

Cardiac care capability framework

DRAFT FOR CONSULTATION

April 2019

Draft for consultation

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About this document

The *Statewide design, service and infrastructure plan for Victoria's health system 2017-2037*¹ sets clear directions and priorities for the design of Victoria's health system. It encourages the planning and development of services, to ensure that all Victorians can access high quality health services, in the right place, at the right time.

In line with the Statewide Plan, and the recommendations of *Targeting zero: report of the review of hospital safety and quality assurance in Victoria*², the Department of Health and Human Services (the department) is developing four new capability frameworks for the following clinical services streams:

- Cardiac care
- Renal care
- Surgery and procedural care
- Urgent, emergency and trauma care.

These capability frameworks have two components:

1. **Service descriptors** that describe the scope of services and the complexity that is managed at each level of service, and
2. **Service requirements**, or the workforce skills, infrastructure and equipment, clinical support services and clinical governance that is needed to consistently deliver the scope of services described at each level in the capability framework³.

The capability frameworks are designed to describe what the scope of services *should be* at each level within each clinical service stream – not what currently exists within the service system.

In February 2019, the department invited feedback on the draft service descriptors for each of the clinical service streams listed above. We received feedback from public health services, professional associations, peak bodies, clinicians and other key stakeholders. The draft service descriptors have been updated in response to the feedback received.

This document contains the revised draft service descriptors, together with the draft service requirements for each level in each of the four clinical service streams. We are now seeking your feedback on the service requirements that support the service descriptors for each of the four clinical service streams. More information on how you can provide feedback is outlined below.

Development process and next steps

These draft capability frameworks have been developed based on extensive research and consultation. This has included research and reviews of capability frameworks in other states and territories; clinical guidelines, policies and procedures issued by professional associations and other key organisations (e.g. the Royal Australasian College of Surgeons (RACS)); a range of government documents (e.g. Targeting Zero); published peer reviewed literature; reports and recommendations from the Victorian Auditor-General's Office; case reviews (e.g. coronial inquests and coroner's reports); input from senior clinicians and clinical care networks; and input from health service executives.

¹ Department of Health and Human Services (2017) *Statewide design, service and infrastructure plan for Victoria's health system 2017–2037*, State Government of Victoria, Melbourne.

² Duckett S (2016) *Targeting zero: report of the Review of Hospital Safety and Quality Assurance in Victoria*, State Government of Victoria, Melbourne available from <https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/hospital-safety-and-quality-review>

³ In this document, the term 'capability framework' is used to describe both of these components – that is, the service descriptors as well as the service requirements that support them.

It is important to note that these documents are intended to be read by health service executives, managers and clinicians. At times the language is necessarily technical in nature. These documents are not primarily designed for consumers.

As these are consultation documents, they include some explanatory notes (provided in *blue italics*), footnotes and examples.

The capability frameworks should be read in conjunction with the Glossary at the end of this document. Key terms are used consistently throughout each of the four capability frameworks. For example, in the service requirements section of the capability frameworks, we talk about nurses or medical practitioners having *access to* particular services or being *available*. These terms mean different things, and the draft capability frameworks should be read in the context of how the terms have been defined in this document – refer to the example provided in the box below.

Term	Definition
Access	Refers to the ability to utilise resources, a service or the skills of a suitably qualified person without difficulty or delay (may be located on-site or off-site in accordance with requirements).
Available	Refers to the ability to immediately access and utilise resources, a service, or the skills of a suitably qualified person. In relation to workforce, an available staff member is formally on-call and can be immediately contacted to provide advice and/or deliver face-to-face care within the timeframes agreed by the health service.

The department is also developing capability frameworks for core services – that is, medical imaging; pathology; pharmacy; anaesthetics and intensive care. Consultation on these capability frameworks is underway and draft documents will be circulated for further consultation. The department will ensure that the final capability frameworks for the four new clinical service streams are consistent with the core capability frameworks.

Following the consultation period, the capability frameworks will be finalised and released to health services in June 2019, for implementation to begin from July 2019. More details on the implementation process will be available when the capability frameworks are finalised.

