

Early Surgical Consultation In The Emergency Department: Effects On Patient Management And Disposition

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Abstract

Background: Surgical emergencies are critical cases or incidents in Emergency Department (ED) where surgical consultation delays can negatively influence patient outcome, disposition as well as the efficiency of the department.

Aim: This research paper attempted to assess the perceived effect early surgical consultation on patient management, disposition outcomes, and ED efficiency and length of stay.

Methods: The study was a prospective cross-sectional study involving 150 healthcare professionals who were working in a tertiary care ED. A structured questionnaire that had been tested validated the perceptions on early surgical consultation on three dimensions, which included patient management, patient disposition, and ED efficiency.

Results: The respondents indicated that there was a high level of agreement that early surgical consultation positively affects the diagnostic accuracy, the speed of clinical decision-making, the resuscitation and administration timing of antibiotics, and clinical deterioration. Early surgical intervention also grew to more favorable disposition planning, earlier decision-making regarding operations, decreased ED length of stay, and enhanced interdepartmental coordination. There was no notable association between the areas of the study and thus it indicates separate benefits.

Conclusion: Early surgical consultation is also viewed as a good mechanism of enhancing clinical management, patient disposition, and ED efficiency.

Key words Early surgical consultation; Emergency; Patient management; Patient disposition; Emergency general surgery; Length of stay; Emergency; Emergency department efficiency.

Introduction

Emergency Departments (EDs) are an essential part of the contemporary health care model as they are the first-line contact with patients having acute, time-sensitive, potentially life-threatening conditions. (Kamper et al., 2020). The past twenty years have seen the usage of EDs rise significantly because of population growth, aging, and the growing number of acute surgical and medical diseases that have put a substantial strain on the emergency care systems to provide high-quality, quick, and effective care (Samadbeik et al., 2024). One of the hardest and most resource intensive presentations in the ED is suspected surgical patients, especially those who present with acute abdominal pain, trauma, or sepsis, in which delays in making a diagnosis or intervention may cause severe morbidity and mortality.

The treatment of surgical emergencies is also time-sensitive in nature, and requires quick identification, immediate resuscitation, accurate diagnosis, and prompt surgical decision making. Past studies have unanimously established that the longer it takes to conclusively manage surgical patients, the higher the complication rates, length of stay in the hospital, and the poor clinical outcomes (Gale et al., 2014). In this context, the communication between surgical teams and emergency physicians is central in defining the effectiveness and efficiency of the patient care pathways. Nevertheless, in most medical organizations, the communication between ED and surgical units is not optimal, which frequently leads to delays in consultations and extended ED visits, as well as inefficient disposition of patients (Voaklander et al., 2022).

The ED process of consultation has come to be identified as one of the significant patient flow and departmental efficiency determinants. (Elder et al., 2015). The increasing amount of evidence indicates that enhancing the timeliness and organization of specialty consultations may be an effective solution to reducing the Emergency Department length of stay and the overall workflow (Samadbeik et al., 2024). In a general umbrella analysis, Samadbeik et al. (2024) found that interventions that optimize consultation procedures resulted in the reduction of response times of 10-71 percent and a steady decrease in ED length of stay. Nevertheless, the majority of these studies reviewed consultation processes, as a whole, without isolating the effect of early surgical consultation as a distinct and clinically significant intervention.

Surgical consultations are a highly sensitive type of ED consultations because surgical decision-making can often result in admissions, discharges, observation or urgent referral to the operating room. (Qian et al., 2025). It has been demonstrated in several studies that surgical complaints, in particular, abdominal pain, are one of the most common reasons to request specialty consultation in the ED, which highlights the primary role of surgical teams in the provision of emergency care (Al Babbain et al., 2023). In addition, inconsistency in risk evaluation and management of emergency patients with general surgery has been related to the variability in time to consultation, time to operative intervention, and length of stay in the hospital (Harpole et al., 2022). The results of the above findings imply that the availability of surgical services as well as the timing of surgical intervention can play a major role in patient outcomes and the efficiency of the system. (Alolayyan et al., 2024).

The recent innovations in health information systems and redesign of workflow have further reinforced the relevance and significance of early and formal involvement of surgery. As an illustration, the adoption of consultation workflows that are based on electronic health records has been revealed to lead to a substantial decrease in the duration of the consultation request to an operating room transfer, especially when urgent and emergent cases are involved (Zubkov et al., 2025). This kind of improvements demonstrates that the early and effective communication between Emergency and Surgery departments can be converted into operational gains that can be measured. In addition to operational measures, it has also been found that early surgical consultation is linked to the improvement of diagnostic accuracy, initiation of adequate resuscitation processes timelier, and the administration of antibiotics to patients with suspected intra-abdominal sepsis or other surgical infections earlier, thus all of which have been identified as determinants of clinical outcomes (Samadbeik et al., 2024; Zubkov et al., 2025).

Although this is accumulating evidence, most of the current literature has put most emphasis on system level performance indicators like length of stay in the ED or time to surgery, as opposed to offering an in-depth analysis of the impacts of early surgical consultation on various aspects of patient care as a system. Specifically, the number of prospective studies that investigate the effects of early surgical intervention on the way patients are managed, clinical decisions, and ultimate disposition outcomes, such as discharge, hospitalization, or surgical intervention, is comparatively poor. In addition, most of the past studies have been based on retrospective data or have tested heterogeneous models of consultation where it becomes hard to identify the particular impact of early surgical consultation on observed improvements in care procedures. (Beckerleg et al., 2023).

