



CUSTOMER OVERVIEW

Hendrick Health System

Abilene, Texas, USA

- Private, not-for-profit, health system
- Level III trauma center with 564 beds and 16 multi-specialty operating rooms
- Performs 10,000+ surgeries annually
- \$2.2 billion total annual revenue
- Winner of the Gallup Great Workplace Award and the Pathway to Excellence designation from the ANCC

Executive Summary

Hospital IQ’s powerful Perioperative Solution has enabled **Hendrick Health System** to analyze, predict, and help manage OR demand, capacity, and staffing. Hospital IQ gave leaders the time and insights to:



Increase prime time case volume by more than 1,300 net new cases in the first eight months



Increase OR block utilization by 15% within the first eight months



Transform its nursing shift structure



Establish the need for another surgical robot



Reduce administrative overhead and demands



Make better-informed growth decisions



“ Using the predictive tools and simulations that only Hospital IQ can provide, I can help hospital leadership make faster, higher-quality, data-driven decisions regarding expansion, case leakage, and growth using a fraction of the resources that we needed before. ”

Tracey Carrigan
 Director of Surgical Services,
 Hendrick Health System



Hendrick Health System's Perioperative Challenge

Hendrick Health System's perioperative department is at a crossroads. Recent increases in patient volume and OR scheduling conflicts suggest that it could be time to expand. But before the hospital spends millions on new operating rooms and equipment, management must ensure that it is optimizing its existing capacity.

After hospital leadership launched an effort to consolidate data across departments using a single EHR provider, managers in the perioperative department realized they needed a robust operations management platform. Perioperative leaders intuitively knew they had a wealth of data within their own records, but none of their existing systems could provide the reliable and predictive information in real-time that the department needed to identify operational problems and to generate actionable intelligence for improving performance.

Within the perioperative department, there was considerable skepticism about the reliability of existing data sources – physicians and staff alike frequently told the department director: “We can't trust the data.” This lack of trust made planning and implementing improvements difficult if not impossible: the hospital had no proven, reliable, and efficient method for taking a system-wide look at OR utilization to foresee the impact of future changes. Consequently, when opportunities arose to bring on additional surgeons, the director herself did not know whether the hospital had adequate capacity.



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Hospital IQ's Perioperative Solution

Hendrick Health System turned to Hospital IQ to gain the insight it needed to:



GROW PRIME TIME CASE VOLUME

Hendrick's leaders knew that unmet demand for surgical services in the local market was adequate to increase the hospital's surgical volume, but they didn't know if Hendrick's existing capacity was sufficient to capture it. Hospital IQ enabled the hospital to engage current and new surgeons to efficiently match available OR time with potential physicians and cases, allowing them to maximize existing capacity. For example, when surgeons from a nearby hospital sought to temporarily move their cases to Hendrick, the hospital was able to accommodate the additional surgical volume. In the first eight months after launching Hospital IQ, Hendrick increased OR case volume by more than 1,300 cases during prime time. Because nurses and other surgical support staff were already scheduled for work and being paid, this additional prime-time case volume increased the department's profitability.



IMPROVE BLOCK UTILIZATION

Hospital leaders wanted a clearer picture of OR block-usage patterns so they could see where performance could improve by working with individual surgeons to increase their utilization and by reallocating block time from low-utilization surgeons to those providers who needed more OR access.

Hospital IQ analyzed block usage trends and applied the system's artificial intelligence capabilities to identify unscheduled blocks and recommend structural schedule changes that would not disrupt surgeons. These improvements enabled perioperative leadership to increase block utilization by 15% in the first eight months.

Hospital IQ also enhanced the degree of trust that department members had in the data that leaders shared with them. This trust in turn promoted teamwork and accountability, and reinforced the surgeons' sense of ownership of the department's success. When surgeons with low OR block utilization were shown their performance metrics, a typical response was: "How can I do better?" The department now encourages surgeons to release unused blocks earlier so OR time is available for other surgeons to claim, improving both OR utilization and team members' morale. With full team buy-in, Hendrick also changed its block allocation policies to offer more blocks to service lines and surgeons with higher utilization rates both within and outside of their allocated block time. For example, the orthopedic service line was given 35% more block time in the first year.



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IMPROVE STAFFING STRUCTURE

Prior to implementing HIQ, leaders knew their manually generated staffing grids were insufficient to meet both current and future needs. But how to revise them to take account of all relevant variables – including volume, case mix, and credentials – was a dilemma, which only became more urgent as case volume grew, outpacing the department’s ability to recruit more staff.

Hospital IQ’s workforce-planning simulation tools enabled managers to easily envision new staffing scenarios that would better match staff hours to surgical demand and also improve staff satisfaction among anesthesiologists and nurses. Because leaders are now certain of their resource needs for each day, they can quickly align departmental needs with anesthesiologic capacity. The department consequently transformed its nursing shift structure, increasing the number of 12-hour shifts and eliminating all 10-hour shifts. The perioperative department now hires almost exclusively for twelve hours shifts, a move that has enhanced recruiting efforts and that the current nursing staff has embraced.



OPTIMIZE ROBOTIC CAPACITY

Hendrick’s surgical robot was in great demand, but the hospital was uncertain whether that demand justified purchasing a second one. With the help of Hospital IQ, leaders determined that the existing robot was indeed being used at full capacity, and that some patients had been forced to wait weeks for robotic procedures. After purchasing a second robot, the hospital then used Hospital IQ to help develop a plan to optimize the use of both robots without overbooking anesthesiologists.



REDUCE OVERHEAD AND IMPROVE ADMINISTRATIVE PLANNING

Prior to implementing Hospital IQ, the perioperative department relied on a business manager to manually generate reports, and when that person left, the director had no capacity to provide that information. In addition, she and her team would typically spend nearly 30 hours preparing for each monthly OR Executive Committee meeting. But despite the considerable effort that went into meeting preparation, leaders still expressed doubt about the reliability of data and reports. They also couldn’t forecast how demand would change and how those changes would affect surgical operations, nor could they plan how to effectively respond to those changes. Instead, they made decisions based on “gut instinct” rather than sophisticated algorithms.

Hospital IQ’s advanced analysis and reporting tools promoted trust in the data and helped streamline the decision-making process. The director can now share clear, reliable, understandable, and real-time block utilization reports and recommendations with committee members electronically. In addition, the committee can make block allocation decisions via email and has reduced its meeting frequency to every other month, freeing up the time of ten physicians and two vice presidents. Finally, the department no longer needs the services of a dedicated business manager, and the administrative team requires just a few hours to prepare for these meetings. Most importantly, leaders now have the knowledge that enables them to plan for the future with a high level of confidence.

About Hospital IQ

Hospital IQ is a team of industry veterans who are passionate about using their collective knowledge and experience to help hospital leaders transform operational practices and improve performance – and deliver the best patient care to the most people.

