
The Queensland Ambulance Service – Clinical Hub Implementation

Initiative Type

Service Improvement

Status

Deliver

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Summary

In the current environment of escalating demand for ambulance services, the QAS has identified a more agile approach to providing care to the community is required. Conceptualised as a

coordination adjunct, the clinical hub provides an adaptive model of service that ensures a timely, appropriate, and patient-centric ambulance response occurs. Briefly, the hub provides a secondary triage to a select cohort of patients and determines the most appropriate healthcare pathway that is proportionate to the acuity of the individual. Staffed by a multi-disciplinary team consisting of senior paramedics, mental health clinicians and medical officers, the clinical hub coordinates the entry of the patient into the broader healthcare system after a Triple Zero (000) call is received. This occurs through undertaking an in-depth telephone assessment that determines the primary complaint of the patient, any relevant medical history and the patient's social circumstances. This mirrors what would occur if the patient was physically attended by a paramedic however utilising digital innovation and tele-health. The Clinical Hub has redesigned the provision of ambulance services in Queensland and raises the question: is the future of paramedicine behind the computer screen, rather than the windscreen?

Key dates

Jan 2021

Feb 2022

Implementation sites

Brisbane

Partnerships

Primary health networks and hospital services (HHS). This is exemplified by the virtual Emergency Department agreement that is ongoing with the Metro North HHS, and arrangements with Residential Aged-Care Facilities outreach services – RADAR, CAREPACT and

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Aim

The QAS Clinical Hub pilot was aimed at identifying Triple Zero (000) calls which were suitable for secondary triage and ultimately alternative care models rather than the dispatch of an ambulance.

Benefits

- The model of service provided by the clinical hub is highly malleable and is tailored to the identified severity of the patient's ailment. Unlike the current rather regimental dispatch model, the clinical hub presents a dynamic and adaptive approach to ensuring patients receive correct and appropriate care.
- As an adjunct of the telephone triage that occurs, clinicians in the hub have capacity to undertake telehealth if consented by the patient. This currently occurs using an encrypted digital solution 'whisper' that ensures patient confidentiality. This process allows the clinician to visualise the patient, allowing for a more thorough assessment. Additionally, this assists in building rapport by making the patient interaction more interactive.
- During the telephone intervention, clinicians may identify symptomology indicative of a serious condition that requires immediate ambulance dispatch. If this occurs, the incident is reclassified and is dispatched under the standard ambulance response model. The clinical hub therefore should be viewed as an imperative safety-net that adds an additional tier of rigor and evaluation that improves clinical quality and patient safety.

Background

Many incidents attended by Queensland Ambulance Service could have been safely managed through an alternative healthcare pathway.

Solutions Implemented

Following extensive stakeholder engagement, the Clinical Hub was implemented within the Brisbane Operations Centre, located at Kedron Park. Staffed a multidisciplinary team these personnel initiate scalable healthcare pathways that can be tailored to the patient's presenting complaint which include:

- dispatch of an emergency ambulance
- dispatch of a non-emergency vehicle
- transport by private means to hospital
- referral to a local general practitioner
- admission of the patient into a virtual emergency department
- provision of self-care advice.

This nuanced approach has been found to positively influence the patient journey through providing a detailed real-time telephone assessment that ensures the allocation of the right care to the right patient. Importantly, this also acts as additional safety-net ensuring high acuity patients which may have been incorrectly triaged during the initial Triple Zero (000) interaction are identified.

Evaluation and Results

Retrospective quantitative review. During a 12-month period (1 October 2020 – 30 September 2021), the Clinical Hub reviewed 46,002 Triple Zero (000) incidents. Of these 5,866 (12.7 per cent) were identified to not require the dispatch of an emergency ambulance and could be safely managed through other processes. Assuming the call cycle of an ambulance response is 120 minutes, calculated from the time paramedics arrive on scene to subsequently offloading the patient at hospital, this equates to 23,464 hours of saved time.