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## Correspondence

## Recovery of non-urgent surgery – Operation backlog and proposals for a restart



Dear Editor,

Surgical practice is facing numerous challenges posed by the COVID-19 pandemic. The prioritisation of resources towards dealing with COVID-19 patients has led to the postponement of all elective surgical procedures in the United Kingdom and various other nations, in an effort to maximise the number of staff and facilities available to tackle the increase in critically ill patients [1].

This is a clearly necessary step, but how will health services and surgical specialities recover to meet the subsequent operation backlog created by the suspension of elective procedures?

A recent article by the CovidSurg Collaborative estimated that the global number of adult elective surgery cancellation could be as high as 28.5 million operations over a period of 12 weeks of suspension. If countries were to increase their normal surgical work volume by 10% post pandemic, the median time required to clear the backlog would be 90 weeks. An increase of 20% would take a median of 45 weeks, and an increase in volume by 30% would take a median of 30 weeks to clear the backlog. The article goes further to state, using the UK as an example, that at an average cost of £4000 per operation, the total cost of clearing the backlog would amount to over £2 billion. This stresses the importance of well-designed recovery plans and strategies to mitigate the impact caused by COVID-19 [2].

The Royal College of Surgeons of England has published a guide on the short-term recovery of surgical services post pandemic. It highlights important prerequisites for the resumption of services and gives a brief outline of the factors that must be addressed to ensure that recovery is adequate. These are salient points, and while these guidelines are providing a framework, they do not provide specific information on how hospitals and their surgical departments should approach the resumption of services, due to the complexity of the situation and the difference in challenges faced by different hospitals [1,3].

In a recent letter, the Chief Executive and Chief Operation Officer of the National Health Service (NHS) in the UK have asked local systems and organisations to step up and ensure that urgent and time-critical surgery are carried out at pre-pandemic levels; however, the provision of at least some non-urgent elective procedures has been left to the judgement of the local authorities taking into account the resources available to them [4].

The British Orthopaedic Association has recently published guidance on the resumption of non-urgent services post pandemic. One of the main points was the separation of patients along COVID-free (green) and COVID-managed (blue) pathways. These green zones are to be further subclassified along 'Gold', 'Silver' and 'Bronze' criteria, with the Gold criteria specifying a completely separate COVID-free hospital. The Silver criteria and Bronze criteria mention a COVID-free building fully separated from the rest of the hospital or a separate COVID-free department within a hospital, respectively. It is within these green zones that non-urgent procedures should be planned to go ahead, especially

higher-risk procedures. The document does not provide a specific timeline, but states that these procedures should be resumed in the short to medium term subject to capacity (e.g. theatre throughput, staff, facilities, PPE, drugs) and the establishment and availability of green zones.

The document also provides guidance on precautions taken for patients and staff in the green zones, with patients being required to have completed self-isolation or shielding for 14 days prior to surgery as well as 14 days post operation. Patients should also be screened for symptoms in this period and be tested for coronavirus 72–48 hours before the operation. Appropriate transport and directions should be provided for patients travelling to hospital to avoid blue zones as much as possible.

The staff working in green zones should be screened daily for symptoms of COVID-19 and undergo regular testing, whilst ideally not interacting with blue zones for at least a week. This would mean significant changes to rotas, and staff may also be expected to move to new hospitals [5].

The challenges ahead are unprecedented and thus it will be a very difficult task to design recovery plans that work for every speciality or hospital. It is essential, however, that adequate guidance is provided while providing local services with the ability to make decisions and define the specific elements of planning based on the resources available to them. Efficient communication between local, regional and national levels will be of paramount importance.

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## Declaration of competing interest

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