

Tasmanian Cardiac Strategy

Improving care and outcomes
for people with, or at risk of,
heart disease in Tasmania

DRAFT FOR CONSULTATION
OCTOBER 2024



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Acknowledgement of Country

The Department of Health Tasmania respectfully acknowledges Tasmanian Aboriginal people as the traditional custodians of the land on which we live, work and play and pays respect to Aboriginal Elders past and present.

Recognition statement

Tasmanian Aboriginal people's traditional lifestyle promoted physical and emotional health and wellbeing, centred around Country, Kin, Community and Spirituality. Aboriginal people continue to value the importance of culture, community connection and being on Country as vital components of health and wellness. Through colonisation, Aboriginal people experienced displacement and disconnection, which has significantly affected their health and

wellbeing. We recognise Aboriginal people are the knowledge holders and provide best practice in promoting health and wellbeing for Aboriginal people. We acknowledge and learn from the ongoing work of Aboriginal organisations in ensuring continued health and wellness. We commit to working in partnership with Tasmanian Aboriginal communities and health leaders now and into the future to improve health and wellbeing.

Artwork adapted from Takira
Simon-Brown's *Health nayri*.



Key definitions

Heart disease encompasses heart conditions including, but not limited to:

- **Coronary heart disease** is the cause of most heart attacks and angina. It is the result of atherosclerosis, a build-up of fatty plaques in the walls of the coronary arteries that, over time, cause blood vessels to become narrowed or blocked;
- **Cardiac arrhythmias** (such as Atrial Fibrillation (AF) and flutter, ventricular arrhythmias and bradyarrhythmias) occur when the heart beats irregularly, too fast, or too slow due to abnormality with electrical conduction in the heart. This can cause palpitations, dizziness, and shortness of breath, with severity ranging from harmless to life-threatening.
- **Heart failure** a chronic condition where the heart is unable to pump blood effectively, leading to insufficient blood flow to meet the body's needs. This results in symptoms like fatigue, shortness of breath, and fluid retention;
- **Structural heart disease**, encompassing rheumatic heart disease, valvular abnormalities, and congenital abnormalities; and
- **Congenital heart disease and defects** is a general term for any defect of the heart, heart valves or central blood vessels that is present at birth. Most congenital heart disease is multifactorial and arises through combinations of genetic and environmental factors. People with complex and severe congenital heart disease require specialist treatment throughout their life.

A myocardial infarction, commonly known as a heart attack, is a life-threatening event that occurs when a blood vessel supplying the heart is suddenly blocked starving the heart muscle of oxygen, threatening to damage the heart muscle and its functions. STEMI (ST Segment Elevation Myocardial Infarction) is the most serious type of heart attack. It is almost always caused by a complete blockage of a major coronary artery, leading to an interruption of blood supply. NSTEMI (Non-ST Segment Elevation Myocardial Infarction) is characterised by a partially blocked artery, which severely reduces blood flow and oxygen to the heart muscle.

Angina is chest pain caused by reduced blood flow to the heart. With stable angina, periodic episodes of chest pain occur when the heart has a temporary deficiency in blood supply during exertion. Unstable angina is an accelerating pattern of chest discomfort, and is the more dangerous form due to a changing severity in partial coronary artery blockages. It is treated in a similar manner to heart attack.

Cardiovascular disease is a collective term for diseases that affect the heart and blood vessels. The term commonly includes heart disease, cerebrovascular disease (conditions that affect the blood vessels of the brain and the cerebral circulation, including stroke), and Peripheral Artery Disease (PAD).

¹ Derived from definitions in *National Action Plan for Heart Disease and Stroke 2020* and AIHW's *Heart, stroke and vascular disease: Australian facts*.

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Introduction

With an ageing population, high rates of cardiovascular disease and demand for cardiac services projected to increase in Tasmania, the Department of Health is planning for the future, positioning our services for excellence and sustainability.

The Tasmanian Cardiac Strategy provides system-wide direction for the delivery of cardiac services, informing our service and infrastructure investment decisions, workforce planning strategies and ensuring we can continue to lead in the delivery of accessible and high quality cardiac care and services.

In planning for the future, we have considered the challenges unique to Tasmanian communities and how we can deliver services to best support their needs. Hospital based care is important and demand is projected to rise with our ageing population, but there are other, more appropriate ways we can provide the services Tasmanians need within the communities they live and work.

This strategy outlines the actions needed at community and health system levels over the next five to ten years to:

1. **Prevent** more people from getting heart disease.
2. Ensure timely **detection** and **treatment** of heart disease.
3. Better **support** people living with heart disease.
4. Use **research** and **data** to improve health outcomes.

The Strategy has been developed in partnership with the Tasmanian Cardiac Network, which brings together expertise in cardiac services across Tasmania and includes representatives from the public health system, private sector, Primary Health Tasmania, Heart Foundation, clinical quality and safety, and emergency services.

We recognise the important role of the broader health system including private providers, General Practitioners (GPs), other primary care providers and non-government organisations. While the Strategy is primarily focussed on changes we will make within Tasmania's public health system, it also considers how we can work better with our partners and communities to develop health care strategies that result in integrated, well-coordinated care.

Feedback on the Tasmanian Cardiac Strategy is invited from individuals, organisations, healthcare professionals, private providers, community providers, researchers, and those with an interest in heart health.

Your input will help shape the strategic actions for Tasmania's cardiac care system.

Please submit your feedback by emailing ourhealthcarefuture@health.tas.gov.au

The facts about heart disease in Tasmania

Tasmanians have a higher prevalence of heart disease (cardiovascular disease) compared to the national average. This is in part due to our population being older and the prevalence of cardiovascular disease risk factors in Tasmania being higher than the national average with Tasmania's rate of obesity the worst in Australia.

Each year **1,300** Tasmanians **die** from cardiovascular disease.



In 2023 **8,850** people were hospitalised for **heart** related reasons.



There are over **30,000** Tasmanians living with the ongoing effects of heart disease or stroke.

Tasmania has a **13% higher** prevalence of heart disease than the national average.



Each year we see around **18,500** people in our public hospital **emergency departments** for heart related concerns.



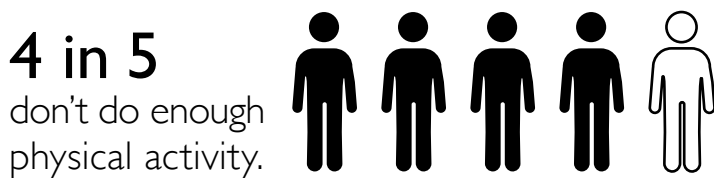
Around **15,800** Ambulance Tasmania call outs are received per year for chest pain, cardiac or respiratory arrest or other heart problems, representing around **20% of all call outs**.



We provide an average of **4,800** **cardiology procedures** in our public hospitals each year to diagnose and treat heart conditions.

In 2021 the incidence of heart attacks in people 25 years or over was **269.2 per 100,000** in Tasmania.

Tasmanians can do more to prevent cardiovascular disease through healthier lifestyles





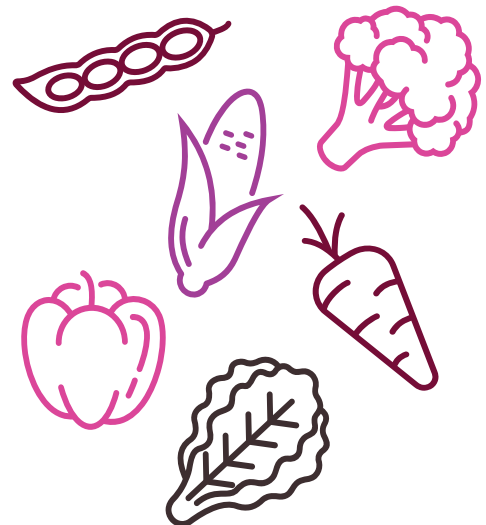
Most Tasmanians know that improving their diet, exercise or weight helps prevent cardiovascular disease.

The rate of **obesity** in Tasmania is **34%** compared to the national average of 31%.



Aim to be active for **30 minutes** for **5 days** each week.

Most **cardiovascular disease** risk factors are preventable through a **healthy lifestyle** (healthy diet, regular exercise & being a healthy weight).



Eating **5+** vegetables a day reduces the risk of cardiovascular disease by almost **17%**.

Tasmanian Cardiac Strategy



Our Vision

That all Tasmanians live healthier lives through effective prevention, treatment and management of heart disease.

Guiding Principles

Person-centred care

Services are designed to be culturally safe and respectful of, and responsive to, the preferences, needs and values of individuals.

Equitable access to services

Ensure all Tasmanians have equitable and timely access to safe and sustainable health services, regardless of where they live.

Transparency and accountability

Provide greater transparency around access to services and system performance to drive the leadership and accountability of all health service providers.

Sustainability

Services are designed to ensure best possible outcomes for patients and an environmentally and financially sustainable health system.

Priority Areas



Prevention and early detection



Diagnosis and treatment



Supportive care



Research and data

Enablers



Workforce



Technology



Infrastructure

Priority population groups

We commit to working with vulnerable and minority groups who are at greater risk of heart disease, who do not enjoy the same health outcomes as the broader population and who may face barriers to accessing care and services that they need.

About this strategy



Overview

Tasmanian communities continue to have access to high quality care and a broad range of health services to help prevent, manage, and treat heart disease. Our staff, including those that provide direct patient care, support services and those that work behind the scenes, work tirelessly to provide Tasmanians with high quality health care. This strategy aims to support them to continue to deliver the services needed, now and into the future.

Building on the achievements of the Tasmanian Cardiac Network who have led many improvements in cardiac care in Tasmania, this strategy explores the current cardiac care system and describes the changes we will make to bridge the gap between what is currently provided and what will be needed to meet the healthcare needs of our community in the future – from prevention to end of life care.

Each year, the Tasmanian Cardiac Network will recommend specific areas for action to progress through an agreed Annual Action Plan.

In line with the National Strategic Action Plan for Heart Disease and Stroke 2020, actions and interventions taken through this strategy to prevent or improve outcomes for heart disease, will also help to prevent and better manage stroke and broader cardiovascular conditions and their associated risk factors.

