THE SURGICALIST GROUP

The Smarter Way to Operate™

Fixing One Side of the Equation is Not Enough:
Optimizing Value Across All Aspects of Surgical Care

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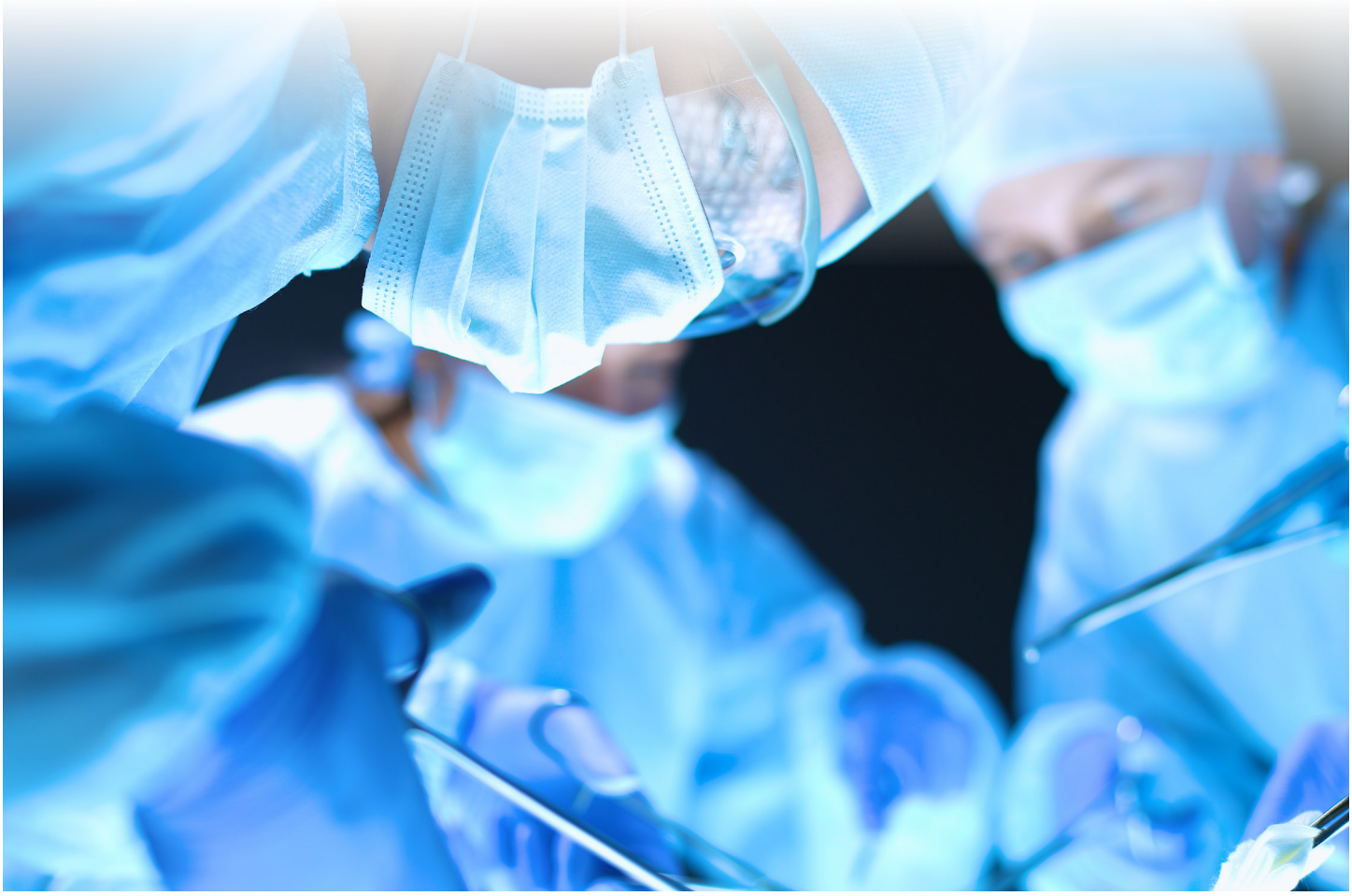


