

SUTTER MEDICAL CENTER, SACRAMENTO

The Verdict Is In: Surgical Hospitalist Programs Deliver Improved Results Throughout the Hospital

Published Data from Five-Year Program with Sutter Memorial, Surgical Affiliates Show Decreased LOS, Reduced Rates of Complications, and Lower Costs

Surgical hospitalist programs have come of age. Results from a five-year collaboration between Sutter Medical Center, Sacramento (SMCS), a tertiary referral community hospital in California and Surgical Affiliates Management Group, one of the nation's first and most experienced surgical hospitalist companies, were published in the July 2014 issue of Journal of the American College of Surgeons (JACS). The article reported sustainable and significant results in improved efficiency, in lower costs, and in improved quality of care.

The article concluded that these results were possible for all institutions throughout the country – especially those in which the hospital may not have a trauma center – to enable patients to receive high quality surgical services any time of the day or night.



Consistent Treatment for Acute Care Surgery: A National Problem

Virtually every U.S. hospital is struggling to find a means to provide consistent medical care for their acute care surgery patients. At the problem's core is a nationwide shortage of surgeons and changing priorities for surgeons in private practice.

Traditionally, acute care surgery patients have been cared for by private practice surgeons who are "on-call" nights and weekends in case an emergency surgical need arises.

However, this model of surgical call rotation is no longer viable as more and more surgeons value the regularity of scheduled procedures in their own private practices, and seek a balance between their personal and professional lives not afforded by the demands of an "on-call" schedule. Unfortunately,

this situation has become a source of contention between hospital administrators and surgeons, as hospitals must somehow overcome the challenges of a surgeon shortage and adequately care for acute care surgery patients.

Evolution of a Specialty: The Surgical Hospitalist

As the shortage of specialists and their willingness to participate in surgical call rotations has created problems for hospitals, fortunately a solution evolved. Around 2007, an evolution within the specialty of hospital medicine produced several sub-specialties dedicated to providing 24/7 coverage for the specialized care of hospital patients at the hospital. The profession of the surgical hospitalist – dedicated surgeons who focused on the care of patients requiring acute care surgeries - was born.

Healthcare History in the Making

Sutter Medical Center, Sacramento is a tertiary referral community hospital that is not affiliated with an academic institution and does not have a surgical residency. At the time of the study, trauma referrals were made to a Level II trauma center in the same system or to a Level I trauma center less than a mile away. A total of three Level II and one Level I trauma centers provided care for the metropolitan area. No organized trauma care was provided at the facility. Sutter Medical Center, Sacramento supported 652 beds on two campuses less than a mile apart, and evaluated between 60,000 and 75,000 emergency room patients per year.

In 2008, the executives and surgeons at SMCS were in a quandary. The number of surgeons available to cover the acute care surgical needs continued to diminish. Most of their surgeons had robust private practices that operated during the day, five days a week. When these surgeons were on-call all night, they faced their daytime office practices and elective surgeries with moderate to severe sleep deprivation. Something had to be done to address this issue, as well as the shortage of surgeons available to meet the needs of SMCS' emergency patients.



Pictured here: Mr. Soohoo and Dr. Owens signing the contract

Gregory Graves, M.D., an oncology surgeon at the hospital, confirms, "In my opinion, it's not safe for, or fair to, patients who came in for an elective surgery to not have their surgeon in the best physical, mental or emotional condition. I knew we needed to make a change, so I proposed that we explore an alternative solution since we did not have the expertise internally. The hospital executive team was, first and foremost, concerned about providing timely, quality care to the community, including those who may have emergency surgical needs."

"We wanted to ensure that patients at our hospital were provided with access to the highest quality of surgical services available, no matter what time of the day or night they needed this care," says Richard SooHoo, Chief Financial Officer of SMCS.

According to Michael Abate, M.D., Chief Medical Officer of the hospital and medical director of its Adult Medical Hospitalist Program, "It just was not easy to get the consults and the support we needed to take care of those patients at the hospital. Our medical hospitalists have always been involved with unassigned patients, those without insurance or who are under insured, and sometimes it was difficult to secure timely surgical consultations. Sometimes patients had to wait until surgery could be arranged, based on the scheduling issues that surgeons had to manage during their day. So, we started talking as a group about how we could make sure that we had surgeons available for us who could take care of these patients and get them to the OR."

Aware that Dr. Leon J. Owens, M.D., FACS, CEO of Surgical Affiliates Management Group had developed a stellar trauma center for another community hospital, the SMCS hospital executives and medical team decided to consult with him on developing a solution.

Dr. Owens notes, "We believed that it was possible to take the service model developed for trauma and apply it to acute care surgeries. The team at Sutter also recognized the value of this model.

