State B	-1
Hospital Closures by Hospital Name and Location	-1

INTRODUCTION

PURPOSE

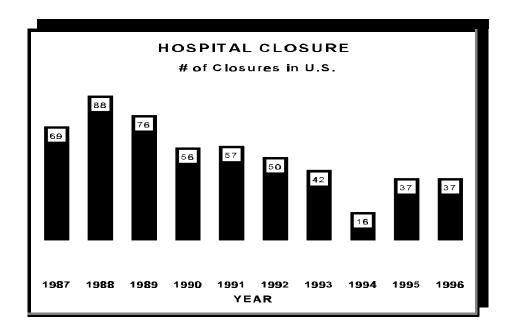
To describe the extent, characteristics, reasons for, and impact of hospital closure in 1997.

BACKGROUND

In the past, closure of general, acute care hospitals has generated public and congressional concern. Numerous questions had been raised about the impact of hospital closure in the United States, as well as implications for public policy. A number of studies predicted that more hospitals would close in coming years.

In response to these concerns, the Office of Inspector General released a report in May 1989 describing the phenomenon of hospital closure during 1987 in the United States. We found that the hospitals that closed were small and their closing did not severely affect access to care. Many users of our 1987 hospital closure study encouraged us to continue year-by-year analyses of the phenomenon to detect differences in the rate of hospital closure, and in the characteristics and circumstances of hospitals that close.

Similar inspections on hospital closures in 1988 through 1994 showed a downward trend in the number of closures. In 1995 and 1996, hospital closures more than doubled that of 1994, but were still less than in any other year since we began this series of reports.



The findings from the 1987 through 1996 inspections were similar. The hospitals that closed were small and had low occupancy rates. When the hospitals closed, few patients were affected. Most could get medical care nearby.

SCOPE

We examined hospitals that closed in calendar year 1997.

For purposes of this study, the following definitions were used.

Hospital: A facility that provides general, short-term, acute medical and surgical inpatient services.

Closed Hospital: A facility that stopped providing general, short-term, acute inpatient services in 1997. If a hospital merged with or was sold to another hospital but the physical plant continued to provide inpatient acute care, it was not considered a closure. If a hospital both closed and reopened in 1997 in the same physical plant, it was not considered a closure.

METHODOLOGY

To determine the *extent, reasons for, and impact* of hospital closure, we obtained information from State licensing and certification agencies, State health planning agencies, State hospital associations, HCFA data bases, officials associated with closed and nearby hospitals, and local public officials.

We obtained information on the *characteristics* of all hospitals, including those that closed in 1997 from the Hospital Cost Report Information System (HCRIS) maintained by HCFA.

Appendix A describes our methodology in further detail.

We conducted our review in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

FINDINGS

Our analysis shows that:

- ! Thirty-eight general, short-term, acute care hospitals closed in 1997 -- 0.8 percent of all hospitals.
- ! One more hospital closed in 1997 than closed in each of the previous two years. The characteristics, reasons for, and impact of closures were similar.
- ! Most hospitals that closed were small and had low occupancy rates.
- ! Although residents of a few communities had to travel greater distances for hospital care, most had emergency and inpatient medical care available within 10 miles of a closed hospital.

EXTENT AND CHARACTERISTICS OF CLOSED HOSPITALS

How Many Closed

In 1997, there were 4,805 general, short-term, acute care hospitals in the United States entered on HCFA's data base as participating in the Medicare program. Thirty-eight hospitals closed in 1997 -- 0.8 percent of all hospitals nationally.

HOSPITALS IN THE U.S.:	4,805
CLOSED IN 1997:	38 (0.8%)

Closure of the 38 general, acute care hospitals reduced inpatient bed supply by 3,882 beds, or 0.5 percent. While 38 hospitals closed in 1997, 2 new hospitals *opened*, adding 204 beds. In addition, 1 previously closed hospital *reopened* in 1997, adding another 37 beds.

Where They Were

The closed hospitals were located in 22 States. California had the greatest number of closures (6), followed by Texas (4), Florida (3), Michigan (3), Virginia (3), Georgia (2), and Montana (2). The remaining 15 States had 1 closure each. Appendix B lists the number of hospital closures by State. Appendix C lists the closures by hospital name and location.

A higher percentage of urban hospitals (1.1%) closed in 1997 than did rural hospitals (0.5%).

