a healthier world through sonographer expertise

Tasmanian Cardiac Strategy team
Our Healthcare Future
Email: ourhealthcarefuture@health.tas.gov.au

Dear Tasmanian Cardiac Strategy team

Re: Consultation on the draft Tasmanian Cardiac Strategy

The Australasian Sonographers Association (ASA) welcomes this opportunity to comment on the consultation draft of the Tasmanian Cardiac Strategy (the Strategy) which promises to improve heart health in the Tasmanian community and address one of the state's leading causes of disease and death. The Australasian Sonographers Association (ASA) is the peak professional body for sonographers, representing over 7,500 sonographers across Australia and New Zealand.

A summary of key points and recommendations are provided below, followed by further detail examining the workforce shortage, and the role of cardiac sonographers in heart health.

We welcome any opportunity to discuss the matters raised in our submission further.

Executive Summary

- **Cardiac screening and diagnostics are critical for disease detection and prevention and we look forward to seeing future initiatives under the Strategy which consider the role of cardiac testing – including cardiac sonography - across all phases of heart disease management.**
- **Cardiac testing– including echocardiograms – is a cornerstone of heart disease detection and diagnosis. Health practitioners rely on reliable, timely results to diagnose, monitor and treat heart disease.**
- **Cardiac sonographers are highly specialised experts trained in echocardiography. This is a specialised field of sonography, and the role cannot be performed by most generalist sonographers.**
- **Wait times for echocardiograms in Tasmania, especially the North, are already extremely high, which has a detrimental impact on individual patient care as well as multiple downstream effects and require immediate attention.**
- **Wait times reflect a long term, chronic shortage of both sonographers and cardiac sonographers in Australia. This is even more pronounced in Tasmania. due to a small population, lower number of employers, geographic isolation, and absence of a local educational institution offering sonography qualifications. Roles are often not filled, and services demand cannot often be met in reasonable time with current staffing levels.**
- **The underlying driver of the shortage is scarcity of training placements for sonographer students, and without action will continue to impact on the success of any health services reliant on medical ultrasound.**

- **Workforce will be a key enabler for the Tasmanian Cardiac Strategy to successfully boost services in prevention, early detection, diagnosis and treatment for heart health into the future.**

Recommendations

The ASA makes the following recommendations:

(1) To prioritise an urgent review of cardiac sonographers in Tasmania to quantify and project workforce needs now and into the future as part of the Strategy's undertaking to "*Regularly review and update workforce models and plans*"

(2) To address short and long-term sonographer workforce issues in Tasmania by:

(a) addressing the extensive wait times in echocardiograms by funding an increase in FTE for sonographers in problem areas

(b) encouraging workplaces in the north and south of Tasmania to take on trainees by funding a combination of
- **ongoing trainee cardiac sonographer positions and**
- **dedicated tutor/trainer sonographer positions.**

(c) partnering with educational institutions around Australia, to alleviate the current burden on post-graduate sonography students to find placements themselves.

(d) considering incentives to encourage upskilling of existing sonographers to specialise in cardiac sonography.

The Cardiac Sonography Workforce Shortage

Cardiac ultrasound – echocardiography - is one of the key diagnostic tools in assessing and monitoring cardiac health. As the experts in ultrasound, sonographers – specifically, cardiac sonographers - are critical to all stages of disease across detection, diagnosis and treatment. As it is low risk, less invasive and comparatively low cost, there is a persistent and growing demand on ultrasound in cardiac and many other areas of health care. Of the over 11 million ultrasounds conducted in Australia, approximately 900,000 echocardiograms are performed each year. More information about the role and work of cardiac sonographers is provided at the end of this paper.

The problem

While there is growing demand for ultrasound examinations, there are simply not enough sonographers to perform them. The sonographer workforce is facing a wicked problem of chronic shortages, caused largely by a bottleneck in the career pipeline that exists at the training and placement phase of a new sonographer's career. The very limited availability of training placements is preventing many dedicated sonographer students from becoming qualified and entering the workforce. The issue is exacerbated by the fact that over 50% of sonographers work in part-time roles with limited capacity to take on additional work, and one-quarter of the workforce is over 50 years of age and approaching retirement. Our 2024 Employment and Salary Survey indicated that 38% of sonographers plan to leave the profession within the next decade, with 19% planning to exit in the next five years.

The extent of the sonographer shortage is widely recognised in Australia, having been listed as such by Jobs Skills Australia on the Skills Occupation List for over a decade. Tasmania is also specifically flagged as a state in shortage. In a salary and employment survey conducted by the ASA this year, respondents estimated a 20 – 30 percent undersupply of sonographers in the workplace, most acute among experienced sonographers, clinical supervisors, and managers. Employers indicated that almost half the

positions advertised were not filled. The shortage is exacerbated in regional, rural and remote locations, and – key to this Strategy - applies particularly to specialists in cardiac sonography.

Extent of the sonographer shortage in Tasmania

To add to this, Tasmania has a significantly lower number of sonographers to service its community than other Australian regions, with far less sonographers and specialist cardiac sonographers per capita than the national average.