Achieving equity

All Tasmanians have the right to experience optimal health and wellbeing. Our health system is for everyone in our community. The Department of Health works to reduce health inequality through programs and initiatives that promote access to high-quality health care for all Tasmanian communities.

Through the actions in this strategy, we commit to working with vulnerable and minority groups who are at greater risk of heart disease, who do not enjoy the same health outcomes as the broader population and who may face barriers to accessing care and services that they need. These include:

- The Tasmanian Aboriginal Community and Aboriginal and Torres Strait Islander people who live, work and play in Lutruwita / Tasmania
- People living in rural and remote areas
- People from culturally and linguistically diverse (CALD) backgrounds
- People in lower socioeconomic groups
- People experiencing homelessness
- Older Tasmanians
- People living with disability
- People living with a mental illness
- Lesbian, gay, bisexual, transgender, queer, intersex and asexual (LGBTQIA+)

Building on our achievements

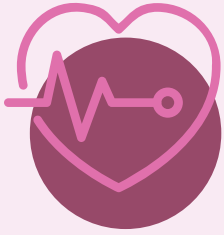
Over the past several years, the Tasmanian Cardiac Network, and the Department of Health have worked together to lead and support reforms to the Tasmanian cardiac service system to provide better and more timely care. Together we have:

- Improved outcomes for people experiencing ST Elevation Myocardial Infarction (STEMI) in all parts of Tasmania, including rural and remote areas, through the statewide clinical pathways for optimal reperfusion in STEMI management and possible acute coronary syndrome chest pain protocol.
- Introduced pre-hospital paramedic led thrombolysis for STEMI.
- Established a Transcatheter Aortic Valve Implantation (TAVI) service in Tasmania, a minimally invasive surgical procedure that repairs the damaged aortic valve without removing the native valve, avoiding referral to interstate hospitals for procedures.
- Contributed to the Victorian Cardiac Outcome Registry to monitor, evaluate and identify areas of improvement.
- Established an Electrophysiology service at the Royal Hobart Hospital (RHH) for diagnosis and treatment of abnormal heart rhythms.
- Established the Nurse Practitioner transition pathway which has led to the introduction of a nurse led heart failure clinic resulting in significant reduction in readmission rates for heart failure.
- Established the Rapid Access Chest Pain Clinic at the RHH to streamline the outpatient assessment of patients with new onset chest pain, as well providing certainty of timely follow up for patients being discharged from an emergency department.
- Improved the care, treatment and management of adults with congenital heart disease through the establishment of the Adult Congenital Heart Disease service at the RHH.
- Developed the community arm of the Tasmanian Cardiac Network to improve communication and engagement between primary and secondary care services, focusing on the management of cardiac related conditions and seamless care of chronic cardiac conditions.

To meet the projected rise in demand for cardiac services in Tasmania, together with our communities and partner organisations, over the next 5 to 10 years we will:

- Do more to help prevent heart disease.
- Expand existing services.
- Enhance service models with more Care@Home and other virtual health care services.
- Build new infrastructure to match the expansion and redesign of services needed over the next 5–10 years.
- Improve outcomes for people with non-emergency but urgent care needs.
- Do more for people who face barriers when accessing the care and services they need.
- Provide more services after a cardiac event to reduce the risk of recurrence.
- Use advances in technology to provide care in new modalities.
- Fill workforce gaps, and grow our workforce by planning for new and expanded clinical roles.





STEMI Pathway – emergency care for heart attacks

A life-saving service that provides emergency care and treatment for heart attacks is delivering nation-leading outcomes for Tasmanians by enabling faster access to vital procedures. Large heart attacks – also known as STEMI – occur when there is a complete blockage of one of the major coronary arteries that supply blood to the heart muscle, with treatment involving inserting a stent into the artery to restore blood flow.

The STEMI Program – a collaboration between cardiology services, emergency departments (ED), ambulance services and rural General Practitioner's (GPs) – aims to optimise the care for people experiencing myocardial infarction (heart attack).

Since being established in 2018, more than 1000 heart attack patients have been treated under the program, with the pathway reducing the time from presentation to treatment in order to improve chances of survival and returning to a normal life. Recent analysis shows the statewide service is delivering high-quality patient outcomes, with key performance indicators ranking amongst the best in the country.

Through the program, paramedics responding to cases in the community are trained to identify STEMI and initiate pre-hospital activation of the catheterisation laboratory with specialist cardiology teams at the Royal Hobart Hospital (RHH) and Launceston General Hospital (LGH). This involves rapidly assembling the life-saving team and equipment, and coordinating direct transfer of patients to bypass the ED and save vital minutes to treatment.

Where transfer to the hospital can't be achieved quickly – for example, due to geographical distance to these specialist centres – strong clot busting medications called thrombolysis can be administered by paramedics, rural GPs or other clinicians to restore blood flow while the patient is transferred for a stent procedure.

The STEMI program is a fantastic example of how our specialist services located in major population centres are working together with clinicians across the health system to deliver quality outcomes for patients in all parts of the State. By streamlining and optimising care pathways on a statewide basis, our doctors, nurses and health professionals are saving lives and supporting long-term recovery by enabling heart attack patients to access the right care sooner.

Our priorities and enablers



Our priorities and enablers

The priority areas outlined in this strategy have been considered through a clinical redesign lens balancing best patient outcomes, efficient use of healthcare resources and budget, reducing duplication and providing safe, high value care. Considering innovative concepts in health care delivery will play a key role in realising the vision of the Strategy.

These priority areas and actions have been developed to respond to the needs of the Tasmanian community, now and into the future, and to maximise the capability of our health services. This will be achieved by configuring and supporting our health services to operate at their maximum level of capacity and capability as determined through the [Department of Health's Clinical Service Profiles \(CSPs\)](#) and [Tasmanian Role Delineation Framework \(TRDF\)](#). (see Appendix I) The CSPs and TRDF provide direction on what can safely and sustainably be provided in our facilities to ensure the delivery of consistently safe, high quality care, in line with best practice.

The priorities have been developed in line with, and designed in response to, the goals and objectives of the *National Strategic Action Plan for Heart Disease and Stroke 2020*.

The Strategy outlines four key priorities, along with specific objectives, to make required service enhancements and deliver sustainable improvements to cardiac care in Tasmania.

Each priority area comprises a number of objectives and actions to realise the overarching priority.

Action plans will be developed annually and will be prioritised against need and will respond to yearly government investments. Not all action items will require funding however, many will, and we will carefully balance need and resources to maximise investment and benefit to the community. Action items will be reviewed annually to align with current best-practice and health advancements to ensure need is addressed in the most appropriate way.

Priorities

1. Prevent more people from getting heart disease.
2. Ensure timely detection and treatment of heart disease.
3. Better support people living with heart disease.
4. Use research and data to improve health outcomes.



I. Prevention and early detection

Primary preventative measures aim to promote healthy lifestyles by improving community understanding about heart health, supporting lifestyle programs to prevent the onset of heart disease and improve risk assessment to detect early signs of heart disease. Identification of risk factors enable the development of individualised management plans that promote adoption of a healthier lifestyle.

Secondary prevention aims to improve the management of people who have had a heart attack or are living with heart disease. Supporting people through the early management of heart disease reduces their risk of further events or hospital readmission.

We will:

- I.1** Strengthen the community arm of the Tasmanian Cardiac Network to support primary health services, non-government and government organisations to provide a coordinated approach to the assessment, screening and early detection of heart disease.
- I.2** In partnership with the Heart Foundation, promote utilisation of the Guidelines for Management of Absolute Cardiovascular Disease Risk (2023) and the associated website risk calculator to ensure accurate identification and management of Tasmanians at risk of a primary cardiac event.
- I.3** Work with non-government and government organisations to increase awareness of heart disease, prevention and early detection within the Tasmanian community through targeted health programs to detect and manage heart disease.
- I.4** Optimise the sharing of information between GPs and specialists to promote efficiency and effectiveness of current shared care models using electronic referrals and virtual communication.
- I.5** Develop in-reach services into district hospitals and community centres, utilising virtual care and technology to reach rural and remote areas.
- I.6** Address risk factors for heart disease to encourage all Tasmanians to live healthier lives by establishing the Tasmanian Familial Hypercholesterolaemia Service.
- I.7** Implement the Global Resuscitation Alliance Framework to improve survival after out-of-hospital cardiac arrest.
- I.8** Develop a structured prevention programme for patients with established chronic stable coronary artery disease and patients at high risk of cardiovascular disease in a primary care setting.



2. Diagnosis and treatment

All Tasmanians need access to timely treatment and evidence based cardiac care that is efficient, effective, and appropriate. We will improve patient outcomes by eliminating disparities in access to diagnosis and treatment services between metropolitan and rural and remote communities.

We will:

- 2.1** Ensure timely access to appropriate treatment by implementing a no refusal policy for time critical referrals that align with national recommendations.
- 2.2** Through Ambulance Tasmania and state-wide retrieval services, strengthen thrombolysis and pre-notification pathways for time critical patients to receive care within nationally recommended timeframes.
- 2.3** Establish a dedicated cardiology inpatient unit at the LGH to support the consultant led service and revised model of care.
- 2.4** Establish nurse led models of care through the Clinical Nurse Consultant to Nurse Practitioner pathway to establish a Rapid Access Chest Pain Clinic, Heart Failure and Arrhythmia clinics.
- 2.5** Establish a Statewide Cardiac Paediatric / Adult Congenital Liaison Service that will provide regular outreach clinics to the North and North West and maintain strong links to the Royal Childrens Hospital in Melbourne.
- 2.6** Expand the Electrophysiology service to the North and North West, providing outreach clinics to district hospitals and explore virtual care models.
- 2.7** Reform specialist outpatient clinics to align with national targets and treatment times, by working with the Outpatient Transformation Program.
- 2.8** Improve access to diagnostic services by building workforce capacity and enhancing statewide IT based reporting systems.
- 2.9** Continue to provide timely access to interventional and non-interventional cardiac services for Tasmanians including strengthening public and private partnerships.



