

Nuclear medicine technologist

Workforce modelling factsheet

Nuclear medicine technologists use radioactive compounds to both diagnose and treat disease. Small amounts of radioactive tracers are inhaled, injected, or ingested to study diseases of the body. The images produced show the amount of tracer going to a tissue or organ and the rate at which it is taken up, indicating the functional status of the body commonly known as functional or molecular imaging. Nuclear medicine is also used to treat an increasing number of diseases, especially cancer that has spread throughout the body. The nuclear medicine technologist plays an integral part in the healthcare team, being responsible for performing the procedure, analysing the images and providing care to patients during this time.



Workforce characteristics for NSW Health nuclear medicine technologist workforce in 2040



264
Headcount



54%
Female



32.7
Work hours per
week



39.7
Years average age



6.6%
Future 60+



3.4%
Aboriginal
workforce target



Demand is expected to grow **2.3%** (low demand scenario) to **3.0%** (high demand scenario).

Workforce modelling indicates the need to grow the NSW nuclear medicine technologist workforce by around **4 to 7** new professionals per annum to meet community need in 2040 across both demand scenarios.

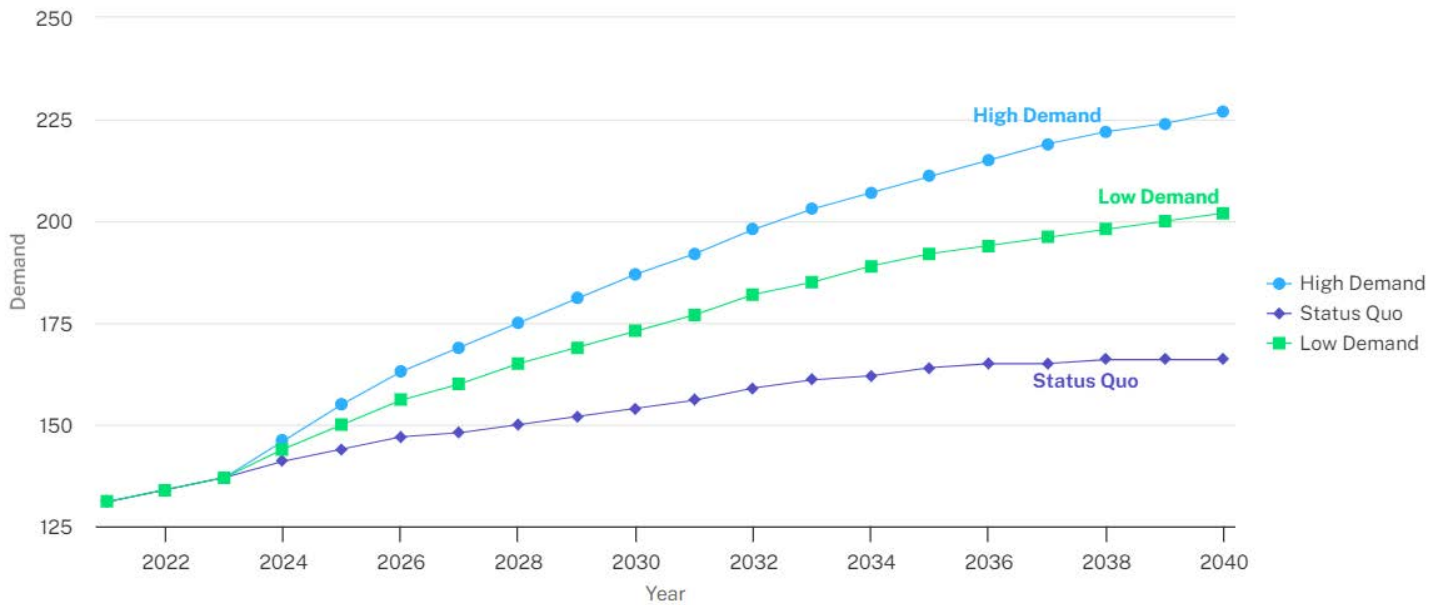
SIGNIFICANT

**CAREER
OPPORTUNITIES**

Notes

- Data included is limited to the workforce employed under the relevant health professional award.
- Specialty Health Networks are not displayed geographically in the workforce distribution maps.
- LHD/SHN may engage in sessional arrangements in selected circumstances.
- Workforce that cannot be aligned to a physical location have been attributed to a pre-determined facility within each LHD/N. This may impact on Headcount shown at these facilities within the distribution map.
- NSW Health does not make any representations or warranties whether expressed or implied with respect to the accuracy and completeness of the information contained in the fact sheet.