Of the 7791 Accredited Medical Sonographers in Australia (March 2024), only about 105 of these worked in Tasmania. This translates to about 18 sonographers per 100,000 Tasmanians, which is significantly lower than the national rate of 28.7. By comparison Victoria has 25.2 sonographers per 100,000 Victorians.

Further, only 21 of Tasmania's 105 sonographers specialise in cardiac sonography, which again demonstrates that Tasmania has a far lower rate of specialised cardiac sonographers to serve its community – around 3.65 cardiac sonographers per 100,000 Tasmanians, compared with 5.98 nationally and 5.3 in Victoria.

The impact

The ongoing chronic shortage of sonographers is already causing significant wait times for patients and will make it increasingly difficult to meet growing demand, let alone fill new roles for expanded service delivery. Based on feedback from our members, employers report having to close exam rooms and delay appointments, as well as other consequences including increased stress and sonographer injuries, higher costs associated with attracting, retaining or upskilling sonographers, and an increased reliance on locums to cover gaps. Based on advice from our Tasmanian cardiac sonographer members, we understand that there is a critical lack of timely access to high quality echocardiograms in the public health system in Tasmania, with especially long wait times in the north of the state.

This context of shortage is a challenging backdrop for service expansion, and it is possible there will be difficulties in staffing and operating new diagnostic services, even in major centres. For example, the Strategy highlights the new cardiac facilities being built through the Northern Heart Centre, with five new echocardiography testing rooms, one exercise testing room and six outpatient consultation rooms. These facilities will require a significant roster of qualified cardiac sonographers and other specialised staff, and there is a real risk that Tasmania does not have enough cardiac sonographers to fill these roles.

Wait times for echocardiograms

Shortages in cardiac sonographers are leading to unacceptably long wait times for echocardiograms for patients, and these delays translate to a myriad of downstream effects throughout the health system including longer in-patient stays, delayed surgeries, missed opportunities for early intervention, and further progress of disease.

While cardiology registrars triage echocardiogram requests, inevitably there are patients who wait longer than they should, which can result in patients having to be admitted to hospital straight from the echo lab, or delays in treatment and prolonged disability. Regardless of the result of an echocardiogram, it can be very distressing for patients and their families to wait months for a test on their heart.

Feedback from our member cardiac sonographers indicate that wait times for echocardiograms in Tasmania - especially in the North and South – are of particular concern, and require immediate attention.

Some specific examples include that:

- Launceston General Hospital has wait times of between 1 to 4 months for urgent and semi-urgent echocardiograms and effectively no capacity for a non-urgent echocardiograms.
- Royal Hobart Hospital has a wait time for a non-urgent echocardiogram of approximately 90-120 days.

Outpatient data from the Tasmanian Department of Health also reflects delays in the cardiac clinics, indicating that:

- wait times at almost all Tasmanian cardiac outpatient clinics are above the average for outpatient services, regardless of urgency.
- the time it takes for 75% of urgent patients in outpatient cardiac clinics the North and South is particularly dire, at almost 4 to 5 times that in the North West (151 days and 111 days wait, compared to 29.5 days).
- for Semi-urgent patients this jumps to almost a year's wait (over 300 days) in the North and South (more than double in the North West of 144 days).

Not only do these significant wait times affect the timely diagnosis and treatment of individual cardiac patients, but as the health system is a highly dynamic, interconnected system - delays in one part affect another. This is especially so in diagnostics, where they can become a bottleneck for many other parts of the system.

The Solution: Prioritise workforce planning and initiatives

As identified in the Strategy, workforce planning is vital to ensure Tasmania has access to comprehensive and sustainable cardiac care. We recommend that given the particularly chronic shortage of sonographers, and downstream impact of this shortage, that planning be prioritised for this sector.

Workforce planning will enable informed decisions to be made in the short term about new sonography roles or expanded services which will be necessary to address problematic wait times that we know exist and facilitate collaboration with the sector when designing and funding incentives to boost training opportunities for sonographers. Expanding the future supply pool will take some time, effort and collaboration across the sector to address the shortage in a way that enables future cardiac health initiatives to succeed. This needs urgent action to ensure the problem does not continue.

1. Short term: Address chronic wait times for echocardiograms

The ASA welcomes the recent addition of a permanent (previously fixed-term) FTE Cardiac Physiologist-Echocardiographer position at the Royal Hobart Hospital, which is a great recognition of the need for increased services that we are advised has significantly alleviated wait lists at this hospital. As such we would also recommend an immediate boost to FTE sonographers in other areas to address the most problematic wait times.

2. Address the core driver of shortage: training placements

Sonography students must complete a minimum of 3 days per week over 2 years of clinical placements before they can graduate and enter the workforce. Placement sites across the nation are getting harder to find not just for cardiac sonography but for all areas of practice due to the busy nature of the placement sites, understaffing issues and increases in community diseases. Training is difficult to prioritise in those conditions.

