

#### Challenges Facing Rural Hospitals

June 2002, Vol. 4, No. 1

ural hospitals are an integral part of their communities not only providing access to health care, but also serving as a hub for public health, wellness, and social services. Rural hospitals contribute heavily to local communities by providing jobs, recruiting health practitioners, consuming the services of other local businesses, and helping to make communities more attractive places to live and work. Over 54 million people live in rural areas and are served by about 2200 rural hospitals.

Despite the critical role of rural hospitals, the continued viability of many is in question. Because of their small size—a median of 58 beds compared to 186 for urban hospitals—rural hospitals have more difficulty absorbing the impact of policy and market changes. From 1980 to 1995, admissions to rural hospitals declined by over 40 percent as did hospital days. Since 1980, over 400 rural hospitals closed¹ and many others drastically reduced their numbers of beds and scope of inpatient services. But now admissions are trending up and days are no longer declining.

Since the enactment of the Balanced Budget Act (BBA) in 1997 and subsequent refinements, the financial performance of rural hospitals has declined. In 2000, 34 percent of rural hospitals had negative total margins.

With modest assets and financial reserves, rural hospitals lack access to the capital required to allow large investments in the latest technologies. Consequently, rural residents may bypass them for larger, urban hospitals. These pressures are forcing rural hospitals to change the way they operate and redefine their role in the community.

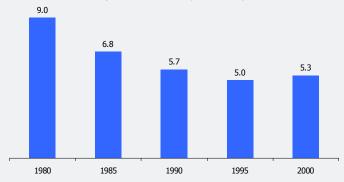
This issue of TrendWatch explores the role of rural hospitals in their communities and discusses some of the challenges they face. Key differences make rural hospitals more vulnerable than their urban counterparts. Rural hospitals are often geographically isolated, in smaller communities, and tend to be more dependent on Medicare and outpatient volume. Other factors like the workforce shortage are common to all hospitals.

"This is one of the most important issues facing rural areas today. Without access to quality, affordable care, our seniors and young families will not be able to remain in rural communities."

Representative Jerry Moran, Chairman of the House Rural Health Care Coalition

## Admissions to rural hospitals declined by 44 percent from 1980 to 1995 but now are trending up.

Chart 1: Rural Hospital Admissions (in millions), 1980-2000



## Just in the last decade 186 rural hospitals closed.

Chart 2: Rural Hospital Closures, 1990-1999



## By 2000, 34 percent of rural hospitals had a negative total margin.

Chart 3: Percent of Rural Hospitals Experiencing Negative Total Margins, 1990-2000

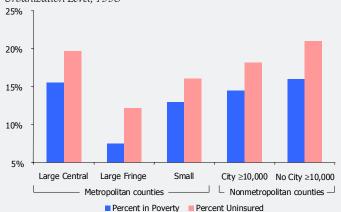


# RENDWATCH

## **Rural Hospitals Face Special Challenges**

## In some ways rural demographics are more similar to inner cities than to suburbs.

Chart 4: Percent of Population Uninsured and in Poverty by Urbanization Level, 1998

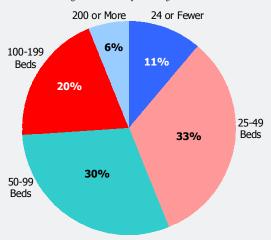


# meet the healthcare needs of their communities. But with fewer patients over which to spread these high fixed costs, costs per case tend to be higher.<sup>2</sup> These higher costs cannot always be recouped through increased payment rates.

areas than suburbs.

## Nearly three quarters of rural hospitals have fewer than 100 beds...

Chart 5: Distribution of Rural Hospitals by Bed Size, 2000



## ...and smaller hospitals tend to have lower margins.

Rural hospitals tend to be located in small communities with declining and aging populations. Between 1995 and

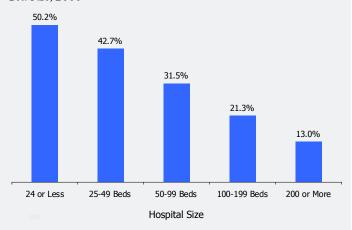
1999, 37 percent of rural counties experienced declining

populations.<sup>1</sup> Rural communities typically have lower household incomes, higher rates of poverty, and higher uninsurance—in some ways looking more like inner city