Introduction

We believe the reason many of the issues related to surgical call coverage have not been solved is that the problems are inherent to the system and the traditional model of surgery; only the creation of a separate sub-specialty can solve them. The invention of the surgicalist specialty in 2007 came out of the necessity to address key issues leading to poor patient care and lost revenue. The new specialty followed the hospitalist's lead from decades earlier and looked to capitalize on opportunities to impact outcomes, both patient-based and financial. There are many systems within the healthcare arena designed to "cut costs", impact future revenue, or promise back-end savings, but very few are designed to improve the real time, up-front, revenue stream starting at the initial point of patient contact, in the Emergency Room. The Surgicalist Group's (TSG) model has data demonstrating increased number of cases captured from the ED with improved clinical documentation accuracy on those encounters leading to a more accurate case mix index (CMI). Our rigorous surgeon on-boarding process focuses on optimizing patient care based on the unique needs of the hospital and improving utilization and efficiency as patients move through the facility. Also, every one of our surgeons completes clinical documentation improvement (CDI) training focusing on complete and accurate DRG capture.

Objective

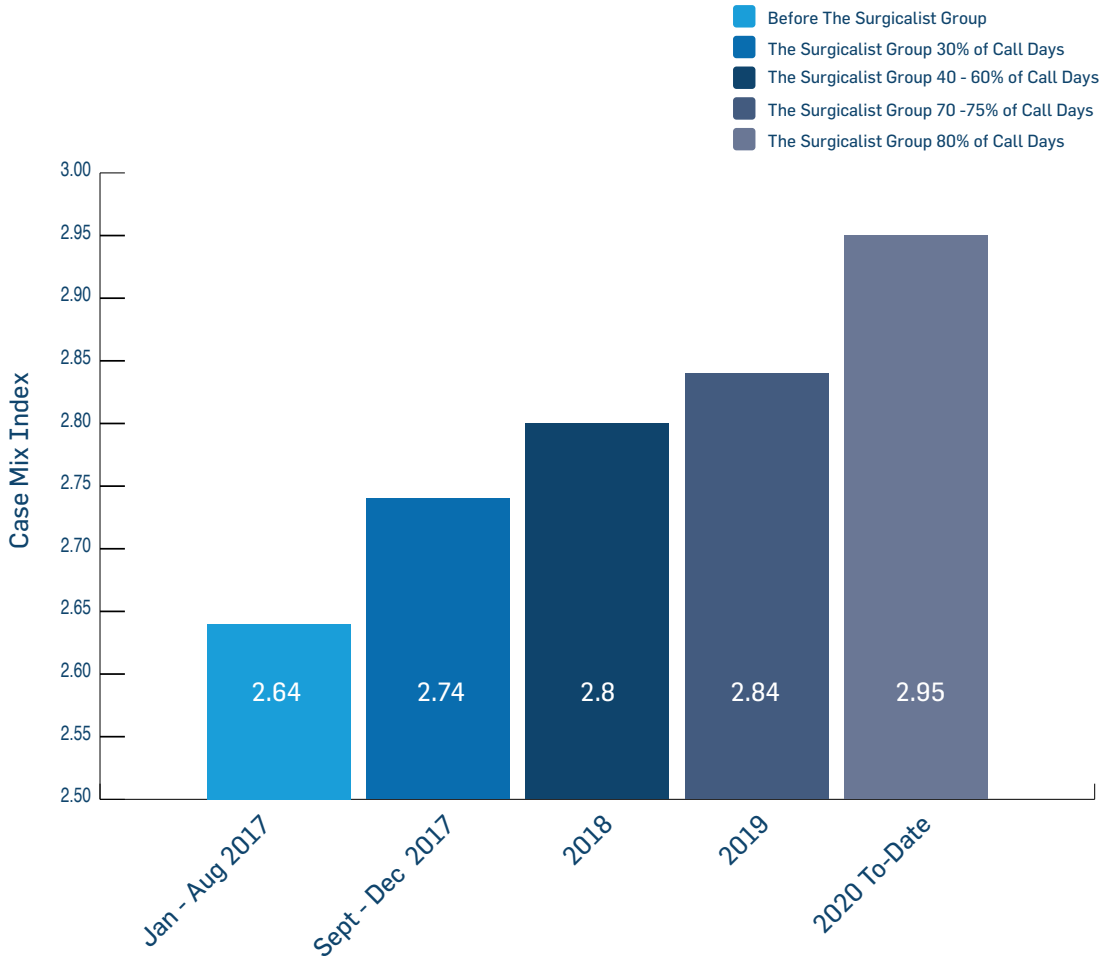
We wanted to evaluate our Clinical Documentation Improvement (CDI) training along with our surgical specialty care model to determine if our hospital-centric approach could accomplish two things: maximize case capture by minimizing patient leakage from the emergency department (ED) and improve clinical documentation accuracy leading to upfront revenue increases for the hospital.

