

RURAL HOSPITALS/ECONOMICS

Chappel A, Zuckerman RS, Finlayson SRG. Small rural hospitals and high-risk surgery: How would regionalization affect surgical volume and hospital revenue? *Journal of the American College of Surgeons* 2006;203(5).

The purpose of this project was to describe the potential impact, in terms of small rural hospital procedure volume and revenue, of regionalizing high-risk operations. The results of this study showed that, with the possible exception of colectomy, small rural hospitals in New York State would likely encounter limited financial repercussions if the procedures evaluated in the study were regionalized to higher-volume hospitals.

Doty BC, Heneghan S, Zuckerman R. Starting a general surgery program at a small rural critical access hospital: A case study from southeastern Oregon. *The Journal of Rural Health* 2007;23(4):306-313.

The purpose of this case study was to identify the challenges, describe the hospital's responses, and detail the initial outcomes experienced by a critical access hospital as it develops a surgical program. Based on the findings, it is clear that while starting a rural surgery program is a complex undertaking, there are benefits for the hospital. If a rural hospital is to be successful in this mission, collaboration and adaptability must be key components of the process.

Glenn J, Hicks LL, Daugird AJ, Lawborne LW. Necessary conditions for supporting a general surgeon in rural areas. *The Journal of Rural Health* 1988;4(2):85-100.

The objective of this project was to determine what is required for a successful general surgical practice in a smaller community. The results showed that a rural county with a population of 15,000 or more and more than 10 potential referring physicians likely possessed "sufficient conditions" to enable it to support a local general surgeon. Whatever a county's population, the requirements for supporting a local general surgeon in rural areas seems to hinge upon the number of potential referring physicians that can be mobilized to support that surgeon.

Williamson H, Hart G, Piani MJ, Rosenblatt RA. Rural hospital inpatient surgical volume: Cutting edge service or operating on the margin? *The Journal of Rural Health* 1994;10(1):16-25.

The objective of this study was to examine the volume and complexity of inpatient surgery in rural Washington State as a first step toward a better understanding of the current status of rural surgical services. The findings showed that hospitals with low catchment populations, no local anesthesia, and difficulty attracting and retaining a competent general surgeon may better serve their citizens by restricting surgery to the least complex care and by participating in a regional referral program. Hospitals with adequate service populations and medical staff, nursing services, operating room equipment, and anesthesia providers should continue to provide basic services. Rural hospitals with the largest hospital service area populations and concentrations of talent and technology should continue to develop as regional referral centers.

Williamson H, Hart G, Piani MJ, Rosenblatt RA. Market shares for rural inpatient surgical services: Where does the buck stop? *The Journal of Rural Health* 1994;10(2):70-79.

The objective of this project was twofold. Firstly, to measure rural hospitals' market share for total surgical discharges and for selected surgical procedures. Secondly, to measure hospital billed surgical charges in order to estimate the financial contribution of surgical services to rural hospitals. The results showed that the presence of surgical procedures markedly increased local market shares, but a substantial proportion of basic surgical procedures bypassed available services in favor of urban hospitals. The authors concluded that there is considerable potential financial advantage to hospitals that have surgical services.

Zuckerman R, Doty B, Gold M, Bordley J, Dietz P, Jenkins P, Heneghan S. General surgery programs in small rural New York State hospitals: A pilot survey of hospital administrators. *The Journal of Rural Health* 2006;22(4):339-342.

The purpose of this study was to describe hospital administrators' perceptions regarding the current state of general surgery programs at small rural hospitals in New York State including the impact that surgical services have on hospital financial viability. According to the perceptions of these hospital administrators, the financial viability of rural hospitals in New York state depends in large part on their ability to provide surgical services. Additionally, general surgeons appear to be in high demand at a significant number of the surveyed institutions.