Clinically, there is a complicated dynamic of diagnostic reasoning, risk stratification, resuscitation, and interdepartmental coordination of patients in the Emergency Department. At an early stage of surgical consultation can affect all of these elements by enhancing the diagnostic hypotheses, speeding up the decision on operative versus non-operative care, and enhancing the readability of disposition planning. Meanwhile, the Emergency Department efficiency and patient flow has become one of the top quality metrics, as the length of ED stay is linked to overcrowding, delayed service of other patients, and the risk of adverse events (Samadbeik et al., 2024). Clinical and organizational significance of understanding the contribution of early surgical consultation to improvement in these areas is thus important.

In spite of this, a conceptual gap in the literature exists on whether the perceived benefits of early surgical consultation in various domains of care, that is, patient management, patient disposition, and Emergency Department efficiency, are overlapping effects or different and independent dimensions of effects. Although the current research indicates that early specialty engagement enhances various areas of care, a small number have engaged in a systematic review of such areas in a single unit of analysis. This is a weakness that inhibits the capacity of policymakers and hospital managers to devise specific interventions that will maximize clinical performance and operational effectiveness.

In that regard, whereas there is solid theoretical and empirical evidence that should underpin the idea of early surgical intervention in Emergency Department care, there is still lack of prospective, systematic evidence that would evaluate the effect of this intervention on the patient management strategy, disposition issues, and departmental efficiency in a more comprehensive manner. This is one major gap in the literature that exists at the moment bearing in mind that there is an increasing number of surgical emergencies as well as the pressure mounting on the Emergency Departments around the world.

Thus, the current study was planned to fill this gap by comparing prospectively adult patients presenting to the Emergency Department with surgical conditions and investigating the impacts of early surgical consultation on important areas of care delivery. The main research question that is discussed within the study is the deficiency of a comprehensive evidence on the impact of early surgical consultation on clinical management, patient disposition decisions, Emergency Department efficiency as the interrelated but distinct aspects of care. The research seeks to determine the impact of early surgical consultation regarding patient management plans and

disposition results among indiscriminate patients presenting to the Emergency Department, to determine its impact on the efficiency and length of stay of the Emergency Department, and to find out which patients and clinical variables are more likely to benefit with early surgical involvement.

Methodology

Study Design

This research was based on a prospective and cross-sectional analytical design to assess the perceived impact of early surgical consultation on the patient management, patient disposition outcome as well as Emergency Department (ED) efficiency and length of stay. The design on which the study was based was chosen to help record real-life perceptions of the profession in regular clinical practice and to enable quantitative analysis of the research areas in a structured manner.

Study Setting and Population Study Design.

The Emergency Department of a tertiary care hospital that offers 24-hour emergency and surgical services was used as the study site. The sample group consisted of healthcare providers who directly relate to the determination, treatment, and disposition of patients with surgical conditions. This involved emergency physicians, surgeons or surgical residents, emergency medicine residents and nurses.

Eligibility Criteria

They were eligible to participate when they:

- Worked in the Emergency Department or surgery actively.
- Directly participated in the clinical decision making in the patients with operative conditions.
- Possessed no less than six months of clinical experience in emergency or surgical care.

Consented to take part on a voluntary basis.

It was limited to the administrative staff and non-clinical personnel.

Sample Size/ Sampling Technique.

The sample size of 150 healthcare professionals was selected through the convenience sampling technique on the basis of their availability during the data collection. This sample size was deemed adequate to conduct descriptive and correlation statistical tests and also to have multidisciplinary coverage of emergency and surgical care providers.

Data Collection Instrument

The questionnaire designed and used to collect the data was a structured self-administered questionnaire created after a lot of review on the relevant literature. The questionnaire was divided into two major parts:

Part 1: Demographics information

This part comprised age, gender, professional role, and years of clinical experience.

Part 2: Early Surgical Consultation

This section included 15 statements that were separated into three domains (5 items each):

- Emergency Department patient management (5 items)

Determining the diagnostic accuracy, the speed of clinical decision making, the effectiveness of resuscitation, timely administration of antibiotics, and the prevention of clinical deterioration.

- Patient Disposition Outcomes (5 items)

Measuring unnecessary admission reduction, proper discharge, operational intervention, understanding of disposition planning, and patient outcomes.

- Efficiency and Length of stay in Emergency Department (5 items)

The measures of ED length of stay, workflow efficiency, delays in patient management, interdepartmental coordination, and departmental efficiency.

All the items were rated on a 5-point Likert scale with 1 (Strongly Disagree) to 5 (Strongly Agree) with higher ranking indicating the higher the agreement with the positive impact of early surgical consultation.

Validity and Reliability

Experts in emergency medicine and general surgery were used to review the questionnaire to assess content validity, clarity and relevance. It was altered accordingly where necessary. Cronbach alpha coefficient was used to evaluate the internal consistency reliability and the instrument was found to be acceptable in all three domains (Cronbachs alpha > 0.70).

Variable	N. of items	Cronbach's alpha
All variables	15	0.734

Data Collection Procedure

Prospective data collection was done during the study. Potential subjects were contacted when they were on clinical shifts, briefed on the study objectives, and guaranteed confidentiality and anonymity. The involvement was voluntary and informed consent was signed beforehand before giving the questionnaire. The filled questionnaires were retrieved anonymously without any details.

Study Variables

Independent variable: Early Emergency Department surgery consultation.

Dependent variables:

- Emergency Department Patient management.
- Disposition results among patients.
- Efficiency/length of stay, Emergency Department.

The demographic and professional characteristics were taken as contextual and descriptive variables.

