

The Impact of Freestanding Ambulatory Surgery Centers on Rural Community Hospital Performance, 1997–2006

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Key Findings

- Of the 2,055 rural hospitals in the study, 35% had at least one ambulatory surgery center (ASC) operating within 50 miles.
- Rural ASCs account for 10% of active, freestanding, Medicare-certified ASCs. Ophthalmology services are the most frequently provided surgical services in rural ASCs, followed by orthopedic services.
- The growth rates and distribution of urban and rural ASCs suggest that urban markets may be becoming saturated while rural markets are growing. This trend may reflect not only an urban saturation phenomenon but also an increase in the attractiveness of setting up an ASC or expanding marketing efforts in rural communities.
- Rural hospitals with a freestanding ASC in close proximity have relatively higher operating margins and profits compared to hospitals with ASCs located between one mile and 50 miles away.

Background

Ambulatory surgery centers (ASCs) are defined by Medicare as distinct entities operating exclusively to furnish outpatient surgical services to patients who do not require hospitalization and do not require more than a 24-hour length of stay.¹ Medicare recognizes two classes of ASCs: independent or freestanding ASCs; and hospital-based ASCs, which are owned or controlled by a hospital.² Hospital-based ASCs may be located on a hospital campus or at some distance in a separate building. This study focuses on the potential impact of freestanding ASCs. While freestanding ASCs are not controlled by hospitals, they can and do establish collaborative relationships with hospitals.

Freestanding ASCs compete directly with hospital outpatient departments for many medical procedures that can now be performed in an outpatient setting. This competition has intensified since 1982 when Medicare-certified ASCs were allowed to provide services to Medicare beneficiaries.

As market competition has heated up, so has the ongoing policy debate over the implications of this competition.³ Central to the ongoing debate is the effect of ASC operations on hospital financial performance. Research has helped inform policy in urban areas. However, studies have largely ignored the rural context. The absence of information about ASC versus hospital competition in rural areas can be especially problematic because of the fragile nature of rural hospital finances. This study begins to bridge that information gap by providing the first-ever picture of the impact of ASCs on rural hospital markets.

Purpose of the Study and Approach

This study uses a retrospective analysis of data on rural hospital, ASC, and market characteristics for the years 1997 through 2006 to assess the impact of freestanding ASCs on rural hospital performance.

Data sources include the American Hospital Association Annual Survey, the Medicare Healthcare Cost Report Information System, the Area Resource File, and the Medicare Provider of Service (POS) File. Hospitals and ASCs were categorized into metropolitan, micropolitan and non-core location using the twelve Urban Influence Code (UIC) categories developed by the U.S. Department of Agriculture. The analyses compared hospitals located in micropolitan counties with hospitals located in non-core counties, as well as comparisons based on the relative proximity of a non-metropolitan county to an area of greater population.

The study employed three measures of hospital financial and operational performance. In addition, two measures of ASC competition were constructed: Close proximity indicated a freestanding ASC located within a mile of a rural hospital and captured the potential positive effect of ASCs through collaboration with the rural hospital or the negative effect of service competition. Distant proximity captured the potential negative effect of ASCs through competition and was measured as the sum of $1 / \text{distance}$ in miles from hospital for all ASCs within 1 to 50 miles from the hospital.

Results

Of the 2,055 rural hospitals with matched AHA and cost report data, 35% have an ASC located within fifty miles. Rural ASCs account for 10% of the 4,654 facilities identified as active, freestanding, Medicare-certified facilities operating within the continental United States. The vast majority of rural ASCs are located in micropolitan areas (Table 1).

Table 1

Distribution of Freestanding ASCs by Degree of Rurality, 2006

Location	Frequency	Percent
Micropolitan Adjacent to Metropolitan	238	52.5%
Micropolitan Not Adjacent	169	37.3%
Non-Core Adjacent to Metropolitan	28	6.2%
Non-Core Adjacent to Micropolitan	8	1.8%
Non-Core Not Adjacent	10	2.2%
All Non-Metropolitan Locations	453	100.0%

Similar to urban ASCs, rural ASCs are more likely to be located in states without Certificate of Need (CON) regulations and those located in the South. Ninety-six percent of ASCs are for-profit enterprises, a figure identical across rural and urban facilities.

Similar proportions of urban (40%) and rural (43%) ASCs provide only one category of surgical procedure. Ophthalmology services are the most frequently provided surgical services in rural ASCs, followed by orthopedic services (Table 2).