While a third of students (those enrolled in undergraduate sonography degrees) have their placements arranged for them by their institution, the remaining two thirds of students in post-

graduate courses are required to have secured a clinical training placement themselves. This model is in part a remnant of history, in that sonography was traditionally a specialisation of radiography pursued in post graduate study where a student would likely have an existing job in a clinic. However, today the majority of students undertake sonography qualifications without a radiography background and the burden of finding a training placement on these students is proving ineffective.

One key solution lies in incentivising traineeships. They could include a mix of funded Trainor/tutor sonographer positions, as well as funding targeted traineeships for students to specialties of shortage - such as cardiac sonography - which cover either some or all of their education and training and include a guaranteed quality placement. All workplace-based incentives would need to be designed and implemented carefully to ensure placements deliver genuine quality training and sufficient experience to enable students to enter the workforce at the right level.

There is also strong value in strengthened partnerships with educational institutions. This has already been acknowledged in the Strategy, which notes the University of Tasmania's post-graduate cardiovascular specialty. ASA understands that CQU currently has students allocated to placement sites in Tasmania for their Bachelor of Echocardiography, and it would be very beneficial to see the Government work with CQU and other education institutions across Australia to help boost local training placements and contribute to a nation-wide approach to boost the much needed sonographic workforce.

Conclusion

Ultimately, the health sector works together to reduce disease and improve quality of life. A major benefit of intervening earlier in patients' health journeys is that it reduces the need for large, complex and expensive health infrastructure and personnel. In this way, preventative health care may in fact relieve some of the chronic workforce shortages we are experiencing across the health sector.

However, demand and population continue to grow and as the Strategy acknowledges, expanding services, building new infrastructure and filing workforce gaps over the next 5-10 years will require funding as well as careful planning to ensure supply of suitable workforce and technology can meet increased demand for diagnostics. Cardiac sonography will be an important part of the mix, and it will be important to address short and longer term supply issues. Innovation and collaboration will be critical to overcoming many of the health system challenges highlighted, and the ASA looks forward to seeing the next stages of the Strategy.

BACKGROUND INFORMATION

The role of sonographers in cardiac health

Early detection and diagnosis of heart disease are essential to guide clinical treatment and help improve prognosis and prevent escalation of future costs and disease burden. Ultrasound is one of the key diagnostic tools in assessing and monitoring cardiac health, and because it is low risk, less invasive and comparatively low cost, there is a persistent and growing reliance on ultrasound in cardiac and many other areas of health care.

Echocardiograms are ultrasound examinations performed by cardiac sonographers to evaluate the overall structure, function, performance and health of the heart and are considered a first port of call in diagnosis of a range of heart problems. Cardiac sonographers can detect subtle risk factors, assess damage, defects and other structural and functional heart issues which are not immediately evident from external symptoms or observable on the surface. This expertise arms

doctors and health care teams with sophisticated diagnostic information that enables them to make decisions about cardiac treatment with confidence.

Cardiac sonographers play a crucial role in cardiac health by creating images of the heart and blood vessels, helping diagnose and monitor heart-related conditions. They work closely with cardiologists, nurses, and other healthcare professionals to provide comprehensive cardiac care. By capturing high quality images and data, cardiac sonographers ensure that cardiologists have the information they need to assess the heart's health. They help interpret imaging results to inform accurate diagnosis and treatment plans for multiple heart diseases such as ischaemic heart disease, hypertensive heart disease, cardiomyopathies, valvular disease, and infective endocarditis.

Cardiac sonography is a more specialised field distinct from general sonography that requires many years of post-graduate study and clinical training. Even further training is required for specialised cardiac sonography such as congenital, foetal or paediatric echocardiography. A fully qualified generalist sonographer who worked in a different specialisation, would not be able to perform high quality echocardiograms without further study.

As with all forms of medical ultrasound, echocardiography is highly operator-dependent, meaning that the quality of both the images and interpretations can vary significantly based on a sonographer's experience. Advanced conditions, such as congenital heart disease, myocardial ischemia, or valvular disorders, require specialised knowledge to interpret the imaging correctly. A misinterpretation of the imaging can lead to incorrect or missed diagnosis, incorrect treatment and possibly dire outcomes for patients. Some anatomical variations are normal and expected, but these can be mistaken for pathology by an inexperienced practitioner, and it requires a high level of expertise to differentiate.

In addition to their important technical role in diagnosis, cardiac sonographers are front line health workers who interact with patients directly, in an intimate setting, on a daily basis. Sonographers explain procedures, listen to their concerns, answer questions, and help patients feel comfortable during the examination. Often patients with chronic or ongoing heart health issues will develop strong relationships with their sonographers and not only does this built trust and make patient's feel heard, but the relationship is also beneficial for consistency and continuity in the patient's health journey.

If you wish to discuss any aspect of this submission, please contact Elissa Campbell, General Manager Policy and Advocacy, at elissa.campbell@sonographers.org.

Yours sincerely,

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Australasian Sonographers Association