

Recovery Management Guidelines Trauma and Orthopaedic Surgery

This document outlines some core principles to consider when returning towards planned activity in Trauma and Orthopaedic. It should be read in conjunction with guidance provided by the National Clinical Advisor Group Lead, Acute Hospitals HSE and the British Orthopaedic Association (BOA) <https://www.boa.ac.uk/>.

Consider establishing an orthopaedic recovery management team who should hold virtual meetings on a regular basis to agree a pathway. This team could be composed of management, administration, nursing, surgeons, anaesthesiology, theatre staff, and physiotherapy.

Consider if there is further capacity to start non-urgent care given the current primacy of the trauma workload. Preparedness should be made for an increase in trauma volume as social restrictions are eased.

Priorities for Trauma and Orthopaedics

- Trauma numbers are likely to increase as restrictions are eased, this should take precedence over starting non-urgent surgery.
- Hospitals should consider how planned care will be delivered in the immediate future.
- Consideration should be given to using Covid-19 free standalone facilities if available. This will require high level discussions and decision-making.
- Services should review waiting lists and prioritise patients ahead of planned surgery resuming.
- Given the imposed physical restrictions that we have lived under, patients may have become physically deconditioned; to optimise their recovery, consideration should be given to a pre-operative exercise programme.
- Advice regarding appropriate transport to hospital should be given.
- Communication to waiting list patients in each hospital regarding the local situation is essential. Pathways should be implemented to allow patients contact the orthopaedic service if their condition deteriorates or red flags symptoms occur.
- Given the potential risks associated with carrying out elective surgery in an uncertain environment, patients must be made aware of conservative self-management options available to them compared to operative intervention.
- **First, do no harm.**

The highest priority should be those patients whose surgery is most clinically urgent. For surgery that is less urgent, and particularly where it is complex, this should occur only once the level of risk and how to minimise it effectively is better understood. The limited evidence available suggests that a patient acquiring Covid-19 in the post-operative period has substantially worse outcomes; hence, the need for caution until more evidence is available.

Capacity issues to consider

- Given the uncertainty around the risk of another surge in the disease, a phased return to elective surgery should be implemented including planning for post-operative review and follow up.
- Throughput in operating theatres will be markedly reduced.
- Materials needed for surgery, including PPE, implant availability and supply lines.
- Restricted availability of anaesthetic drugs.
- There should be consideration of whether post-surgery facilities such as rehabilitation will be operational and able to support patients post-operatively. Currently many rehabilitation centres are taking post Covid-19 patients from acute hospitals.
- Support in theatre from implant companies is unlikely to be available in the short term.

Infection prevention and control measures for planned surgery

Changes to previous care pathways should include the creation of Covid-19 free or Covid-19 unknown pathways in order for planned surgery to be safe. The limited evidence available at present, suggests that if a patient develops Covid-19 in the peri-operative period their outcome is severely compromised.

Prior to Admission

- The following wording should be considered when discussing surgery with patients prior to admission:
“If you catch, the coronavirus, this could affect your recovery and might increase your risk of pneumonia and even death. Talk to your healthcare team about the balance of risk between waiting until the pandemic is over (this could be many months) and going ahead with your procedure. If your procedure is routine, rather than urgent, your Doctor may recommend a delay. Please visit the WHO website for further information.”

- Ideally, patients should self-isolate at home for 14 days prior to their surgery.
- The patient should be contacted to discuss pending admission and the attendant issues and risks. They should be questioned about symptoms.
- Pre-Operative Covid-19 PCR testing should be carried out within 48-72 hours of surgery. Assuming the result is negative, the patient should be questioned again about symptoms on admission.
- Advice regarding appropriate transport to hospital should be given.

Theatre practice

- Regional anaesthesia is advised if it is appropriate for the procedure, to minimise risk from aerosol generating procedures (AGP) during intubation and extubation.
- Restricted availability of anaesthetic drugs.
- Theatres should be allocated for Covid-19 negative work.
- Standard operating procedures (SOPs) already developed during the initial phase of the pandemic should be continued.
- Ensure availability of appropriate PPE, anaesthetic equipment, implants and medications.
- Consider using two theatres if available to reduce delays.

Consent

Informed consent is more complex and time has to be set aside for detailed discussions, on the risks and benefits of the proposed surgery, as well as the treatment alternatives including non-operative care.

Interface with Primary Care

There must be a clear communication pathway for general practitioners (GP's) whose patients require urgent treatment. Prior to the pandemic, trauma and orthopaedics already had enormous waiting lists of patients who required surgical intervention. In addition, many patients who had their surgery deferred early in the crisis now require urgent treatment.

Patients on the waiting list who suffer marked deterioration must be able to access urgent care as necessary. There should be flexibility within the prioritisation lists to ensure this can occur.

- Referrals of non-urgent conditions must be triaged appropriately and the correct option for management selected:
 - Advice and guidance to the GP.
 - Remote consultation with the consultant/senior SpR or musculoskeletal (MSK) physiotherapist and with the patient.
 - Face to face consultation in secondary care.

Triage into categories must have oversight from a senior decision-maker.

Enhanced recovery, rehabilitation and follow-up

- Patients will need to be discharged from hospital back into the community as soon as it is safe and possible to do so.
- Pre-operative discharge planning is essential and should be commenced prior to admission.
- Seven-day physiotherapy services must be available.
- Daily, seven days a week ward rounds by a senior decision maker are required so that problems can be assessed quickly and acted upon.
- Clear communication with the patient and community care teams is necessary so that post-discharge care and rehabilitation can be continued.
- Given the constraints in outpatient clinics, it is necessary to consider a virtual follow up with the patient.

Outcomes

- As planned surgery is resumed there are going to be many unknowns. It is essential to share information on good practice, problems and complications as soon as they become known.
- Communications with colleagues and other units is to be encouraged.
- Audits of process and outcomes should be established within each unit.

Wider considerations regarding staffing

- The financial implications of the pandemic are enormous and resources for planned surgery will undoubtedly be reduced in the future. Consideration should be given to using the cheapest appropriate implants available.
- With the undoubted reduced throughput and the anticipated delays between cases, consider whether this time could be used for virtual consultations with outpatients who have restricted access to care. Forward planning needs to occur for these consultations.

- Interdependencies with other specialties and services must be recognised.
- As planned surgery resumes it may be useful to consider double consultant operating for cases that are more complex.
- Teaching opportunities for trainees have been significantly reduced in planned surgery, consideration of this needs to be included in planning operating lists.
- Psychological support should be available for all members of the team who have been working on the Covid-19 response. It is reasonable to expect that staff may need to take some time off to recover from time spent in high-pressure environments dealing with Covid-19 patients.

Paediatric Issues

- DDH and CTEV (Ponseti Clinics) “Covid-19 managed lines of flow as per trauma”
- Life is not normal; we cannot do what we want to do.
- Prioritise time critical cases.
- Is now really the right time for surgery, are all the required support networks available?
- Is the normal peri-operative pathway feasible?
- If even the straightforward cases are no longer that, how do you deal with those obviously complex ones?
- **Think long and hard.**

Other relevant resources

Parvizi et al. (2020) Current Concepts Review: Resuming Elective Orthopaedic Surgery During the COVID-19 Pandemic Guidelines Developed by the International Consensus Group (ICM), JBJS in press available online at: <https://journals.lww.com/jbjsjournal/Documents/P-FINAL-Parvizi.pdf>

The British Orthopaedic Association guidance document is available at <https://www.boa.ac.uk/resources/boa-guidance-for-restart---full-doc---final2-pdf.html>.