Findings

Our model, when compared to traditional surgical staffing, has shown up to a 130% increase in operative surgical case capture from the ED. When specifically looking at index cholecystectomies, we have seen increases as high as 169%. This improved operative volume, along with our, previously proven, LOS reduction has shown a net positive on all sides of the equation: more patients admitted, more surgeries performed (all with improved accuracy of clinical documentation), and an increased in-hospital efficiency.[1,2]

One of the biggest top line impacts for the hospital comes from the improved clinical documentation surgicalist can provide on all patients encountered. Better documentation of appropriate DRG's and more thorough clinical charting leads to a more accurate surgical CMI for the hospital. At one of our hospital partners, the year prior to the institution of the surgicalist program and the acute care surgical service CMI was 2.64. The next year, when The Surgicalist Group was covering ~30% of the call days, the CMI was 2.74, over the next year The Surgicalist Group moved to taking about 50% of the call and the CMI moved to 2.8, the following year 70% of the call days with a CMI of 2.84 and finally, with TSG covering >80% of the call days, the CMI was 2.95. We would expect the trend to continue if The Surgicalist Group was taking 100% of the call and removed the less thorough documentation of the non-The Surgicalist Group surgeons. Assuming approximately $4,500 for every 0.1 CMI improvement, this documentation accuracy and DRG capture lead to substantial revenue capture for the hospital.[3]

Real World Example of Improved Case Mix Index Accuracy



Discussion

Establishing a surgical service, solely dedicated to the hospital and the needs of its patients, provides several benefits over the traditional model of staffing call coverage with community surgeons.[4,5] Surgicalists can offer unencumbered support to all areas of the hospital, provide rapid assessment and disposition of consults, and increase OR utilization, by being available to fill unexpected operating room openings, are just a few specific advantages.

While evaluating our data, some of the improved metrics we observed with the surgicalist model were directly measurable, other information we gathered from interviews with ED providers and administrative staff. Obtaining the improved case capture data was a straightforward comparison of the urgent and emergent cases done, per call day, prior to The Surgicalist Group being contracted and comparing it to how many cases being done after the hospital's transition to a surgicalist model. The Surgicalist Group had a 130% increase in cases performed per call day when compared to the baseline set under the traditional call model. With many publications looking specifically at the medico-economic burden of acute cholecystitis we wanted to analyze this patient population separately to evaluate our results compared to the published data.

Multiple studies have shown acute cholecystitis and symptomatic biliary cholic are very expensive pathologies to treat, often due to the inadequate surgical attention paid to the disease during the patient's index visit to the ED.[6,7] Traditionally patients who are able to be "cooled down" with antiemetics and pain control are sent home to follow up in the surgical clinic to be scheduled for further workup or an elective cholecystectomy. We interviewed the ED physicians and discovered that extreme measures were being taken to get the symptoms of patients, with obvious cholecystitis, controlled enough to send them home, "avoiding surgery at all costs". Some ED physicians reported needing to give multiple doses of IV narcotics and anti-nausea medication over several hours in order to "get them out the door". These cool-down measures are being performed even in patients with definitive operative signs.