3. Supportive care

The impact of heart disease can have a significant effect on a person's quality of life, often changing the physical, social and emotional wellbeing of people living with or experiencing the impacts of heart disease. All Tasmanians should be empowered to navigate their own healthcare, to live their best quality of life. Services that support care for those living with heart disease need to be flexible and individualised to target the specific needs of a patient's cardiac health journey from early detection to end of life care. Ongoing support and programs to provide people with tools to manage their disease are the core of rehabilitation programs.

We will:

- 3.1** In accordance with Australian Cardiovascular Health and Rehabilitation Association quality indicators, improve cardiac rehabilitation and secondary prevention to support patients' optimal recovery and meaningful engagement in community and family life.
- 3.2** In partnership with Heart Foundation, Healthy Hearts Tasmania project, develop a statewide model of care for cardiac rehabilitation and secondary prevention of heart disease. The statewide model of care will outline key principles for best practice cardiac rehabilitation consisting of various adaptable, person-centred service models that enhance local, targeted cardiac rehabilitation services according to consumer need.
- 3.3** In line with the Department of Health expansion of virtual care, enhance digital health approaches to improve the utilisation of clinical applications to enhance the delivery of cardiac rehabilitation.
- 3.4** Partner with primary care stakeholders and the community arm of the Tasmanian Cardiac Network to strengthen referral pathways facilitating access to cardiac rehabilitation services.
- 3.5** Continue to work with palliative care providers and heart failure services to promote greater integration and coordination of services. This will facilitate early referrals to palliative care providers and promote the provision of a holistic and patient centred approach to end of life care for those living with end stage chronic heart failure.



4. Research and data

Adopting translational research and data into evidence-based service system improvements is vital to positively affect patient outcomes. Investing in opportunities to identify and deliver clinical advancements in the prevention and/or treatment of heart disease, we can improve positive outcomes in primary prevention, acute and secondary care, rehabilitation and beyond.

We will:

- 4.1** Through the Cardiovascular Research Flagship, work with the Menzies Institute for Medical Research to implement research findings on developing, implementing, and evaluating interventions to improve the cardiovascular health of all Tasmanians.
- 4.2** Engage rural and remote areas to participate in clinical trials.
- 4.3** Ensure Tasmanian hospitals performing interventional services participate in the Victorian Cardiac Outcome Registry and the National Cardiac Registry to monitor, evaluate and identify areas for ongoing improvement in patient outcomes.
- 4.4** Develop a statewide approach to streamline data capture and reporting for outpatients, echocardiography and other non-interventional services to better understand current activity and future demand to inform service development and improvement activities.
- 4.5** Develop a coordinated approach to Department of Health and Tasmanian Health Service data collection to support integration and linkage of data sets to improve quality and access to meaningful clinical information.
- 4.6** Improve research translation and implementation of evidence-based practice through ongoing evaluation and updating of government policy and clinical guidelines.



Image: RHH Cardiac Catheterisation Laboratory

Hospital infrastructure

Based on what we know about Tasmania's heart health and our projected population changes, we expect to see an increased demand for cardiac care services in our hospitals over the next five to ten years, with more people needing overnight and multi-day hospital stays for cardiac-related events, more interventional cardiac procedures, more diagnostic services, and more cardiac rehabilitation services.

Through this strategy we are targeting a number of initiatives to stem this growth and reduce the impact on people's lives and the health system, by focusing on prevention, early detection, diagnosis, and intervention. Advances in technology, more nurse-led clinics and new models of care will be used to optimise patient outcomes and strengthen the delivery of cardiac services.

Infrastructure and facilities upgrades will also be required to meet the current service requirements and the expected growth in demand for acute hospital services, with another public cardiac catheterisation laboratory (cath lab) required in both the Royal Hobart Hospital and Launceston General Hospital in the next five years. More outpatient, community-based, Care@Home, and virtual care services will be needed to complement these hospital-based services.

Southern Tasmania

As Tasmania's Level 6 service, the Royal Hobart Hospital (RHH) provides general public cardiac services for people in Southern Tasmania as well as specialist cardiac services for all Tasmanians.

To meet expected growth in demand, the RHH will need access to an additional 2,009 bed days for patients admitted to hospital for cardiology, cardiothoracic surgery, and interventional cardiology services by 2028 (same day and overnight admissions), representing a 17% increase in demand. It is not expected that additional infrastructure (hospital beds) will be required at the RHH to meet this need.

We will deliver additional bed days in multiple ways, including through our investments in subacute capacity to free up acute beds, more Hospital@Home and virtual care services, increasing efficiency and doing more day cases.

However, by 2033 an additional 4,521 total bed days is projected to be required (37% increase), which may have infrastructure implications and will be considered as part of future infrastructure planning for the RHH.

Access to additional cath lab capacity is also required, with demand for cath lab procedures, including expansion of TAVI and EP services, expected to grow by 8% from 2023 to 2025, 19.2% to 2028 and 29.2% to 2033. The RHH currently partners with the Hobart Private Hospital for onsite access to a cath lab to manage capacity surges and patient flow. However, the projected growth in demand over the next ten years, indicates the need for access to additional cath lab capacity at the RHH, with additional dedicated recovery and holding bays.

Northern Heart Centre

The Launceston General Hospital (LGH), North West Regional Hospital (NWRH) and Mersey Community Hospital (MCH) provide general cardiology services for their respective population catchment areas. Most interventional cardiology services are able to be provided to the people of North and North West of Tasmania at the LGH. More complex interventional procedures, and cardiothoracic surgery are provided as a statewide service from the RHH, with support from private and interstate providers when needed.

To meet service requirements now and into the future, the Australian and Tasmanian Governments have partnered to build new facilities at the LGH as part of the Hospital Masterplan, to enable expansion of cardiac service capability for the region. The new Northern Heart Centre will provide Level 5 cardiac services and include:

- A new cardiology care unit with additional inpatient cardiac ward beds, and a dedicated coronary care unit.

- Two cardiac cath labs with dedicated recovery and holding bays enabling direct access for patients requiring procedures (bypassing the ED).
- Dedicated diagnostic testing for echocardiography and outpatient services, with five echocardiography testing rooms, one exercise testing room and six outpatient consultation rooms.
- Direct access to the Intensive Care Unit, ED, and medical imaging.



Health facility planning and delivery

The Tasmanian Cardiac Network will work closely with the Department of Health to provide advice on infrastructure planning and design to enable the delivery of high quality cardiac care to Tasmanian communities.

Over the life of this Strategy, advances in technology and new models of care will impact on how we deliver services into the future. Through the Department of Health's planning cycles, we will continue review and where needed update our service projections to reflect these changes.

This ongoing capacity planning and forecasting is a critical input into the infrastructure planning cycle, ensuring investment decisions are targeted appropriately and that health facilities are fit for purpose and match the service needs of the community.

Masterplanning Principles

- CONSUMER CENTRED**

 - Developments are informed by current and future health needs of the community.
 - Future buildings enable safe, contemporary, effective and efficient models of patient care and are designed to meet the accessibility needs of consumers, visitors and staff.
 - New facilities are designed to contribute to the process of healing and with regard to:
 - the safety, privacy, and dignity of patients, staff, and visitors
 - the diverse needs, values, and circumstances of consumers, including their race, religion, gender, age, sexual orientation, and any disability.
- FUNCTIONAL AND CONNECTED**

 - Developments improve the efficiency of operational relationships.
 - Clinical and support service zoning promotes connectivity, safety, and effectiveness.
 - Seamless patient journeys are facilitated.
 - Interprofessional connectivity and learning are supported.
- FLEXIBLE AND SUSTAINABLE**

 - Future buildings are inherently flexible and long life, able to respond to advances in healthcare, technology, new models of care and patient needs.
 - Developments deliver the required quality of design and contribute to wider environmental, social, and economic sustainability.
- DELIVERABLE**

 - Developments are affordable and achievable.
 - Coordinated and time-efficient build programs are able to be designed and delivered.
 - Construction works can be delivered while maintaining clinical functionality.
 - Service interruptions and impact on patients, staff, and visitors are considered in planning decisions.
- OPTIMISES USE OF TOTAL HEALTH SYSTEM RESOURCES**

 - Developments provide value for money.
 - Non-infrastructure solutions to service needs are considered.
 - Maximum benefit is derived from any previous investments.
 - Focus is given to whole-of-life rather than just initial capital costs.
 - Opportunities for partnership are pursued.

Health Facility Design Principles

There is strong evidence that well-designed hospitals and health services contribute to the healing processes, improve patient experience, support staff performance, recruitment, and retention, improve efficiency and reduce ongoing operating costs.

The following principles guide our approach to the design of all new health facilities and upgrades:

- The *Australasian Health Facility Guidelines (AustHFG)* are used as the basis for the planning and construction of new health facilities and the refurbishment of existing facilities.
- Co-design with patients, consumers, carers, and staff underpins our planning and design processes.
- The needs of people of diverse culture and linguistic backgrounds are sought and used to inform our planning and design process.
- Universal design is incorporated in all capital works projects to ensure health facilities are accessible to most people, regardless of age, disability, background or any other factors.
- All capital projects aim for best practice in environmental sustainability – reducing the cost of energy, water usage and to eliminate pollutants in our environment, especially greenhouse gas emissions, while supporting patient and staff safety and comfort.
- Infection control principles and standards are fundamental to the design of health facilities.
- Health facilities are designed to provide a safe and secure environment for patients, staff, contractors and visitors.

STRATEGIC ASSET MANAGEMENT PLAN 2021-2023 13



Workforce

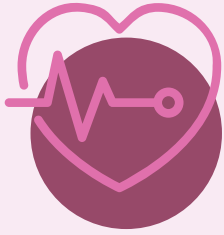
A highly trained and supported workforce is essential in providing Tasmanians with access to comprehensive and sustainable cardiac care that can meet the demands of our community. The Tasmanian Role Delineation Framework outlines the staffing requirements for the various levels of service provided at each Tasmanian hospital. Responding to changing demand for services will require innovative ways of working, expansion of existing roles and alternative models of care. This will require participation in nationally accredited training programs and access to ongoing education and professional development.

The Tasmanian Cardiac Network will continue to support operational workforce planning, aligned with Health Workforce 2040, to address evolving service needs and build a sustainable cardiac workforce.

