Opportunistic COVID-19 vaccination in the emergency department

Dear Editor,

Over the course of the COVID-19 pandemic, vulnerable and unvaccinated people have continued to attend our ED in Melbourne, Australia. In an effort to facilitate vaccine equity and minimise hospitalisation and death, we have implemented an opportunistic COVID-19 vaccination programme in our ED at St Vincent’s Hospital Melbourne with marked success. We are one of the first hospitals in Australia to offer this service and we hope that this letter may assist other institutions to establish a similar programme.

People with social vulnerabilities frequently seek help from EDs. A recent Australian Institute of Health and Welfare report determined that 23% of emergency presentations were by people living in the most socioeconomically disadvantaged areas. Structural racism and colonialism have fuelled health inequalities for Indigenous Australians, who make up 7.5% of Australian ED presentations despite only comprising 3.4% of the population. The pandemic has intensified inequities within our society; the conditions experienced by people with socio-economic disadvantage predispose to a greater risk of virus acquisition and a higher incidence of physical and mental multimorbidity implicating adverse outcomes from COVID-19 infection.

We audited the immunisation status of the 400 patients who presented most frequently to our ED (>6 presentations to the ED per annum). Only 47% of this cohort had received a first vaccine dose compared to 69% of the Victorian population at the time of writing (Tables S1,S2). Consequently, we have implemented opportunistic COVID-19 vaccination in our ED for patients based on eligibility criteria (Table S3). This has resulted in up to five vaccinations daily in the context of ~145 patient attendances per day.

This process is illustrated in Figure 1. The use of an external vaccine supplier removes the need for the ED to manage complex cold-chain storage requirements and avoids wastage. Any Australian healthcare worker wishing to become a COVID-19 vaccine provider must complete the free online government accreditation course and undertake local training.
to use state-based vaccine documentation systems. Vaccinators in Victoria must also administer five supervised vaccinations. The service is available to ED patients on a weekday morning; we are unable to keep patients for the sole purpose of vaccination and outside of a feasible time-frame patients are signposted to local services and supported to book an appointment. Opportunistic vaccinations in the afternoon are occasionally facilitated with surplus doses from our hospital’s mobile clinic and we have plans to acquire the use of a separate discharge lounge area for vaccination.

Very few eligible patients have declined vaccination which supports evidence from American EDs. Instead, our patients cite numerous barriers to vaccination; 40% of Australians are functionally illiterate⁵ and many describe significant competing daily priorities such as finding shelter for the night or navigating an immediate threat of family violence. Furthermore, these patients are often without smartphones or the internet access required to negotiate online appointments.

Start-up resources required to implement opportunistic vaccination in the ED include lead FACEM, management, pharmacy, vaccination centre and ED clinician engagement and the provision of suitable vaccine storage units. Our ongoing resource requirements comprised a dedicated ED nurse on weekday mornings (~0.5 EFT for 12 weeks) who is able to collect and then vaccinate eligible patients; 1 h of a pharmacist’s time per day, continuous lead FACEM input and registrar champions are also necessary. Hospital and vaccination hub managers required regular clear communication and written protocols to meet the governance requirements of both the hospital and the hub.

Vaccine equity must be prioritised to end this pandemic safely and in the words of the World Health Organization, ‘no one is safe until everyone is safe’. We cannot solely offer vaccination where we want or hope people will be – we must also provide safe and opportunistic immunisations where we know vulnerable people are, including in our EDs.

Acknowledgements

The authors acknowledge Susan White and Royal Exhibition Building Vaccination Centre staff, Melbourne.

Competing interests

KW is a section editor for Emergency Medicine Australasia.

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COVID-19 swab in patients with suspected open globe

Dear Editor,

SARS-CoV-2 polymerase chain reaction testing by nasopharyngeal swabs are current common practice in EDs in Australia as a significant proportion of patients in the EDs meet the criteria for suspected COVID-19.1

While collection is generally considered safe, case reports have described uncommon complications such as nasal foreign body, epistaxis and cerebrospinal fluid leak requiring surgical repair.2,3 Nasopharyngeal sampling is known to stimulate the gag and cough reflex which precipitates high intrathoracic pressures similar to vomiting.4,5 Vomiting is an important cause of further extrusion of intraocular contents by stimulating the gag and cough reflex by the nasopharyngeal swab.

Patients who are admitted to our hospital from the ED typically require a COVID-19 swab as a part of the admission process. In this case, it was decided that the COVID-19 nasopharyngeal swab would be deferred until the patient was under a general anaesthetic. This was to avoid possible further extrusion of intraocular contents by stimulating the gag and cough reflex by the nasopharyngeal swab.

For patients with undifferentiated ocular trauma, we would advocate for careful consideration of the best timing of nasopharyngeal swabs. This may be after an open globe has been ruled out following eye assessment or after the patient is under general anaesthesia in a confirmed globe rupture. Topical oropharyngeal anaesthesia in a conscious patient with an open globe rup-

ture may contribute to patient comfort but may not completely prevent the gag and cough reflex.5 Alternative methods such as saliva testing may be more acceptable but is not as widely available at present.

Competing interests
None declared.

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doi: 10.1111/1742-6723.13894