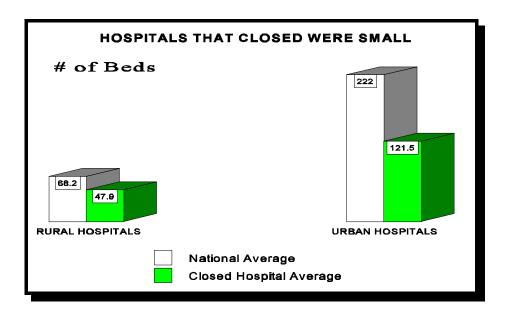
	URBAN	RURAL	
HOSPITALS IN THE U.S.:	2,666	2,139	
CLOSED IN 1997:	28 (1.1%)	10 (0.5%)	

What The Closed Hospitals Were Like

<u>Size</u>: Both rural and urban hospitals that closed in 1997 were smaller, on average, than the national average size. The average number of beds for hospitals nationwide is 154. About 90 percent of the hospitals that closed had fewer beds than the national average. Moreover, half (50 percent) of the hospitals that closed had fewer than 100 beds. In contrast, 10 percent of the closed hospitals had more beds than the national average.

SIZE OF CLOSED HOSPITALS			
	Number of Closed Hospitals		
Number of Beds	Rural	Urban	Total
0 - 30	5	3	8 (21%)
31 - 50	1	2	3 (8%)
51 - 100	3	5	8 (21%)
101 - 150	1	14	15 (40%)
151 - 200	0	0	0
201 - 300	0	2	2 (5%)
301 >	0	2	2 (5%)
Totals	10	28	38

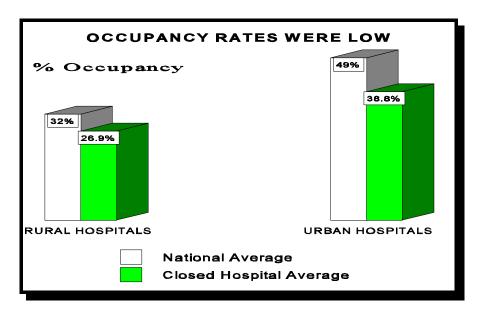
Rural hospitals that closed had an average of 47.9 beds as compared to an average of 68.2 beds for all rural hospitals nationally. *Urban* hospitals that closed had an average of 121.5 beds as compared to an average of 222 beds for all urban hospitals nationally.



Occupancy: Occupancy rates for closed rural and urban hospitals were lower on average than the national averages.¹

Rural hospitals that closed had an average occupancy rate of 26.9 percent as compared to an average of 32 percent for all rural hospitals nationally. The average daily census in the year prior to closure was about 13 patients.

Urban hospitals that closed had an average occupancy rate of 38.8 percent as compared to an average of 48 percent for all urban hospitals nationally. The average daily census in the year prior to closure was about 47 patients.



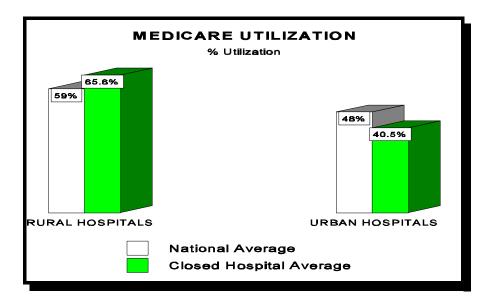
<u>Medicare Utilization:</u> The average Medicare utilization among *rural* hospitals that closed was higher than the national average. The average Medicare utilization among *urban* hospitals that closed was lower than the national average.²

In rural areas, the average Medicare utilization among hospitals that closed was 65.6 percent compared to an average of 59 percent for all rural hospitals nationally. About nine Medicare patients were in the hospital on an average day in the year prior to closure.

In urban areas, the average Medicare utilization among hospitals that closed was 40.5 percent compared to an average of 48 percent for all urban hospitals nationally. About 19 Medicare patients were in the hospital on an average day in the year prior to closure.

¹ Hospital occupancy rate is defined as the actual number of patient days divided by the total bed days available. National average occupancy rate is defined as the sum of all hospitals' occupancy rates, divided by the number of hospitals.