Data Analysis

The analysis of the data was performed with the help of the Statistical Package of Social Sciences (SPSS). Demographic characteristics and responses to the questionnaires were described using descriptive statistics (frequencies, percentages, means and standard deviations). The correlation coefficient was measured by Pearson to measure the relationships among the three major domains of study. The statistical significance used was $p < 0.05$.

Ethical Considerations

The institutional ethics committee gave the ethical approval. The participation was optional, all information kept confidential, and no data was used in any other way other than scientific research.

Results

4.1 Demographic information of study sample

The distribution of age is well balanced with the participants aged below 30 years 28.7% ($n=43$), those aged 30-39 years 20.0% ($n=30$), those who are 40-49 years 24.0% ($n=36$) and those who are 50 years and above 27.3% ($n=41$). The target population is represented by including both young professionals and old ones, which adds credibility to the study due to the incorporation of varied clinical viewpoints. Further researches can further investigate whether perceptions vary among these age categories to maximize age-specific process of implementation.

Table 1: Distribution of Age sample

Age			
		Frequency	Percent
Valid	Less than 30	43	28.7
	30–39	30	20.0
	40–49	36	24.0
	50 years or older	41	27.3
	Total	150	100.0

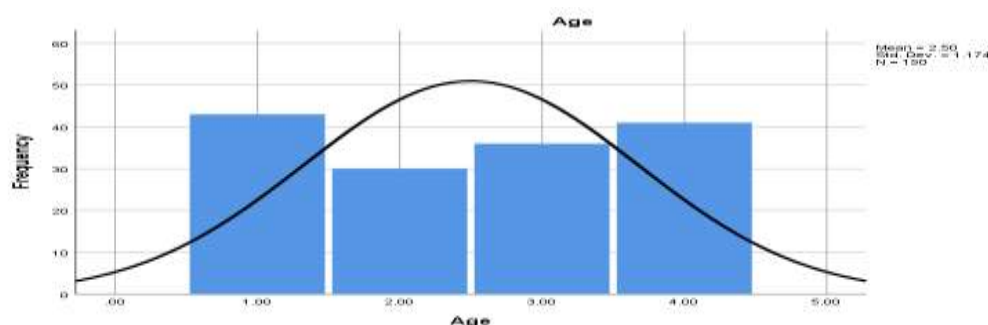


Figure1: Distribution of Age sample

There were 84 females (56.0) and 66 males (44.0), meaning there were equal and inclusive gender representation in the sample. This justifies the overall theory of generalizability of the results between the two genders. Subtle gender related differences in interdepartmental coordination perceptions and clinical decision making processes could be investigated further.

Table2: Distribution of Gender

Gender			
		Frequency	Percent
Valid	Male	66	44.0
	Female	84	56.0
	Total	150	100.0

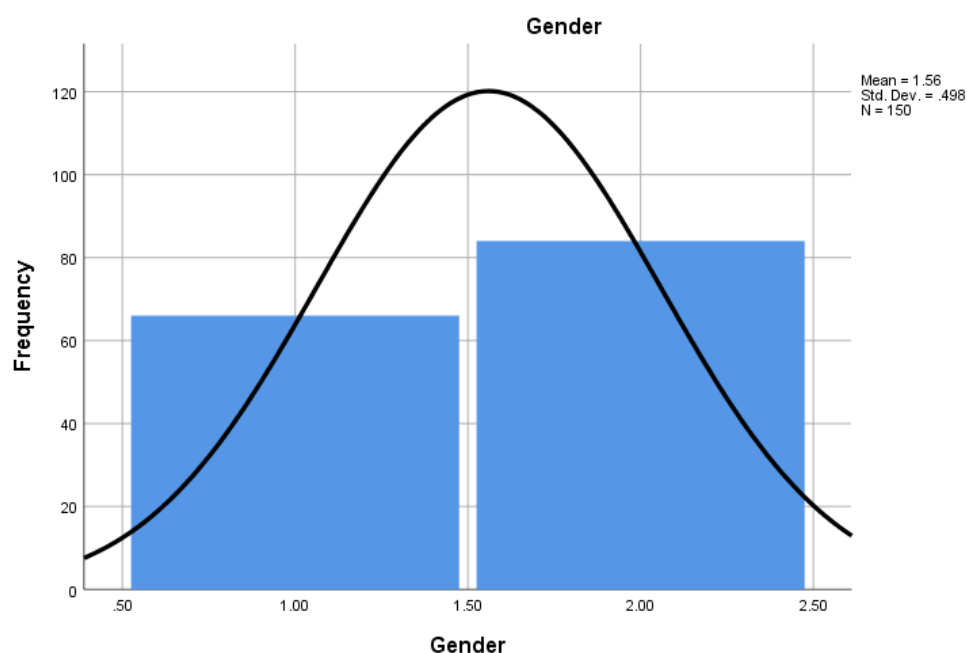


Figure2: Distribution of Gender

The research population included 47 physicians in the emergency (31.3%), 42 nurses (28.0%), 34 surgeons or surgical residents (22.7%), and 27 emergency medicine residents (18.0%). This interdisciplinary work is one of the strong points of the piece of work as it reflects the views of all the stakeholders that perform the vital role in managing the patient. Role-specific subgroup analysis can also be taken into account in future research to enhance workflow integration strategies.

