
Metro South Hospital in the Home - Remote Patient Monitoring Trial

Initiative Type

Technology

Status

Deliver

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Summary

The Remote Patient Monitoring (RPM) platform will enable collection of patient biometric data and connection with the Hospital in the Home (HITH) clinicians via notifications, alerts, and a triage

dashboard (all vital signs outside of predetermined ranges aligned with the Queensland Adult Deterioration Detection System) as well as enhanced communication through videoconferencing. Additionally, this pilot will contribute to the evidence-base on the application of RPM in the management of acute patients in community based settings. The pilot will run for six months.

Key dates

Aug 2018

Mar 2019

Implementation sites

Redland Hospital, QEII Hospital

Partnerships

Metro South HHS

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Aim

The project aims to pilot and evaluate the impact of Remote Patient Monitoring (RPM) of vital signs in acute patients admitted to Metro South Hospital in the Home program.

Benefits

Despite evidence suggesting that HITH is an optimal use case for RPM, the technology has not been routinely deployed in HITH programs in Australia. There is currently no published literature on the application of RPM technology in acute care substitution programs, instead the majority relates to RPM in long term management of patients with chronic disease conditions in the community with a focus on hospital avoidance. In applying RPM to an existing acute care hospital substitution program, the following benefits are anticipated:

- Improved patient safety by providing HITH teams with access to clinical observation data comparable in frequency and quality to admission to hospital, combined with enabling HITH clinicians to initiate a range of interventions in response to vital sign readings, including videoconferencing the patient to visualise their clinical status, at any time of day as required.
- Improved patient flow and reduced access block in Metro South Hospitals participating in the pilot through enabling HITH clinical teams to admit a broader range of higher acuity patients and increase acute care capacity.
- Reduced demand on Queensland Ambulance Service for out-of-hours transfer to hospital through earlier detection of clinical deterioration.
- Improved patient satisfaction and quality of service.
- Increased referral rates to HITH programs in line with improved clinical decision-making and provider confidence.

Background

RPM technology has been available and in use for over a decade, however use cases to date have been applied to the management of patients with chronic disease with the goals of hospital avoidance and improved self-management. In acknowledging the significant and growing interest in RPM as a potential aspect of the wider Telehealth Program, the Clinical Excellence Division (CED) has partnered with Metro South Hospital and Health Service (HHS) to explore the application of RPM in an acute setting.

References

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2. [Lattimer, V., George, S., Thompson, F., Thomas, E., Mullee, M., Turnbull, J., et al. (1998). Safety and effectiveness of nurse telephone consultation in out of hours primary care: randomised controlled trial. The South Wiltshire Out of Hours Project (SWOOP) Group. *BMJ*, 317(7165), 1054-1059.
3. [1] Nakamara, N. et al (2014) A meta-analysis of remote patient monitoring for chronic heart failure patients. *Journal of Telemedicine and Telecare*. Vol. 20(1). 11-17
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