Projected FTE growth for NSW Health nuclear medicine technologist workforce to 2040



Workforce characteristics for NSW Health nuclear medicine technologist workforce in 2021



162
Headcount



27.5
Work hours per week



40.7
Years average age



65.4%
Female



4.6%
Aged 60+



1.2%
Aboriginal

Metropolitan Sydney



132
Headcount



26.7
Work hours per week



40.4
Years average age



3.5%
Aged 60+

Non-Metropolitan Sydney



41
Headcount



30.7
Work hours per week



41.6
Years average age



1.2%
Aged 60+

Nuclear medicine Technologist junior entrant positions into NSW Health



2017
8

2018
7

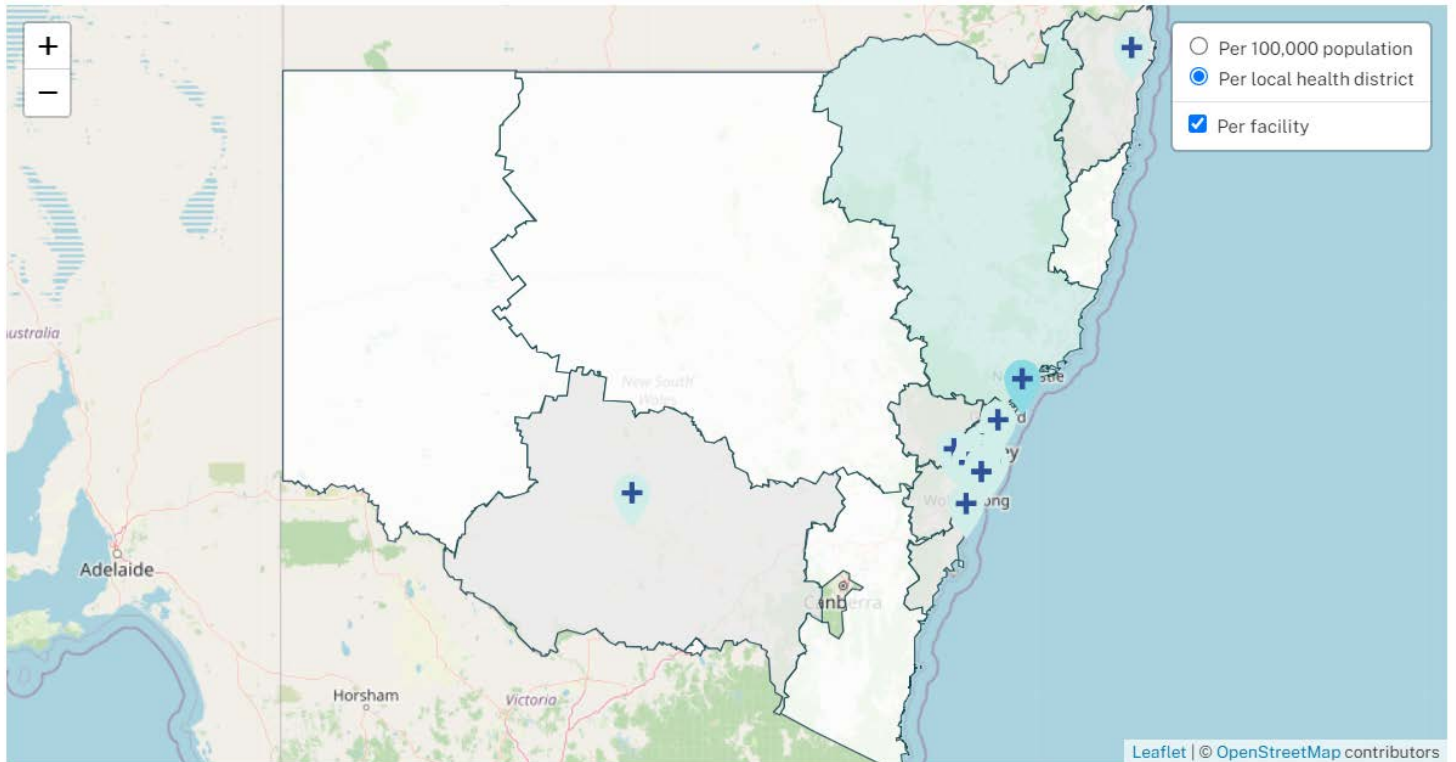
2019
7

2020
5

2021
4

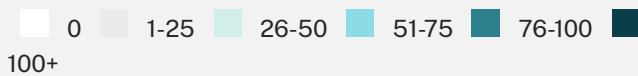
Workforce distribution for NSW Health nuclear medicine technologist workforce in 2021

The geographic distribution of the public workforce by local health district/network, by facility and per 100,000 population.



Legends

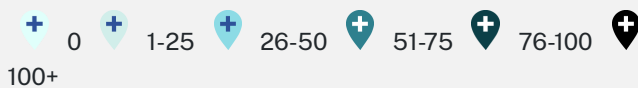
Per local health district



Per 100,000 population



Per facility



Other networks

- Sydney Children's Hospitals: 1 to 5 | 1 per 100,000
- Enable NSW: 1 to 10 | 1 per 100,000
- Justice Health and Forensic Mental Health: 0 | 0 per 100,000

Workforce considerations

- Population demographics and increasing incidence of complex and chronic disease may increase demand for nuclear medicine services.
- Consideration needs to be given for physical infrastructure and equipment to deliver nuclear medicine services.
- Ensuring sustainable training pipelines, graduates, and workforce reflect the future workforce requirements of the community, by both location, speciality and skills.
- Technology and innovation impacts on nuclear medicine service delivery and workforce demand.
- Interdisciplinary workforce availability impacts on nuclear medicine service delivery, efficiency, and scope of practice. For example: nuclear medicine technologists don't work in isolation. They are reliant on radiation physicists and radiation safety officers.
- The nuclear medicine technology workforce is ageing. Workforce planning which includes succession planning and bringing in new entrants to NSW Health should be a priority for this workforce.