The immediate priority for the Tasmanian Cardiac Network will be to provide advice and input into the operational workforce plan for the new Northern Heart Centre, the Tasmanian Government's investment into improving cardiac care services in Tasmania.

We will:

- Regularly review and update workforce models and plans, to ensure our workforce is ready and supported to deliver service expansions and enhanced models of care to meet future service demand.
- Develop the cardiac workforce through participation in nationally accredited training programs for specialist cardiology trainees, cardiac physiologists, nurses and allied health staff.
- Continue to build a well-educated and highly skilled workforce through strengthened partnerships with the University of Tasmania post-graduate qualifications in the cardiovascular speciality.
- Increase our nursing workforce capacity by supporting the well-established Clinical Nurse Consultant transition to Nurse Practitioner role to lead innovative ways of delivering alternative models of care.
- Ensure workforce levels align with nationally recognised CSANZ staffing recommendations.
- Through the Community arm of the Tasmanian Cardiac Network, develop a shared care model that targets GPs in rural and remote areas of Tasmania to improve access to cardiac care.



Expansion of the cardiac nurse practitioner service

The cardiac nurse practitioner service has expanded in Tasmania to ensure that patients have better access to specialised healthcare. The cardiac nurse practitioner traditionally follows up patients who were recently admitted in hospital for heart failure, and is expanding to include arrhythmia and lipid clinics.

From working with patients admitted by the cardiology team, the service now also manages heart failure patients referred from GPs, general medical physicians and private practice.

They also manage the prevention of secondary risk factors, particularly managing hypertension, dyslipidaemia (high cholesterol), valvular heart disease and arrhythmias.

The service has also expanded from outpatient clinics – which can be challenging for patients experiencing transport or financial difficulties – to outreach clinics in New Norfolk, Bridgewater and Sorell. There is also now a home-visit service for patients at high risk of heart-failure hospitalisation or experiencing transport challenges.

The objective is to improve quality of life, increase life expectancy, and reduce re-hospitalisation. The impact is already noticeable, with 30-day re-admission falling from 24% in 2018 to 7.8% in 2023 (67% reduction). This reduction equates to 118 bed days per month that are now not being occupied by heart failure patients – which can now be used to facilitate elective surgery and for patients in the emergency department.

There are now also nurse-led lipid clinics to improve access to the management and treatment of dyslipidaemia (high cholesterol) in high-risk individuals. This will ultimately reduce premature coronary artery disease, and prevent patients who have had a coronary event from having another. The nurse-led lipid clinic has already seen over 150 patients in the last year. The service also includes nurse practitioner candidates, who receive mentorship in the use of diagnostic tools and in developing advanced clinical assessment and care plans.

Congratulations to the cardiac nurse practitioner service for this amazing achievement! We thank all our teams for their fantastic care that makes a huge difference to the health and well-being of Tasmanians.



Digital technology

Information technology plays an important role in our health care system. The Digital Health Transformation – Improving Patient Outcomes strategy (May 2022) describes the initiatives that will help achieve an integrated health care system that will assist Tasmanians access the services they need, when they need them.

Virtual care will play an important role in the future of cardiac services in Tasmania. Increasing the modalities in which patients, clinicians and staff can meet and communicate, will reduce the need for unnecessary travel and reduce the length of inpatient stays, meaning less time in hospital and more care in the community setting.

Optimising how we work by improving the way clinicians (GPs, clinicians, allied health professionals, community services) communicate and share information across care settings and patients, integrating care platforms to simplify processes, reducing duplication and triage time, and enabling more timely communication, will result in a more streamlined experience for patients and clinicians alike. The introduction of eReferrals, Statewide Referral Criteria, the Digital Outpatient Management System and an Electronic Medical Record are all key components to realise this goal.

Harnessing technological innovations, proven heart health technology and Artificial Intelligence (AI) can significantly contribute to improved patient care and outcomes. Telemedicine, remote

monitoring, implantables, genomic medicine, advanced decision support tools and mobile applications for monitoring and management have all become more prevalent in modern healthcare. Advancements in AI assisting with diagnosis and risk prediction, image analysis, personalised treatment planning, monitoring and telemedicine are occurring across the world. Technology and AI is becoming more prevalent in health care and has the potential to transform the sector by increasing efficiency, enhancing clinical decision making and improving patient outcomes. Addressing challenges relating to data privacy, compliance and integration will require clinicians and policy makers to work together to ensure patient safety and equitable access to AI innovations.

Specific actions that the Department of Health will pursue over the next five years are:

- Upgrade cardiac Picture Archiving Communication Systems to enable the rapid electronic transfer of images between services.
- Continue to adopt innovative models of care in line with the Digital Health Strategy to implement virtual care, telehealth, eReferral, Statewide Referral Criteria and digital outpatient management systems and other IT based solutions to provide contemporary cardiac care to all Tasmanians.

Delivering change

The Tasmanian Cardiac Network is the key clinical advisory group for statewide cardiac services. It brings together leaders from across the state including doctors, allied health professionals, nurses and researchers and includes representatives from public and private service providers, the Heart Foundation and Primary Health Tasmania. The Network provides high-level leadership, expertise and specialist clinical advice to the Department of Health, service providers, clinicians and other stakeholders to promote optimal health outcomes for patients with cardiac conditions in Tasmania.

Each year, the Department of Health, will oversee and lead the development and implementation of an action plan to deliver on this strategy. Action plans will describe which priorities are to be addressed and the specific actions to be taken. The identification of annual priorities will require a considered approach which balances need, resource availability and necessary funding. To ensure the priorities and actions contained within the Strategy remain relevant, we will conduct annual reviews and updates to ensure it reflects the most up to date information regarding the Tasmanian community's heart health needs.

Action plans will consider the entire Tasmanian public service system and may involve reconfiguring services and developing new models of care. We will do this by fostering health service partnerships and relationships based on patient needs.

Monitoring progress

An evaluation plan incorporating our key principles will be developed to assess how we have performed each year against the priorities and actions detailed in our annual plans. It will include specific indicators to measure progress, and we will take learnings and apply them to future plans to maximise the potential for successful change. Activity and performance targets for THS providers will be set annually as part of the THS Service Plan and will reflect the anticipated improvement we expect to see.

The Department of Health will regularly report against progress of the annual action plans.

A collaborative approach

Collaborating with stakeholders from all stages of the patient journey allows us to better understand the lived experience of consumers and service providers during the heart health continuum of care.

We will listen to, and apply, their input and ideas around service improvement and develop and refine strategies to enhance services, respond to current service pressures and create models of care that place patients at the core.

We will work with our partners and leverage existing investments and services to deliver care that is easy to access and navigate, and listen to and learn from, people who have lived experienced of heart disease to improve the way we design health services. We will take their unique perspectives of the complex realities of living with heart disease to better understand the challenges they face, from treatment decisions and managing lifestyle modifications, to coping mechanisms and navigating the health system.

We will:

- Work with the **Heart Foundation** to create a holistic approach to, and increase community awareness of, cardiac wellbeing and increase rehabilitation services in community and acute environments by utilising codesign principles to develop statewide models of care.
- Engage with key stakeholders **including consumers and clinicians** to understand challenges accessing and engaging cardiac care with communities who face barriers in accessing services including people living in lower socio-economic indexed areas, culturally and linguistically diverse, LGBTIQ+, people living in rural and remote areas, people with a disability, Aboriginal and Torres Strait Islander people, those experiencing homeless and people with health literacy challenges.
- Improve coordination and communication between **primary health providers** (GPs) and the THS, to enable patients to be managed in the community, for longer; improve the transfer of care from GPs to specialists back to GPs and to improve access to high quality specialist care when needed.
- Utilise existing relationships with **GPs, Primary Health Tasmania and the community arm of the Tasmanian Cardiac Network** to progress community initiatives and education programs (e.g. managing hypertension) and strengthen services in rural and remote areas, including regional hospitals, by providing specialist outreach clinics such as atrial fibrillation clinics.
- Build and strengthen existing partnerships with **public and private providers** to support the public sector deliver interventional and non-interventional services throughout the whole patient journey.

Preventing heart disease





Preventing heart disease

Heart disease is largely preventable. Eating well, being physically active, not using tobacco products and limiting alcohol improves health and reduces the risk of heart disease as well as other chronic conditions.

There is a close relationship between people's health and the circumstances in which they live, work, play, grow and age, known as the wider 'determinants of health'. These include factors such as education, employment, income, social inclusion, housing, geographical location and how liveable the community is.

Preventive health is the term for activities that help protect, promote and maintain health and wellbeing. Preventive action can:

- Occur at different points along the continuum of disease progression in healthy populations; in those recognised as being at an increased risk of developing chronic conditions, and in individuals displaying early signs of a chronic condition or those experiencing long-term and persistent chronic conditions;
- Occur across the life course – from conception and birth, for infants, throughout childhood, adolescence, adulthood and into older age;
- Take place in different settings – childcare centres and schools, workplaces and the urban environment, as well as more traditional health service locations; and

- Be undertaken by individuals, families, community organisations, employers, private health insurers, non-government organisations, industry and different sectors and levels of government.

Healthy Tasmania Five-Year Strategic Plan 2022-2026 is a plan for preventive health in Tasmania, creating environments, settings and services that will support Tasmanians to live longer and healthier lives. The Strategy focuses on actions to support Tasmanians to be more connected in their communities, have positive mental health and wellbeing, limit harmful alcohol use, be smoke free, eat well, and live more active lives. To keep the Strategy adaptive and relevant to changing circumstances, environments, and trends, we will also create action plans to implement the Strategy. These plans will update and expand on what we've learned from the current *Healthy Tasmania Five-Year Strategic Plan 2022-2026* and other relevant initiatives.

Through the *Healthy Tasmania Five-Year Strategic Plan 2022–2026*, the Tasmanian Department of Health delivers and funds a number of initiatives that help people live healthy lives.

