USING TELEHEALTH to increase access to after-hours MEDICAL care

Due to difficulty recruiting general practitioners to be on call to provide emergency care, three South Gippsland urgent care centres were struggling to meet demand for after-hours medical assistance. The health services developed a telehealth model that connected patients at urgent care centres with medical staff at a large regional hospital emergency department to improve patient access to timely care.

## Background

In 2016, four urgent care centres (UCCs) operated by Gippsland Southern Health Service, South Gippsland Hospital, and Yarram and District Health Service relied on general practitioners (GPs) from local medical centres to provide medical consultation and emergency care to patients.

Over time, it became increasingly difficult to maintain a 24/7 UCC service due to the burden it placed on GPs to constantly be on call and challenges in recruiting additional GPs. Nursing staff were also impacted because if a GP was not available after hours, they would need to care for the patient until alternative management could be arranged.

Without sufficient medical staff to provide consistent overnight consultation, the health services were unable to meet community demand for after-hours medical care. This meant patients had to leave the local community to seek care or wait until the GP clinic opened the next day to be assessed and receive treatment. Depending on their health concern, this delay could lead to negative outcomes for patients.

The Gippsland region telehealth project aimed to develop an after-hours telehealth service with the Latrobe Regional Hospital (LRH) emergency department (ED) to enable 24-hour access to UCC services in South Gippsland, providing the local community with timely and convenient access to medical care.

Gippsland region telehealth

**Lead** Gippsland Southern Health Service

**Partners** Latrobe Regional Hospital, South Gippsland Hospital, Yarram and District Health Service

**Duration** October 2016 – January 2018

**Key outcomes**

* Facilitated after-hours medical consultations with an ED doctor for 21 semi-urgent and non-urgent patients
* Helped to deliver timely after-hours care, with half of telehealth consultations taking place within 20 minutes of referral
* Reduced travel for patients
* Reduced the workload for local medical practitioners

## Key activity

* The project team reviewed telehealth services that had been successfully established in other areas of the state to inform the new model of care.
* Research was conducted to identify and procure video conferencing telehealth equipment appropriate for the model.
* Senior medical and nursing staff were engaged to co-design a staff education package.
* Three clinician education workshops were delivered to train staff on the new service model.

### Telehealth model of care

* The new model of care involved a hub and spoke design, with the LRH ED acting as the central ‘hub’ providing advice and support via telehealth to the four UCC ‘spokes’ in Foster, Leongatha, Korumburra and Yarram.
* The telehealth model focussed on semi-urgent (triage category 4) and non-urgent (triage category 5) patients who presented between 9pm and 7am to one of the four UCCs.
* These patients had access to a medical consultation with a doctor rostered on at the LRH ED via telehealth.
* Patients with more urgent needs (triage categories 1–3) continued to be seen under the on-call rostered GP model.

## Outcomes

* From mid-May until October 2017, 21 requests for after-hours telehealth medical consultations were received from the four UCCs, with the majority (86 per cent) of referrals being for triage category 4 presentations.
* Most of the telehealth consultations resulted in patients being referred to their GP for follow up (see Figure 1). Only one led to an inter-hospital transfer. Another referral led to a patient being admitted to a ward of the hospital where the UCC was located. Two patients were discharged home and three patients left the UCC before the telehealth medical consultation occurred.

Figure 1. Outcome of telehealth consultation referrals

* The entire process from referral to completion of an after-hours telehealth medical consultation could range in duration from 15–130 minutes but was usually over within in 35 minutes. Half of the telehealth consultations started within 20 minutes of referral, with 65 minutes being the longest a patient waited. The medical consultation itself usually lasted 15 minutes or less, however one consultation took 90 minutes to complete.
* Only one of the UCC patients interviewed had participated in an after-hours telehealth consultation, however, they spoke positively of the new service, describing the care provided as timely, comprehensive, and of great benefit.
* Training provided as part of the project increased the confidence and competence of triage nurses in managing triage category 4 and 5 patients. At the start of the project, only 20 per cent of these patients were managed solely by the triage nurse. Over the course of the project, this increased to 37 per cent.
* Other long-term benefits of the model included:
	+ less travel for patients
	+ fewer inter-hospital transfers
	+ improved access to medical review after hours
	+ reduced workload for local medical practitioners.

## Key learnings

* Strong partnerships and support from staff were key to the project’s success. Throughout the project, there was close collaboration between the three South Gippsland health services. The initiative strengthened engagement with local GPs and improved the working relationship between LRH ED and UCC staff. There was also active support from all the nurse unit managers involved. Identifying project champions and engaging them early in the project is pivotal to a positive outcome.
* The project revealed that a number of GPs preferred to consult patients after hours if they were on call instead of referring them to a telehealth consultation. While GPs agreed to participate in the trial and saw the benefit of the telehealth model, many indicated that if they were already in the UCC treating urgent triage category 1–3 patients, they were still willing to attend to less urgent triage category 4 and 5 patients. Some GPs also asked to be called for any presentation, regardless of their triage category. As such, the telehealth model of care needs to be flexible and marketed as an alternative consultation method available rather than the only consultation method for certain triage categories.
* Feedback from staff showed that while the training they received oriented them to using the telehealth equipment, it did not provide them with practical experience in using the equipment and facilitating a telehealth medical consultation. Another suggestion was that training should include how to communicate effectively with the patient and LRH doctor and maintain a three-way conversation. There was also feedback that a once-off training session was insufficient. It would be beneficial to periodically provide staff with refresher training and include a simulated experience of a successful telehealth medical consultation.
* In future, use of the telehealth equipment at the UCCs could be expanded to include:
	+ medical reviews of triage category 3 patients
	+ access to specialist medical support for urgent presentations
	+ liaison with critical retrieval services, particularly for infants and children
	+ non-urgent specialist medical consultations
	+ access to specialist allied health and non-medical support in the management of complex and chronic health conditions.