Despite a smaller patient base to draw from, rural hos-

pitals still have to maintain a broad range of services to

Chart 6: Percent of Rural Hospitals with Negative Total Margins by Bed Size, 2000



#### **Rural Hospitals and Economic Development**

Hospitals are key to the economic health of rural communities. They are major employers in rural communities and hospital jobs pay well by rural standards. Hospitals attract businesses and residents to rural towns. The goods and services they buy circulate income and generate indirect economic activity, and their local bank deposits create funds to invest in rural businesses and individuals.<sup>1</sup>

#### Economic Impact of a Typical Rural Hospital

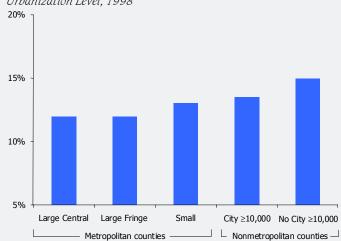


Cordes, Sam. "Health Care Services and the Rural Economy," The Changing Rural Economy of the Midwest. Chicago: Federal Reserve Bank of Chicago, 1996.

## **Rural Hospitals are More Dependent on Medicare**

#### Rural populations are older...

Chart 7: Percent of Population 65 Years of Age and Over by Urbanization Level, 1998

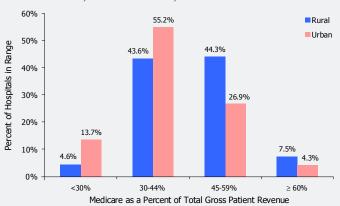


Rural populations tend to be older than those of urban areas. This age difference translates into a greater dependence of rural patients and hospitals on Medicare. Since the enactment of the BBA and subsequent refinements, falling Medicare margins in rural hospitals have led to declining overall margins.

Rural hospitals have lower Medicare margins than urban hospitals despite special programs targeted to help rural hospitals. Factors contributing to low margins include: higher per unit costs and more difficulty managing risk inherent in a prospective payment system because of their small patient base; less contribution from disproportionate share and indirect medical education payments; and a different service mix.

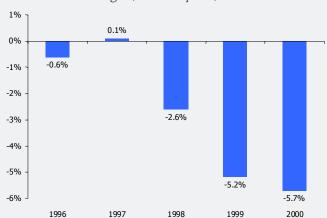
#### ...making rural hospitals more dependent on Medicare.

Chart 8: Medicare Gross Revenue as a Percent of Total Gross Patient Revenue, Rural and Urban, 2000

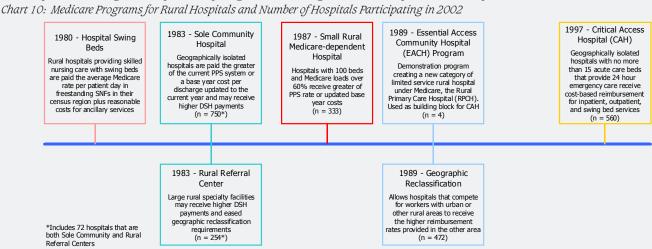


#### Medicare margins are low for rural hospitals and have been declining...

Chart 9: Medicare Margins, Rural Hospitals, 1996-2000



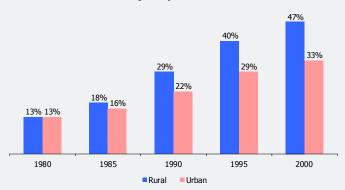
#### ...despite a range of special programs designed to help rural hospitals.



### **Rural Hospitals are Redefining Their Role**

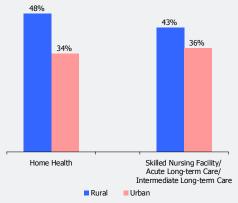
## Rural hospitals have seen a more dramatic shift of care to the outpatient setting...

Chart 11: Outpatient Revenue as a Percent of Total Gross Revenue, Rural vs. Urban Community Hospitals, 1980-2000



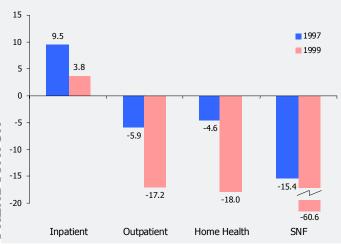
## ...and more must provide needed home health and skilled nursing care.