Table3: Distribution of Professional Role

Professional Role			
		Frequency	Percent
Valid	Emergency Physician	47	31.3
	Surgeon / Surgical Resident	34	22.7
	Emergency Medicine Resident	27	18.0
	Nurse	42	28.0
	Total	150	100.0

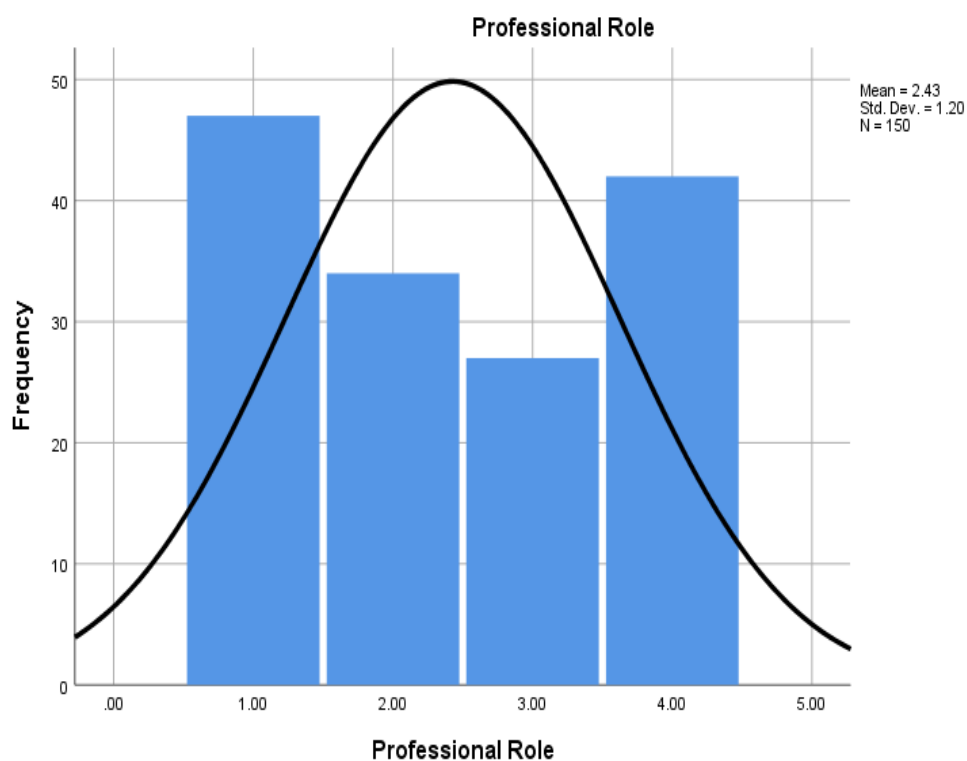


Figure3: Distribution of Professional Role

Those who have had an experience of over 10 years made up 32.7% (n=49), 2 years or less 24.0% (n=36), 2-5 years 21.3% (n=32) and 6- 10 years 22.0% (n=33). The resulting breadth of distribution of experience makes the findings more profound and believable as they represent senior clinical judgment blended with frontline operational insight. The further research may involve investigation about whether perceived benefits may differ at different levels of experience to facilitate implementation and training policies.

Table4: Distribution of Years of Clinical Experience

Years of Clinical Experience			
		Frequency	Percent
Valid	Less than 2 years	36	24.0
	2–5 years	32	21.3
	6–10 years	33	22.0
	More than 10 years	49	32.7
	Total	150	100.0

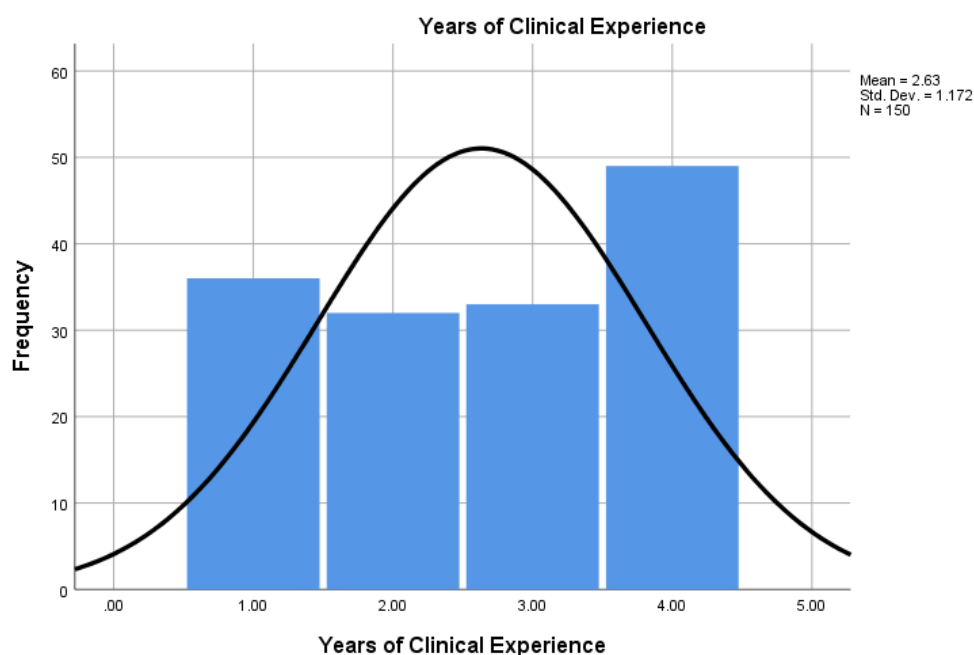


Figure4: Distribution of Years of Clinical Experience

4.2 Descriptive Statistics of study sample

The descriptive statistics reveal that the agreement among the participants within the study design is very high in terms of the perceived positive effect of early surgical consultation irrespective of the areas considered. The mean scores measured between a five-point Likert scale of 3.89 to 4.10, which showed a high level of approval of the early surgical involvement in Emergency Department practice.

