CONFERECE ABSTRACT

The role of Australia’s first virtual hospital in the COVID-19 pandemic response: learnings and opportunities
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RPA Virtual Hospital (rpavirtual) was launched in February 2020 as Australia’s first virtual hospital. Initially a proof-of-concept trial, the virtual hospital has a comprehensive organisational and governance structure to ensure optimal performance, quality and safety, research and innovation. Local relationships with hospital specialists support safe and effective virtual models of care, including escalation and assessment pathways.

Now embedded in the local health district, rpavirtual has delivered safe and effective virtual care to over 37,000 patients with nil adverse events.

rpavirtual was the first clinical service in Australia to introduce a remote monitoring program for patients with COVID-19. This novel virtual model of care included medical and nursing staff, 24/7 patient access to the virtual care centre, the use of wearable devices and patient escalation material. The model has been adopted across New South Wales and learnings shared widely across the country and overseas.

Within two weeks of launching community COVID care, enhancements were made to provide more holistic care, with the introduction of virtual social work, clinical psychology, specialised paediatric nursing and midwifery services. Other features included the use of a Digital Patient Navigator to improve patient digital literacy and access, and the loaning of electronic devices to patients.

The majority of patients were initially returning travellers and returning expatriates in hotel quarantine. However, the Greater Sydney COVID-19 Delta Outbreak in mid-June 2021 saw widespread community transmission and an increase in the proportion of patients receiving rpavirtual care in the home setting (approximately 70%).

This cohort also showed a marked difference in demographics and social care needs with greater diversity in cultural background, Aboriginality and socio-economic status. Rpavirtual continues to further specialise with the introduction of Emergency Medicine specialists and General Practitioners, both critical to comprehensive care for patients with COVID-19. A close partnership with our Aboriginal Cultural Response Team enabled the provision of complex cultural support and liaison between Indigenous patients and their treating clinicians. A further refinement of our COVID-19 model saw the use of in-person nursing services to support vulnerable patients living in social housing, many experiencing mental illness, by conducting face-to-face clinical assessments, testing and vaccination and linking patients in with ongoing virtual care.

The patient experience of virtual care has remained high. 2,260 patient experience surveys have been collected to date and confirm that: 88% felt confident at home knowing their symptoms were
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monitored virtually; 89% felt the nurses met their needs; 93% felt clinicians explained things in a way they could understand; 81% said the technologies used by rpavirtual improved their access to care and treatment; and, 74% felt involved as much as they wanted in making decisions about care and treatment.

Most recently, rpavirtual has introduced referral of lower risk COVID-19 patients to general practice and is developing a post-acute and long COVID multidisciplinary clinical response.

The infrastructure and virtual hospital model of care that has evolved during the pandemic is now able to be redirected towards hospital avoidance programs and the ongoing delivery of hospital level care in the community.