Achieving Financial Optimization of a da Vinci Robotic Program While Achieving Best Clinical Outcomes

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Abstract

Objective

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The majority of hospitals with da Vinci robots struggle with program management and consequently fail to achieve optimal financial and clinical outcomes. This chapter summarizes the key elements administrative and clinical leadership should employ to help achieve robotic program best practice and desired financial and clinical performance goals.

Methods

Based on real-world experience with dozens of Integrated Delivery Networks (IDNs) and hospitals, this chapter deconstructs and describes many common robotic program challenges, and then addresses the most efficient, effective pathways to achieve optimal program performance.

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Results

Significant improvement in robotic program financial and clinical performance vs. baseline performance is achieved when hospitals/IDNs engage in programmatic best practices. By following these guidelines, top percentile financial and clinical performance indicators are commonly matched or surpassed within 12–24 months. Overall, institutions report significant robotic direct variable cost reductions, reduced supply usage, faster overall operating room times, and improved quality metrics.

Conclusions

When robotic program best practices are implemented in a rigorous, transparent, and accountable environment, the financial, clinical, and operational performance of these programs markedly improves.

Keywords

Robotic program optimization
Direct variable costs
Supply/reposable reduction
Performance benchmarking
Program transparency
Cost accounting
Data analytics
Program maturity
Surgeon learning curve

14.1. Introduction

Today, there is a steady and highly desirable migration from open to minimally invasive surgery (MIS) worldwide [1]. Yet, the number of annual global MIS