

EMERGENCY GENERAL SURGERY: EVOLVING

Introduction

General surgery, the original and the oldest of the surgical specialties, has undergone rapid advances in the last few decades, emphasizing a shift to specialization. These changes have improved the patient journey immensely with outpatient but, more noticeably, with inpatient care.

For example, in colorectal surgery, surgical pioneers are now able to perform and teach highly specialized techniques such as robotic surgery to peers in their field. Generic general surgery subsequently has risked being relegated to becoming an ill-defined specialty with no definite borders.¹ There is also a risk with the specialization that the modern surgical trainee may not have the breadth of emergency experience to deal with the “bread and butter” surgical emergencies that come with their own challenges and complexities.

In the United Kingdom, the Royal College of Surgeons of England has been pushing to establish emergency surgical units in every acute trust in the country. This drive has led to the development of new organizations, workshops, and conferences, all aimed at improving the delivery of critically ill surgical patients.² This strategy is consistent in Europe and elsewhere globally, with the general surgery community enthusiastically approaching the challenge of managing surgical patients with many different models of surgical care but all consistent in their approach—the complete separation of emergency with elective surgical commitments.

The Need

A busy general hospital has a continuous need for inpatient beds throughout the year, with severe pressures for beds in peak seasons, for example, winter. Each available bed is a valuable commodity for managing acute surgical patients, and safe patient throughput from admission to discharge is the key to the effective management of beds. Unnecessary admissions should be minimized without compromising patient care. This challenge could be met in the Division of General Surgery by establishing the Department of Emergency General Surgery (EGS).

The Plan

The traditional system in the hospital involved the on-call consultant being supported by a team of junior doctors at three different tiers of training (postgraduate, junior surgical trainee, and senior surgical trainee). The junior doctors will be responsible for the initial assessment and management of referrals before involving senior team members (who may or may not have been available due to their other on-call commitments). In a unit, it is not unusual for a consultant to be operating with their trainee for most of the day. If a particular operation is prolonged, this leads to an inevitable delay in the senior assessment of new patients.

It was not uncommon for patients to be admitted and have their first senior surgical review >24 hours later. Our data showed many patients admitted who could have safely been managed in the community. Worryingly there was also a small cohort of patients who would have benefited from a more expeditious senior review. The Royal College of Surgeons statement,² together with the issues described above, were the necessary drivers for change that led to establishing emergency surgery as an independent unit within a surgical department.

The model for the delivery of acute surgical care will have a dedicated group of at least four emergency surgeons managing referrals between the busiest times of 8 and 8.30 pm. The emergency surgical consultant is supported by the on-call team, which is released from elective commitments. This space can be expanded from a four-bedded unit next to surgical wards to an expansive 25-bedded assessment unit. The area can also include a “hot clinic” for seeing urgent, though not emergency operating theaters and a minor procedures room, which can further reduce bed requirements.

Training can be significantly improved, and feedback has to be obtained from all the concerned, including junior doctors. For example, referrals from primary care are accepted by the consultant and then reviewed by one of the foundation-year doctors, the most junior member of the surgical team (emergency department referrals are still seen and managed by the junior and senior surgical trainees), and the assessment and management plan discussed with the consultant who reviews the patient usually within two hours of their presentation to hospital. This supervision can dramatically improve the confidence of newly graduated doctors in the management of surgical emergencies, reduce delays in the “decision to admit” time, and reduce unnecessary referrals. Emergency surgeons may also be timetabled to spend one week in emergency theaters supporting the senior surgical trainees with emergency operations. It is incredibly reassuring for our trainees, who often embark on some major cases independently, to know there is a consultant nearby on standby should they encounter any intraoperative difficulties.

Expectations

Establishing an EGS can result in easy access to surgical expertise offered to our primary care colleagues, minor procedures pathway that can streamline the inpatient journey for patients requiring minor procedures, and a surgical hot clinic that is utilized effectively by general practitioners. It helps urgent treatment centers and emergency departments in accessing expedited rather than emergency surgical services. It can reduce unnecessary referrals, repeat admissions, and also associated morbidity.

Challenges Ahead

As a "new" specialty recruiting consultants into this position may not be easy. This difficulty is confounded by the relative lack of private work available to specialists in this area. However, perspectives even amongst our trainees are changing, especially when considering family and work-life balance which is one of the strengths of the job. Therefore, we remain optimistic that we will be able to recruit high-caliber surgeons for this role. The cost of establishing EGS is another difficulty that has to be addressed.

The Acceptance and Adoption

The need for dedicated EGS is now well recognized. Immediate benefits were noted in those units that have established the EGS pathway. Of course, no one model fits every single hospital, and each hospital will have to look at its resources, but it is clear that with early decision-making, effective use of beds, and improvements in surgical training that the general emergency surgeon is here to stay.

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References

1. Ramsay G, Wohlgemut JM, Jansen JO. Emergency general surgery in the United Kingdom: a lot of general, not many emergencies, and not much surgery. *J Trauma Acute Care Surg.* 2018;85(3):500–506. DOI: 10.1097/TA.0000000000002010
2. Emergency General Surgery - Commissioning Guide. The Royal College of Surgeons of England. RCS publication, Year: 2014. The Royal College of Surgeons of England, 35-43 Lincoln's Inn Fields, London WC2A 3PE; reception@rcseng.ac.uk