From the literature we know that up to 27% of patients who present to the ED with signs of biliary cholic or cholecystitis are managed without an operation, at that index visit, will have at least 1 recurrent attack prior to their elective operation.[8] These patients are often dissatisfied by their lack of definitive treatment at the hospital where they sought initial treatment and tend to follow up at other institutions. We surveyed over 50 cholecystectomy patients cared for by The Surgicalist Group. We found that 32% of them had more than 1 visit to the ED for biliary issues and 16% had 3 or more visits before receiving surgery despite presenting with classic symptoms and laboratory findings of cholecystitis at their first visit. These multiple visits not only lead to high patient dissatisfaction, but also lead to higher surgical complication rates, especially in elderly patients.[9,10] Establishing a surgicalist service, where the focus is strictly on in-patient care, allows for rapid and appropriate treatment being provided during a patient's first encounter with the hospital. We also found, that prior to The Surgicalist Group taking over the acute care surgical service, many cholecystitis patients were being admitted to the medical service leading to delayed time to the OR as well as delays in discharges leading to increased LOS. The delay of one day, taking a patient with acute cholecystitis to the operating room, adds a 22% to the cost of admission.[11,12] At hospitals we have partnered with, all surgical patients get admitted to The Surgicalist Group's service showing not only improved outcomes, but also improved throughput.[1]

We followed strict criteria in determining which patients with RUQ pain should be taken for expedited operations and who should be deferred for further workup or an elective operation – ensuring only appropriate patients were taken to the operating room. Patients with a classic history of cholecystitis or biliary cholic and met the following criteria: intractable pain or nausea (requiring more than 2 doses of IV medication for control), ultrasound evidence of stones, sludge, or gallbladder wall thickening, a stone in the neck of the gallbladder, elevated white blood cell count, signs of SIRS or sepsis, two or more attacks within the last year, and/or multiple ED visits for the same issue, were deemed urgent operative candidates.

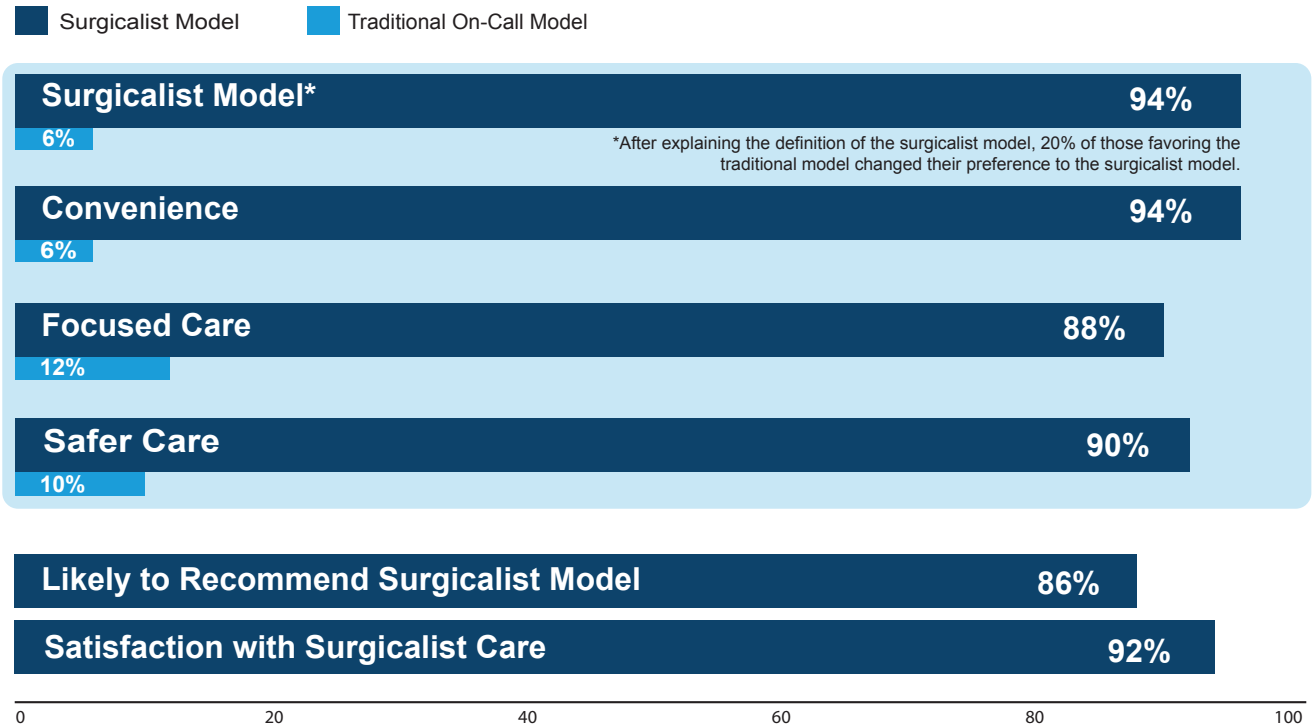
It was difficult to assess why, under the non-surgicalist model, patients with definitive signs and symptoms of cholecystitis or symptomatic biliary cholic, were being discharged from the ED rather than receiving the appropriate operation. We interviewed the ED providers, at one of our hospitals, and asked what rational was being given, by the on-call surgeon, as to why urgent surgery was not being offered as the treatment option. The common, paraphrased, responses were, 'I have clinic today, it will be easier for them to follow up here', or, 'I won't be able to get over there until late tonight, have them follow up in my office'. Most responses centered around the on-call surgeon not being truly, 100% available to the hospital except for dire emergencies. These on-call surgeons were all receiving a stipend, from the hospital, for committing to ED surgical coverage.