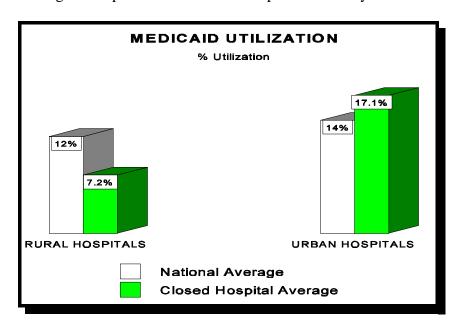
² Average Medicare utilization in closed hospitals is defined as the percent of Medicare patient days compared to the total patient days for each hospital, summed and divided by the number of hospitals. National average Medicare utilization is the percent of Medicare utilization of each hospital, summed and divided by the total number of hospitals.



<u>Medicaid Utilization</u>: The average Medicaid utilization among *rural* hospitals that closed was lower than the national average. The average Medicaid utilization among *urban* hospitals that closed was higher than the national average.³

In rural areas, the average Medicaid utilization among hospitals that closed was 7.2 percent as compared to an average of 12 percent for all hospitals nationally.

In urban areas, the average Medicaid utilization among hospitals that closed was 17.1 percent as compared to an average of 14 percent for all urban hospitals nationally.



³ Medicaid utilization is calculated in the same way as Medicare utilization.

REASONS FOR HOSPITAL CLOSURE

As in our previous hospital closure studies, the many health care professionals interviewed reported no single reason for hospital closure. Hospitals closed because of the interrelated factors of declining occupancy, lagging revenues, and rising costs. Hospital viability was said to depend on the stability of all three factors. The weakening of any one may begin a chain reaction eventually leading to hospital closure.

Although the sequence and combination of these factors were not always the same, generally the scenario was the same as we reported in our 1996 Hospital Closure report:

The hospital's occupancy begins to slide because a doctor leaves town or retires, or begins to admit patients to a more modern hospital not far away. Lengths of stay are down because of prospective payment pressures and more effective treatment methods. A new ambulatory surgical center has opened and is also drawing patients away.

While occupancy is declining, the hospital's costs continue to rise. Competition with other hospitals means that new, high technology equipment is needed. Nurses and technicians are demanding higher salaries - and they are getting them from other hospitals nearby. The building may be deteriorating but the hospital has not been able to fully fund its capital reserves for several years.

On the other hand, patient care revenue is down because of lower occupancy and more uninsured or inadequately insured patients. For those who do have coverage, either public or private, insurers are holding down their costs and further eroding the hospital's dwindling resources.

Soon the hospital administrator is unable to manage the situation, and the Board examines its options: continue to go deeper into debt; sell the hospital; merge with another hospital; or close.

The smaller the hospital, the less able it is to resist this downward spiral. As noted earlier, the average size of the 38 hospitals that closed in 1997 was only 48 beds for rural hospitals and 122 beds for urban hospitals. They are considerably smaller than the national averages.

IMPACT OF HOSPITAL CLOSURE

In communities where hospitals closed in 1997, we determined the

- ! number of patients affected by closure of hospitals,
- ! availability of inpatient care and emergency medical services, and
- ! current use of closed hospital facilities.

How Many Patients Were Affected

For rural hospitals that closed in 1997, the average daily census in the year prior to closure was about 13 patients. The urban hospitals that closed had an average daily census of about 47 patients.

WHEN HOSPITALS CLOSED, HOW MANY PATIENTS WERE AFFECTED?			
	Rural Hospitals	Urban Hospitals	
Average Number of Beds	47.9	121.5	
Average Occupancy Rate	<u>x 26.9%</u>	<u>x 38.8%</u>	
Average Number of Patients	12.9	47.1	

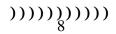
We analyzed Medicare utilization data to determine the number of elderly patients affected by hospital closure in 1997. In rural hospitals that closed, about nine Medicare patients were in the hospital on an average day in the year prior to closure. In the urban hospitals that closed, about 19 Medicare patients were in the hospital on an average day.

WHEN HOSPITALS CLOSED, HOW MANY MEDICARE PATIENTS WERE AFFECTED?			
	Rural Hospitals	Urban Hospitals	
Average Patient Census	12.9	47.1	
Average Medicare Utilization Rate	<u>x 65.6%</u>	<u>x 40.5%</u>	
Average Number Medicare Patients	8.5	19.1	

What Inpatient Care and Emergency Services Are Available

Inpatient Care: In most communities where a hospital closed in 1997, inpatient hospital care was available nearby.⁴

⁴ We assessed availability of inpatient medical care in miles from a closed hospital to the nearest inpatient facility.