How to provide feedback

You are invited to provide feedback on the draft capability frameworks particularly on the service requirements. We are particularly interested in your feedback on the following consultation questions:

1. Do the service requirements capture all of the workforce, infrastructure and equipment, clinical support and clinical governance requirements that a health service will need to consistently maintain a particular capability level?
2. Are there service requirements (workforce competencies, infrastructure and equipment, clinical support services or clinical governance) that are missing?
3. Do you have any other feedback you would like to provide, or other issues you think should be considered in finalising the capability frameworks?

To provide your feedback, please email emergencyandtrauma@dhhs.vic.gov.au no later than **Monday 20 May 2019**.

If you have any queries or would like to discuss further, you can also contact Kerryn Rozenbergs, Manager, Admitted Care Policy on (03) 9096 1233 or via email to:

kerryn.rozenbergs@dhhs.vic.gov.au

The Cardiac Care capability framework

Cardiac investigations

In this draft framework, a subset of cardiac investigations have been grouped to assist health services to assess their service and the types of investigations they may safely support. However, as in all clinical situations, the individual circumstances of the facility, the operator and the patient must be assessed. This is not an exhaustive list and the risk of a particular investigation depends on many factors including the patient complexity, which is a clinical decision.

Low risk investigations	Medium risk investigations	High risk investigations
Electrocardiogram (ECG)	Transoesophageal Echocardiogram (TOE)	Complex electrophysiology studies
Echocardiogram	Diagnostic coronary angiography	Percutaneous Coronary Intervention (PCI)
Treadmill testing		

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Level 1 CARDIAC CARE

Service description

Service	Description
Complexity of care/ service role description	A level 1 service: <ul style="list-style-type: none"> provides partners with primary care (including community health) to deliver cardiac health promotion and risk reduction programs to adult and paediatric clients and the broader local community (e.g. smoking cessation initiatives and healthy eating education) refers and transfers all patients needing acute care to a higher-level service.
Emergency services	A level 1 service: <ul style="list-style-type: none"> provides basic life support (including use of an automatic external defibrillator) and facilitates urgent transfer to a higher-level service supports ambulance team (including ARV) to stabilise the patient prior to transfer, as required has guidelines for referral to general practitioner (GP), nearest emergency department, or urgent care centre for assessment. Has established protocols for transfer of patients requiring acute admission.
Assessment	A level 1 service: <ul style="list-style-type: none"> provides advice to patients regarding the warning signs of heart attack.
Prevention/ screening	A level 1 service: <ul style="list-style-type: none"> partners with primary care providers and others to promote early identification and management of cardiac risk factors and to deliver cardiac health promotion initiatives.
Acute care	A level 1 service: <ul style="list-style-type: none"> refers patients with acute care needs to higher level cardiac services.
Rehabilitation	A level 1 service: <ul style="list-style-type: none"> assists patients with health self-management.
Palliative care	A level 1 service: <ul style="list-style-type: none"> refers patients requiring palliative care to the closest service capable of meeting patient needs in accordance with the <i>Victorian palliative care capability framework</i>⁴.

Service requirements

Clinical workforce

Service	Requirements
Emergency response	Rapid response system ⁵ (for example, 'respond blue') and designated roles on-site to respond immediately to acute cardiac emergencies across the facility.
Prevention/health	Staff with demonstrated competency in health promotion in a community or

⁴ Department of Health and Human Services 2016, *Palliative care service capability framework*, State Government of Victoria, Melbourne, accessed at <https://www2.health.vic.gov.au/about/publications/policiesandguidelines/palliative-care-service-capability-framework>.

⁵ Standards Australia 2010, *Australian Standard 4083-2010, AS3745 Planning for emergencies: Health care facilities*, Standards Australia, Sydney.

Service	Requirements
promotion	primary health setting.

Clinical support services

Service	Requirements
Aboriginal liaison	Aboriginal hospital liaison officer services (male and female) are available during operating hours.
Language services	Access to accredited interpreters and translators and other language services in accordance with the department's <i>Language services policy and guidelines</i> ⁶ 24/7.

Equipment and infrastructure

Area	Requirements
Community health unit	Dedicated facilities, fit-for-purpose for the range of services provided, informed by the Australasian Health Facilities Guidelines on community health units ⁷ . Culturally safe places for the patient and family to meet (e.g. for discussions with Aboriginal health workers).

