

## Financial Model for a Zero Cost Academic Surgical Department in Rural Areas

*Saju Joseph, MD, FACS, Julie Molland, MBA, Dinesh Vyas, MBBS, FACS, Valerie Bauer, MD, Brittany Woodall, DO, C. Neal Ellis, MD, Monu Joseph, JD, MBA*  
*Texas Tech University Health Sciences, Odessa, TX*

**INTRODUCTION:** Rural hospitals recruit surgeons at a higher cost and suffer from lack of scale and location. Regionalization has increased these costs while causing displeasure amongst patients. Academic departments rely on Graduate Medical Education (GME) funding to offset the cost of indigent care and education.

**METHODS:** Our model addresses these two issues by exploiting an arbitrage opportunity between two supply and demand curves. We place academic surgeons in rural hospitals to increase revenue, mitigate GME funding reductions, while reducing cost of rural hospitals. In addition to enjoying the better supply demand curve associated with academic surgeons, these rural hospitals also reduce transfers and locums costs, while enjoying efficiency of scale.

**RESULTS:** Our department is able to acquire salary lines for faculty in partnership with rural hospitals. This allows us to cluster hospitals by region in spite of varying hospital interests. We have developed this model with 7 partner hospitals for 9 FTE's. Our partner institutions have not required locum's coverage since the start of this model and have reduced patient transfers by over 70%. Finally, patient satisfaction with local service has increased substantially. We have also included resident training cost in this model and have developed an additional 9 resident salary lines.

**CONCLUSIONS:** We have successfully deployed novel methodology to address the costly and growing problem of rural area surgical care. The model has reduced rural area surgical costs, improved quality of care and has the simultaneous effect of increasing revenues for academic surgical programs thus mitigating reductions in GME funding.