

Virtual Emergency Department for People with Dementia: Usage Patterns and Outcomes

Northern Health

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RESEARCH WEEK
20-24 OCTOBER 2025
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Background

433,000

Australians living with dementia
Expected to almost double by 2053

Traditional EDs are challenging:

- Unfamiliar environment
- ↑ risk of falls, delirium, hospital acquired complications
- ↑ length of stay vs. people without dementia

Potential Solution



Australia's first comprehensive statewide virtual emergency department.

Benefits include:

- Care in familiar environment
- Carer involvement
- Reduce transport stress/ED burden

The Study

410

People with dementia

12

Months of VVED data

Design: Retrospective audit

Period: July 2022 – June 2023

Mean age: 83.3 years (96% aged 65+)

Key finding: 61% of referrals from RACF

Primary Outcomes

62%

Managed virtually

37%

Referred to physical ED

vs 15% in general VVED population

Unplanned Physical ED Re-presentation Rates

Within 48 hours

91%

No ED

9%

ED

Within 5 months

70%

No ED

30%

ED

Key Findings

- VVED appears feasible and safe for dementia care
- Low 48hr representation rates
- Sustained benefit over 5 months
- Higher complexity: 37% vs 15% Physical ED referral rate
- RACFs major users
- Low First Nations representation

Next Steps

Service optimisation:

- Development of dementia-specific VVED pathway
- Carer integration strategies

Research priorities:

- Stakeholder experiences
- Addressing digital divide for people with dementia