General Surgery Patient Call Coverage Demand in a Community Hospital with a Limited Number of General Surgeons

Case Study Manuscript

(This case study manuscript is being submitted in partial fulfillment of requirements for election to Fellow.)
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Statement of Problem:

A general surgery practice consisting of six general surgeons and one advanced practitioner is facing a challenge in providing 24-hour coverage of their patients and emergency room call at the local community hospital. The practice recently experienced two general surgeons requesting to drop out of the call schedule due to sub-specialization without a call demand.

The four general surgeons and one physician assistant remaining would be required to provide call coverage of two hospital based bariatric clinics, a wound care clinic, a women’s health clinic, the general surgery office clinic and the inpatient and outpatient departments at the community hospital. The hospital is a 132 patient bed hospital that sees more than 30,000 patients in the ER per year.

Even with the complement of six general surgeons providing this complete coverage, statistics revealed that on the average five patients per week were being transferred to other facilitates from the Emergency Room due to the unavailability of the surgeons due to the surgeons’ existing demands. The volume of patients wanting to be referred to the general surgery clinic had a 30 day wait for non-emergent or non-urgent appointments. Physicians were consistently challenged to provide satisfactory response times to hospital patients, referring providers, hospital departments, office and nursing floor staff, as well as their office clinic patients due to the multiple demands on their time with these existing patient
volumes. The physician assistant’s main responsibility to this coverage demand was to assist within the hospital with patient rounds, assess the Emergency Room patient consults and to assist with surgery in the Operating Room. On occasion the physician assistant covered the office patients when a surgeon was unable to make it to the office due to the other patient care demands faced.

The existing work-life balance was near impossible to achieve with seven providers. It was essential to the well-being of the remaining five providers to identify a satisfactory resolution to facilitate a balance.

The providers agreed that they wanted to work towards a solution to care for all patients wishing to have their services at the hospital. They felt that the solution should provide reasonable access of care to patients and allow reasonable response times to clinic and hospital patients, referring providers, hospital departments and nursing floor staff. They wished to accomplish this without compromising patient safety while creating a positive work-life balance for a surgeon.

**Alternative Solutions Considered:**

Three alternative solutions were evaluated: 1) Recruitment to replace two existing general surgeons; 2) Recruitment of additional surgical advanced practitioners; 3) Collaboration with another general surgery group locally to provide services.
The pros and cons of each option were assessed by a group that included the physicians and administration of the practice.

One possible solution evaluated was to recruit two general surgeons to replace the two general surgeons that would no longer be providing call coverage to the practice. The additional surgeons would create a decreased demand on an individual surgeon’s time commitment needed for the coverage. This would contribute towards maintaining a work-life balance for the call surgeons. The balance may even be improved since the two surgeons opting out of call would still be available to cover the day to day responsibilities of some of the outpatient clinics. Response times should improve since the call physician would be able to lessen day to day responsibilities. The patient base could be maintained or potentially increased through more availability resulting in an increase in revenue. From a financial perspective, the patient base may not generate adequate revenue to cover expenses of the two additional surgeons. Recruitment of general surgeons could take up to a year or more which would add a strain on the existing call and coverage resources. The patient access could be compromised, which may result in referring providers transferring patients elsewhere if needs cannot be met. The dissatisfaction of referring providers and patients in regard to perceived unreasonable patient appointment access and response times had been experienced with the seven provider coverage complement. If referring providers did refer to other physicians during the interim of recruitment, this could result in a challenge of rebuilding referring provider relationships to regain the referral patterns once additional surgeons were hired. Adding two more providers to the
group would require additional office space for provider offices and patient clinic areas since the group would then consist of nine providers.

The second solution would involve recruiting additional surgical advanced practitioners to support the four physician call group. The demands on the surgeons could be lessened through delegated responsibilities of more than one advanced practitioner providing non-call patient demands. Responsibilities could be divided into specific responsibilities to cover the hospital demands, facilitating a more efficient utilization of the surgeon’s responsibilities. The delegated focus of their responsibilities could include initial assessing of patient consults on the inpatient and outpatient floors at the hospital, discharging of the patients at the hospital, assisting with the dictation of history and physicals and discharge summaries, performing minor procedures required for the hospital patients, assisting with surgical cases and providing support coverage at the office or clinic if the hospital demand was low. The advanced practitioner’s salary would be considerably lower, which would make this option more cost effective. Coverage in the office and clinics may still be limited if the patient volumes at the office are consistent with a majority of new patients appointments. The providers feel strongly that if the patient has been referred for a surgical condition the initial visit should be with the surgeon. Recruitment for general surgery advanced practitioners is difficult. The wide scope of specialized skill needed for this specialty has resulted in a limited availability of candidates for the position in the past. If this was the solution chosen to be pursued and recruitment was not successful within an agreeable time frame with the two surgeons opting out of call, a locum tenans service could be contracted for the physician assistant coverage.
The final solution evaluated involves collaborating with another general surgery group locally to assist in providing call coverage. Shared call coverage would provide less of a burden on the remaining surgeon, which may result in a more positive work-life balance for the surgeons. The expense of hiring additional surgeons and advanced practitioners would be eliminated. However, the quality of patient care may differ with providers outside of the existing practice. This may result in a poor patient and referring provider experience and dissatisfaction between surgeons if there is a difference perceived in the quality of care provided. If the other group would be competitive and want to acquire a greater market share, the patient base may be compromised or eroded. The patients may gravitate to the other group on a long term basis. Depending on the number of surgeons in the local group, their availability and the mileage distance required for coverage, the result could be an increase in the response time of the surgeon. Revenue into the practice may be decreased depending on the coverage model agreed upon.

