

Impact story: Assessing the redesigned aeromedical retrieval model in Central Australia

## What was this research about?

We wanted to assess the timeliness, efficiency, health outcomes, and cost-effectiveness of the February 2018 redesigned Central Australian aeromedical retrieval model for acute care cases and the primary health care tele-health service in Central Australia. The service covers an area of over **1.26m** km<sup>2</sup> across three jurisdictions.





\*MRacc = Medical Retrieval and Consultation Centre, ROCC = Remote Outreach Consultation Centre

#### What did we find out?

Separating emergency and primary care referrals made a **Significant difference!** By directing the referral to the appropriate health professional and having the patient treated at the right time, there was a **10%** decrease in the total rate of aeromedical retrievals, emergency

department admissions and hospitalisations.

# Total hospital bed days and hours spent in ICU went down by **17%** and it was **18 minutes faster** between initial consultation to "wheels up".





On the cost-effectiveness side of things, this redesign was found to cost:



These costs don't include estimated **Savings of over \$740k/year** in reduced hospitalisations and the out-of-pocket costs to patients and their families associated with temporary relocation to Alice Springs.

# Why is this important?

For many Australians living in remote regions, 18 minutes saved can be the difference between **life and death.** 

These findings are critical for informing health policy development and allocating scarce public dollars. The MRaCC/ROCC model lowered retrieval and hospitalisation rates, saved money with reduced hospitalisations, and has a **75%** chance of being cost-effective in saving years of life.

## What next?

The findings have been used to improve the aeromedical retrieval system

in Central Australia and inform planning for other remote regions in Australia and internationally that have comparable GP-led retrieval services. We are exploring ways for policymakers to be responsible for the design and outcomes of remote health services in Australia and internationally.

The efficiency, timeliness, health outcomes and cost-effectiveness of a new aeromedical retrieval model in Central Australia Research Team (Led by Menzies School of Health Research): Deborah Russell; Yuejen Zhao; Supriya Mathew; Michelle Fitts; Richard Johnson; David Mark Reeve; Bridget Honan; Petra Niclasen; Zania Liddle; Danielle Green; John Wakerman MRFF number: 2019/MRF9100014, Approval to published received 21 October 2024.