Chart 12: Percent of Hospitals with Home Health and Skilled Nursing Facility/Acute Long-term Care or Intermediate Long-term Care, 2000



#### Margins for non-inpatient services are lower and were hit harder by Medicare policy changes.

Chart 13: Medicare Margin by Service for Rural Hospitals, 1997 and 1999



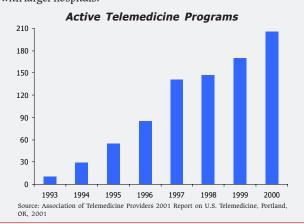
Like other hospitals, rural hospitals face payer pressure to reduce length of stay and lower costs. As inpatient volume and days declined, rural hospitals shifted more care to the outpatient setting. The shift to outpatient care has been more pronounced for rural hospitals because they often do not have the resources or the patient base to justify investment in the expensive technologies required to support specialized inpatient services. Thus patients in rural areas tend to travel to urban centers for complex inpatient services.

Often with few options available for alternative levels of care in rural communities, rural hospitals have expanded their range of services to include home health and skilled nursing. These services were particularly hard hit by BBA and subsequent refinements. As a result some hospitals have cut these services.

Conversion to a critical access hospital (CAH) is an another strategy that a growing number of rural hospitals have adopted to preserve access in the face of financial pressures. The CAH designation allows low-volume, rural hospitals to receive cost-based reimbursement for inpatient and outpatient services. At the same time it provides incentives to reduce acute care services but still maintain emergency department and other essential services. Since its introduction as part of the BBA, the number of CAHs has grown to 560.

#### **Telemedicine Programs Provide Access to Specialized Care for Rural Populations**

Telemedicine uses information and communications technology to provide health care services when long distances separate the patient from the provider. A telemedicine network often connects multiple rural sites to a central hub, generally in a larger urban center. Teleradiology allows x-ray images to be sent electronically, telephones can be used to perform diagnostic tests, and video conferencing equipment can allow "face-to-face" interactions between specialists and patients. Telemedicine allows rural hospitals to enhance the scope and quality of services, improve cost effectiveness of existing services, and strengthen relationships with larger hospitals.



### **Workforce Shortage in Rural Hospitals**

The nationwide health care workforce shortage hits rural hospitals especially hard. Just a few vacancies can cause major problems for small rural hospitals. Fewer professionals per job class mean that overtime often is not a realistic option to fill the gap created by vacancies. Rural hospitals far from urban centers have limited access to agency staff, and often have no where else to divert patients when demand for services exceeds the supply of staff available to deliver them.

Because of lower living costs, rural workers traditionally earn less than their urban counterparts. As suburbs expand and interstate highways connect far-flung communities, many rural residents choose to commute long distances to earn higher wages in urbanized areas. 62 percent of rural hospitals are within 50 miles of a metropolitan hospital.

Though many rural hospitals must now compete in the same labor market as urban hospitals, Medicare policies hamper the ability of rural hospitals to close the wage gap. Medicare's prospective payment system adjusts reimbursements using a wage index that reflects the average hourly wages paid by hospitals. Medicare calculates the wage index for every metropolitan area in the country. But instead of calculating the wage index for each rural hospital's labor market, Medicare sets a single wage index adjustment for all non-metropolitan counties in a state. As a result, many rural hospitals are paid too little to compete for personnel in their labor markets\*.

The workforce shortage comes at a time when regulatory burden on hospital staff is increasing. Hospitals face new Medicare prospective payment systems for outpatient care, home health, skilled nursing, and ambulance services. Hospitals also are gearing up for HIPAA privacy and transactions standards. Staff time is required to develop and implement new processes, reprogram systems, and train staff. One way many rural hospitals choose to reduce cost and burden is to forgo Joint Commission accreditation, a process that is both expensive and labor intensive.

\*Medicare does allow hospitals that can prove proximity and similarity to another geographic area to be reclassified for payment purposes. As of the beginning of 2002, 472 rural hospitals had been reclassified.

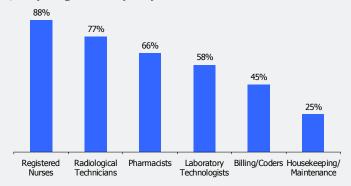
#### **Quote from the Field**

"Here was our little ad placed next to an ad from a huge hospital offering a \$4,000 signing bonus. We just don't have the money."

