

# A Northern Territory-trained health workforce is required to meet its context-specific disease burden and health care needs

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The beauty and diversity of the Northern Territory often mask major health, economic, and social challenges for the people living in this vast Australian region. The geography of the NT adds to this complexity: some 1 347 791 km<sup>2</sup> with a sparse population of about 250 000 people, of whom about 26% are First Nations Australians.<sup>1</sup>

The pronounced health problems for people in the NT have been documented in numerous reports detailing high levels of morbidity and mortality. Most strikingly, albeit most simplistically, life expectancy at birth in the NT is the lowest in Australia: in 2020–2022 it was 76.2 years for males, five years lower than the national figure (81.2 years), and 80.7 years for females, 4.6 years lower than the national figure (85.3 years).<sup>2</sup> Unsurprisingly, these health inequalities are the result of several factors that have frequently been articulated, including geographic isolation and remoteness, inadequate infrastructure and resources, the complex needs of the large proportion of Indigenous Australians, and the difficulty of recruiting and retaining health care workers.<sup>3</sup>

A key contributor to health inequalities may be the lack of an adequate and appropriate health care workforce that suits the specific needs of the NT population; the recruitment and retention of health care professionals is a lamented tale nationwide.<sup>4</sup> The shortage and often high turnover of health workers in the NT exacerbates these challenges and has far reaching consequences for regional public health and wellbeing. Some reports highlight regional deficiencies in specific health professions; for example, the Australian Institute of Health and Welfare and other national peak bodies have reported that the numbers of allied health professionals, pharmacists, speech pathologists, and dentists are among the lowest in the country.<sup>5,6</sup> However, some areas of apparent adequate supply have also been identified; for example, a surplus of optometrists is expected nationally, and their numbers are also reasonable in the NT.<sup>7</sup> The pattern regarding medical practitioners is similar: the number in the NT (505 full-time equivalents per 100 000 population) was the highest in the country in 2022, as reported by the Australian Institute of Health and Welfare (the lowest was for Western Australia, 423 full-time equivalents per 100 000 population).<sup>5</sup> Despite the apparent adequate supply of these health care professionals, the health demands of people in the NT remain high and their outcomes poor.

In this issue of the *MJA*, Zhao and colleagues<sup>8</sup> present a different perspective on the problem, assessing the health workforce in relation to the burden of disease and injury in the NT. In their analysis of administrative data for 2009–2018, the authors

found that the NT health workforce is about 22% smaller than the national level after adjusting for disease burden, and that increased numbers of health care professionals are required to meet its needs. The most urgently needed health care professionals are 464 more nurses and midwives, 196 more physiotherapists, 189 more psychologists, 152 more pharmacists, and 144 more dentists. In short, Zhao and colleagues found that the NT is underserved by health care professionals and that there are major gaps in many specialties.<sup>8</sup> As the NT struggles to recruit and retain its current level of health workers, it will continue to fall behind the rest of Australia with respect to health care standards. Maintaining the present status quo is not an option.

Remote area nurses in the NT play crucial and multifaceted roles in delivering health care services to some of the most isolated and underserved communities in Australia. Working in small clinics or health centres, often in remote or very remote locations, they provide a wide range of health care services, adapted to the unique needs and challenges of these areas. Unfortunately, many nurses who accept positions in the NT have short term contracts, leading to high turnover and poor continuity of care. The stress of working with limited resources, caring for people with complex health care problems, and the isolation of remote areas can lead to burnout. The shortage of professionals also means that those who do stay often have overwhelming workloads, further increasing burnout risk. A vicious cycle results, and findings of high occupational stress among remote area nurses<sup>9</sup> are unsurprising. This professional experience is not limited to nurses: it is shared by many health care professionals working in remote areas.

Zhao and colleagues have highlighted the specific workforce requirements for improving Indigenous health outcomes in the NT. As 26% of NT people are Indigenous Australians, the need for more Aboriginal Health Practitioners is clear; their number must reflect the number of Indigenous people in the NT and their health care needs.

In summary, Zhao and colleagues provide eye-opening insights into the NT health workforce, which together suggest a 22% shortfall in numbers based on the disease burden in the NT. One solution would be to locally educate, recruit, and retain a health workforce suitable for the unique needs of this region. With this approach, the NT health workforce is more likely to include more Indigenous people, understand the unique health problems of the NT, and remain in the NT, ensuring workforce security and numbers appropriate for meeting the requirements of this vast region.<sup>10</sup> By systematically responding to these challenges, the NT can work toward

achieving the more stable health workforce its people so richly deserve.

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- 1 Australian Bureau of Statistics. Snapshot of Northern Territory. 28 June 2022. <https://www.abs.gov.au/articles/snapshot-nt-2021> (viewed Sept 2024).
- 2 Australian Bureau of Statistics. Life expectancy, 2020–2022. 8 Nov 2023. <https://www.abs.gov.au/statistics/people/population/life-expectancy/latest-release> (viewed Sept 2024).
- 3 Zhao Y, You J, Wright J, et al. Health inequity in the Northern Territory, Australia. *Int J Equity Health* 2013; 12: 79.
- 4 Bourke L, Merchant N, Mathew S, et al. Who is suited to work in remote First Nations health? Perspectives of staff in remote Aboriginal Community-Controlled Health Services in northern Australia. *Aust J Rural Health* 2024; 32: 1008-1017.
- 5 Australian Institute of Health and Welfare. Health workforce (here: figure 3). Updated 2 July 2024. <https://www.aihw.gov.au/reports/workforce/health-workforce> (viewed Sept 2024).
- 6 Jobs and Skills Australia. Occupation shortage list. <https://www.jobsandskills.gov.au/data/occupation-shortages-analysis/occupation-shortage-list> (viewed Oct 2024).
- 7 My Health Career. The coming surplus of optometrists in Australia: what can you do to stay competitive in the jobs market? 8 Aug 2015. <https://www.myhealthcareer.com.au/optometry/the-coming-surplus-of-optometrists-in-australia-what-can-you-do-to-stay-competitive-in-the-jobs-market> (viewed Oct 2024).
- 8 Zhao Y, Wright J, Unnikrishnan R, et al. Assessing the adequacy and sustainability of the Northern Territory health workforce with respect to burden of disease and injury, 2009–2021: an analysis of administrative data. *Med J Aust* 2024; 221: 596-602.
- 9 Lenthall S, Wakerman J, Dollard MF, et al. Reducing occupational stress among registered nurses in very remote Australia: a participatory action research approach. *Collegian* 2018; 25: 181-191.
- 10 Dussault G, Franceschini MC. Not enough there, too many here: understanding geographical imbalances in the distribution of the health workforce. *Hum Resour Health* 2006; 4: 12. ■