

## Application for the Gerry Murphy Prize

Title: Falls related injuries in the NT, 2020-2022

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### Background:

Falls represent a major public health issue, particularly among older adults, Indigenous communities and individuals residing in remote regions. Between 2020 and 2022, falls were the second leading cause of injury-related hospital admissions across all genders in the Northern Territory (NT), accounting for 26% of total injury admissions (Cherian & Zhang, 2023). The consequences of falls can be severe, ranging from permanent disability due to traumatic brain or spinal cord injuries especially among younger, otherwise healthy individuals, to increased morbidity in older populations, exacerbated by comorbidities such as osteoporosis and the use of anticoagulant or antiplatelet medications (James et al., 2019). In the 2020–21 financial year, fall-related injuries were estimated to have cost the Australian healthcare system over \$4.7 billion (Australian Institute of Health and Welfare, 2024).

**Methodology:** A total of 6,899 hospital admissions related to falls were reviewed over a three-year period in the NT. Data were analysed in relation to key demographic variables, causes of falls, hospital length of stay, and patient outcomes. Statistical analysis, including descriptive and diagnostic methods, was conducted using Microsoft Excel and Stata 17 software. Ethical approval for this study was obtained from the Menzies School of Health Research Human Research Ethics Committee. Indigenous cultural guidance will be sought from the NT Health Aboriginal Health Policy Unit to ensure culturally appropriate interpretation and application of findings.

**Results:** Among the 6,899 cases analysed, approximately 50% involved falls due to slipping, tripping, stumbling, or other incidents occurring on the same level. Notably, 28% of falls occurred within the home environment, and 47% resulted in fractures. The incidence of falls was markedly higher among individuals aged 60 years and older, as well as among children aged 5–9 years.

**Discussion / conclusion:** Fall-related injuries constitute a significant public health burden in the NT, with disproportionate impacts on older adults. These injuries are associated with considerable morbidity, mortality and reductions in quality of life. To address this issue, proactive and multidisciplinary approaches to health assessment and risk management are essential. Targeted falls prevention strategies should be prioritised to mitigate the long-term health and economic consequences of fall-related injuries.

**Indigenous Data Sovereignty:** It is acknowledged that 24.7% of the Northern Territory identify as Aboriginal and / or Torres Strait Islander (ABS, 2021) and while this research does not directly target Aboriginal and / or Torres Strait Islanders, the researchers recognise this audit includes significant population who identify as such. Indigenous consultation with the NT Health Aboriginal Health Policy unit during this audit occurred in its design, and to ensure that data obtained and conclusions are culturally appropriate. A co-author will be requested from the unit but at time of submission, this person is pending.