

# CFAHR Evidence Brief

Physiotherapy ICU Clinical Support (PICS): supporting the management of patients at risk of respiratory deterioration

## Authors and Affiliations

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## Alignment with [Metro South Health Research Strategy 2019 - 2024](#)

- Build research capability
- Increase research capacity
- Embed research in clinical services
- Translate research to better health
- Research excellence

## Alignment with [Allied Health Research Capability & Development Strategy 2017 - 2020](#)

- Engage staff as research consumers
- Enable staff as research generators
- Build research-enabling infrastructure and strategic processes
- Strengthen leadership in research and innovation
- Enhance internal research collaboration and synergy
- Strengthen partnerships with consumers and external stakeholders

## Alignment with [Allied Health Research Capability & Development Strategy 2017 - 2020](#)

- Standard 1 – Clinical Governance
- Standard 2 – Partnering with consumers
- Standard 3 – Preventing and controlling healthcare-associated infection
- Standard 4 – Medication safety
- Standard 5 – Comprehensive care
- Standard 6 – Communicating for safety
- Standard 7 – Blood management
- Standard 8 – Recognising and responding to acute deterioration

## Practice Issue

Patients at risk of respiratory deterioration require complex and coordinated management by the multidisciplinary team, including specialist respiratory assessment and treatment by advanced physiotherapists. At the Princess Alexandra Hospital, patients at risk of respiratory deterioration are located throughout the hospital, and thus managed across numerous caseloads, including by staff with variable experience in identifying early signs of respiratory compromise. Early research has demonstrated that the quality and safety of care in this patient cohort can be optimised through the establishment of a dedicated physiotherapy service, with advanced respiratory assessment skills to identify and treat patients with early signs of respiratory failure and provide upskilling and support of other physiotherapists.

## Evidence

A mixed methods approach was used to assess the implementation and impacts of the new respiratory physiotherapy service, PICS, at the Princess Alexandra Hospital, between August 2018 – January 2019. The PICS service (1.0 full-time-equivalent) was staffed by advanced physiotherapists between the hours of 10am and 6pm, Monday to Friday. Service aims were to prevent respiratory deterioration and optimise management using a multi-faceted approach including consultation, education and support, and overnight on-call physiotherapy planning. The PICS physiotherapist worked closely with ward physiotherapists, treating teams, and ICU Outreach, trauma and tracheostomy services to optimise communication and clinical handover. Patient referrals were obtained from physiotherapists and senior specialist nurses (tracheostomy, trauma, ICU) for patients identified as being at risk of respiratory deterioration on the ward. Flexible and informal supports were provided according to the clinician's identified needs and level of experience, through case discussions, joint treatments, assisting to set-up respiratory equipment, as well as advocacy and support in communication or care escalation. The PICS team also provided scheduled education sessions and high-fidelity simulations focusing on patient deterioration.

There was a perceived benefit in facilitating transition from ICU to the ward and reducing readmissions as a result of proactive management of deterioration. Staff reported that escalation of care was easier with PICS support. Additionally, flow on time/treatment benefits to other, non-deteriorating patients were identified, as a result of the service facilitating care of the deteriorating patient. Timely access to senior clinicians was reported to be beneficial for comprehensiveness and continuity of care for tracheostomy management, deteriorating patients and use/application of specialised equipment. Physiotherapists also identified the benefits of expertise to support physiotherapists undertaking remote call shifts. There was high satisfaction with the PICS service. The simulation training was found to be highly satisfactory to the participating physiotherapists, who felt the training improved their clinical reasoning and ability to debrief and reflect on their own performance.

## Practice Change

With the addition of just one full time equivalent position this service was identified as optimising physiotherapy respiratory management of patients at risk of respiratory deterioration. Unfortunately, this role was unable to be continued due to funding limitations which has meant that the positive changes were not able to be sustained. It is hoped that this role will be able to be re-commenced in the future.

## Publication/s

Presented at the 2019 Australian Physiotherapy Association National Conference. Manuscript in prep.

Adapted from Tilley Pain (Townsville HHS)

Based on the Australian Healthcare and Hospitals Association's Health Policy Evidence Brief

Metro South Health Research Strategy 2019 – 2024 [https://qheps.health.qld.gov.au/\\_data/assets/pdf\\_file/0012/2325000/research-strategy.pdf](https://qheps.health.qld.gov.au/_data/assets/pdf_file/0012/2325000/research-strategy.pdf)

Allied Health Research Capability & Development Strategy 2017 – 2020 <https://metrosouth.health.qld.gov.au/sites/default/files/allied-health-research-strategy.pdf>

National Safety and Quality Health Service Standards <https://www.safetyandquality.gov.au/sites/default/files/migrated/Overview-of-the-NSQHS-Standards-second-edition.pdf>