Table 2

Distribution of Urban and Rural Freestanding ASC Surgical Services, 2006

Surgical Services Provided	Urban (n = 3,234)*		Rural (n = 384)*	
	Rank	Percentage Provide	Rank	Percentage Provide
Ophthalmology**	1	54%	1	65%
Plastic**	2	40%	7	35%
Orthopedic	3	50%	2	50%
Foot	4	48%	4	46%
General**	5	43%	3	49%
Otolaryngology	6	40%	5	44%
Obstetrics/Gynecology**	7	38%	6	42%
Urology**	8	35%	6	42%
Oral	9	25%	8	24%
Neurological	10	14%	9	10%
Cardiovascular	11	5%	10	4%
Thoracic	12	4%	11	3%

*Includes only those ASCs with identified surgical services

** $p \leq .05$

All three measures of patient care margin indicate that, on average, rural community hospitals are financially fragile and receive a degree of relief from the addition of ancillary revenues and government appropriations. Rural hospitals with a freestanding ASC in close proximity had relatively higher operating margins and profits compared to hospitals with ASCs located between one mile and 50 miles away. One possible explanation for this relationship is that ASCs located within one mile of a hospital made those hospitals more profitable. The relationship between ASC proximity and hospital margins was not affected by either providing hospital outpatient department surgical services or providing services in conjunction with a health care system, network, or joint venture. However, hospitals within one mile of an ASC were significantly more likely to report engaging in a joint venture with an ASC.

The growth rates and distribution of urban and rural ASCs suggest that urban markets may be becoming saturated while rural markets are growing. It is possible that this trend reflects not only an urban saturation phenomenon but also an increase in the attractiveness of setting up an ASC practice or expanding marketing efforts in rural communities. An increase in ASC market presence could also make physician joint ventures a more viable option for hospitals. The use of joint ventures to secure mutually beneficial arrangements with physician competitors and to retain the collaboration of physicians who have yet to establish a competitive practice has become increasingly popular in recent years.

Policy Implications

The cross-subsidization of lower margin services by high margin services is clearly not a sustainable option for rural hospitals. In the case of sufficient high margin demand where rural hospitals can generate the revenues needed for cross-subsidization, competitors may be attracted to that market and eventually provide profitable services previously provided by rural facilities (e.g., orthopedic surgery, gastroenterology, and otolaryngology).

Efforts to restrict the ability of ambulatory surgery centers to enter and compete in rural markets may preserve the financial viability of community hospitals and those hospitals' ability to cross-subsidize low margin, community beneficial services. However, such efforts will not encourage the innovation or cost efficiencies needed to continue meeting local health care needs. If ASCs provide efficient, high quality services, then limiting their establishment through regulation is not a prudent option. If, on the other hand, ASCs do not provide services more efficiently and of higher quality than community hospitals (and/or if the capacity for meeting important community health needs does not exist without the local hospital), then efforts to level the playing field may make sense.

The impact of ASC competition on the capacity of community hospitals to provide high or low margin services could be better assessed if future studies incorporate data on patient flow and cost center expenditures, plus information on uncompensated care. The increasing availability of data from the IRS 990 form may help clarify the impact of competition on the provision of low margin health services needed by rural communities. Further understanding of the implications of ASC–hospital competition in the rural context is necessary to determine if market or regulatory strategies, or some combination of the two, best assures health care access, quality, and efficiency for rural communities within the market area of ASCs.

References

1. Centers for Medicare and Medicaid Services (CMS). (2008a). *Title 42: Public health, Part 416—Ambulatory surgical services, Subpart A—General provisions and definitions*. Electronic code of federal regulations, e-CFR, GPO access. Washington, DC: Government Printing Office. Accessed June 2009 <http://ecfr.gpoaccess.gov>.
 2. Centers for Medicare and Medicaid Services (CMS). (Revised 2008b). *Chapter 14—Ambulatory surgical centers*. In *Medicare claims processing manual*. Publication 100-4. Baltimore, MD: CMS. Accessed July 2008 <http://www4.cms.hhs.gov/>.
 3. Choudhry, S., Choudhry, N., & Brennan, T. (2005, August 9). Specialty versus community hospitals: What role for the law? *Health Affairs Web-Exclusive 24*, w5–361-w5–372.
- Russo, C., Owens, P., Steiner, C., & Josephsen, J. (2007). *Ambulatory surgery in U.S. hospitals, 2003—HCUP fact book No. 9*. AHRQ Publication No. 07-0007. Rockville, MD: Agency for Healthcare Research and Quality. Accessed June 2009 <http://www.ahrq.gov/>.

Additional Information

The information in this policy brief is based on Upper Midwest Rural Health Research Center Final Report #11 by Walt Gregg, MA, MPH; Douglas Wholey, PhD; and Ira Moscovice, PhD. For more information, contact Walt Gregg, (612) 623-8320, gregg006@umn.edu

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