Joint replacement center: Protocols affect outcomes of both low and high volume surgeons when compared to a control group

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Background: Patients undergoing joint replacement surgery have higher risk for complications at hospitals with low surgical volume. Surgeons who perform more than 50 surgeries annually have fewer complications. The Long Beach Memorial Joint Replacement Center (JRC) is a Destination Center of Superior Performance® created by Marshall Steele/Stryker Performance Solutions® that has a comprehensive course of treatment for persons undergoing elective joint replacement surgery. JRC surgeons have strived for standardization of practice through surgical and post-surgical evidence-based protocols. A retrospective study comparing outcomes of the JRC surgeons and non-JRC surgeons was conducted.

Results: In 2012, 11 JRC surgeons performed 584 surgeries compared to 9 non-JRC surgeons who performed 137 surgeries. Four JRC surgeons performed >50 surgeries compared to none of the non-JRC surgeons. A review of specific clinical, operational, and financial outcome measures for elective/non-elective joint replacement surgeries in 2012 demonstrated that there were significant and positive differences between JRC surgeons and non-JRC surgeons in length of stay, discharge home, blood transfusion rates, complication rates, and 30-day readmission rates. Lower direct costs and higher contribution margins were noted for the JRC comparatively. Additionally, JRC surgeons with volumes of less than 50 demonstrated improved clinical outcomes.

Conclusion: Strong, collaborative physician leadership in the JRC and establishing evidence-based protocols had positive influences on the clinical outcomes of patients and operational/financial performance of the hospital in JRC surgeons with less than 50 surgeries per year as well as JRC surgeons with more than 50 surgeries per year while non-JRC surgeon outcomes remained unchanged.

Biography

Douglas E Garland received his Medical Degree from Creighton University (1969) and Orthopedic Surgery Residency at Tulane University (1976). He serves on the editorial board of Orthopedics Today, and has been on the clinical faculty at the University of Southern California for over 35 years. He has published more than 100 peer-reviewed scientific articles and chapters. He’s an internationally recognized expert in bone metabolism and his fracture surveys of locations, treatments, and outcomes within orthopedics are considered benchmarks in the field today. Since 2011, he has been the Medical Director for the Joint Replacement Center at Long Beach Memorial.

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