Clinical governance

Area	Requirements
Service guidelines	<p>Guidelines define the scope of cardiac care available at the health service site in accordance with cardiac capability level.</p> <p>Service partners and the community are provided information about the level of cardiac care provided at the health service and how services can be accessed. This information is provided in a format that meets the cultural and communication needs of consumers.</p> <p>Guidelines for referral to:</p> <ul style="list-style-type: none"> • cardiac specialist clinics (for example general cardiology, heart failure) • community smoking cessation programs • cardiac rehabilitation services • community allied health • mental health services • inpatient and community palliative care services • general practitioner (GP), nearest emergency department, or urgent care centre for assessment.
Partnership care	Formal agreement with primary care providers (including community health) to deliver cardiac health promotion initiatives.
Consultation, referral and transfer	Guidelines for consultation, referral and transfer are established in accordance with agreed regional referral, escalation and transfer pathways. This includes guidelines for the transfer of patients requiring acute admission.

⁶ Department of Health and Human Services 2017, *Language services policy*, Government of Victoria, Melbourne, accessed <https://dhhs.vic.gov.au/publications/language-services-policy-and-guidelines>

⁷ Australasian Health Infrastructure Alliance 2016, *Australasian health facility guidelines, part b - health facility briefing and planning 0255 - community health*, AHIA, Sydney, accessed at https://aushfg-prod-com-au.s3.amazonaws.com/HPU_B.0255_6_0.pdf

Level 2 CARDIAC CARE

Service description

Service	Description
Complexity of care/ service role description	<p>A level 2 service provides:</p> <ul style="list-style-type: none"> inpatient care for adult patients with exacerbation of chronic heart disease requiring short term observation and nursing or medical intervention by a general practitioner secondary prevention and early intervention heart health programs to local community acute assessment of unplanned presentations for patients experiencing an acute cardiac episode.
Emergency services	<p>As for level 1 plus:</p> <ul style="list-style-type: none"> provides comprehensive assessment, advanced life support, stabilisation of a person suffering an acute cardiac episode 24/7 prior to urgent transfer to a Level 4–6 service is able to commence administration of fibrinolysis⁸ (supported by the attending medical practitioner, a Mobile Intensive Care Ambulance (MICA) paramedic, or cardiologist via the cardiology telephone advice line⁹).
Assessment	<p>A level 2 service:</p> <ul style="list-style-type: none"> has a protocol for the management of acute cardiac conditions and consultation, referral and/or transfer, as appropriate assesses patients with chest pain or likely to be experiencing acute coronary syndrome in a standard way to identify the appropriate clinical pathway¹⁰.
Prevention/ screening	As for Level 1.
Acute care	<p>A level 2 service provides:</p> <ul style="list-style-type: none"> low risk, low complexity inpatient care to stable adult patients suffering exacerbation of chronic cardiac conditions. Patients are admitted to hospital by their general practitioner for nursing observation and medical management non-invasive monitoring (e.g. continuous electrocardiography).
Rehabilitation	<p>A level 2 service provides (or facilitates access to) cardiac rehabilitation services and community-based secondary prevention and risk reduction programs based on Australian Cardiovascular Health and Rehabilitation Association's <i>Core components of cardiovascular disease secondary prevention and cardiac rehabilitation</i>¹¹.</p>

⁸ Chew, D, Scott, I, Cullen, L, French, J, Briffa, T, Tideman, P, Woodruffe, S, Kerr, A, Branagan, M & Aylward, P 2016, 'National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Australian clinical guidelines for the management of acute coronary syndromes 2016', *Heart, Lung and Circulation*, vol. 25 no. 9, pp.895-951, accessed at https://www.heartfoundation.org.au/images/uploads/publications/PRO-174_ACS_guidelines_2016-WEB.pdf.

⁹ The cardiology telephone advice line currently supports ALS paramedics. It is envisioned that this will be expanded to incorporate health services in the near future in line with the *Design, service and infrastructure plan for Victoria's cardiac system*.

¹⁰ Chew, D, Scott, I, Cullen, L, French, J, Briffa, T, Tideman, P, Woodruffe, S, Kerr, A, Branagan, M & Aylward, P 2016, 'National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Australian clinical guidelines for the management of acute coronary syndromes 2016', *Heart, Lung and Circulation*, vol. 25 no. 9, pp.895-951, accessed at https://www.heartfoundation.org.au/images/uploads/publications/PRO-174_ACS_guidelines_2016-WEB.pdf.