INITIATIVES	
The Healthy Tasmania Fund	A grants program that supports community action on health and wellbeing in Tasmania. There are four grant streams: Step Forward, Lift Local, Healthy Focus and Healthy Together.
Heart Foundation Walking Program	The Heart Foundation Walking program supports Tasmanians to be more active by joining a free walking group or by setting up a walking plan.
Eat Well Tasmania – What’s in Season	This social marketing campaign promotes the value of local, seasonal food in Tasmania. Eat Well Tasmania partners with community houses, farmers markets and other community organisations to spread the message.
Back On Your Bike	Bicycle Network Tasmania’s Back on Your Bike program aims to enable more adults to safely ride bikes more often for physical activity and mental health. Back on Your Bike provides small group sessions teaching basic riding skills, road safety, route planning and bike maintenance.
Huon Valley Food Hub	This is a nationally recognised program to develop a community food hub to improve access to affordable and nutritious food and stimulate economic activity in the Huon Valley region.
Makara patapa/Stop smoking	This program aims to reduce smoking rates in the Tasmanian Aboriginal community. The program provides personalised and culturally appropriate smoking cessation support for people using Tasmanian Aboriginal Centre Services, including the Aboriginal Health Service.
Hello Sunday Morning	Through a social media campaign, the project will target women who drink at levels that may cause harm, encouraging them to download the Daybreak app. Daybreak offers women a safe, anonymous, free and non-judgemental entry point to access support to manage their own drinking.

From the Heart Foundation

Coronary heart disease remains the leading cause of death in Australia – accounting for more than 18,000 deaths each year. If nothing changes, Australia can expect to see 1.37 million individuals experience a cardiovascular disease (CVD) event from 2020–2029, resulting in \$62 billion in healthcare costs and \$79 billion in indirect costs. Failure to prevent the growing burden of CVD and associated chronic conditions threatens both our health system and our length and quality of life.

To respond to this urgent need, the Heart Foundation is investing in and implementing a long-term, co-ordinated and collaborative approach to drive research, innovation and translation in CVD in Australia. Vision 2050 is the Heart Foundation's aspiration for improving heart health and preventing CVD for all people in Australia over the next 25 years.

To ensure aspirations are locally relevant, focused and inclusive, stakeholders from each state and territory are providing input. The initial opportunity for feedback was at a multidisciplinary meeting held on 30 May 2024 in Hobart. The meeting was attended by stakeholders ranging from health professionals to cardiac researchers.

In the latter part of 2024, there will be a consultation survey on high level priorities, a horizon scan of what is emerging in the world of cardiovascular health and disease and an iterative development of the Heart Foundation's Vision statement and first five-year strategy.



In partnership with
**Heart
Foundation**

The Tasmanian Government is partnering with the Heart Foundation with the four-year *Healthy Hearts for Tasmania* project. This partnership will improve rehabilitation services in Tasmania, through evidence-based and menu-based comprehensive programs to facilitate recovery, avoid disease progression and readmission and maximise quality of life.

The Tasmanian Government supports the Heart Foundation's *Give with Heart* campaign, and the expanding *Jump Rope for Heart* program in schools. To encourage Tasmanians, especially those from lower socioeconomic communities, to get more exercise, the Tasmanian Government has also invested in the Heart Foundation's National Walking Program.

Later this year, the Tasmanian Health Service, the Heart Foundation and the University of Tasmania will embark on a research and outreach project to improve the outcomes of out-of-hospital cardiac arrest.



Our heart health



Our heart health

The following data comes from trusted sources and is the most current at the time of writing. These include:

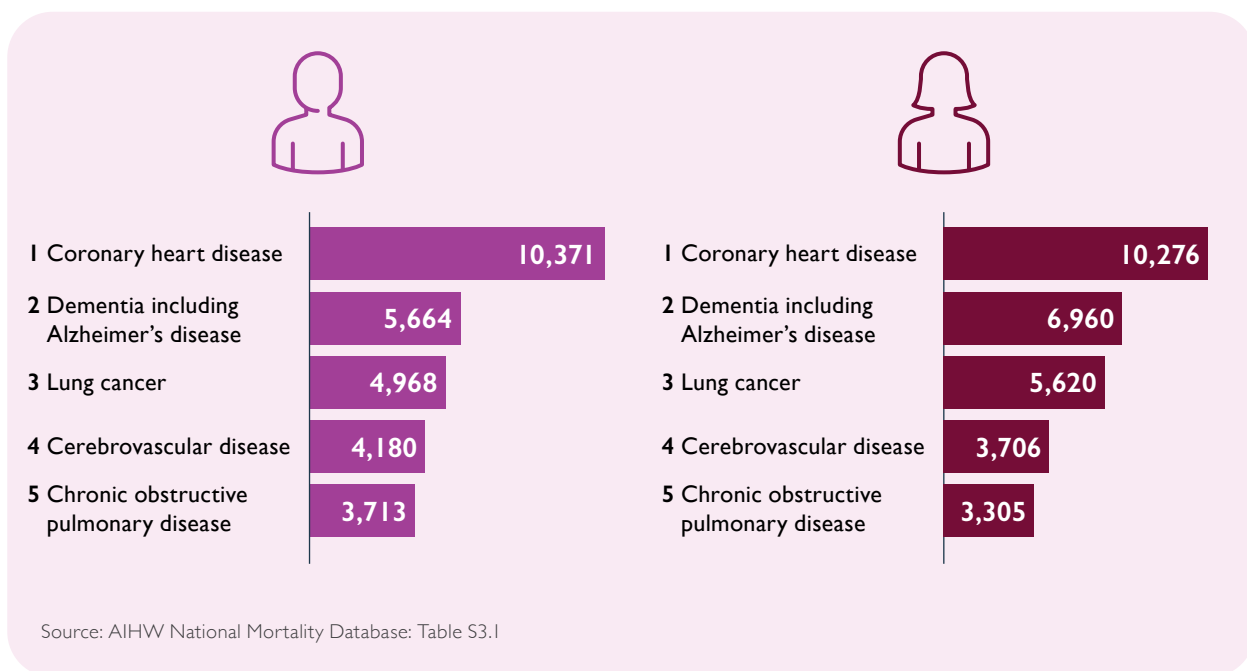
- Tasmanian Population Health Survey 2022
- Australian Bureau of Statistics (ABS) data, including the National Health Survey 2022
- Australian Institute of Health and Welfare (AIHW) publications and other reports
- Heart Foundation

While heart disease has long been the leading cause of death in Australia, the percentage of deaths attributed to it is decreasingⁱ. Improvements in early diagnosis and intervention, pharmacology and other medical technology may all contribute to the improved survival rate. Despite the decline in death rate, prevalence of heart disease is on the rise. More people may be surviving acute events, but an increasing number of people are living with chronic heart conditions, particularly those associated with aging and other chronic diseases.

The AIHW reports that in 2021, coronary heart disease was the leading cause for death in males and the second leading cause of death for females in Australia.

It is estimated that the number of acute coronary events (including heart attack and unstable angina) was 56,700 among people aged 25 and over – equivalent to around 155 events every day. Around 12% of these events (6,900 cases) resulted in deathⁱⁱ.

In 2020–21 there were 160,000 hospitalisations where coronary heart disease was recorded as the principal diagnosis, equivalent to 1.4% of all hospitalisations. Of these, angina accounted for 22% (35,300 hospitalisations) and acute myocardial infarction (AMI) for 36% (57,100 hospitalisations).



Aboriginal and Torres Strait Islander people

Aboriginal and Torres Strait Islander people are more likely to die from coronary heart disease in Australia than non-Indigenous people. The AIHW reports that between 2017–21, while coronary heart disease was the leading cause of death for both Indigenous and non-Indigenous Australians, the age-standardised death rate for Indigenous Australians was twice as high as for non-Indigenous Australians. For diabetes it was 4.8 times as high and for Chronic Obstructive Pulmonary Disease (COPD) it was 3.2 times as highⁱⁱⁱ.

In 2020–21, there were around 5,400 hospitalisations with a principal diagnosis of coronary heart disease among Aboriginal and Torres Strait Islander people, a rate of 623 per 100,000 population. After adjusting for differences in the age structure of the populations:

- the rate of hospitalisation among Indigenous Australians was twice as high as the non-Indigenous rate
- the disparity between Indigenous and non-Indigenous Australians was greater for females than males – 3.1 times as high for females and 1.8 times as high for males^{iv}

Socioeconomic area

In 2020–21, hospitalisation rates for coronary heart disease were 1.2 times as high for people living in the lowest socioeconomic areas compared with those in the highest socioeconomic areas. The disparity was greater for females than males (1.4 and 1.1 times as high, respectively).

Remoteness area

In 2020–21, after adjusting for differences in the age structure of the populations, hospitalisation rates for coronary heart disease were around 1.5 times as high among those living in remote and very remote areas compared with those in major cities. This largely reflects disparities in female rates, which were twice as high in remote and very remote areas as in major cities – while male rates were 1.3 times as high.

People with comorbidities

Comorbidity is when two or more diseases/conditions occur in a person at the same time and can have a major impact on a person's general health and health outcomes. Disease comorbidity can occur by chance; however, diseases are often linked. Comorbidity is common in people with heart conditions and can result in treatment challenges, poorer health outcomes, lower quality of life and higher rates of mortality^v. The complexity of treating people with multiple diseases and conditions is considerable and presents significant challenges to the health system in both the acute and primary setting.

Based on self-reported data, the AIHW estimated that in 2017–18, around 82% of people who had heart, stroke and vascular disease, also had at least one other chronic condition: arthritis (49%); back problems (35%); mental and behavioural conditions (30%); diabetes mellitus, (23%); asthma (17%); osteoporosis (14%); chronic obstructive pulmonary disease (10%); cancer (7.1%); and kidney disease (6.6%).



In Tasmania

In 2022, heart disease was the leading cause of death in Tasmania with coronary heart disease attributed to almost 10% of underlying causes of death, equating to 553 Tasmanians dying from coronary heart disease in 2022 (344 males, 209 females)^{vi}. Tasmania's rate of death from coronary heart disease is above the national average, with 74 people per 100,000 dying from heart disease between 2012 and 2020^{vii, viii}.

