## Exploring non-communicable diseases in Australian communities

ustralia continues to experience a high burden due to non-communicable diseases, with cancer, cardiovascular diseases and neurological conditions among the disease groups causing the greatest burden. In this issue of the MJA, several articles explore patterns, drivers, inequities and potential interventions for non-communicable diseases in Australia, including how centring Aboriginal and Torres Strait Islander knowledges and leadership is crucial to improving outcomes for affected communities.

In a narrative review, Truong and colleagues<sup>3</sup> discuss current knowledge of and research priorities for cancer in Aboriginal and Torres Strait Islander children. Research focusing on cancer in Aboriginal and Torres Strait Islander children is limited. Although the incidence of cancer overall appears to be lower in Aboriginal and Torres Strait Islander children compared with non-Indigenous children, important gaps exist in survival outcomes. The authors argue that "... it is time to ensure parity in the progress of research in Aboriginal and Torres Strait Islander children," and that "Any future research in this space should be co-designed with Aboriginal and Torres Strait Islander communities with their priorities in mind, and should ideally be led by Aboriginal and Torres Strait Islander researchers".

Boyd and colleagues<sup>4</sup> investigated cancer survival in a retrospective cohort study of notifications of invasive cancer to the Northern Territory Cancer Registry from 1991 to 2020. Encouragingly, five-year cancer survival improved significantly from 1991–2000 to 2011–2020 for both non-Aboriginal (males, 50.0% to 65.9%; females, 64.5% to 75.4%) and Aboriginal populations (males, 20.5% to 37.1%; females, 32.3% to 47.2%). However, for the most recent decade excess mortality five years after cancer diagnosis was 3.3 times higher for Aboriginal peoples compared with non-Aboriginal peoples. The authors concluded that "While progress in screening, diagnostics and treatment has contributed to enhanced survival, there remains a crucial need to comprehensively address inequities, overcome barriers in culturally sensitive ways with initiatives led by Aboriginal peoples, and ensure accessibility to services".

Place-based disparities in dementia prevalence were explored in research by Clarke and colleagues.<sup>5</sup> Their cross-sectional population-based prevalence study used 2021 Australian census data to examine the nationwide prevalence of dementia and the intersection with rurality for Aboriginal and Torres Strait Islander and non-Indigenous peoples. For Aboriginal and Torres Strait Islander peoples, the age-standardised prevalence of dementia was 16.2 per 1000 persons, whereas for non-Indigenous peoples, it was 7.4 per 1000 persons. The odds of dementia decreased significantly with increasing remoteness in non-Indigenous peoples, but not in Aboriginal and Torres Strait Islander peoples. The authors concluded that their results "emphasise that geographic considerations are of crucial significance in dementia epidemiology, particularly for Aboriginal and Torres Strait Islander peoples," and that "Place should inform targeted health care policy to address risk and protective factors for dementia prevention and care".

Finally, a smartphone-activated volunteer responder (SAVR) program has operated in Victoria since 2018, utilising the

GoodSAM app (https://www.goodsamapp.org/) to alert nearby registered volunteer responders to eligible out-of-hospital cardiac arrests. In a population-based observational cohort study using Victorian Ambulance Cardiac Arrest Registry data, Delardes and colleagues<sup>6</sup> examined survival to hospital discharge in cases of out-of-hospital cardiac arrest when an SAVR arrived before emergency medical services (EMS). They found that the risk-adjusted odds of survival to hospital discharge, bystander cardiopulmonary resuscitation, and bystander defibrillation were higher for events in which SAVRs arrived before EMS than for those not attended by SAVRs. The study was limited by its retrospective observational design and inability to account for several potential confounding variables. In an accompanying editorial, Morrison and Simpson<sup>7</sup> write that while it is often the technology which receives attention in SAVR programs, it is the volunteer responders themselves who are the foundation. They discuss the importance of responder density to the success of the programs in optimising outcomes after out-of-hospital cardiac arrest, the challenges of maintaining a committed responder community, and potential means to enhance responder experience. They also discuss the role of health services implementing SAVR programs in looking after the welfare of responders: "as responders commit to improving survival after out-of-hospital cardiac arrest, health services must commit to optimising responder wellbeing and experience".

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- 3 Truong A, Williams-Tucker K, Narkle A, et al. Current gaps in knowledge and future research directions for Aboriginal and Torres Strait Islander children with cancer. *Med J Aust* 2025; 222; https://doi.org/10.5694/mja2.52650.
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- 6 Delardes B, Tofte Gregers MC, Nehme E, et al. Smartphone-activated volunteer responders and survival to discharge after out-of-hospital cardiac arrests in Victoria, 2018–23: an observational cohort study. *Med J Aust* 2025; 222; https://doi.org/10.5694/mja2.52673.
- 7 Morrison A, Simpson P. Optimising the impact of smartphone-activated volunteer responder programs on out-of-hospital cardiac arrest outcomes by increasing responder density. *Med J Aust* 2025; 222; https://doi.org/10.5694/mja2.52674. ■