¹¹ Woodruffe, S, Neubeck, L, Clark, R, Gray, K, Ferry, C, Finan, J, Sanderson, S & Briffa, T 2015, 'Australian Cardiovascular Health and Rehabilitation Association (ACRA) core components of cardiovascular disease secondary prevention and cardiac rehabilitation 2014', *Heart, Lung and Circulation*, vol. 24 no. 5, pp.430-441, accessed at [https://www.heartlungcirc.org/article/S1443-9506\(14\)00822-1/pdf](https://www.heartlungcirc.org/article/S1443-9506(14)00822-1/pdf).

Service	Description
Palliative care	<p>A level 2 service:</p> <ul style="list-style-type: none"> manages patients requiring palliative care, in accordance with level 1 of the <i>Victorian palliative care capability framework</i>. refers patients requiring level 2 services of the Victorian palliative care capability framework.

Service requirements

Clinical workforce

Service	Requirements
Emergency response	<p>Rapid response system¹² (for example, 'respond blue') and designated roles on-site 24/7 to respond immediately to acute cardiac emergencies across the facility.</p> <p>Registered health practitioner with demonstrated competency in advanced life support, available 24/7.</p> <p><i>For acute coronary syndromes:</i></p> <ul style="list-style-type: none"> registered medical practitioner credentialed at the health service to commence administration of fibrinolysis in accordance with clinical protocols¹³ 24/7, and/or nursing staff able to commence administration of fibrinolysis under instruction and according to protocols (supported by the attending medical practitioner, a MICA paramedic, or cardiologist via the cardiology telephone advice line¹⁴) designated staff to initiate peripheral intravenous cannulation and therapy and take 12-lead ECG and interpret the results* within 10 minutes of the first emergency contact 24/7¹⁵ a standardised clinical assessment tool is used by all staff¹⁶. <p><i>Note: this should be done in conjunction with escalation of care and arrangement to transfer the patient as soon as possible</i></p> <p><i>Note: *ECG interpretation may be by an ECG reading service or via a formal arrangement with a higher-level service.</i></p>
Medical – general practice	<p>Access 24/7 to registered medical specialist or equivalent for advice.</p> <p><i>Note: this may be via an off-site service</i></p>
Medical – cardiology	<p>Access 24/7 to registered medical specialist (RACP - Cardiology) or equivalent for advice.</p> <p><i>Note: in the future this will be via an established cardiology telephone advice line.</i></p>

¹² Standards Australia 2010, *Australian Standard 4083-2010, AS3745 Planning for emergencies: Health care facilities*, Standards Australia, Sydney.

¹³ For example, Chew, D, Scott, I, Cullen, L, French, J, Briffa, T, Tideman, P, Woodruffe, S, Kerr, A, Branagan, M & Aylward, P 2016, 'National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Australian clinical guidelines for the management of acute coronary syndromes 2016', *Heart, Lung and Circulation*, vol. 25 no. 9, pp.895-951, accessed at https://www.heartfoundation.org.au/images/uploads/publications/PRO-174_ACS_guidelines_2016-WEB.pdf.

¹⁴ The cardiology telephone advice line currently supports ALS paramedics. It is envisioned that this will be expanded to incorporate health services in the near future in line with *Design, service and infrastructure plan for Victoria's cardiac system*.

¹⁵ Standard 2: Early assessment. Australian Commission on Safety and Quality in Health Care 2014, *Acute coronary syndromes clinical care standard*, ACSQHC, Sydney, accessed at <https://www.safetyandquality.gov.au/our-work/clinical-care-standards/acute-coronary-syndromes-clinical-care-standard/>.

¹⁶ Standard 1: Immediate management. *ibid*.

