# A poorer path, less trodden - patients with 'ambulatory trauma' in the United Kingdom Vizhe Lim and William Eardley



**Yizhe Lim** is an ST4 Trauma and Orthopaedic Registrar, currently in James Cook University Hospital, North East of England.



William Eardley is an academic orthopaedic surgeon at the South Tees Hospitals NHSFT. He has a specialist interest in the management of post-traumatic complications including fracture fixation failure, non-union, deformity and osteomyelitis. Having left the British Army in the rank of Lt Col after 19 years of service, Will has worked in an operational capacity in Kosovo, Iraq, Sierra Leone and Afghanistan. Will has an acknowledged reputation in orthopaedic trauma research and has completed a Master's degree investigating fracture distribution in Road Traffic Accidents. Will is RCSEd Speciality Board Chair, Orthopaedic Clinical Lead for the National Hip Fracture Database, National Major Trauma Registry Audit Orthopaedic Lead and Deputy Medical Director at University Hospitals Tees.

rthopaedic trauma care frequently conflicts with elective surgery, and cancellations of the latter are encountered when the burden of trauma cases overwhelms inpatient operative capacity. Although the United Kingdom (UK) has established guidelines for major trauma and hip fractures, patients with less severe injuries, such as wrist, ankle, and clavicle fractures, often experience delays in surgery. Many such patients are eligible as day-cases, but have to wait a long time for their operation according to the ORTHOPOD study which identified and highlighted delays and significant variation in operative capacity throughout the UK1,2. In order to improve the time to surgery for ambulatory trauma patients within MTCs and their related trauma networks, we outline the causes of these delays, their effects, and propose evidence-based recommendations.

# **Current challenges in managing surgical delays**

One of the main problems is variation in case burden and list provision among hospitals<sup>1</sup>. Ambulatory trauma patients not on a dedicated day case pathway (those seen at one of a range of emergency care facilities and sent home to represent either for an operation, or at a fracture clinic prior to surgery) have higher cancellation rates, and underutilisation of dedicated day surgery sessions results in unnecessary inpatient admissions and extended waiting periods<sup>1,2</sup>.

Another major issue is the absence of coordination at the regional network level<sup>1,3</sup>. Regardless of the first institution's immediate capacity, patients frequently have surgery there, which results in differences in waiting times and little patient movement between hospitals<sup>3</sup>. The trauma system is overworked and the recuperation from elective surgery is adversely affected by this approach. This has created a situation where a patient with

a benign distal radius fracture seen initially at a busy major trauma centre Emergency Department (ED) will automatically be added to that hospital's operative burden. The patient's priority then competes with more significant trauma such as open fractures, children's trauma, hip fractures and complex peri-prosthetic surgery for example. Had the patient been referred to a local (often 8-9 miles away) hospital, they could have had surgery the following day or at worst the day after<sup>3</sup>. Moving patients between hospitals for non-specialist care is not a feature of UK trauma care and hence delays occur whilst capacity is mismanaged.

Additionally, oversight and financial incentives observed for high-priority injuries, like the Best Practice Tariff for hip fractures, are absent for common orthopaedic trauma-like wrist, ankle, and clavicle fractures<sup>1</sup>. Longer wait times and possible negative patient outcomes, such as decline, increased pain, and frustration, are caused by this deprioritisation4. Widespread cancellations and growing waiting lists are the results of the COVID-19 pandemic's exacerbation of these problems<sup>5,6</sup>. Patients waiting for simple surgery at home therefore experience significant delays because of these systemic inefficiencies and disorganised pathways.

# Recommendations for improving time to surgery

### Optimisation of day case trauma pathways

Clearly, one significant area for improvement is in reversing the underutilisation of day-case surgery. Inappropriate inpatient bed occupancy would also thereby be decreased and general trauma lists made less stressful as well. This can all be made available by growing and promoting dedicated day-case trauma lists (DCTLs)¹. Day-case trauma lists have been shown in studies to be both safe and economical, resulting in significant cost savings and high patient satisfaction¹. >>

## **Subspecialty**



"One significant area for

improvement is in reversing

the underutilisation of

day-case surgery.

Inappropriate inpatient

bed occupancy would also

thereby be decreased and

general trauma lists made

less stressful as well."

This calls for a change in how resources are allocated, improved pre-operative evaluation, precise eligibility standards, and methods to lower cancellation rates<sup>2</sup>. Optimising the internal flow and scheduling of these

day-case lists is essential in order to reduce patient anxiety and dissatisfaction. Dedicated scheduling and open communication with patients can help on-call teams and patients overcome obstacles. By addressing common causes of hospitalisation found in daycase trauma studies, modern

post-operative

pain management techniques, such as peripheral nerve blocks and standardised analgesia packs, can further minimise the need for overnight stays7. We have previously demonstrated that the median number of day case trauma lists at any given acute

hospital is zero. Gains therefore will be easy to make. We have also previously shown that around three quarters of all cases operated on UK orthopaedic trauma lists are hip fractures followed by wrist and ankles. It is

> clear therefore that in terms of case selection, ankle and wrist fractures should be targeted for day case surgery.

Further emphasising this, since October 2024, the 'Get It Right First Time' (GIRFT) recommendation from NHS England alongside the British Association of Day Surgery (BADS) is that Trusts not only 'think day case first' for elective surgery, but trauma as well8. They have highlighted that primary open

reduction and internal fixations of ankles and wrists, as well as hand tendon repair, K wire removal and foreign body removal from skin are suitable for day surgery, by being allocated first on the trauma list whenever possible and managed through a dedicated day surgery list8.