NEAREST INPATIENT CARE TO CLOSED HOSPITALS			
		NUMBER OF CLOSED HOSPITALS	
DISTANCE	Rural	Urban	
Within 3 Miles	3 (30%)	18 (64%)	
4-10 Miles	1 (10%)	8 (29%)	
11-20 Miles	2 (20%)	2 (7%)	
21-30 Miles	2 (20%)	0	
More than 30 Miles	2 (20%)	0	
Totals	10 (100%)	28 (100%)	

Rural Areas: Residents in 6 of the 10 rural communities (60 percent) where a hospital closed could get inpatient hospital care within 20 miles of the closed hospital. Residents of Fort Benton, Montana and Malta, Montana had to travel 40 and 71 miles respectively for full service inpatient hospital care. However, these frontier communities converted their closed hospitals into Medical Assistance Facilities (MAF).⁵ These MAF facilities provide up to four days of limited inpatient services.

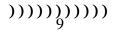
Urban Areas: In 26 of the 28 urban communities (93%) where a hospital closed in 1997, residents could get inpatient hospital care within 10 miles of the closed hospital. Residents in 22 of the 28 urban communities (79 percent) where a hospital closed could get inpatient care in the same community.

<u>Emergency Services</u>: When a hospital closed, the community lost not only inpatient beds, but also 24-hour emergency services.⁶

Rural Areas: In 8 of the 10 rural communities (80 percent) where a hospital closed in 1997, emergency care facilities were available within 20 miles of the closed hospital. Residents of Summerville, Georgia had to travel 23 miles for 24-hour emergency care and residents of Albany, Texas had to travel 30 miles for 24-hour emergency care.

Urban Areas: Emergency care facilities were available within 10 miles of the closed hospital in all but one of the 28 urban communities where a hospital closed in 1997. Residents of Graysville, Alabama had to travel 12 miles for 24-hour emergency care. In 23 of the 28 urban communities (82 percent) where a hospital closed, residents could get emergency services in the same town.

 $^{^{6}}$ We assessed availability of emergency medical care in miles from a closed hospital to the nearest emergency facility.



⁵ The 1997 Balanced Budget Act changed Medical Assistance Facilities (MAF) to Critical Access Hospitals (CAH) as part of the Rural Hospital Flexibility Program.

NEAREST EMERGENCY SERVICES TO CLOSED HOSPITALS			
	NUMBER OF CLOSED HOSPITALS		
DISTANCE	Rural Urban		
Within 3 Miles	5 (50%)	19 (68%)	
4-10 Miles	1 (10%) 8 (28.5%)		
11-20 Miles	2 (20%) 1 (3.5%)		
21-30 Miles	2 (20%) 0		
More than 30 Miles	0 0		
Totals 10 (100%) 28 (100%)			

What the Building Is Used For Now

At the time of our inspection, 25 of the 38 closed hospital facilities (66 percent) were being used for health-related services. For example:

- ! Healtheast Midway Hospital in St. Paul Minnesota and Stanislaus Medical Center in Modesto, California became outpatient care centers.
- ! Chattooga County Hospital in Summerville, Georgia and Medcenter One Hospital in Mandan, North Dakota are now long-term care facilities.
- ! Promina Windy Hill Hospital in Marietta, Georgia was converted to a long-term acute care hospital. The newly converted facility also provides outpatient surgery.
- ! Memorial Hospital of Michigan City, Indiana and Genesys Regional Medical Center-St. Joseph Campus in Flint, Michigan became specialty hospitals.
- ! Loudoun Hospital Center in Leesburg, Virginia closed its short-term, acute inpatient care services at one facility and opened a new facility six miles away. The former facility still provides long-term care and mental health services.
- ! Phillips County Hospital in Malta, Montana and Missouri River Medical Center in Fort Benton, Montana were converted to HCFA sponsored Medical Assistance Facilities. In addition to providing limited inpatient care, they provide 24-hour emergency services and outpatient care. (The Office of Inspector General released a report on Medical Assistance Facilities (OEI-04-92-00731) in July 1993.

APPENDIX A

METHODOLOGY

Extent of Hospital Closure

To determine how many hospitals closed in 1997, we contacted State licensing and certification agencies, State hospital associations, and State health planning agencies. We also compiled Health Care Financing Administration (HCFA) data on terminated providers in 1997. When a closed hospital met the study's definition or when there were questions, we surveyed officials associated with the closed hospitals, officials associated with hospitals nearest to the closed hospital, and local public officials.