The greatest consensus was on the sentence concerning the acceleration of the clinical decision-making process (Mean = 4.10, SD = 0.83), then on the Emergency Department efficiency (Mean = 4.03, SD = 0.84) and effectiveness of initial resuscitation (Mean = 4.05, SD = 0.81). These results indicate that the respondents have a special attachment to the operational and time-based advantages of early surgical consultation.

Equally, other outcome relating variables like diagnostic accuracy (Mean = 4.01, SD = 0.84), timing of operative intervention (Mean = 4.00, SD = 0.81), and overall patient outcomes (Mean = 3.93, SD = 0.82) were also strongly agreed upon which further supports the sense that early surgical intervention has both clinical and logistical benefits.

Even though slightly lower average scores were observed in the items associated with the decrease in unnecessary admissions (Mean = 3.93, SD = 0.81) and the increase in the appropriate discharge of the Emergency Department (Mean = 3.89, SD = 0.82), they also reflect a positive consensus, but hint at the fact that disposition related decisions could be affected by some other systemic or institutional factors other than just the timing of consultation.

The standard deviations are fairly stable (between around 0.80 and 0.87) which means that there is indeed a degree of uniformity among the respondents and indicates that the perceptions are widely common among the various professional communities. The research questions that might be discussed in the future are whether these perceptions depend on role or level of experience and this may still enhance implementation strategies without undermining the overall high level of consensus found in the present research.

Table5: Descriptive Statistics of study sample

Descriptive Statistics		
	Mean	Std. Deviation
Early surgical consultation improves diagnostic accuracy for patients with surgical conditions.	4.0067	.83944

Early surgical consultation accelerates clinical decision-making in the Emergency Department.	4.1000	.83345	
Early surgical consultation improves the effectiveness of initial resuscitation.	4.0467	.80549	
Early surgical consultation facilitates timely administration of antibiotics when indicated.	4.0467	.84613	
Early surgical consultation reduces the risk of clinical deterioration and complications.	3.9333	.79989	
Early surgical consultation reduces unnecessary hospital admissions.	3.9267	.81180	
Early surgical consultation increases appropriate discharge from the Emergency Department.	3.8933	.82043	
Early surgical consultation improves the timing of operative intervention decisions.	4.0000	.81100	
Early surgical consultation enhances clarity in patient disposition planning.	3.9667	.82264	
Early surgical consultation contributes to improved overall patient outcomes.	3.9333	.82468	
Early surgical consultation reduces Emergency Department length of stay.	3.9333	.81650	
Early surgical consultation improves overall Emergency Department workflow.	4.0133	.85127	
Early surgical consultation minimizes delays in patient management.	4.0067	.80682	
Early surgical consultation improves coordination between Emergency and Surgery departments.	150	3.9200	.87101
Early surgical consultation enhances overall Emergency Department efficiency.	150	4.0333	.83880

4.3 Correlation

Table 4.3 has shown the correlation analysis reveals that the three main study domains do not have statistically significant linear relationships with one another. The outcome of patient disposition depending on patient management in the Emergency Department showed very weak and negative correlation ($r = -0.040$, $p = 0.629$), as well as the outcome of the Emergency Department efficiency and length of stay regarding patient management ($r = -0.056$, $p = 0.495$).

In the same way, patient disposition results and Emergency Department efficiency and length of stay had a weak positive correlation ($r = 0.089$) which was not found to be significant ($p = 0.281$). Such results suggest that, despite high ratings of each of the domains in the descriptive examination, they seem to be similar, although conceptually different, features of the effects of early surgical consultation, as opposed to intersecting variables. The lack of significant correlations can be an indication of the fact that enhanced patient management, disposition choice, and departmental efficiency are perceived as the independent benefits of early surgical consultation, which play a role in improving the overall quality of care. This tendency serves the purpose of the multidimensional value of involving surgical intervention at an early age but not a pathway of dominant effect. What the methodological side says is that the correlation coefficients between variables are constantly low and the p-values are not significant, which proves the separation of domains in the measurement structure, which enhances the conceptual clarity of the study framework. Further research can be conducted on such relationships with multivariate or outcome-based research methods to provide more insight into how these realms interact in clinical practices.

Table 6: Patient Management, Patient Disposition Outcomes versus Emergency Department Efficiency and Length of Stay correlation.

Correlations				
		Patient Management in the Emergency Department	Patient Disposition Outcomes	Emergency Department Efficiency and Length of Stay
	Pearson Correlation	1	-.040-	-.056-
	Sig. (2-tailed)		.629	.495

Patient Management in the Emergency Department	N	150	150	150
Patient Disposition Outcomes	Pearson Correlation	-.040	1	.089
	Sig. (2-tailed)	.629		.281
	N	150	150	150
Emergency Department Efficiency and Length of Stay	Pearson Correlation	-.056	.089	1
	Sig. (2-tailed)	.495	.281	
	N	150	150	150