Nearly 1 in 5 Indigenous Australians in Tasmania (18% or an estimated 5,000) had a heart or cardiovascular condition in 2018–19. This is a similar proportion to the prevalence of cardiovascular conditions among Indigenous Australians nationally (16%) (NATSIHS 2018–19).^{ix}

Tasmania has a high proportion of its population living in areas of socio-economic disadvantage. In the 2016 Census, Tasmania had the lowest proportion of people living in the most advantaged areas (4.6%) and the highest proportion of people living in the most disadvantaged areas (37%). In general, people from lower socioeconomic groups are at greater risk of poor health, have higher rates of illness, disability and death, and live shorter lives than those from higher groups^x.

We know that on average, people in lower socio-economic groups are more likely to have key risk factors that contribute to the likelihood of being affected by heart disease, including:

- smoking
- high blood pressure
- insufficient exercise
- obesity

The prevalence of these four risk factors in Tasmania is higher than the national average with Tasmania's rate of obesity the worst in Australia^{xi}. The West and North West of the state have the highest rate of disease mortality and prevalence of all risk factors, followed by Launceston/North East and lastly, Hobart/South East.

Heart related hospital admissions (2012–2016)

ASR (per 10,000 persons)

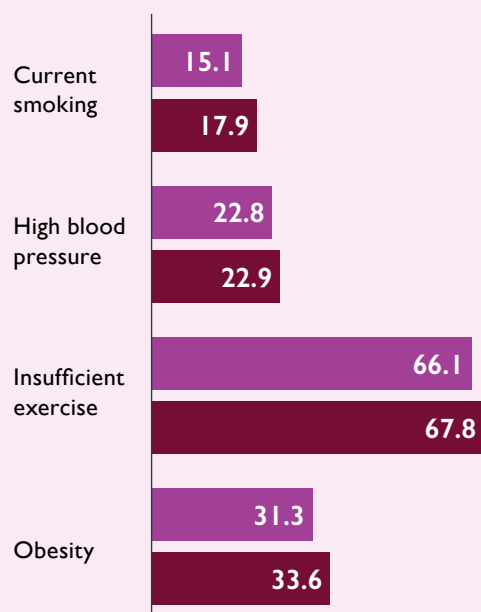


Coronary heart disease mortality (2012–2020)

ASR (per 100,000 persons)



Prevalence of risk factors (%)



Source: The Heart Foundation^{xii}

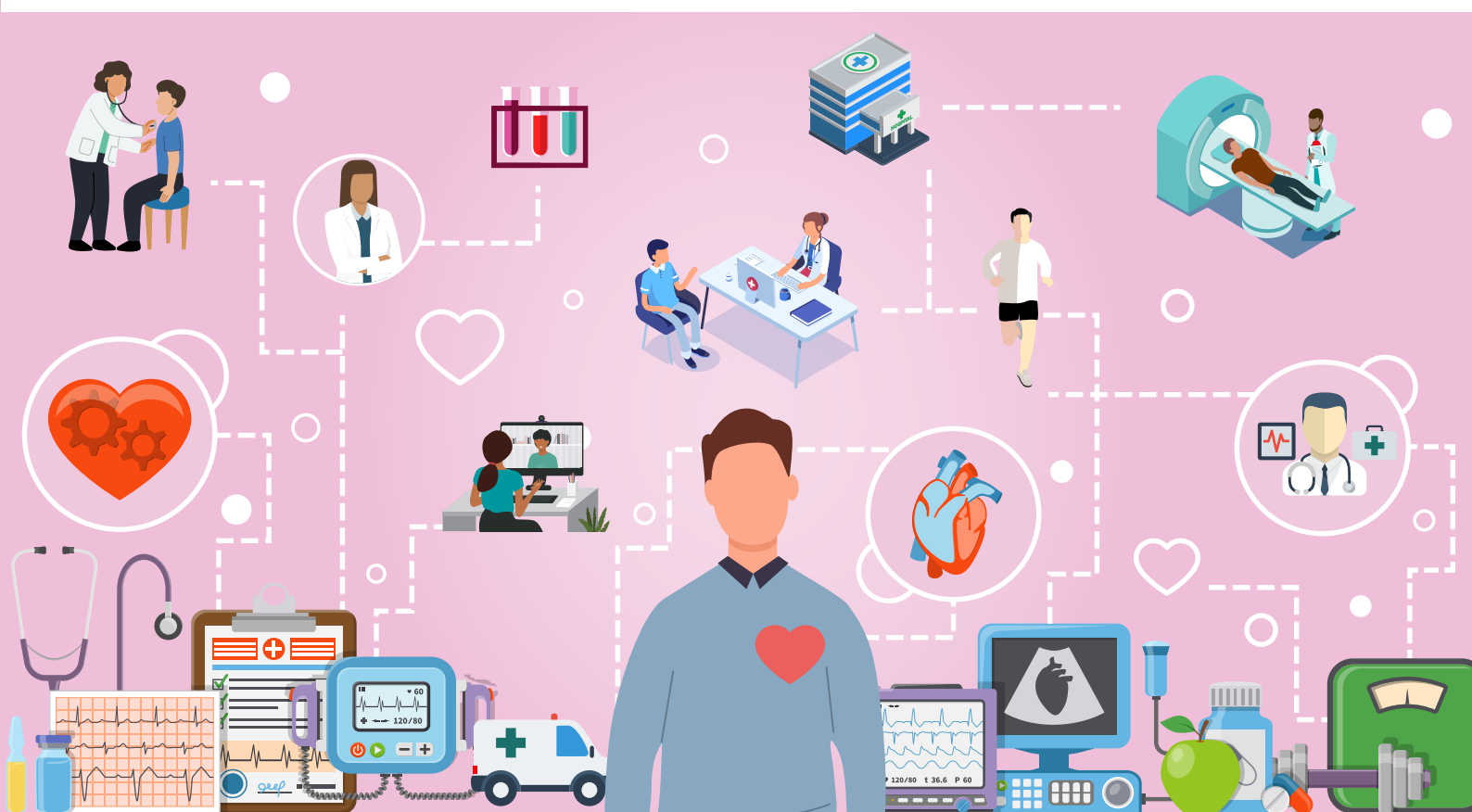
● National ● Tasmania

Cardiac care services in Tasmania



Cardiac care services in Tasmania

Recognising the role of the various healthcare providers across the continuum of care, and a collaborative approach to care across sectors and specialties, is essential to providing high quality, appropriate, and well-coordinated care. During the heart health journey, a patient may come into contact with primary care, GPs, emergency services, the acute care hospital environment, specialist outpatient clinics and palliative services. These services span public and private sectors and multiple regions, heightening the need for well-integrated health services even further.



Primary care

Primary health care professionals, including GPs, practice nurses, nurse practitioners and Aboriginal and Torres Strait Islander health workers, are often the first point-of-care for people who have non-acute heart disease. Primary care providers work within communities, deal with all aspects of physical and mental health, provide care through all stages of life and consider patients within their social, cultural and environmental contexts.

As the typical first point of contact in the health system, and through their role in providing and coordinating ongoing care, primary care health professionals provide a range of services to support people identify, treat and manage cardiovascular risks and problems. Common actions by primary health care professionals include undertaking preventative health assessments, prescribing medicines, ordering pathology or imaging tests, and referral to specialists.^{xiii}

The Tasmanian Health Service

The Tasmanian Health Service (THS) provides a wide range of services to people living with heart disease through primary health care facilities, acute care hospitals and outpatient services. Inpatient cardiac care is provided by almost every public hospital in Tasmania, however the range and scope of services in each location vary. The highest level of specialised cardiac care for adults is provided by the Royal Hobart Hospital (RHH) and includes an inpatient coronary care unit and ward, cardiac surgery, and cardiac catheterisation laboratories. Launceston General Hospital (LGH) provide the second highest level of care followed by the North West Regional Hospital (NWRH) and Mersey Community Hospital (MCH) respectively. Four private hospitals across the state provide a mix of emergency and elective procedures and clinics, with cardiac surgery provided in one location.

While most cardiac related services are provided within the public health system, some services are provided in partnership with the private sector or in some cases, due to the highly specialised nature, in partnership with interstate providers. For example, some outpatient paediatric cardiology services are provided from the RHH however, cases requiring highly specialised care are managed via interstate partnerships with the Royal Melbourne Children's Hospital. Strengthening our relationships with

interstate partners is an important component to ensuring the Tasmanian community can access the services they need.

While the Tasmanian public can access services from a facility outside of their home region, specialised cardiac services are generally physically located in major regional centres, making accessibility more challenging for those living remotely. As people living in remote and very remote regions have higher rates of coronary heart disease mortality, reducing this inequity by increasing the availability of key services in more locations and strengthening clinical and consumer engagement and service integration across the care continuum, forms an important part of addressing this issue^{xiv}.

** Further detail regarding the level of cardiac service provision in each region can be found in [Regional Clinical Services Profiles and the Tasmanian Role Delineation Framework \(ref \[Internal medicine services\]\(#\) | \[Tasmanian Department of Health\]\(#\)\)](#).*

** Note: Some general outpatient clinics are provided via an in-reach model, in various locations across the State.*

Access and flow

Access and flow, the ability for patients to receive the care they need, in the right place, at the right time, spans both community and hospital environments. We know that many Tasmanians face challenges accessing services which can cause added stress for patients, their families, and carers, and may result in negative health outcomes.

The THS responds to time critical intra-hospital transfers within national expected time frames across all regions; this can be attributed to the successful implementation of the Tasmanian STEMI program.

However, there is opportunity to enhance existing models of care in the North and North West to support timely access to treatment for non-critical transfers. Through system wide collaboration, we will make accessing cardiac services easier and more timely, by increasing the number of cardiac inpatient beds, improving intra-hospital transport services, and increasing catheterisation laboratory capacity. This will result in reduced emergency department length of stay and shortened access to treatment times, maximising the potential for positive patient outcomes.