Service	Requirements
Nursing	<p><i>Ward based services:</i></p> <p>Staffing in accordance with the <i>Safe patient care (nurse to patient and midwife to patient ratios) Act 2015¹⁷</i> or, in the case of the private sector, the relevant enterprise agreement and statutory requirement.</p>

Clinical support services

As for level 1, in addition:

Service	Requirements
Emergency services	Access to an emergency service that can provide emergency response and expeditious transfer to level 4–6 cardiac service.
Pathology	<p>Defined scope point of care testing (for example, troponin) is available 24/7. Protocols are in place for the quality control of point-of-care testing¹⁸.</p> <p>Specimen collection service with off-site processing.</p> <p><i>(pending advice on draft core capability levels)</i></p>
Blood management and blood products	<p>Provision of blood and blood products in accordance with Victoria's agreement to:</p> <ul style="list-style-type: none"> • the National blood and blood products charter for hospitals¹⁹ • the National blood and blood products charter for pathology labs²⁰ • Standard 7 of the ACSQHS Standards: <i>Blood and blood products</i>²¹. <p><i>(pending advice on draft core capability levels)</i></p>
Medication management	<p>Access to a registered pharmacist for medicines supply, patient education and support and medication review.</p> <p>Defined and appropriate supply chain for medicines sourced from a community pharmacy or health service.</p> <p>Documented protocols for purchasing and stock control of medicines, including fibrinolytics.</p> <p>Medicines available for the management of acute cardiac episodes and resuscitation (for example, fibrinolytics, antithrombotic agents, antiplatelet drugs, nitrates, beta blockers, analgesics, anti-coagulants, intravenous fluids and resuscitation drugs are available in line with clinical practice guidelines^{22,23}).</p> <p><i>(pending advice on draft core capability levels)</i></p>

¹⁷ Parliament of Victoria *Safe patient care (Nurse to patient and midwife to patient ratios) ACT 2015* Government of Victoria, Melbourne accessed at <https://www2.health.vic.gov.au/health-workforce/nursing-and-midwifery/safe-patient-care-act>

¹⁸ National Heart Foundation of Australia 2015, *Australian acute coronary syndromes capability framework*, National Heart Foundation of Australia, Melbourne, accessed at https://www.heartfoundation.org.au/images/uploads/publications/ACS_framework.pdf.

¹⁹ National Blood Authority Australia 2016, *Blood and blood products charter for hospitals*, National Blood Authority, Canberra, accessed at <https://www.blood.gov.au/australian-health-provider-blood-and-blood-products-charter>.

²⁰ National Blood Authority Australia 2016, *Blood and blood products charter for pathology laboratories*, National Blood Authority, Canberra, accessed at <https://www.blood.gov.au/australian-health-provider-blood-and-blood-products-charter>.

²¹ Standard 7: Blood management. Australian Commission on Safety and Quality in Health Care 2017, *National safety and quality health service standards*, ACSQHC, Sydney, accessed at <https://www.safetyandquality.gov.au/publications/national-safety-and-quality-health-service-standards-second-edition/>.

²² Therapeutic Guidelines 2012, *Therapeutic guidelines: Cardiovascular, version 6*, Therapeutic Guidelines Limited, Melbourne.

²³ Chew, D, Scott, I, Cullen, L, French, J, Briffa, T, Tideman, P, Woodruffe, S, Kerr, A, Branagan, M & Aylward, P 2016, 'National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Australian clinical guidelines for the management of acute coronary syndromes 2016', *Heart, Lung and Circulation*, vol. 25 no. 9, pp.895-951, accessed at https://www.heartfoundation.org.au/images/uploads/publications/PRO-174_ACS_guidelines_2016-WEB.pdf.

Equipment and infrastructure

Area	Requirements
Emergency/ Urgent care	Level 2 capability framework for <i>Urgent, emergency and trauma care</i> . <i>Note: this capability framework is part of the suite of frameworks currently under consultation.</i>
ECG services	On-site ECG machine. Transmission capability of ECG to higher level service for access to timely interpretation and/or secondary consultation.
Admitted care	Inpatient facilities informed by the Australasian Health Facilities Guidelines on inpatient units for overnight stay patients ²⁴ .
Non-admitted care	Consult room(s) informed by the <i>Australasian Health Facilities Guidelines standard component consult room</i> ²⁵ for pre and post-operative reviews and on ambulatory care units ²⁶ .
Telehealth	Telehealth services available 24/7 within the acute treatment space/resuscitation area.