After we established the surgicalist service it took several months to change the emergency room physicians engrained way of thinking. We would discover patients, with justified surgical issues, sent to our clinic rather than having received a consult while the patient was in the emergency department. When we would inquire as to why we were not consulted at the patient's index presentation, the ED providers stated, they were so accustomed to being 'shot down' on a surgical admission, they had given up trying - leading to a huge amount of lost revenue for the hospital. As we educated our ED colleagues on The Surgicalist Group approach and made our 24/7 availability known, the surgical service volume immediately increased.

Conclusion

It is impossible to focus 100% on one's private practice and provide undistracted coverage to the hospital; the two are mutually exclusive. Today we live in a world with a much faster pace than ever before. Emergency departments are busier and are the gateway to the hospital, wait times are expected to be less, and traditional coverage models leave serious gaps in patient care. The surgicalist approach has proven better for outcomes, is more desirable for EMS and ED providers, improves hospital revenue and case capture, decreases complications, and is highly desirable for patients. Surveyed patients were much more satisfied with the expedited treatment under the surgicalist approach. When asked, 93% of patients preferred the more rapid treatment of same day surgery to the traditional surgeon on-call model. Patients reported the surgicalist approach was far more convenient with 87% stating the model was more "focused on the *patient* rather than the *surgeon*". Ninety-three percent of cholecystectomy patients were either satisfied or very satisfied with treatment and 85% stated they were likely or very likely to recommend treatment by a surgicalist over a traditional surgeon to their friends and family. We found patients were not always aware of the risk of additional attacks and complications if their surgery was delayed under the classic approach. After patients were counseled regarding the fact, they have a 20-30% risk of another gallbladder attack before receiving their elective surgery, 18% of patients who favored the traditional treatment model changed their mind in favor of the surgicalist model.