- Lynn Kier, Nurse, Haxtun Hospital, rural Colorado

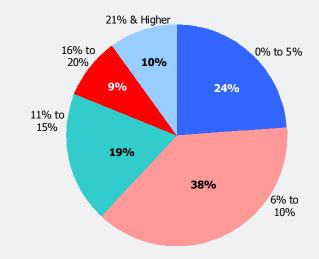
## Rural hospitals report more jobs than people for key positions.

Chart 14: Percent of Rural Hospitals that Perceive there are More Job Openings than People, April 2001



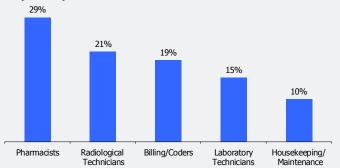
## One in five rural hospitals reports RN vacancy rates exceeding 15%...

Chart 15: Rural Hospital RN Vacancy Rates, April 2001



## ...but rural hospital vacancy rates are even higher for other types of professionals.

Chart 16: Vacancy Rates for Selected Hospital Personnel in Rural Hospitals, April 2001



## **Policy Issues and Questions**

Rural hospitals face many challenges common to all hospitals, but their unique characteristics make them more vulnerable to policy and market change than other hospitals. The workforce shortage is felt by all hospitals, but the geographic isolation of rural hospitals and lower wages can make it even harder to fill vacant positions. The small size of rural hospitals makes it more difficult to manage costs and risk in a prospective payment environment. The older population of rural areas leads to a higher Medicare mix that increases the financial impact of recent policy changes. Finally, the service mix of rural hospitals puts downward pressure on margins. A number of programs have been designed to help rural hospitals, but incremental policy change has created a patchwork of programs rather than a unified strategy. Looking forward, key questions must be addressed:

- How do the various programs (see Chart 10) interact to protect rural hospitals? What hospitals are left out?
- How can payment strategies be further designed to recognize the special circumstances of rural hospitals?
- What can be done to reduce the administrative burden on rural hospitals?
- What can be done to strengthen the rural health infrastructure to enhance access to care for rural populations?
- How can rural hospitals continue to reshape their mission and role to meet the challenges posed by changing demographics, health care needs, and technology?

#### **Quotes from the Field**

"We want all Americans, regardless of where they live, to have an equal chance for a healthy life." — Tommy Thompson, Secretary of Health and Human Services

"If you don't have medical care, it's hard to attract people." — Gail Wilensky, Project Hope (Former Chair, MedPAC)

"If you are well, you never really think about [rural hospitals]. But if your mother or your wife needs help, the way mine did, you sure get to know that it's just vital to have it here." — Gwen Gardner, resident, Lone Pine, CA

"Young people [prospective hospital employees] want to stay in big cities where there are more things to do. Not many want to come out to the rural areas."

— Denise Denton, Director, Colorado Rural Health Care Center

"You never get ahead. In the end, you operate at a loss, so instead of setting money aside you have to put it back into the current operation. You're stuck."

- Russell Cox, Pershing General Hospital, Lovelock, NV

"The fragility of the rural health care system calls for continued vigilance and special care to ensure that Medicare policies do not weaken rural medicine inadvertently." — MedPAC, Report to the Congress: Medicare in Rural America, June 2001

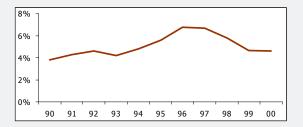
"Health care service is not only an essential service, it is an economic engine that generates hundreds of thousands of dollars in additional revenue for local areas." — Mary Wakefield, RN, PhD, Director, Center for Rural Health, University of North Dakota

"...when a hospital is in trouble and it looks like it is going to fold, it affects access to health care and it also affects the health of the whole community in terms of economics." — Sharon Avery, California Healthcare Association's Rural Health Care Center

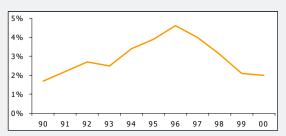
## Stats to know

#### Hospital Sector

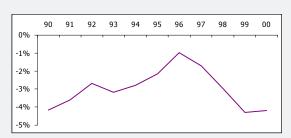
Total Margin:	1998	1999	2000
90 to 00 Trend	5.8%	4.7%	4.6%