Clinical governance

As for level 1, in addition:

Area	Requirements
Scope of services	Short-term, unavoidable changes in scope of cardiac care (capability level) are: <ul style="list-style-type: none"> formally agreed and documented with local health services and other providers that will be affected (including Ambulance Victoria) formally agreed and documented with the department effectively communicated with the local community with advice on how care can be accessed²⁷.
Service guidelines	Documented policies and protocols consistent with best practice guidelines for: <ul style="list-style-type: none"> cardiac patient triage and emergency care pathways, including escalation policies and processes for timely activation of transfer protocols administration of fibrinolysis care pathways for cardiac conditions. Documented clinical protocols approved for use for emergency care (including advanced life support roles and functions). <i>Note: health services must specify the advanced life support interventions their staff can initiate</i> Guidelines for referral to local community-based services ²⁸ . Guidelines and processes for discharge planning to ensure patients receive ongoing support for community based primary and secondary prevention programs.

²⁴ Australasian Health Infrastructure Alliance 2018, *Australasian health facility guidelines, part b - health facility briefing and planning 0340 - inpatient accommodation unit*, AHIA, Sydney, accessed at <https://healthfacilityguidelines.com.au/part/part-b-health-facility-briefing-and-planning-0>.

²⁵ Australasian Health Infrastructure Alliance 2017, *Australasian health facility guidelines, standard components - consult room*, AHIA, Sydney, accessed at https://aushfg-prod-com-au.s3.amazonaws.com/download/RDS_CONS_5.pdf.

²⁶ Australasian Health Infrastructure Alliance 2016, *Australasian health facility guidelines, part b - health facility briefing and planning 0155 - ambulatory care unit*, AHIA, Sydney, accessed at https://aushfg-prod-com-au.s3.amazonaws.com/HPU_B.0155_6_0.pdf.

²⁷ Department of Health and Human Services 2019, *Department of health and human services policy and funding guidelines 2019-2020*, State Government of Victoria, Melbourne. To be released later in 2019.

²⁸ For example, smoking cessation, hospital admission risk program and other health independence program services, community mental health services, community allied health.

Partnership care	Formal agreement with a higher-level service for ongoing support and timely advice on management of emergency and ongoing low complex cardiac care, including cardiac specialist advice.
Competence and credentialing	<p>Credentialing processes for registered medical practitioners providing cardiac care²⁹.</p> <p>Annual competency assessment and review processes for staff providing cardiac care.</p> <p>Annual competency assessment for staff nominated to provide advanced life support.</p> <p>Annual peer review processes for staff providing cardiac care are consistent with the Australian Commission on Safety and Quality in Healthcare's <i>Review by peers: a guide for professional, clinical and administrative processes</i>³⁰.</p>

²⁹ Safer Care Victoria 2018, *Credentialing and scope of clinical practice for senior medical practitioners policy*, State Government of Victoria, Melbourne, accessed at <https://bettersafecare.vic.gov.au/our-work/governance/credentialing>.

³⁰ Australian Commission on Safety and Quality in Health Care 2010, *Review by peers: A guide for professional, clinical and administrative processes*, ACSQHC, Sydney, accessed at <https://www.safetyandquality.gov.au/wp-content/uploads/2012/01/37358-Review-by-Peers.pdf>.

Level 3 CARDIAC CARE

Service description

Service	Description
Complexity of care/ service role description	<p>A level 3 service:</p> <ul style="list-style-type: none"> provides admitted and non-admitted cardiology services for adult patients with low to moderate complexity cardiac conditions including high dependency care provides ambulatory cardiac rehabilitation programs^{31,32,33} provides low risk cardiac investigations, clinical cardiology services and inpatient cardiac monitoring services. <p><i>Note: paediatric patients with low, moderate or high cardiac conditions are managed in a designated specialist paediatric health service.</i></p>
Emergency services	<p>As for level 2 plus:</p> <ul style="list-style-type: none"> provision of comprehensive assessment, advanced life support, stabilisation and management of a person suffering an acute cardiac episode patients likely to require access to Percutaneous Coronary Intervention are transferred to a higher-level service.
Assessment	As for level 2 plus low risk cardiac investigations ³⁴ .
Prevention/ screening	As for Level 1.
Acute care	<p>Level 2, plus:</p> <ul style="list-style-type: none"> provides access to cardiology specialist clinics and has referral pathways to specialised cardiac services at higher level services provides moderate complexity admitted care (including high dependency care) for patients with exacerbation of chronic cardiac conditions and acute inpatient care for low risk patients supports patients to receive acute care in the home.
Rehabilitation team	<p>Level 2 plus:</p> <ul style="list-style-type: none"> provides telehealth facilitated cardiac rehabilitation programs to patients.
Palliative care	<p>Level 2 plus:</p> <ul style="list-style-type: none"> provides a broad spectrum of care and has the capacity to manage most palliative care patients, in accordance with level 2 of the Victorian palliative care capability framework.