Patient Preference



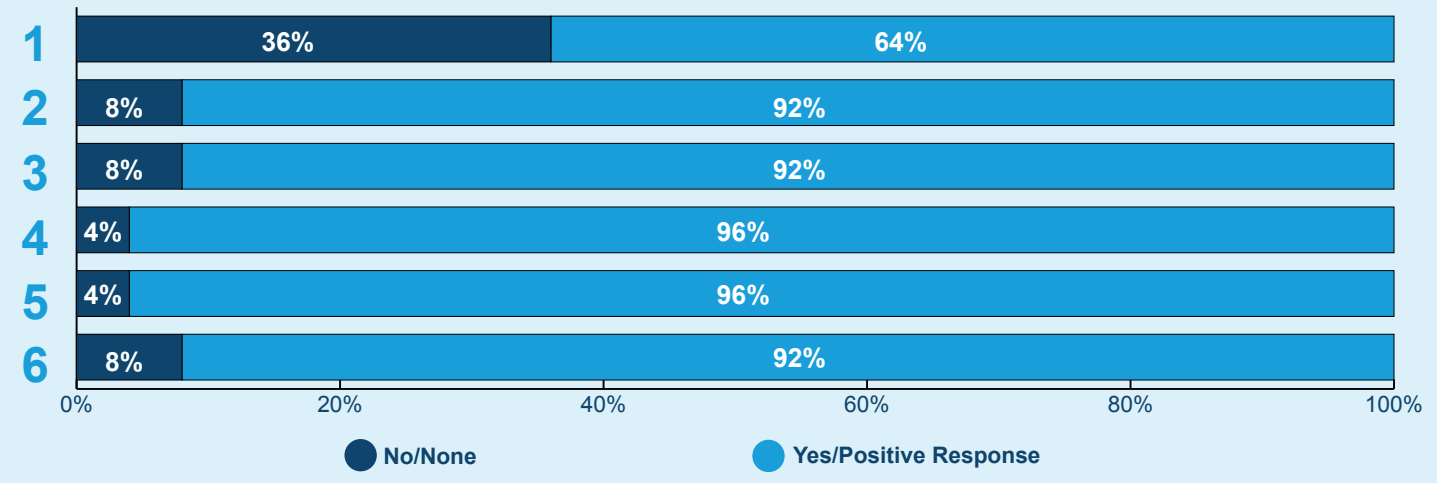
An unexpected ‘halo effect’ is often seen after The Surgicalist Group establishes services. The extra attention and proven expertise in acute surgical care leads to increased confidence of pre-hospital providers in the medical center’s ability to care for patients. We surveyed EMS providers, questioning them on their perception of having a dedicated acute care surgical service. They not only felt more comfortable bringing surgical patients to the hospital, they also felt better about increasing medical patient traffic.

EMS Serving Hospital Partners

We surveyed EMS providers affiliated with our hospital partners; the survey was blinded to ensure honest responses. We looked to measure if their hospital preference was influenced by the presence of The Surgicalist Model versus one with the traditional on-call community surgeon. The results revealed positive outcomes across six key areas of performance.

The questions were:

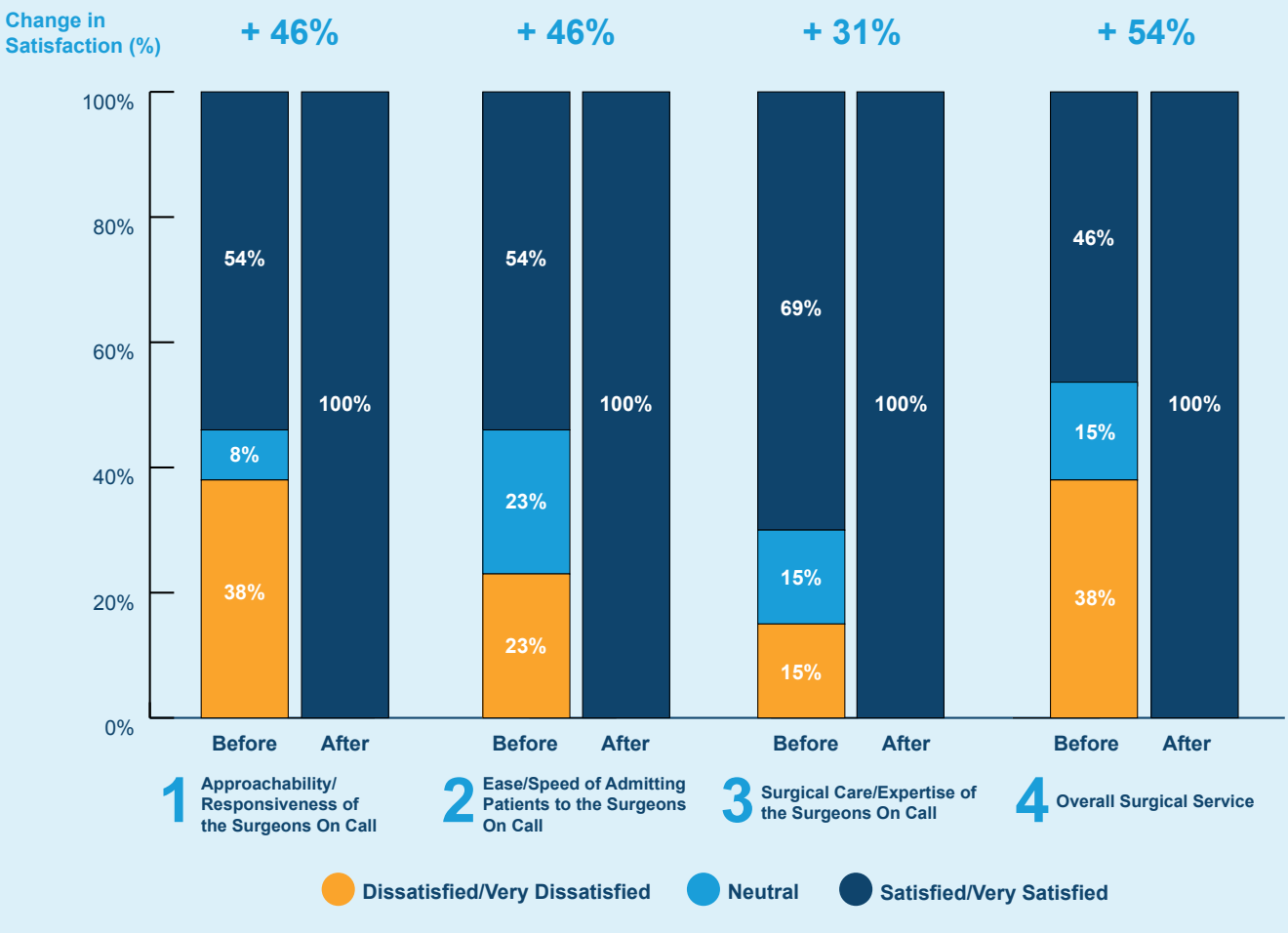
1. Has the hospital’s decision to add a specific trauma surgical service, to care for emergency surgery and trauma patients, improved your opinion of the hospital?
2. Do you feel that the hospital is making an effort to improve patient care by staffing specialty-trained surgeons?
3. With the recent efforts and implementation of the Trauma/Emergency General Surgery Service, has this increased your likelihood of bringing NON-trauma patients to the hospital?
4. In general (not at the hospital specifically), does knowing that a hospital has 24/7 surgical service dedicated specifically to the care of emergency surgery and trauma patients effect your likelihood of transporting a patients to that facility?
5. In general (not specifically at the hospital), when transporting a patient, does your perception of that hospital’s level of competency determine if you go there or route to another facility?
6. In general (not specifically at the hospital), would your opinion of a hospital improve (more likely to transport patients there) knowing there was a dedicated surgical service there to care for those patients 24/7?



Another side effect of the surgicalist's dedication to the ED and its patients is an improved relationship with emergency medicine physicians and advanced practice providers. We surveyed our ED colleagues and found significant improvements in: surgeon approachability, confidence in surgeon ability, ease and speed admitting to the surgical service, and overall opinion of the surgical service. Prior to The Surgicalist Group taking over call duties, the ED's satisfaction across these categories range between 46-69% in the community surgeons. After The Surgicalist Group took over call coverage, due to all the factors previously discussed, the ED's satisfaction rose to 100% in all categories. The impact of putting the patient and hospital first can be seen across all the metrics previously discussed as well as the more intangible areas of cooperative and collegial relationships, and improved confidence and patient traffic from EMS providers.

