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Emergency departments and the COVID-19 pandemic: making the most of limited resources

Dear Editor,

The coronavirus disease 2019 (COVID-19) pandemic will stretch hospital resources all over the world. EDs in high-income countries are not immune, but those in low-income and middle-income countries (LMICs) are likely to be impacted more significantly. Emerging data speak to overwhelming demands for care and widespread disruption of hospital functioning.

In order to support colleagues in resource-limited settings, the Australasian College from Emergency Medicine (ACEM) has developed a free guide for emergency care (EC) clinicians in LMICs preparing for a surge of patients with COVID-19.2 Content was developed by a working party of ACEM's Global Emergency Care Committee and included EC clinicians from Timor Leste, Vanuatu, Papua New Guinea and Solomon Islands. The guide provides consensus-based advice on optimising resource utilisation during the pandemic and draws heavily on technical guidance from the WHO.3 It is intended to complement, not replace, local and national guidelines.

The guide is structured according to the central components of ED disaster response: systems, space, supplies and staff. A small number of boxes provide specific guidance to clinicians on triage and screening, infection prevention and control and clinical management. Figure 1 reproduces the section of the guide dedicated to 'systems'.

EC clinicians in LMICs will be deeply impacted by COVID-19, and there is a substantial risk of burnout and moral injury. ACEM's guide is an attempt to express solidarity with colleagues in resource-limited settings and will hopefully stimulate further collaboration among the global EC community.

The guide is available free online at: https://acem.org.au/covid-19. Feedback on the document is encouraged and should be directed to gecnetwork@ acem.org.au.

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Systems

Ensure ED processes are consistent with broader public health and hospital management strategies.

Prepare the ED and hospital as much as possible. A checklist approach can be used – see <u>Resource 1</u>, the World Health Organization's Hospital readiness checklist for COVID-19.

Identify suspected cases using local case definitions. Ensure staff are aware of these definitions and maintain a high level of clinical suspicion at all times.

Establish a screening and/or triage process at the entrance to the hospital - see Resources 1 and 2. Use simple risk stratification tools to stream suspected cases into different areas based on clinical severity (see example on next page), for example:

- + Low acuity patients divert to nearby surge clinic if available (see below)
- + Medium acuity patients direct to isolation zone within the ED, or other designated area of the hospital
- + High acuity patients escort to resuscitation area within the ED

Maintain IPC to the highest possible standard. Educate staff and patients about PPE requirements and ensure treatment spaces are cleaned regularly - see Resources 3, 4 and 5.

Minimise the volume of patients in the ED and isolate patients with respiratory symptoms away from others - see Resources 2 and 3. The following approaches may assist with this:

- + Establish a surge clinic in a nearby area for low acuity patients with fever and/or respiratory symptoms, rather than assessing them in ED. In order to preserve resources, this clinic should not be staffed by ED personnel
- + Develop clear admission criteria and discharge as many patients as possible back to the community. Provide 'when to return' advice and clear isolation instructions to minimise spread of the virus
- Maintain flow through the ED. Ensure the hospital has established an isolation ward and patients requiring admission are transferred as rapidly as possible

Consider developing criteria for treatment rationalisation - a palliative or comfort based approach may be appropriate in some high acuity patients who have care needs that exceed local capacity. It is estimated that 5-10% of all cases will require critical care support, which is unlikely to be available in resource limited settings

Ensure that ED patients without respiratory symptoms are not forgotten - these patients are vulnerable, and can easily be neglected.

Figure 1 Excerpt from the quide focussed on 'systems'. IPC, Infection, Prevention and Control.

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