"However, before moving forward, it was important to ensure that surgeons on staff at the hospital were comfortable with the plan. New surgeons would be brought into the mix as surgical hospitalists to provide dedicated coverage for the acute care surgery patients. Just as in the launch of the hospitalist medicine profession, some physicians reacted negatively to what they feared might be a loss of their patient volume, so we recognized that SMCS's surgeons might have concerns about this new program and how it would affect their practices and their patients."

Mr. SooHoo observed, "Administratively we were all for it. But in a hospital environment, it's an influencer model. You have to lead by influencing. It takes a paired leadership of both administration and physicians. Dr. Owens had to talk to his peers and colleagues about this idea because they were going to work with he and his group. Physician buyin was critical, or we would not have succeeded.

"Fortunately, the communications to the surgeons were very well received. For a physician, they can quickly identify what's quality and what's not. From day one they could see Dr. Owens and his group were quality. Also, they realized their patients were being well cared for, and that's what is most important for any physician."

Five Year Results Published in the Journal of American College of Surgeons

- » Length of stay decreased as much as 12%
- » Readmission rates trended downward
- » Complications decreased 43%

- » Hospital costs decreased 31%
- » Overall hospital CMI improved
- \$2 million in savings annually

Surgical Affiliates Management Group's System of Care®

From these early days the dedicated Surgical Affiliates Management Group's acute care surgery model, The System of Care© – which is comprised of the following three critical core competencies, was born:

- Leadership from expert surgeons and executives.
- The ability to build and manage an outstanding surgical team comprised of surgeons, nurse practitioners and physician assistants who deliver care according to evidence-based guidelines.
- Collaborative processes with hospital staff and departments that result in increased satisfaction, improved outcomes, lower costs, and reduced length of stay without an increase in readmissions.

The proven benefits to hospitals, patients and surgeons of this System of Care are:

- The hospital experiences fewer management challenges, better patient throughput, optimized capacity and cost savings.
- Patients receive timely, high quality surgical care, experience fewer complications, and can go home faster.
- Surgeons appreciate the opportunity to have an improved quality of life through more manageable schedules and ability to maintain their surgical volume, as well as the opportunity to be a part of this transformational movement in surgical care.

"The launch of the program in 2008 resulted in immediate improvements," Dr. Abate noted. "Because the surgical hospitalist was not trying to maintain an outpatient practice at the same time they were caring for acutely ill patients, they could perform surgeries during the day time. Prior to the surgical hospitalist program being implemented, it was difficult to secure a surgeon for a patient consult because they weren't readily available as they were often in their offices doing work. They were not able to just be available for patients in the ER.

"The second issue was how quickly could they work it into their schedule to get that patient in to the OR? It might take three to five days to get a patient to the OR because their schedule is so complicated. With the surgical hospitalist group however, when the patient comes into the hospital with an acute care issue, that surgeon – because their practice is solely in the hospital, is available to do consults right away, or surgery, when clinically indicated. With the surgical hospitalist program, the time it took to get the patient to the OR was significantly reduced, pretty much overnight."

Carrie Owen Plietz, hospital CEO, noted, "A general surgeon often has a lot of cases, or pre-scheduled surgical cases which means someone gets bumped by the emergency case, or office visits may get cancelled by that emergency case. Now, a team is dedicated to providing that emergent surgical support. You have someone who can not only perform a surgery quickly, but who also knows the ins-and-outs of the hospital and is familiar with the environment and is ready to go. In addition, they provide support to the intensivists for consults, and are a ready resource for the rest of the team on the floor, be it physicians or nurses."

"Originally we set out to solve the problem faced by almost all hospitals: having reliable 24/7 surgical call coverage. With our dedicated Acute Care Hospitalist Practice Model, we have a solution that improves results throughout the hospital that improves care, lowers costs, and enhances efficiency."

Leon J. Owens, MD, FACS

President & CEO

Surgical Affiliates Management Group

Richard Bergmann, Administrator of the Operating Room, recognized the important role that physicians' assistants and nurse practitioners also play on the surgical hospitalist team. "These advanced health-care professionals allow the surgeons to be in surgery by handling the clinic. This frees the surgeons up to take care of more rare cases. Also, if the mid-levels are not needed in the clinic, it gives them the ability to have an extra hand in surgery."

Mr. Bergmann also observed a significant increase in timeliness and efficiency. "For the patients, there is a more timely response. With that consistent coverage and team in place, there is improved teamwork and quality, and you are able to have an ongoing dialogue with a more prepared team. As the other surgeons are not on-call now they are better rested and enjoying a better quality of life. Not only are we

seeing patients being taken care of without the headaches, we see better quality, and we see a single group that is accountable for its performance. I only have to make one call; I don't have to call all around. There is an ongoing single point of contact for metrics discussion and communications. We can talk about strategies. When you're dealing with a larger group you can't sit down and have those conversations."