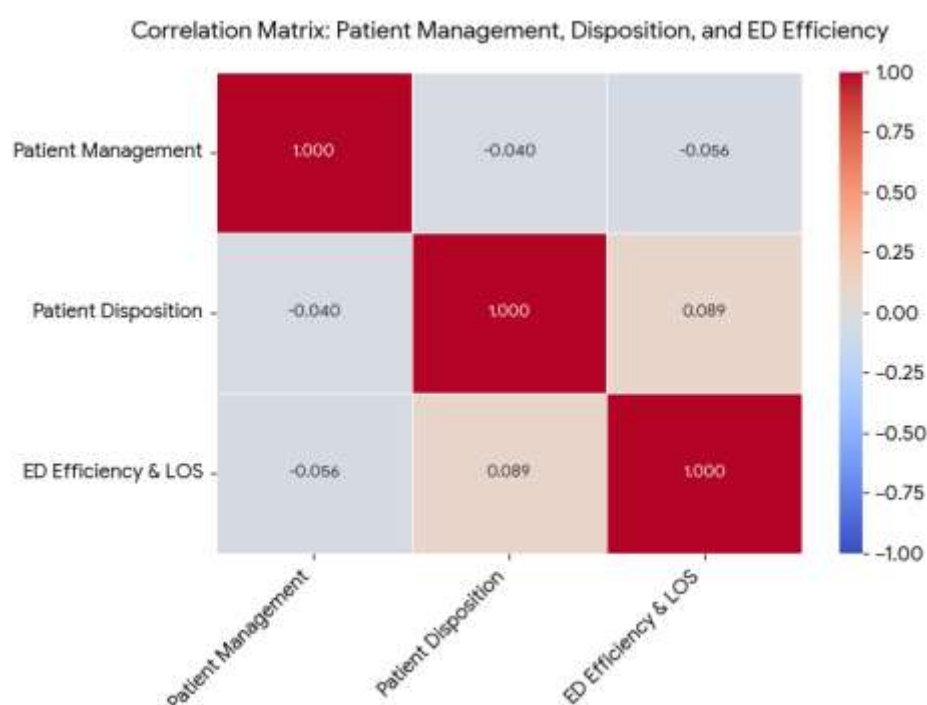


Figure5: Patient Management, Patient Disposition Outcomes versus Emergency Department Efficiency and Length of Stay correlation

Discussion

The current research offers strong prospective data on the perceptions of the healthcare professionals about the effect of early surgical consultation on Emergency Department (ED) on patient management and outcome of disposition. The mean scores in all the domains of questionnaires are very constant and high, which means that there is a high multidisciplinary agreement that the implementation of surgical teams early in the practice of clinical decisions and operational clarity improves. These results are specifically important in the light of the growing ED crowding, the elevated emergency general surgery admissions, and the increased attention paid to time-sensitive care pathways (Harpole et al., 2022; Samadbeik et al., 2024).

Compared to the numerous earlier researches that only considered objective throughput variables like ED length of stay, the present study is a widening literature as it evaluates the early surgical consultation as a multidimensional intervention of diagnostic accuracy, resuscitative effect, disposition planning, and perceived patient outcomes. Under this wider interpretation, it is possible to understand the value of early surgical intervention in providing quality of care beyond the time-to-intervention metrics.

In this area, the research questions are as follows: 2.1 Diagnostic Accuracy and Clinical Decision-Making.

The main finding of this study that is most evident is that there is a high consensus among the respondents that early surgical consultation enhances diagnostic accuracy and clinical decision-making process. The given finding is closely connected to the modern literature highlighting the diagnostic complexity of emergency general surgical presentations, especially of acute abdominal pain and undifferentiated sepsis.

As proven by Harpole et al. (2022), differences in the pattern of emergency department evaluation of surgical patients are a source of delays in the definitive diagnosis and treatment. Such variability can be minimized by having an early surgical consultation as it will unveil specialty-specific diagnostic frameworks earlier in the ED course of the patient. Surgeons may have subtle clinical intuition of subtle expressions of surgical pathology which may not be obvious at the first port of call in the ED, thus narrowing down the differences and decreasing diagnostic ambiguity.

On the same note, it was observed that surgical consultation delays led to longer consultation-to-decision delays (Snyder et al., 2023). Their results imply that prior surgical involvement allows reaching a new consensus on the management plans quicker, which can corroborate the current study result, according to which early consultation speeds up the decision-making process (Snyder et al., 2023). Taken together, these results contribute to the thesis that the role of early surgical input in the ED is that of a diagnostic trigger, which improves the efficiency and correctness of clinical thought in the ED.

Respondents in the current research highly affirmed that early surgical consultation would have a positive impact on the efficacy of the initial resuscitation process and the administration of antibiotics in time. The perceptions are especially applicable when patients have suspected cases of intra-abdominal sepsis or complicated surgical infections because the extent of survival depends on the initiation of early source control and antimicrobial therapy.

In their umbrella review, Samadbeik et al. (2024) have shown that a rather early specialty engagement is always linked to a higher level of compliance with evidence-based resuscitation guidelines. Even though their review covered a variety of specialties, surgical consultation was shown to be especially helpful when it comes to cases where urgent increase of care is required. Preoperative surgical intervention can encourage more aggressive resuscitation with fluids, earlier identification of septic physiology and prompt start of broad-spectrum antibiotics.

Also, ED-based multidisciplinary early intervention models have shown better physiological stabilization and shorter periods to definitive care (Jayaprakash et al., 2022). Although this research involved critical care consultation, the conceptual principle, namely, attempting to engage as early as possible in a specialty, is reminiscent of the present-day results and contributes to the extrapolation of the beneficial outcome of early consultation to the rest of the patients experiencing high-acuity care.

This finding that early surgical consultation will lower the risk of clinical decline and complications is in line with the outcome based research in emergency general surgery. Morbidity and mortality rates in emergency surgical patients are also disproportionately high, almost always due to a delay in recognition and intervention (Harpole et al., 2022).