### Enhancement of regional network coordination and patient flow

Effective patient flow (the ability of a patient to move effortlessly around a region to gain early surgery and day case pathway access) is hampered by lack of inter-hospital coordination. It is critical that all network hospitals (MTCs and Trauma Units (TUs)) implement real-time oversight of trauma workload and operative capacity3. By guiding patients to facilities with available theatre slots, this facilitates dynamic patient transfer protocols and cuts down on wait times. Clear communication, standardised transfer procedures, and shared electronic health records are necessary for this 'load balancing' strategy<sup>3</sup>.

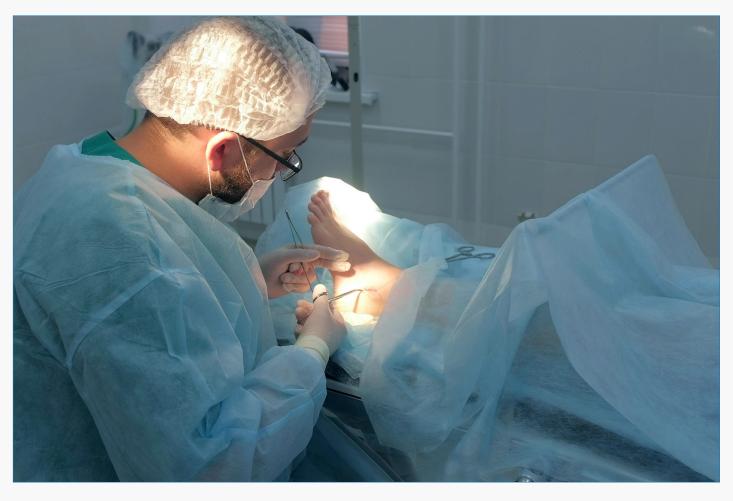
### Implementation of performance monitoring and incentives for ambulatory trauma

There is a lack of standardised audit and incentives for common injuries like the ones mentioned previously. Their priority could be raised by establishing financial incentives and performance measures for prompt surgical intervention for ankle and wrist fractures. An effective example is the implementation of the Best Practice Tariff (BPT) for hip fracture surgery in England. Significant improvements in time to surgery and other patient outcomes result from the BPT's incentives for hospitals to meet certain quality standards, such as performing surgery within 36 hours of admission<sup>9,10</sup>. For day case only wrist and ankle surgery, a similar strategy might promote better care and cut down on delays. Tracking important metrics, such as 'time from decision to operate to surgery', yields useful information for locating bottlenecks and promoting advancements1. The ability to define key performance indicators and potential for improvement is vast. This costs nothing as per the hip fracture BPT, the whole tariff is top sliced and the full amount is given to those Trusts hitting the day case metrics.

### Standardisation and streamlining pre-operative assessment, patient listing, and patient tracking

Delays and inaccuracies in pathway care can be caused by differences in listing procedures and outpatient procedures2. Standardising pre-operative evaluation can speed up surgical listing and cut down on hospital visits, possibly with the help of virtual clinics. The pathway can also be streamlined by giving emergency rooms or trauma clinics the authority to directly list qualified cases2. It is crucial to have reliable systems in place for tracking and recording patients who are awaiting surgery. The waiting list should be recorded in a live comprehensive database and discussed daily during trauma meetings.

Trauma registries, such as the National Trauma Data Bank (NTDB) in the United States, are crucial for tracking patient-specific care, complications, and outcomes at the hospital



and regional levels<sup>11</sup>. These databases allow for accurate prioritisation, transparent waiting list management, and data for identifying bottlenecks and evaluating interventions. In orthopaedic trauma, aside from the NHFD, there is no data collection for this population.

### Dedicated trauma theatre capacity and staffing

It is essential that trauma theatres have ring-fenced staff and overall capacity that is distinct from elective lists and any element of inpatient care. Operating rooms specifically designed for trauma patients increase productivity and cut down on delays<sup>12</sup>. Flow is maximised by orthopaedic trauma teams that are regular and well-trained (surgeons, anaesthetists, and nursing staff). The fact that different hospitals perform different numbers of cases per session indicates that improved resource allocation and standardised procedures could lead to efficiency gains1.

### Conclusion

There is a delay to prompt surgical care for injured patients waiting at home especially those with ankle and wrist fractures. The scope of this problem has been brought to light by the ORTHOPOD studies, which have shown a significant lack of regional coordination in

### Take home messages

- Orthopaedic trauma operative demand and provision vary significantly amongst UK hospitals.
- The underutilisation of day-case trauma pathways results in needless inpatient admissions and delayed surgery for patients that wait at home for their operation.
- Ineffective patient transfer and load balancing between hospitals are caused by a lack of regional network coordination.
- The absence of performance monitoring for common injuries (wrist and ankle fractures) results in deprioritisation.

patient flow, underutilisation of day-case pathways, and marked variability in operative capacity. These systemic inefficiencies affect patient outcomes and experience in addition to adding to long wait times.

A multifaceted approach is necessary to reduce these delays. Important actions include improving regional network coordination for dynamic patient transfers, streamlining day-case trauma pathways, and introducing performance monitoring with incentives for ankle and wrist fractures. Additionally, ensuring dedicated theatre capacity and staffing, as well as standardising pre-operative assessment and listing procedures, will greatly increase efficiency. Health care systems can strive towards a more responsive and equitable orthopaedic trauma service by implementing these evidence-based recommendations. This will ultimately lessen patient suffering and enhance the general standard of care for patients awaiting surgery for ambulatory trauma.

As a key sponsor of the ORTHOPOD study, the British Orthopaedic Association has a vested interest in lobbying the key stakeholders to address the systemic issues identified for the benefit of our patients.

### References

References can be found online at www.boa.ac.uk/publications/JTO.