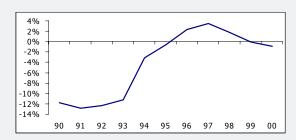
Operating Margins:	1998	1999	2000
90 to 00 Trend	3.1%	2.1%	2.0%



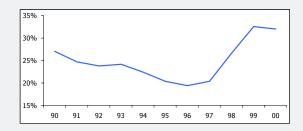
Patient Margins:	1998	1999	2000
90 to 00 Trend	-3.0%	-4.3%	-4.2%



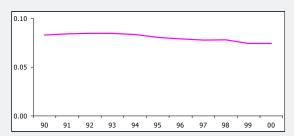
Medicare Margins:	1998	1999	2000
90 to 00 Trend	1.8%	-0.1%	-0.9%



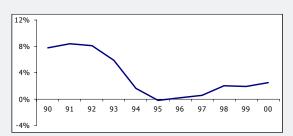
Percentage of Hospitals with	1998	1999	2000
Negative Total Margin: 90 to 00	26.6%	32.5%	32.0%



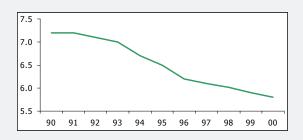
FTEs per Adjusted Admission:	1998	1999	2000
90 to 00 Trend	0.08	0.07	0.07



Percent Change in Expense per	1998	1999	2000
Adj. Admission: 90 to 00 Trend	2.0%	1.9%	2.5%



Average Length of Stay (in Days):	1998	1999	2000
90 to 00 Trend	6.0	5.9	5.8



#### **Endnotes:**

- Page 1: 1 US Department of Health and Human Services Office of the Inspector General
- Page 2: <sup>1</sup> Economic Research Service, U.S. Department of Agriculture
  - <sup>2</sup> MedPAC, Report to the Congress: Medicare in Rural America, June 2001

#### Sources:

- Chart 1: The Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000
- Chart 2: US Department of Health and Human Services Office of the Inspector General
- Chart 3: The Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000
- Chart 4: U.S. Census Bureau, Small Area Income and Poverty Estimates, 1998
- Chart 5: The Lewin Group analysis of American Hospital Association Annual Survey, 2000
- Chart 6: The Lewin Group analysis of American Hospital Association Annual Survey, 2000
- Chart 7 U.S. Census Bureau, Estimates of the Population of Counties by Age, Sex, Race, and Hispanic Origin, 1990-1998
- Chart 8: The Lewin Group analysis of American Hospital Association Annual Survey, 2000
- Chart 9: The Lewin Group analysis of American Hospital Association Annual Survey, 1996-2000
- Chart 10: MedPAC, Report to the Congress: Medicare in Rural America, June 2001, Number of hospitals from FY2002 Prospective Payment System Payment Impact File (May 2001 Update) and CMS OSCAR data base (CAH)
- Chart 11: The Lewin Group analysis of American Hospital Association Annual Survey, 1980-2000
- Chart 12: The Lewin Group analysis of American Hospital Association Annual Survey, 2000
- Chart 13: 1997 from MedPAC Report to the Congress, March 2001. Updated 1999 figures from direct communication with MedPAC staff, January 2002
- Chart 14: The Lewin Group analysis of American Hospital Association Workforce Survey, 2001
- Chart 15: The Lewin Group analysis of American Hospital Association Workforce Survey, 2001
- Chart 16: The Lewin Group analysis of American Hospital Association Workforce Survey, 2001

#### Source for "Stats to Know":

Total Margin: Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000

Operating Margins: Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000

Patient Margins: Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000

Medicare Margins: Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000

Percentage of Hospitals with Negative Margin: Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000

FTE/Adjusted Admission: Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000

Percent Change in Total Expense per Adjusted Admission: Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000

Average Length of Stay: Lewin Group analysis of American Hospital Association Annual Survey, 1990-2000

TrendWatch is a series of reports produced by the American Hospital Association and The Lewin Group highlighting important and emerging trends in the hospital and health care field.



American Hospital Association Liberty Place, Suite 700 325 Seventh Street, N.W. Washington, DC 20004-2802 (202) 638-1100



The Lewin Group 3130 Fairview Park Drive, Suite 800 Falls Church, VA 22042 (703) 269-5500