Given that early surgical consultation implies proactive and not reactive management, the possibility to make decisions on the operative and non-operative paths of surgical intervention and the required degree of monitoring in time is revealed. Even though the current study was not directly conducted to measure the complication rates, the correspondence of the clinician perceptions to the existing outcome data provides some plausibility to the idea that the early surgical intervention can lead to safer patient journeys.

In relation to the timing of operative intervention, it was noted that the majority of the health care system is utilized in the emergency department. <|human|>3.1 Timing of Operative Intervention It was also observed that most of the health care system is used in the emergency room.

Among the most highly supported provided disposition-related benefits in this research was higher timing of operative intervention decisions. The results are very much in agreement with the recent data indicating that early surgical consultation reduces the duration in which the patient presents to the ED and ultimate surgical planning occurs.

Zubkov et al. (2025) displayed the electronic health record-based consultation workflow decreased time to operating room in acute surgical patients significantly. Although their research involved process redesign on a system level, the process of bringing benefits - an engagement in surgery earlier - resembles the mechanism of the intervention in the current study. Previously established operative necessity is not only a quicker way of delivering care but also helps to avoid the long-lasting diagnostic uncertainty and unnecessary reassessments in the ED.

The participants also noted that early surgical consultation improves the clarity in disposition planning including admission, discharge or operative intervention decisions. The clarity is needed in the ED setting, where it is shown that disposition decisions are ambiguous and are adding to the crowding and inefficiencies.

Snyder et al. (2023) showed that incomplete workups during surgical consultation time greatly increase the length of consultation-to-decision time and ED length-of-stay. This problem can be addressed by performing

surgery early, which will direct specific diagnostic workups and clarify disposition aspirations at an earlier stage of the patient process. In this regard, the early consultation is an organizational and clinical intervention.

Mean scores of reducing unnecessary admissions and increasing appropriate discharge were not as large as other items of disposition but it was still positive. This delicate observation indicates that early surgical consultation also helps make more fitting disposition decisions, but these results are also moderated by other institutional and systemic conditions like a bed availability, risk tolerance, and hospital admission policy.

As it has been recently highlighted, the disposition decisions are multifactorial and cannot be assigned only to the consultation timing (Samadbeik et al., 2024). However, the early surgical consultation can minimize defensive commitments by instilling increased assurance in the outpatient management plans of the chosen individuals.

Comparing the findings with the existing literature, the current findings are mostly consistent with the current evidence base with the additional information on the context. The majority of previous studies have considered the objective measures like length of stay or time to surgery (Zubkov et al., 2025; Snyder et al., 2023). Conversely, the current research demonstrates clinician-reported enhancement in care delivery, which provides an understanding of the mental and interpersonal mechanisms that contribute to the better outcomes.

Such contribution is further supported by the fact that the sample was multidisciplinary because perceptions were provided by emergency physicians, surgeons, residents, and nurses. This agreement implies that the perceived benefits of early surgical consultation are not occupation specific and are an expression of a collective view of better care delivery.

The results of the current research show that there is high consensus among health care practitioners that early surgical consultations can lead to a reduced length of stay in the Emergency Department (ED) and efficiency in the overall department. This impression is very much aligned with the modern evidence of specialty consultation delays as one of the primary factors contributing to ED crowding and elevated patient throughput times.

Snyder et al. (2023) showed that delays in surgical consultation and incompleteness of diagnostic workups before surgical consultation were major contributors to consultation-to-decision time and length of stay in the ED. In their findings, they found that ED length of stay was lessened by over three hours when surgical consultations were done following a timely and coordinated diagnostic assessment. Although the scope of their research was to study workup completion, the implicit meaning of the research is similar to the current results: the earlier and more organized surgical involvement simplifies EDs.

In the same vein, an umbrella review that included over 100 studies, conducted by Samadbeik et al. (2024) found that one of the most effective interventions to decrease the length of stay in EDs is early specialty consultation. Their review highlighted how timely contribution of inpatient services, especially that of surgical services, minimizes time wastage due to delayed decision making, reevaluations and delays in disposition.

In addition to the length of stay, the participants had a strong opinion that early surgical consultation is the best in enhancing the workflow of the ED and reducing the delays in patient management. Such results emphasize the organizational importance of early surgical intervention, which can go beyond patient-specific results to the level of system performance.

Zubkov et al. (2025) showed that the application of an electronic consultation process that allows surgical notification early on was able to decrease time to operating room in emergency surgical patients by a significant margin. Significantly, they have also noted that it was the mechanism of better coordination rather than the process of faster communication that resulted in efficiency gains. This fact shows a direct correlation to the current research study findings about the enhancement of coordination between surgical and ED departments. There has been recurrence of poor interdepartmental coordination as the impediment to effective emergency care. Harpole et al. (2022) observed that the inconsistency of the consultation time and patterns of communication frequently leads to duplication of assessment and increased ED stays. Surgery consultation at the early stage leads to interprofessional situational awareness, unified clinical priorities, and minimization of the inefficiencies associated with discontinuous decision-making.

Among the most methodologically and conceptually significant results of the current study, one should note the lack of statistically significant relationships between patient management and patient disposition outcomes, on the one hand, and ED efficiency domains, on the other hand. Although the scores of high agreement in all the three areas were high, the correlation coefficients were not significant and weak, thus indicating that the three areas are independent dimensions of benefit and not a causal line.

The discovery questions the naive idea that the enhancement in patient care automatically leads to the improvement of disposition or ED efficiency. Rather, early surgical consultation seems to have parallel influences on a wide range of the care in different mechanisms:

The positive effects of patient management include improved diagnostic reasoning, early resuscitation advice, and clinical expertise.

