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Commentary

A 'new normal': Harnessing the experience of COVID-19 for sustained improvements in global emergency care ☆,☆☆,★

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As the COVID-19 pandemic has evolved, references to clouds and silver linings have become ubiquitous.

The idiom may be cliched, but it speaks a certain truth. The experience of COVID-19 will have far-reaching consequences for healthcare, and will hopefully precipitate stronger and more resilient health systems.

Emergency care (EC) is no exception. Lessons learned through the pandemic stand to have a substantial impact on emergency departments (EDs) all over the world, in both high- and low-resource settings.

Case studies from the Western Pacific region

In the Western Pacific, Australia and Papua New Guinea (PNG) provide useful examples. Despite geographical proximity, the countries differ substantially in their socioeconomic characteristics. With respect to healthcare, Australia has a high-performing system that is highly regarded for its accessibility and outcomes [1]. PNG, meanwhile, faces significant challenges in service delivery, with poorly developed primary care infrastructure and a substantial burden of communicable and non-communicable disease [2,3].

By international standards, both countries have been relatively successful at controlling the spread of COVID-19 [4,5]. Recent outbreaks have exposed vulnerabilities, but overall mortality has remained low [4]. In keeping with global experience, the success of containment measures does not appear to reflect development status. Rather, it seems to be a function of public health responsiveness, and capacity to test, trace and isolate cases [5].

In both countries, the major impact on EDs has not come from confirmed cases. Patients present with complaints and not diagnoses, so the challenge has been to maintain 'business as usual' in the face of a significant and ongoing burden of 'suspected COVID-19'.

Not unexpectedly, PNG EDs have faced difficulties in rising to this challenge. Shortages of essential supplies (such as personal protective equipment and oxygen concentrators) have been problematic, and longstanding issues in procurement, workforce and infrastructure have been exacerbated. Stigma has also become an issue, compounding the anxiety of frontline clinicians. These challenges reflect the reality of resource-limited EC [6].

Notwithstanding these issues, the pandemic has precipitated a suite of reforms that stand to enhance infection prevention and control (IPC) and improve ED functioning during and beyond the pandemic. In a country where EC systems are developing and tuberculosis is highly prevalent, these improvements could be transformative [2,3]. Examples include enhanced screening and triage processes; widespread use of facemasks; improved access to hand hygiene facilities; better collaboration with pre-hospital care providers; and streamlined access to pathology testing. Many of these strategies have also been extended to other EC settings, such as urban clinics.

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In Australia, a liberal approach to testing has meant that a substantial proportion of ED patients meet case definition criteria. This has mandated major changes to EDs, including establishment of 'hot zones' and rapid expansion of isolated treatment capacity [7].

Following an initial reduction in presentations at the point of lockdown, demand for EC has escalated. Although hospitals have invested in surge capacity, IPC and isolation requirements have impacted on patient flow, exacerbating longstanding issues with ED overcrowding and access block [7,8].

In both countries, EC responses have been facilitated by unprecedented levels of co-operation between clinicians, health services and governments. Although the challenges for EDs are ongoing, Table 1 highlights some of the positive developments that have come about through enhanced collaboration and strong leadership from EC clinicians.

Implications for global emergency care

The pandemic has highlighted the essential role of EC systems [9]. But it has also unmasked pre-existing deficiencies and ongoing challenges for effective IPC in EDs, even in well-resourced contexts [8].

As the world transitions to a 'new normal', there is an opportunity to capitalise on the investment and goodwill that COVID-19 has brought to EC. In Australia, there have been calls for substantial improvements in ED design, staffing and processes to facilitate safe, effective and ethical care in the post-COVID era [8]. In Papua New Guinea, as with many low- and middle-income countries, the need for foundational EC functions, such as triage and surveillance, has never been more evident. These requirements are clearly defined in World Health Organization guidance [9,10].

In both high- and low-resource EDs, reforms should include redesign of clinical spaces to facilitate IPC; optimisation of patient flow processes to enhance timeliness and efficiency of care; and implementation of streamlined referral pathways that minimise overcrowding and access block. These strategies are consistent with regional priorities [3,7], and will help progress the World Health Assembly's vision of universal access to safe and effective EC [9].

Although COVID-19 has had a devastating global impact, it has provided a catalyst for significant improvements in healthcare safety. There is a unique opportunity to harness the momentum for sustained enhancements in ED functioning and more resilient EC systems. It's a silver lining too important to ignore.

Table 1
Examples of responses to emergency care challenges during the COVID-19 pandemic.

Surge response component*	Challenge	Response in Papua New Guinea	Response in Australia
Systems	Lack of guidelines that inform clinical care and IPC requirements for ED patients with suspected and confirmed COVID-19	Endorsement and dissemination of World Health Organization (WHO) clinical guidelines and other relevant resources [6,10]	Rapid development of comprehensive national clinical guidelines by a working group of EC clinicians, co-ordinated by the Australasian College for Emergency Medicine [7]
Space	Shortage of isolated treatment spaces within and beyond the ED	Establishment of an isolation and treatment facility in the capital city (incorporating IPC-compliant areas for staff to screen and assess patients), and implementation of protocols that require ambulances to preferentially transfer suspected cases to this facility (rather than the ED)	Implementation of treatment 'zones' and cohorting strategies in EDs; infrastructure modifications to extend negative ventilation to an expanded number of rooms; and widespread use of assessment clinics for 'well' patients meeting case definition criteria
Supplies	Delays in acquiring and distributing personal protective equipment (PPE) and other essential supplies (such as oxygen delivery devices)	Enhanced collaboration with donors and international partners to facilitate timely resource mobilisation, including PPE, oxygen concentrators and hospital beds	Centralised co-ordination and procurement to ensure a sufficient supply of PPE, high-flow oxygen devices and ventilators across all EDs
Staff	Maintaining communication with ED staff members at a time when anxiety levels are high and information is changing rapidly	Effective use of staff briefings at ED handover; increased utilisation of digital messaging platforms to disseminate communications; and roll-out of online educational material for clinicians, in partnership with international partners such as WHO	Regular distribution of ED and hospital-wide electronic newsletters; widespread use of online video conferencing to facilitate staff briefings; and rapid development of web-pages to house relevant guidelines and resources

* The essential elements of emergency care surge response are often structured according to the '4S' framework: systems, space, supplies and staff.[6]

Declaration of Competing Interest

Dr Mitchell reports he is a member of the Australasian College for Emergency Medicine's (ACEM) COVID-19 Clinical Guidelines Working Party, and was lead author for ACEM's guidance 'Managing COVID-19 across the Indo-Pacific: A guide for emergency departments with limited resources'. Dr Nou reports he is President of the Papua New Guinea Society for Emergency Medicine and Hospital Manager at the Rita Flynn COVID-19 Temporary Treatment Facility in Port Moresby.

Author contributions

RM and GN both contributed to content development based on their clinical experiences with COVID-19 in Australia and Papua New Guinea. RM wrote the first draft. Both reviewed the final version.

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