**Procedure Used to Select Solution:**

A SWOT analysis was completed to evaluate the three possible solutions. Weekly meetings were held over a 6 week period so that a timely solution could be identified. Each SWOT analysis was evaluated and discussed by the physicians and administration of the practice. The majority vote decided the solution to execute.

**Decision:**
The decision was to move forward with recruitment of two full time advanced practitioners. The advanced practitioners would not participate in the evening call group but would provide a seven day per week coverage at the hospital. This would result in the complement of providers available for general surgery patient care call coverage to four surgeons and three advanced practitioners.

The surgeons elected to move to a surgicalists model of providing care to the hospital patient much like the current day hospitalists model of patient care. The surgicalist’s model would designate one physician (surgicalist) whose responsibility it would be to cover demands associated with both the inpatient and outpatient hospital patients 24 hours per day, seven days per week, one week at a time. The surgicalist would not be responsible for any patient clinic hours during this week and would be responsible for after hour call during this week for all general surgeons in the practice as well as any emergent or urgent surgery that was required at the hospital.

**Implementation:**

The recruitment for two full-time additional advanced practitioners commenced. Fortunately the two surgeons requesting to be relieved of call agreed to continue with call until the advanced practitioners could be recruited for a period not to exceed one year. The providers and administration designed what was felt to be an optimal call coverage schedule that provided the quality of patient care desired along with a reasonable demand of the surgeon’s time. The four surgeons would be on call one week at a time. The call
could begin at 7 am on a Friday and end the following Friday at 7 am. The surgeon on-call for the week would be provided with relief of overnight call on Monday evenings of the call week. This would be covered by one of the other surgeons. If the demand of the call presented a challenge in that adequate sleep could not be experienced due to multiple or consecutive evenings or nights of call demands, the surgicalist would ask for relief of an additional night of call during the week. It was felt that the surgeon needs to be rested so good surgical performance and patient care can be obtained. Their responsibilities were to focus only on those demands of the inpatients and outpatients in the hospital setting.

Two additional 1.0 FTE physician assistants were recruited and hired within a six month period. There was a three month training period of the physician assistants that occurred before the following outlined work structure was implemented: One physician assistant would work a 7am to 3pm schedule, Monday through Friday. Another physician assistant would work a 7am to 7pm schedule for a seven day stretch starting on a Monday extending until 7am the next Monday. The physician assistant working the 7am to 7pm, seven day stretch would then follow with seven days off. The physician assistant on the Monday through Friday, 7am – 3pm shift would begin the 7 day, 7am – 7pm shift the following Monday. The physician assistant that is off for the seven days would begin working the Monday following their seven days off on the Monday – Friday, 7am to 3pm shift. This rotation would continue throughout the year. In the event that a physician assistant requested paid time off or continuing medical education hours, the physician assistant off would be asked to cover. If the physician assistant was unavailable, the surgicalist would assume the additional responsibilities of the physician assistant during the day.
The physician assistant working the 7am to 3pm shift would have the primary responsibility of assisting the surgeons at surgery and providing back up care at the hospital or office as required. The physician assistant working 7am to 7pm would hold the primary responsibility of doing floor rounds independently and then rounding with the surgeon on call at mid-day. This physician assistant would coordinate the hospital services required of the surgical service at the hospital. All consultations requested and communication relative to the current hospital care passed through the coordinator which resulted in organized attention to the daily demands. At the end of this shift, the physician assistant would sign out to the call surgeon so there would be continuity of care being provided at the hospital setting.

The physician assistant’s responsibilities within the hospital would include completing patient assessments and work-ups, discharging of patients from the hospital, assisting with surgery and performing procedures such as wound debridement and insertion of chest tubes. As time allowed, the staff member would also perform wound debridements, incision and drainage of skin cysts, and minor skin excisions in the office clinic setting.

