

Public-private partnership: strategies for continuing urgent elective operative care during the COVID-19 pandemic

Editor

Novel coronavirus Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and the coronavirus disease (COVID-19) have had an enormous impact on non-COVID-19 related care. A particular challenge is maintaining high-quality surgical care for patients requiring urgent operations¹.

The impact of COVID-19 on perioperative outcomes is unclear, although there may be increased perioperative mortality²⁻⁴. Recommendations from surgical societies are conflicting, but many recommend postponing surgery when possible and pursuing non-surgical alternatives^{1,5}. There is clear justification for this: reducing demand on bed capacity, the anaesthetic workforce and a reduction in demand for critical care resources⁵. It is unclear whether deferring surgery for tumours with rapid doubling times, or with aggressive biology will result in an increase in cancer-related deaths. Establishing a safe pathway for access to urgent surgical care is imperative in the COVID-19 era.

In Ireland, as part of the government's response to the COVID-19 pandemic, the state has temporarily leased the private hospital system. This has dramatically increased bed capacity, critical care access and operating theatre space. It has facilitated a rapid re-alignment of the surgical services to attempt to allow safe and timely urgent surgical care.

Our co-located private hospital is a 205-bed institution with eight operating theatres and full critical care capacity. Prior to the nationwide leasing of private hospital capacity, the decision was made to designate it as a COVID-19 free hospital. All COVID-19 related care is centralized to the public hospital, including patients who developed COVID-19 complications in the perioperative period.

The cornerstones of our practice to date have been: 1. Separate hospitals for COVID-19 and non-COVID-19 related

Table 1 Overview of cases performed in a COVID-19-free private institution in the study period. General surgery includes colorectal surgery, hepato-pancreatico-biliary surgery and breast surgery

Specialty	Day cases	Inpatient cases	Median length of stay for inpatients (range)	COVID-19 related morbidity
General surgery	40	30	2 (1-8)	0
Gynaecology	13	23	3 (1-7)	0
Cardiothoracic surgery	2	9	10 (6-11)	1
Ophthalmology	8	0	n/a	0
Plastic surgery	20	0	n/a	0
Otolaryngology	2	0	n/a	0
Orthopaedic surgery	0	1	3	0
Urological surgery	18	17	2 (1-5)	0
Vascular surgery	0	2	4/5	0

care; 2. Separation of surgical teams, to COVID-19 and non-COVID-19 related care; 3. Screening questionnaires with targeted testing; 4. Immediate transfer of COVID-19 related morbidity to the COVID-19 designated hospital; 5. PPE with a minimum of FFP2 masks, face shields, full gown and gloves for all staff in theatre complex; 6. Minimizing the number of staff present in theatre.

Screening questions are designed to highlight patients at a high risk of having COVID-19, either through symptoms, behaviours or contacts. There is an additional risk assessment prior to induction of anaesthesia.



In the first 4 weeks of this protocol, 185 patients successfully underwent urgent operations. The cases, broken down by treating specialty with length of stay data and COVID-19 related morbidity is outlined in *Table 1*. One hundred and ninety eight patients were screened prior to admission. Thirteen patients had their surgery deferred. These were due to cough ($n = 7$), close contact ($n = 5$) and fever ($n = 1$). One patient developed COVID-19 related symptoms post-operatively and was transferred to the public hospital for further care.

The pandemic is likely to continue for many months. It is vital that we continue to offer a high level of care for surgical patients. Where feasible, elective cases should be performed in a COVID-19 free institution, with rapid inter-institution transfer of patients if patients develop COVID-

like symptoms. Robust contact tracing of staff members is necessary, and judicious use of PPE is essential. As there is still no robust data on the safety of open or minimally invasive surgery without PPE in the COVID-19 era, we are currently recommending full PPE for our theatre staff, to protect both patients and healthcare workers.

Although challenging, the COVID-19 pandemic offers an opportunity to reflect on current practices. Lateral thinking will be required as we devise new pathways to ensure the provision of high-quality surgical care in the COVID-19 era and this public-private partnership is one example of how this can be achieved.

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