Ms. Owen Plietz stated, "For a surgical hospitalist program like this, it's important to ensure it has the right leadership for the group. That's true of any clinical program – the right physician leadership with a passion to do things right, with fantastic surgeons involved who are committed to the organization and patients they are serving is critical. One must create the program from a platform of very strong leadership."

Improving Care and Saving Lives

An example of how not only care is improved, but lives are saved with this vigilant, 24/7 team in place, is the case of one patient who presented to the emergency department with arm pain that was ultimately diagnosed to be the potentially deadly flesh-eating bacteria, necrotizing fasciitis. The surgical decisions about his care and the actual procedure itself needed to be implemented within minutes to save his life. Fortunately, the Surgical Affiliates' team on hand included both a general surgeon and an orthopedic specialist, both of whose expertise was necessary to make these critical decisions that ultimately saved the patient's life.

Marked Results Experienced by All Parties: Patients, the Hospital and Physicians

After five years, this groundbreaking program was still generating sustainable improvements that revealed how it was raising performance throughout the entire hospital. The five-year data, published in the Journal of the American College of Surgeons, documented these milestones:

Improved Efficiency and Timeliness

After just five short years, the changes seen both in hospital efficiencies, as well as patient satisfaction and outcomes were outstanding. Patients no longer had to wait for a surgeon to finish an elective surgery they were already involved in before becoming available to care for an acute case in the emergency room. Patients and families benefited significantly from more timely communications from the surgeons and the nurse practitioners and physician assistants.

Teamwork amongst all participants improved, and care became better and more standardized.

"The surgical hospitalist group has developed a very similar practice style, so there's less variation amongst the surgeons, and there are closer relationships between the medical team and surgical team because we're all in the hospital together," observed Dr. Abate.

Decreased Length of Stay

Over the five-year period, the JACS study showed that length of stay declined 12%, from an average of 6.5 days at the start of the program to a low of 5.7 days.

Dr. Graves remarks, "Number one, the program was helpful to stabilize surgical service. Number two, we were able to improve quality of care, decrease the length of stay and decrease the cost of caring for this patient population. In fact, I think that's the real value of this program. We have been able to move patients through the system in a more efficient, timely way and achieve higher quality outcomes at the same time."

Dr. Abate agreed, "The real throughput that is improved, because patients get to surgery more quickly and the length of stay is shorter, is that the hospital beds open up that much faster. If the patient used to be in hospital for five days, they're now in hospital for three days. For two days that bed is now free because you're able to get patients into surgery faster and your team is in-house to deal with all subsequent care so there are real throughput gains and cost savings."

Decreased Complications

The number of complications resulting from surgeries declined markedly, from 21% to 12%, indicating a significant improvement in the quality of care patients received.

Ms. Owen Plietz noted, "Quality is always our number one goal. Whenever you can increase the quality and the overall patient experience by having better mortality stats and fewer complications, a hospital should take that step. Patients recover better and faster at home. So getting them home faster not only provides better outcomes, but it also reduces the cost of their care. Altogether these outcomes equal a more superior service."

Around the Clock Availability – Clinical and Management

Decreased length of stay and patient complications are two improvements directly tied to around the clock acute surgical care availability made possible by Surgical Affiliates' team. Not only are patients seen faster with this 24/7 coverage, but seasoned surgeons are readily available to assist other surgeons when needed.

Dr. Graves notes, "If other problems develop and another surgeon needs assistance in helping a patient in trouble in the ICU, OR, or ED, there's an experienced surgeon available to provide the additional clinical input, advice and treatment. Having someone with that training, background and experience available is invaluable to the total care patient population in the hospital."

An Aid in Recruitment

Dr. Abate found a surprising benefit to the surgical hospitalist program – an aid in recruitment.

"Now I can tell my new hires and the doctors I work with that they don't have to worry about getting surgeons to come and see their patients. There is a 24-hour availability of surgeons and we have a great relationship. It's helped me to sell the medical hospitalist program and to recruit good medical hospitalists. So that is a big deal for me."

Dr. Abate continued, "The surgical hospitalist group has also provided leadership. There is a clear

"We wanted to ensure that patients at our hospital were provided with access to the highest quality of surgical services available, no matter what time of the day or night they needed this care. The data published in the Journal demonstrates that our collaboration with Dr. Owens and his team at Surgical Affiliates is achieving that goal. We are encouraged by the success we have seen, and the outcomes, both clinical and financial, have been quite amazing."