To determine the number of hospitals in the United States, we used the Hospital Cost Report Information System (HCRIS) maintained by HCFA. We included only general, short-term, acute care hospitals under Medicare's Prospective Payment System (PPS) in the universe. There were 4,805 hospitals listed on HCRIS as short-term, acute care, general hospitals for the thirteenth year of PPS (PPS 13).

Characteristics of Hospital Closure

To analyze characteristics of closed hospitals, we used HCRIS data. We used the latest preclosure cost reports. For example, if a hospital closed in May 1997 and its accounting year was on a January-December cycle, we used the provider's January 1, 1996 to December 31, 1996 report.

Reasons for and Impact of Hospital Closure

We limited our "impact" analysis to the distance from a closed hospital to the nearest still-operating hospitals and to emergency services. In addition to the HCRIS, we obtained data for our analysis from interviews with the following sources.

- ! Former hospital administrators, board members, and/or staff of closed hospitals
- ! Hospital administrators and/or staff at the nearest hospitals
- ! Local police, health, and government officials
- ! State health planning agencies
- ! State certification and licensing agencies
- ! State hospital associations

APPENDIX B

1997 HOSPITAL CLOSURES - RANKED BY STATE				
State	Total Closures	Rural Closures	Urban Closures	
California	6	0	6	
Texas	4	1	3	
Florida	3	0	3	
Michigan	3	0	3	
Virginia	3	0	3	
Georgia	2	1	1	
Montana	2	2	0	
Alabama	1	0	1	
Illinois	1	1	0	
Indiana	1	1	0	
Kentucky	1	1	0	
Minnesota	1	0	1	
Missouri	1	0	1	
North Dakota	1	0	1	
New Jersey	1	0	1	
New York	1	0	1	
Ohio	1	0	1	
Pennsylvania	1	0	1	
South Carolina	1	1	0	
Tennessee	1	1	0	
Utah	1	0	1	
West Virginia	1	1	0	
22 States	38 Closures	10 Rural	28 Urban	

APPENDIX C

1997 HOSPITAL CLOSURES BY NAME AND LOCATION				
Hospital Name	City	State	Rural/ Urban	
Longview General Hospital	Graysville	AL	urban	
Newhall Community Hospital	Newhall	CA	urban	
East Bay Hospital	Richmond	CA	urban	
Harbor View Medical Center	San Diego	CA	urban	
Pioneer Hospital	Artesia	CA	urban	
Stanislaus Medical Center	Modesto	CA	urban	
Thompson Memorial Medical Center	Burbank	CA	urban	
Parkway West Regional Medical Center	Miami	FL	urban	
University General Hospital	Seminole	FL	urban	
Columbia Pompano Beach Medical Center	Pompano Beach	FL	urban	
Chattooga County Hospital	Summerville	GA	rural	
Promina Windy Hill Hospital	Marietta	GA	urban	
Central Community Hospital	Clifton	IL	rural	
Memorial Hospital of Michigan City	Michigan City	IN	rural	
McLean County General Hospital	Calhoun	KY	rural	
Thorn Hospital	Hudson	MI	urban	
Genesys Regional Med Ctr-St. Joseph	Flint	MI	urban	
Genesys Regional Med Ctr-Flint	Flint	MI	urban	
Healtheast Midway Hospital	St. Paul	MN	urban	
Columbia Hospital-North Campus	Springfield	MO	urban	
Missouri River Medical Center	Fort Benton	MT	rural	
Phillips County Hospital	Malta	MT	rural	
Medcenter One Mandan	Mandan	ND	urban	
United Hospitals Medical Center	Newark	NJ	urban	
Union Hospital of the Bronx	Bronx	NY	urban	
Mercy Hospital	Toledo	ОН	urban	
Mt. Sinai Hospital	Philadelphia	PA	urban	
Mullins Hospital	Mullins	SC	rural	
Baptist Hospital of Roane County	Rockwood	TN	rural	
Columbia Doctors Hospital East Loop	Houston	TX	urban	
Columbia Medical Arts Hospital	Texarkana	TX	urban	
Shackelford County Hospital District	Albany	TX	rural	
South Park Hospital	Lubbock	TX	urban	
Paracelsus Regional Hospital and Med Ctr	South Salt Lake City	UT	urban	
Loudoun Hospital Center	Leesburg	VA	urban	
Portsmith General Hospital	Portsmith	VA	urban	
Newport News General Hospital	Newport News	VA	urban	
Beckley Hospital	Beckley	WV	rural	