Ambulance Tasmania

Ambulance services provide a critical role in the care of cardiac patients including administering thrombolysis and hospital pre-notification of time critical patients. From July 2023 to June 2024, Ambulance Tasmania responded to 16,045 call outs to patients reporting cardiac symptoms including cardiac arrest, chest pain and angina. This represents 19.8% of all Ambulance Tasmania call outs in the same period. In 2021–22 Ambulance Tasmania achieved a cardiac arrest survival rate (for paramedic witnessed arrests) of 57.1% - almost 10% higher than the national average of 49.5%^{xiv}. It is estimated that demand for ambulance transports would increase by 2% on 2023 levels by 2028, 4% in 2033 and 7% in 2038.^{xv}

Emergency Department

Emergency Departments (EDs) act as a critical entry point to the health system and provide immediate care for people experiencing cardiac symptoms including chest pain, shortness of breath and palpitations. As well as EDs playing an important role in assessing, diagnosing, stabilising and treating these people, they also coordinate care, which may include hospital admission, follow up in the outpatient setting, provide patient education and refer to specialist services.

In 2023 the rate of ED cardiac related presentations per 1,000 population was substantially higher for residents of the North West & West Coast compared with other regions. However, there was little change for those residents compared with 2019, where other regions had increases above population-linked levels. The annual average above population increase for residents of the South was 4.1%, in the North 1.9% and 2.1% statewide.^{xv} There will also be a requirement for access to ED points of care of 1.9 in 2028, 3.7 in 2033 and 5.5 in 2038 for people with cardiac related presentations.^{xv}

Outpatient services

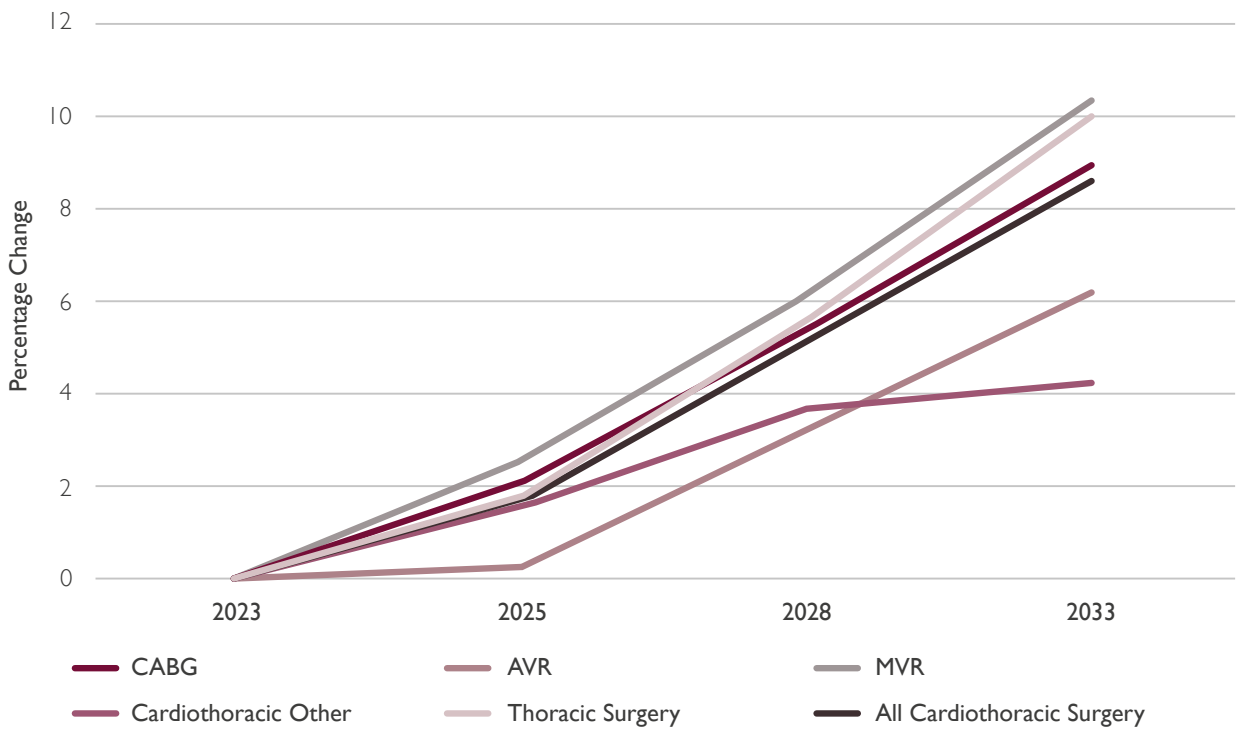
Outpatient clinics are an essential part of our healthcare system and provide a comprehensive range of specialist cardiology services across the state. Outpatient clinics are often a patient's first specialist contact point in their heart health journey. Through outpatient services, health professionals diagnose, manage chronic conditions, offer preventive healthcare, conduct diagnostics, facilitate follow-up care, and provide emergency services for non-life-threatening conditions.

Surgical services

As the Level 6 service, the RHH provides emergency and elective cardiac surgery to Tasmanians whose condition cannot be resolved by nonsurgical interventions. This includes coronary artery bypass, heart valve repair/replacements and aortic root procedures. Highly specialised and complex surgeries, including transplants, are provided by our interstate partners.

The percentage increase in overall cardiothoracic activity is presented in Figure I and demonstrates an increase in all procedure categories in 2025, 2028 and 2033. The strongest expected growth is projected for mitral valve replacement (MVR), thoracic surgery and coronary artery bypass graft surgery.

Figure I: Predicted increase in cardiothoracic surgery by procedure predictions, 2025–2033

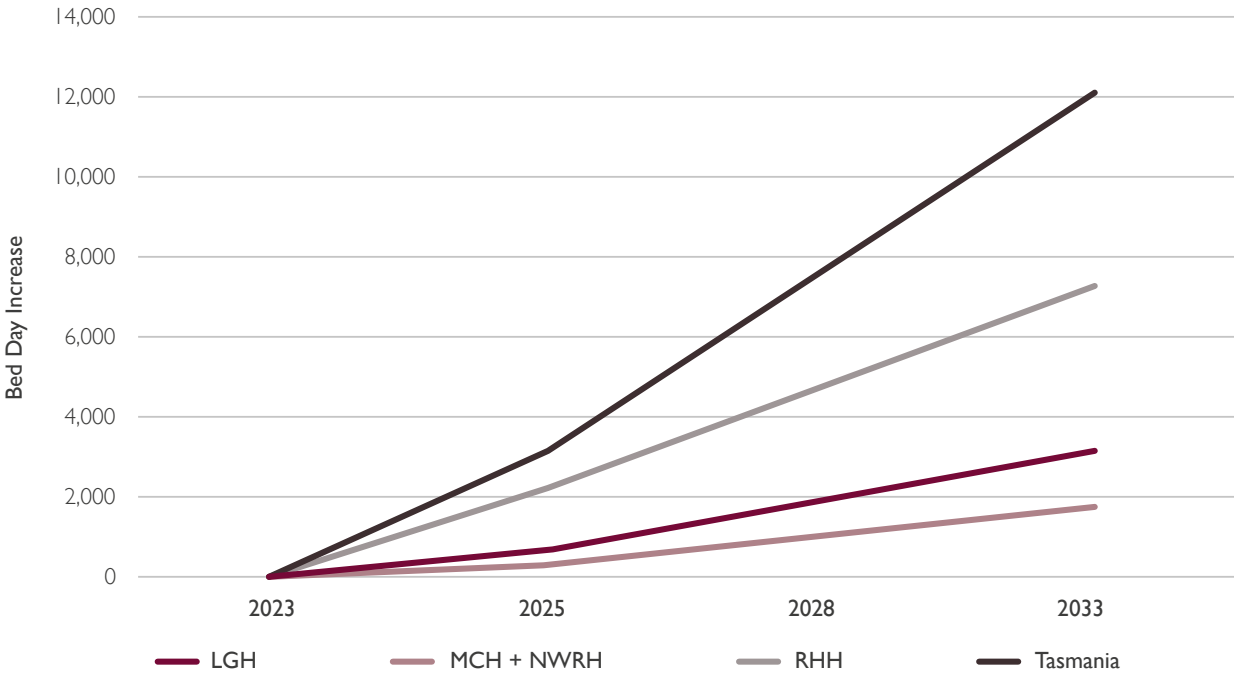


Inpatient services

The THS provides individualised, high acuity and inpatient care for adults requiring cardiac and thoracic surgical procedures, emergency and elective cardiac catheterisation, and specialised cardiology medical, nursing, cardiac rehabilitation and allied health services. Primary referral for admission into the service is from emergency departments, hospital transfer, surgical, outpatient clinics and elective admissions. Inpatient services are currently provided across the state and manage the acute cardiac patient cohort with over 33,200 bed days in 2023.

The projected increase in yearly overnight and same day bed days, by hospital, is presented in Figure 2. The strongest expected growth in demand is at the Royal Hobart Hospital.