Richard SooHoo – Chief Financial Officer Sutter Medical Center, Sacramento

Private Practice Physician Volume

	Pre- Surgical Affiliates	YEAR 1	YEAR 2	YEAR 3	YEAR 4	p-value
Total Operations	2306	2395	2542	2253	2301	
Average Cases per Surgeon (9 surgeon group)	256 ± 129	266 ± 134	282 ± 149	250 ± 127	256 ± 128	0.93

person to talk to when there are problems. If there is something going on that we need to deal with as a group, having a program with a designated person as a leader streamlines the ability to make changes. We can work together on our relationships. The surgical hospitalist leadership is involved with the hospital on a consistent basis, working on quality improvement and standardization of care. There are many benefits to having a service that's dedicated to the hospital and not trying to split their time between the hospital and their own private practice."

Decreased Hospital Costs

As a result of having the Surgical Affiliates Management Group surgical hospitalist program in place, SMCS hospital's average adjusted total hospital costs fell 31%, from \$12,009 to \$8,306. The JACS article notes that anticipated savings for a hospital of this size and type with this surgical hospitalist program would be \$2 million (or more) in a single year.

Mr. SooHoo elaborates, "When we talk about the length of stay, it has many tentacles. The quality side is to get patients out of the hospital as quickly as they are ready to prevent infections. This can improve throughput, thereby increasing capacity for more patients. Also, from a cost perspective, it's less cost per case. When you are getting paid by DRGs, it improves margins and hospital performance overall."

Professional and Personal Benefits for Surgeons in Private Practice

Just as important as these hospital enhancements, the quality of life of the surgeons in private practice dramatically improved, directly contributing to their willingness to continue practicing at the hospital.

Dr. Graves explains, "It allowed surgeons who were thinking about retiring to stay in practice because they didn't have an onerous emergency room and hospital consultation requirement."

The study data showed that volume of patients for the surgeons in private practice stayed the same or increased, with the addition of the surgical hospitalist program.

Dr. Owens notes, "For many surgeons who may be starting out, or who might be considering retiring, the surgical hospitalist role offers a more flexible schedule and an alternative career option. Similarly, when surgeons in private practice don't have to be included in the surgical call rotation, their quality of life improves and it gives them a workable option to continue practicing."

The Final Verdict – So Far

"At the end of the first year when we saw the data, we wondered if it was a fluke," commented Dr. Owens. "Our concern was that these improvements wouldn't be reproducible. But after five years, we've realized that not only can they be replicated, but they can be sustained over the long-term as well."

Mr. SooHoo notes, "The data published in the JACS study demonstrates that our collaboration with Dr. Owens and his team at Surgical Affiliates is achieving our goals. We are encouraged by the success we have seen. The outcomes, both clinical and financial, have been quite amazing."

Ms. Owen Plietz points out the benefits to patient care and the patient experience that the partnership has created. "The results of the study speak for themselves for increased quality of care and improved outcomes. What the program also delivers is a team of professionals who are inherent within the lifeblood of the organization, and who are committed to ensuring the patients receive great service. It's not just about clinical outcomes. It's the connection with family members, healing touches, holding individual's hands and making sure they enjoy an overall great experience."

"This study proves that in both the short - and the long-term, our model has produced a "halo" effect throughout the hospital in clinical outcomes, in efficiency and in cost savings. The value to all communities, especially those in which the hospital may not have a trauma center is clear: patients can get high quality surgical services any time of the day or night, when they are needed," said Dr. Owens.

Implementing a program like the one provided by Surgical Affiliates has helped SMCS to solve a problem, rather than merely address the symptoms. Mr. SooHoo notes, "We are most proud about sustaining these results, and taking this model from just patching the tire to getting a whole new tire that never has to be repaired again."

Raising the Bar for Other Hospitals to Follow Suit

Together, Surgical Affiliates and SMCS are raising the bar for better patient care, improved hospital efficiencies and happier doctors.

"For the collective whole, it is far more powerful than the sum of its parts, and every component was and still is vital to the success of the overall program," stated Ms. Owen Plietz. "We are an excellent example of how pulling surgeons in to be part of the collective team is the right direction to go forward in the future. It's really about that collaboration and creative solutions to get the desired outcomes."

Dr. Abate comments, "I attribute our continued success to the wide availability of surgical coverage, the dedication of surgeons to our hospital, as well as the good, close relationships we have been able to foster amongst the medical and surgical teams. All of these elements have been extremely important in moving the hospital forward. We are confident that this program will be a cornerstone in keeping our hospital a premier leader in delivering superb health care for our community."

"I would say the notion of best practices is the "best" we have found so far. We want to be better. We can call it best practice for the moment, but there are better practices than that, and we are hunting them down," added Dr. Owens.

In conclusion, the data shows that a high performing surgical hospitalist program is much more than a sustainable solution for on-call surgical rotations – it is a powerful tool to raise the bar for hospital performance throughout the organization, and a distinct competitive advantage in today's world of pay-for-performance and value based purchasing.