- The consequences of disposition are determined by better surgical decision-making authority and prompt consensus.
- The ED efficiency will be enhanced due to the decrease in delays, enhance coordination and simplified workflows.

This multidimensional meaning is related to complex adaptive systems theory of healthcare, which acknowledges that interventions tend to create numerous, non-linear outcomes in various system parts (Samadbeik et al., 2024). On measurement side, that the questionnaire is not correlated also suggests the construct validity of the questionnaire which indicates that each domain measures a different dimension of impact on early surgical consultation.

The implications of the study to clinical practice are as follows:

The conclusion of this paper would greatly advocate the incorporation of early surgical consultation as an apparent element of ED services to patients who present with a possible surgical disorder. Preemptive consultation must not be a feature of only those cases with final surgical diagnoses but must be contemplated when assessing high risk or diagnostically ambiguous presentations in the first instance.

This method is in line with recent guidelines that propose early multidisciplinary intervention in time-sensitive diseases like sepsis, bowel perforation, and acute abdomen (Harpole et al., 2022; Samadbeik et al., 2024). Preoperative surgical consultation raises the confidence of the diagnosis, minimizes wait times to definitive treatment, and enables safer patient paths.

Administratively, early surgical consultation is a high-impact, low-cost intervention which could have various performance outcomes. Hospitals can also think of using systematic protocols of early consultation, explicit criteria of escalation and the use of electronic notification mechanisms to ensure timely surgical intervention.

There is also some evidence by Zubkov et al. (2025) that interventions on systems level that enable early consultation may provide measurable positive effects on operational efficiency. Such strategies could become crucial in the quality and safety of emergency care provision due to the increasing burden of the emergency general surgery and increased ED crowding observed in many parts of the world.

There are a number of strengths of this study. First, its prospects design will improve the validity of the findings, as it will involve capturing real-time perceptions of healthcare specialists who are involved in the work of ED and surgical care. Second, the sample is multidisciplinary as it consists of emergency physicians, surgeons, residents, and nurses, which represents a balanced and wide-range view on early surgical consultation.

Third, the research takes a multidimensional approach, as it studies the patient management, disposition outcomes, and ED efficiency at the same time. Such a methodology will fill a big gap in the literature since most of the studies concentrate on one outcome with little breadth like length of stay or time to surgery.

Limitations

Although the study has several strengths, it has its limitations which are to be noted. The main weakness is that it is based on self-reported perceptions and not on objective patient-level outcomes, including morbidity, mortality, or readmission rates. Although the perceptions of clinicians are useful predictors of feasibility and perceived impact, objective outcomes measures should be incorporated into future research to enhance causal inference.

Secondly, convenience sampling can also restrict the generalization of the findings, though the representation of the various professionals and experience somewhat neutralizes the effect. Lastly, the cross-sectional nature of the analysis design does not allow evaluation of the changes with time or the causality of variables.

Future Research Directions

The research should seek to confirm these findings in the future by applying outcome-based research designs such as the prospective cohort studies and controlled interventions by comparing early and standard models of surgical consultation. Research on patient-level outcomes, cost-effectiveness, and role-specific perceptions would also be beneficial to improve knowledge.

Also, a thorough examination of how digital consultation tools and standardized early consultation pathways in various healthcare facilities are used can be an important source of insights into the strategy of their implementation at scale.

Conclusion

This paper will prove that the notion of early surgical consultation in the Emergency Department is seen by healthcare professionals as a highly beneficial intervention in various domains of care that work independently. Early surgical intervention increases the ease with which patients are managed, the clarity and appropriateness of disposition choices, and the efficiency and decreased length of stay in EDs. Notably, these advantages seem to work in parallel and not in a linear fashion. Taken together, the results are rather encouraging in terms of the introduction of early surgical consultation into the regular routine of ED practice as a method of enhancing the quality of clinical care and the efficiency of the work.

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Appendix

Questionnaire

Section 1: Demographic and Professional Information

1. **Age (years):**
 - ☐ Less than 30
 - ☐ 30–39
 - ☐ 40–49
 - ☐ 50 years or older
2. **Gender:**
 - ☐ Male
 - ☐ Female
3. **Professional Role:**
 - ☐ Emergency Physician
 - ☐ Surgeon / Surgical Resident
 - ☐ Emergency Medicine Resident
 - ☐ Nurse
4. **Years of Clinical Experience:**
 - ☐ Less than 2 years
 - ☐ 2–5 years
 - ☐ 6–10 years
 - ☐ More than 10 years

Section 2: Patient Management in the Emergency Department

(5-point Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree)

Early surgical consultation improves diagnostic accuracy for patients with surgical conditions.
Early surgical consultation accelerates clinical decision-making in the Emergency Department.
Early surgical consultation improves the effectiveness of initial resuscitation.
Early surgical consultation facilitates timely administration of antibiotics when indicated.
Early surgical consultation reduces the risk of clinical deterioration and complications.

Section 3: Patient Disposition Outcomes

Early surgical consultation reduces unnecessary hospital admissions.
Early surgical consultation increases appropriate discharge from the Emergency Department.
Early surgical consultation improves the timing of operative intervention decisions.
Early surgical consultation enhances clarity in patient disposition planning.
Early surgical consultation contributes to improved overall patient outcomes.

Section 4: Emergency Department Efficiency and Length of Stay

Early surgical consultation reduces Emergency Department length of stay.
Early surgical consultation improves overall Emergency Department workflow.
Early surgical consultation minimizes delays in patient management.
Early surgical consultation improves coordination between Emergency and Surgery departments.
Early surgical consultation enhances overall Emergency Department efficiency.