Figure 2: Demand in overall overnight and same day bed days, by hospital

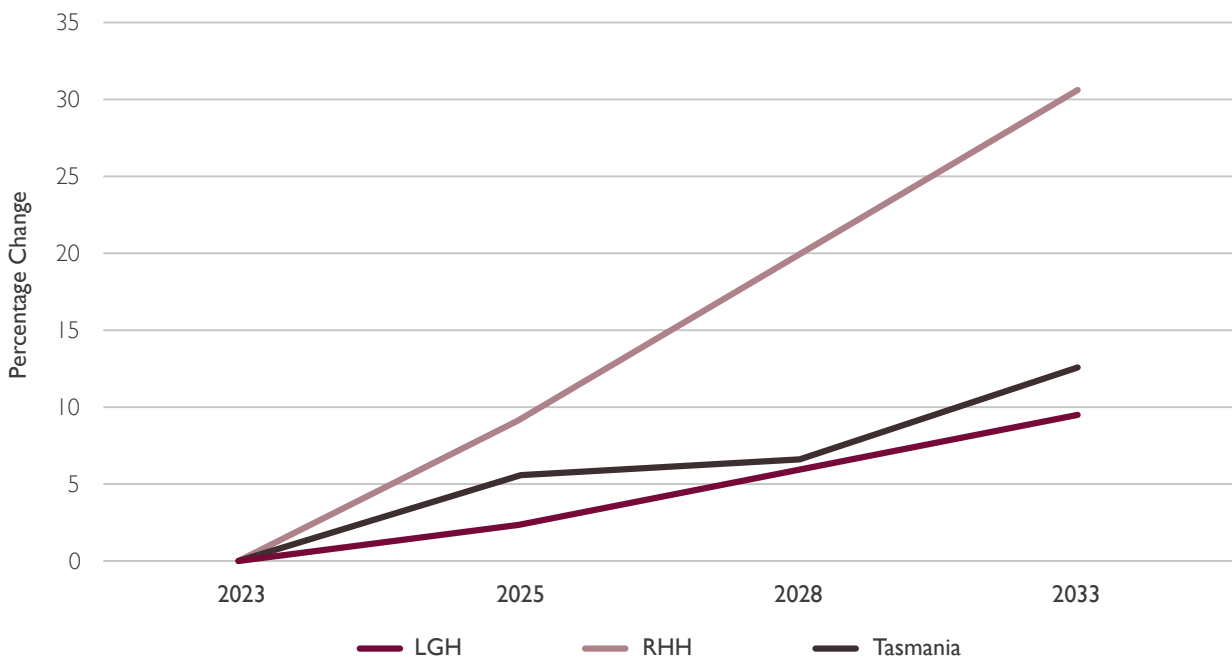


Interventional services

Interventional cardiac catheterisation procedures for diagnostic and therapeutic purposes are currently provided in the north and south of the state and are an integral part of managing and treating heart related conditions through minimally invasive techniques. Projected shifts in population distribution, age profile and prevalence of disease show increased demand for cardiac catheterisation procedures over the next ten years. While the percentage increase in ten years' time is similar across all regions, the south will see the largest growth in number of procedures. We know that access to catheterisation laboratories and interventional services is more difficult for those not living near our tertiary centres in Launceston and Hobart, and improving access to the locations in which this service is provided is a critical component to enhancing regional accessibility.

Figure 3 presents the predicted increase in total Cath Lab activity per hospital, RHH and LGH, and overall.

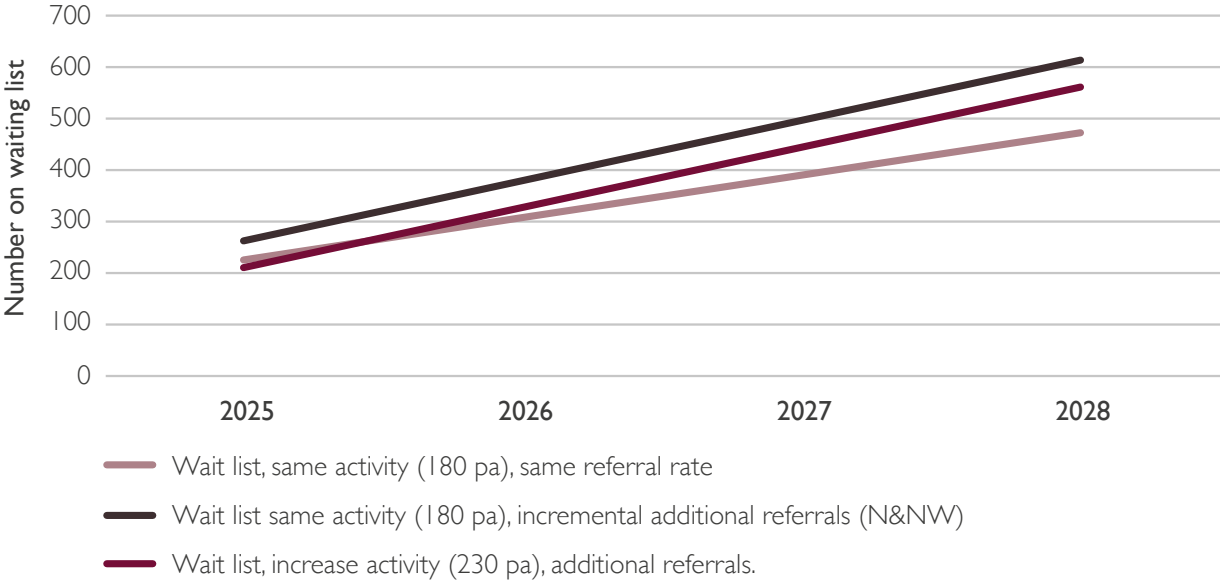
Figure 3: Projected change in predicted Cath Lab activity



Electrophysiological (EP ablation procedures)

As a developing statewide service, increasing additional referrals are expected from the North and North West regions. Figure 4 demonstrates the likely outcome of these ongoing and increasing demands with the current resource availability on activity and waiting lists.

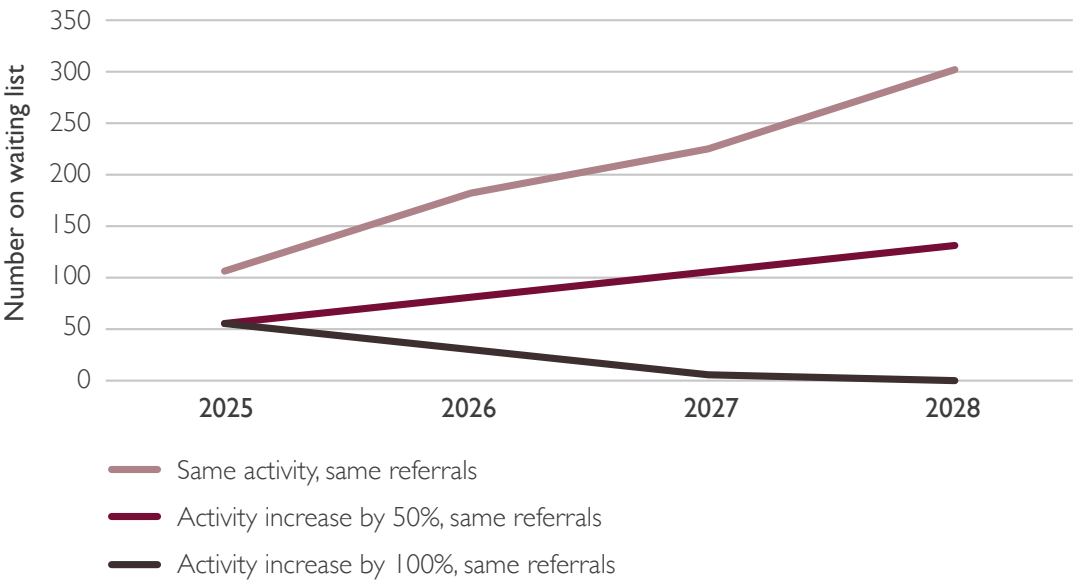
Figure 4: Projected change in EP waiting lists, 2025–2028, 3 scenarios



Transcatheter Aortic Valve Implantation (TAVI)

Demand is expected to grow with additional statewide referrals for TAVI procedures. Figure 5 presents three scenarios of these ongoing and increasing demands with the current resource availability on activity and waiting lists.

Figure 5: Projected change in TAVI waiting list, 2025–2028, 3 scenarios



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- xii <https://www.aihw.gov.au/reports/heart-stroke-vascular-diseases/hsvd-facts/contents/treatment-and-management/primary-health-care>
- xiii The Heart Foundation, Health indicators across Australia – Interactive Australian Heart Maps – Inequities (internet), [cited March 2024], available from [https://www.heartfoundation.org.au/health-professional-tools-\(2\)/interactive](https://www.heartfoundation.org.au/health-professional-tools-(2)/interactive)
- xiv (Productivity Commission Report on Government Services 2023)
- xv Cardiac, Cardiothoracic Surgery and Interventional Cardiology Activity Report (Tasmania Health Service), KP Health, August 2024.

Appendix

I. The Tasmanian Role Delineation Framework (TRDF) for Cardiology and Adult Cardiothoracic Services

Cardiology Services

A **Level 1** service provides low-acuity, ambulatory cardiac care to patients with non-urgent cardiac care needs. There are no inpatient services provided at this level.

A **Level 2** service provides a Level 1 service plus: Provides ambulatory cardiac services to patients with non-acute and / or urgent cardiac care needs. Service delivered in outpatient, community health and / or primary care settings. There are no inpatient services provided at this level.

A **Level 3** service provides a Level 2 service plus: Provides ambulatory and inpatient cardiac services to patients with urgent and non-acute care needs.

A **Level 4** service provides a Level 3 service plus: Provides inpatient cardiology care by a registered medical practitioner practicing in general medicine and/or non-interventional cardiologist.

A **Level 5** Cardiology service provides a Level 4 service plus: Provides a full range of cardiac services through a dedicated cardiology department including emergency services and on-site cardiac catheterisation laboratory. A Level 5 service caters for the complex cardiology medical care. The service is usually provided at a general hospital by a multi-disciplinary team available 24 hours and has a network referral role.

A **Level 6** Cardiology service provides a Level 5 service plus: Provides a full range of cardiac services through a dedicated cardiology department including emergency services and on-site cardiac catheterisation laboratory. A Level 6 service caters for the most complex cardiology medical care. The service is usually provided at a large referral hospital by a multi-disciplinary team available 24 hours and includes an interstate referral role.

Adult Cardiothoracic Services

A **Level 5** service provides low complexity, low risk non-acute cardiothoracic diagnosis and treatment services. Service scope may include thoracic surgical procedures.

A **Level 6** service provides services at Level 5 plus the service is able to deal with high complex diagnosis and treatment in association with other specialties. It has a statewide referral role, research role and undergraduate and post graduate teaching role.

A **Level 6** service in Tasmania does not provide heart and lung transplantation services or paediatric cardiac surgical services. They do not provide tracheal stenting, or surgical procedures, lung volume reduction surgeries and ventricular assist devices.

	Cardiology	Cardiothoracic Surgery
South		
RHH	6	6
Hobart Repat	-	-
New Norfolk	1	-
Midlands MPC	3	-
May Shaw	1	-
Tasman MPHC	1	-
Esperance	1	-
North		
LGH	5	-
St Helens	3	-
Deloraine	3	-
George Town	3	-
Scottsdale	3	-
Beaconsfield	1	-
Campbell Town	1	-
Flinders Island	3	-
St Mary's	1	-
North West		
NWRH	4	-
MCH	3	-
Smithton	3	-
King Island	3	-
West Coast	3	-