**Significance of Outcomes and Lessons Learned:**

Reasonable coverage of general surgery demands were met with the additional advanced practitioners and the schedule model as implemented.

The quality of care provided to the patient was enhanced through improved response times to referring provider and patient care demands. This model allowed for surgeons to have
limited demands on their time and for the most part minimized the exhaustion experienced with the original daily demands of covering both the hospital and clinic each day. The result was a better work-life balance and helped mitigate that exhaustion that has the potential to compromise patient safety.

This model provided an improvement to the total patient experience. Patient access improved as the surgeon’s office hours were protected since the surgicalist focused on the hospital responsibilities and the office surgeon focused on clinic hours. Patients had been experiencing long waits or cancelations. With the new model canceled or rescheduled office hours were almost non-existent which alleviated the patient’s frustration with having to have their appointment rescheduled. More timely responses to patients calling in with concerns and questions were achieved since a surgeon was readily available in the office.

Referring providers and hospital departments have been appreciative that the patients are able to experience a greater degree of continuity of care with this approach since the majority of the time the same surgeon and advanced practitioner does see the patient through their entire hospital course. With the original model, the surgeon’s hospital and call coverage identified a different physician rotating through hospital responsibilities on a daily basis.

A more timely response to the nursing floors and hospital departments was seen with the availability of both the designated hospital physician assistant and surgeon. This model also allowed for a timelier discharging of patients from the hospital.
Total patient volume and revenue increased within three months of implementation. This was the result of the organized, structured responsibilities which allowed for an increase in capacity of patients able to be seen both within the hospital and within the office clinic, while maintaining the patient volumes in the outpatient clinic areas. Patients were able to now be seen in the general surgery clinic within a ten day period instead of the prior 30 day period.

With the reasonable distribution of work load and flexibility this model allowed, the surgeon’s attitudes were more consistently positive due to the work-life balance that was achieved.

The positive effects of the change to this model have led to an improvement in employee satisfaction within the clinic office staff. A frustration with inefficiencies in communication that was created by the surgeons being pulled in so many directions in the former model has righted itself. Staff is now able to provide timely and effective communication to their patients with improved access to the surgeon in the clinic.

By having the physician assistant as the hospital care coordinator, work flows became more efficient. Instead of staff having to make multiple calls to resolve a hospital-based patient care issue, they now have one contact at the hospital, which minimizes the amount of time it takes for resolution. Having this coordination also provides efficient communication with the other general surgeons in the group when following up on their patients that are being cared for in the hospital settings.
With the existing call responsibility model, patients were frequently seen post-operatively in the office by a physician other than the physician that had performed their surgery due to the frequency of cancelations and rescheduling that was occurring. This resulted in patient dissatisfaction. With the new model, coordination of post-operative appointments to coincide with the same provider that performed the surgery has resulted in a more satisfied patient.

This model did present challenges not addressed with the analysis. Elective surgeries could no longer be provided to the patient within the timeframe referring providers and patients had come to expect as the call schedule created a one week delay in elective surgical case scheduling. The surgicalist model did not include the surgeon performing elective cases during the surgeon’s week as surgicalist. There was a decrease in the number of surgical cases performed per week with this model, which decreased revenue generation as well as patient and referring provider satisfaction. This challenge was addressed by scheduling up to two elective surgeries per day, each less than an hour in duration during the surgicalist’s work week. By limiting the duration of the case, responses to emergent and urgent cases would not be compromised since it would typically take an hour to prepare the patient for surgery. The additional time with elective cases did not highly impact the balance of other demands within the hospital during the surgicalist week. These elective cases still allowed the surgeon time to perform urgent and emergency surgical cases as well as the ability to perform patient rounding on the hospital floors. If a true emergency presented while the surgicalist was in a one hour elective case and the surgicalist was immediately needed, an office based surgeon would be asked to attend to the emergent
surgery until the surgicalist was available and one of the physician assistants was asked to
cover the office clinic.

**Recommendation for Other Managers:**

The success of this model was achieved through detailed analysis and active participation
in the process of those providers responsible for the general surgery services to the patients
of the local communities within the hospital, office clinic and the outpatient clinics. This
approach resulted in provider buy-in to the change and satisfaction with the final solution.

It is believed that throughout this process there was value in always bringing the work
flows and the changes back to a basic question, “How will this affect the patient?” With
the commitment to the patient, the decisions remained focused on the true reason of why
one chooses to be involved in the healthcare profession. This focus limited decisions and
changes made that were of a self-serving nature.

The restructuring of provider’s responsibilities allowed for better manageability of the
demands of the general surgery practice, which has resulted in more productive and
efficient work flows that have translated into content surgeons who have an acceptable
work-life balance.