BUILDING THE NURSING WORKFORCE OF THE FUTURE

Karen Cook, Samantha Lavender*, Frances Rice

Australian Government, Department of Health and Aged Care

Correspondence: samantha.lavender@health.gov.au

ABSTRACT

The supply, retention and distribution of a quality nursing workforce is critical to ensure Australians have access to health and aged care, when and where they need it. The nursing supply and demand study projects the supply and demand of Australia's nurses until 2035 across all sectors and geographical levels. The results of the study predict an undersupply of nurses over the next 12 years, which indicates Australia may not have the number of nurses required to keep pace with the demand for nursing services in the community overall.

KEYWORDS

PROBLEM/ISSUES

Nursing is the largest single health profession in Australia.[1] Even though recent workforce data shows growth in the nursing workforce, with an ageing population and higher incidences of chronic diseases, the Australian community requires more nurses. [1, 3]

The geographical distribution of nurses across the country poses an ongoing challenge, impacting on communities in rural, regional and remote areas. The main principle underlying Australia's health system is that no individual or community group is to be disadvantaged when accessing health care services. [1]

By looking at trends and changes in Australia's population, it is possible to forecast how many nurses are needed in the future and to consider where those nurses are most needed based on location of the population and health outcomes. [1]

The first supply and demand study for nurses in Australia was completed by Health Workforce Australia (HWA) in 2012 which predicted a shortfall of around 109,000 nurses by 2025. The study was updated in 2014, the revised 2014 study forecast a shortfall of 85,000 nurses by 2025. [4] The current nursing workforce exceeded the numbers predicted by Health Workforce Australia HWA for 2025 however a supply and demand study for nursing has not been undertaken since this time.

INTERVENTION/APPROACHES

Identifying potential workforce gaps through workforce planning projections such as the nursing supply and demand study provides governments, professional bodies, employers, regulatory bodies, and higher education and training providers the opportunity to develop and implement plans to minimise any gaps.[1]

The nursing supply and demand model is a complex workforce model that projects the supply and demand of Australia's nurses, Nurse Practitioners, Registered Nurses and Enrolled Nurses, until 2035 across all sectors including public and private, at various geographical levels, including national, state/territory and Monash Modified Model (MMM). [1,2] The model commences from a point of balance in 2022 and divides the nursing workforce into five sectors: aged care nurses, acute care nurses, primary healthcare nurses, mental health nurses and nurses working in other settings. [1]

The study uses data from several sources collected between 2014 and 2022 and a microsimulation approach was used to model the nursing workforce. [1,5] The Microsimulation modelling technique was used for simulating data at an individual level. [1]

Supply for the model followed a "bottom-up" simulation approach where entries and exits to the nursing workforce are distinctly modelled in detail and projected separately. The modelling begins by identifying the current stock of nurses and analysing their demographic profile and historically observed work patterns. Inflows and outflows are simulated in accordance with a set of predefined modelling parameters and historical sampled data. [1, 5] Baseline demand was projected by assuming the supply of nurses meets the demand in the base year. The demand model follows a "top-down" approach where the ratio of nurse to service volumes in each sector, and the ratio of services to the population are used to forecast the expected demand for nurses. [1] Future demand for nurses was estimated using the Lifetime Transition and Estimation (LiTE) population projections. [5]

LEARNING

While both supply and demand of the nursing workforce are estimated to increase during the projection period, supply is not expected to keep pace with demand. This indicates that Australia may not have the number of nurses required to keep pace with the demand for nursing services in the community overall. [1]

The nursing supply and demand model projections at national level show that baseline projections across all sectors show an undersupply of 70,707 Full Time Equivalent (FTE) by 2035 with around 79,473 nurses needed to fill the gap.

Undersupply for each sector in 2035 is:
- Acute care sector - 26,665 FTE.
- Primary health care sector - 21,765 FTE.
- Aged care sector - 17,551 FTE.
- Mental health sector - 1,918 FTE.
- Other sectors - 2,808 FTE.

FIGURE 1: NURSING FTE – NATIONAL SUPPLY AND DEMAND BY SECTOR [1]
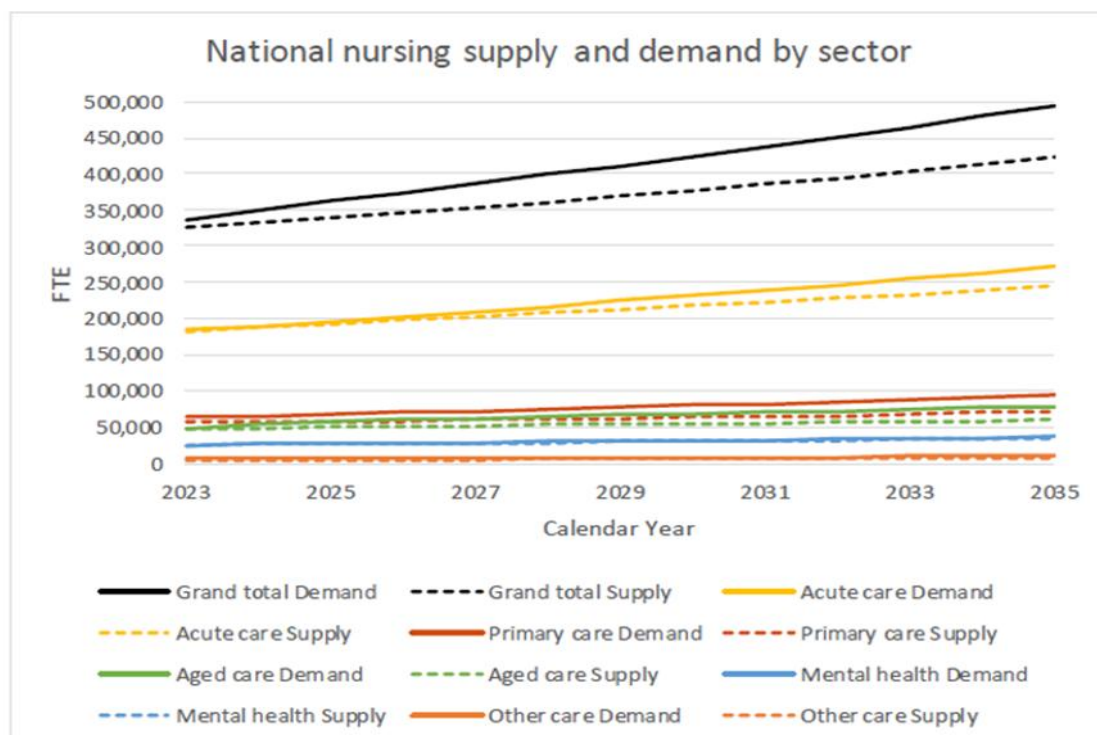
IMPACT FOR PRACTICE

The study predicts outcomes to demonstrate what could happen if nothing was done to address supply of and demand for the nursing workforce. With an updated supply and demand study, stakeholders can use the available data in innovative ways to support effective workforce planning and evidence-based future health workforce decisions. The supply and demand study forms part of the evidence required for improved policy interventions and workforce planning, which will better support the nursing workforce and the community's access to it. [1] Importantly, no single policy solution or stakeholder is able to address the projected undersupply of nurses.

The nursing model will be incorporated into the Health Demand and Supply Utilisation Patterns Planning (HeaDS UPP) Tool. [1] HeaDS UPP is a single, integrated, quality source of health workforce and services data that informs workforce planning and analysis. [1] The HeaDS UPP Tool includes data from a range of sources to demonstrate how the community uses and accesses health services and the health workforce. [1, 6]

References

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