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## Letter to Editor Focused surgical pandemic response in a Malaysian hybrid COVID-19 hospital



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To the Editor,

We present the strategies adopted by the Department of Surgery University Malaya Medical Centre (UMMC), the first designated hybrid COVID-19 hospital in Malaysia situated within the epicenter of the outbreak. In Malaysia, the first case of COVID-19 was detected on 25 January 2020, in a traveler from China<sup>1,2</sup> The first COVID-19 patient admitted to our institution was on 26 February 2020. Malaysia declared a Movement Control Order (MCO) on 18 March 2020. Scalability was important, to allow better responsiveness to the ebb-andflow of the pandemic. Therefore, we incorporated the hospital alert status criteria, and developed a triage system for all the different surgical sub-specialties. Operating lists became communal, with central vetting by the OT COVID-19 Team. This became more important over time, with decreasing availability of critical care beds, PPE and blood bank reserves. The workflows and checklists for operating on COVID-19 patients and PUIs were developed in tandem with our anaesthesia and infection control colleagues (Fig. 1).

A COVID-19 risk assessment questionnaire and Pre-Surgical Swabbing (PSS) for all patients requiring surgery was done based on a risk reduction strategy in the following areas:

- i. Disease transmission to HCWs
- ii. Operative morbidity and mortality of patients, which is higher in COVID-19 patients<sup>3,4</sup>
- iii. Judicious use of appropriate of PPE

By 23 March 2020, UMMC declared an access block, to allow containment and decanting activities. Our departments bed capacity went from 136 beds to 24 beds in 72 h. All elective surgeries were cancelled, and most emergencies were diverted. Emergent, semi-urgent and category 1 elective surgeries resumed in a limited way on 10 April 2020. In 2019, for the same period, we had done an average of 700 cases per month, which included both elective and emergency cases, of which the emergencies formed approximately 80 per month. In 2020, this had reduced to 105 emergency surgeries collectively for both March and April 2020 (66% of baseline). By the last week of April, we were allocated 2 semi-elective lists, and 18 semi-urgent or category 1 elective cases were done. A limited number of elective lists were subsequently made available in May 2020. This allowed for a total of 175 cases to be done. Although this implies an overall cancellation rate of 75%, consistent with global cancellation rates,<sup>5</sup> it should be noted that our cancer surgery waiting list has only increased by 2–4 weeks, as a result of external decanting to non-COVID-19 hospitals. Elective surgeries for non-cancer cases have been more adversely affected, with waiting lists extending 3-6 months over baseline. We will need to strategize on measures to overcome this backlog in the months to come. All pre-surgical swabs have been negative thus far. Most patients had been designated no- or low-risk following risk assessment. This suggests that the screening questionnaire is effective in identifying high-risk patients, thus, potentially not all patients need to be swabbed pre-operatively. However, numbers are too small to be conclusive. Fortunately, none of our department's HCWs have been infected or have required extended psychosocial support. As of 7th September 2020, the number of recorded COVID-19 infections had reached 9459 cases in Malaysia.

Work is still in progress, but we are committed to improving and modifying practice based on emerging evidence and local audit. As an academic surgical department, we need to ensure that our services are agile enough to maneuver in this pandemic and provide surgery to our patients.

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Fig. 1. COVIDpatient for surgery workflow.

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Compliance with ethical standards

Yes.

## **Declaration of competing interest**

We have no conflicts of interest to disclose.

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