Hospital Emergency Room Satisfaction

Being amicable is an important trait in today's surgeon. A large amount of hospital business comes through the emergency department and surgeons need to be ready and willing to help the emergency medicine physician triage and admit patients. A blinded survey was given to the entire emergency medicine physician group. They were asked to rate their satisfaction both BEFORE and AFTER the implementation of the Surgicalist model. A total of 12 of the 19 ED physicians responded with following results:

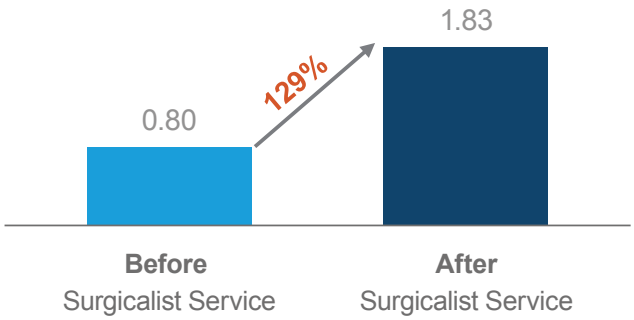


In the 1990's, Internists realized having both an in-patient and out-patient practice was untenable for their personal lives, bad for patient care, demonstrated worse metrics, and was detrimental to hospital financials. The advent of the Hospitalist service revolutionized hospital efficiencies, revenue generation, and patient outcomes. Three decades later it is time to see the same opportunities for surgical services. Paying community surgeons to provide surgical coverage is not the same as getting a dedicated and focused surgicalist service to provide acute care surgery. Increased patient capture, better documentation with improved CMI accuracy, higher revenue, fewer complications, and improved patient satisfaction are all proven benefits to the surgicalist model. The new specialty of the surgicalist is elevated even further by The Surgicalist Group via dedicated training of its surgeons with a specific focus on the needs of patients as well as the hospital. This attention to both medical and economic aspects of patient care are the foundation to the building a cooperative service that is customized to the needs of each institution. With all this evidence, it is becoming harder to ignore the fact that The Surgicalist Group is the smarter way to operate.

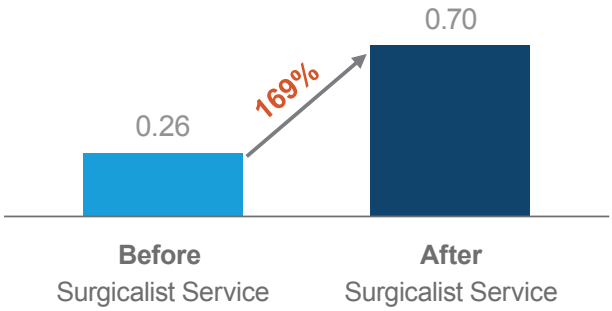
Hospital Process Improvement

Our model, when compared to traditional surgical staffing, has shown up a 130% increase in operative surgical case capture from the ED. When specifically looking at index cholecystectomies, we have seen increases as high as 169%. This improved operative volume, along with our, previously proven, LOS reduction has shown a net positive on all sides of the equation: more patients admitted, more surgeries performed (all with improved accuracy of clinical documentation), and an increased in-hospital efficiency

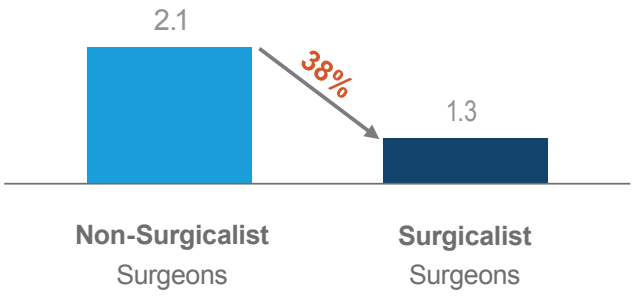
Operative Cases Performed per Call Day



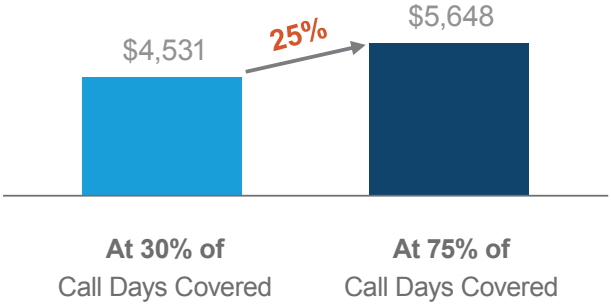
Index Cholecystectomies (captured from ED)



Length of Stay for Cholecystectomies (Days)



Income generated from increased cholecystectomy and decreased LOS (per call day)*



* Potential if 100% call days covered: >$2.4M per year

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