³¹ National Heart Foundation of Australia and Australian Cardiac Rehabilitation Association 2004, *Recommended framework for cardiac rehabilitation*, National Heart Foundation of Australia, Melbourne, accessed at <https://www.heartfoundation.org.au/images/uploads/publications/Recommended-framework.pdf>.

³² Woodruffe, S, Neubeck, L, Clark, R, Gray, K, Ferry, C, Finan, J, Sanderson, S & Briffa, T 2015, 'Australian Cardiovascular Health and Rehabilitation Association (ACRA) core components of cardiovascular disease secondary prevention and cardiac rehabilitation 2014', *Heart, Lung and Circulation*, vol. 24 no. 5, pp.430-441, accessed at [https://www.heartlungcirc.org/article/S1443-9506\(14\)00822-1/pdf](https://www.heartlungcirc.org/article/S1443-9506(14)00822-1/pdf)

³³ National Heart Foundation of Australia 2010, *Multidisciplinary care for people with chronic heart failure: Principles and recommendations for best practice*, National Heart Foundation of Australia Melbourne, accessed at <https://www.heartfoundation.org.au/images/uploads/publications/Multidisciplinary-care-for-people-with-CHF.pdf>.

³⁴ Refer to table 1 in introduction to this document.

Service requirements

Clinical workforce

Service	Requirements
Emergency response	Rapid response system ³⁵ (for example, 'respond blue') and designated roles on-site 24/7 to respond immediately to acute cardiac emergencies across the facility, including internal alerts for patients likely to be experiencing acute coronary syndromes.
Medical – cardiology	Registered medical specialist (FRACP – general medicine or cardiology) or equivalent, credentialed at the health service for cardiology care, available 24/7.
	Registered medical practitioner on-site 24/7. <i>For private services:</i> If no designated registered medical practitioner on-site 24/7, must meet requirements for Level 4 urgent, emergency and trauma care capability framework AND Level 4 Intensive care capability framework. <i>(pending advice on draft core capability levels)</i>
	On-site access to a cardiac technician during business hours.
Nursing	<i>Ward based services:</i> Staffing in accordance with the <i>Safe patient care (nurse to patient and midwife to patient ratios) Act 2015</i> ³⁶ or, in the case of the private sector, the relevant enterprise agreement and statutory requirement.
Rehabilitation	A cardiac rehabilitation team comprising cardiac rehabilitation professionals in accordance with best practice guidelines ³⁷ .

Clinical support services

As for level 2, in addition:

Service	Requirements
Pathology	On-site blood and specimen collection with processing available 24/7 for biochemistry, basic haematology, anatomical pathology and microbiology. <i>(pending advice on draft core capability levels)</i>
Medical imaging	Limited range of on-site imaging services and cardiac imaging services available 24/7. <i>(pending advice on draft core capability levels)</i>
Pharmacy	On-site pharmacy service that provides clinical pharmacy, medicines information, clinical trial support, hospital-wide medication management services, medicines procurement, sterile compounding, dispensing and distribution services available during business hours with on-call access 24/7. <i>(pending advice on draft core capability levels)</i>
Allied health	On-site access during business hours to:

³⁵ Standards Australia 2010, *Australian Standard 4083-2010, AS3745 Planning for emergencies: Health care facilities*, Standards Australia, Sydney.

³⁶ Parliament of Victoria *Safe patient care (Nurse to patient and midwife to patient ratios) ACT 2015* Government of Victoria, Melbourne accessed at <https://www2.health.vic.gov.au/health-workforce/nursing-and-midwifery/safe-patient-care-act>

³⁷ For example, Woodruffe, S, Neubeck, L, Clark, R, Gray, K, Ferry, C, Finan, J, Sanderson, S & Briffa, T 2015, 'Australian Cardiovascular Health and Rehabilitation Association (ACRA) core components of cardiovascular disease secondary prevention and cardiac rehabilitation 2014', *Heart, Lung and Circulation*, vol. 24 no. 5, pp.430-441, accessed at [https://www.heartlungcirc.org/article/S1443-9506\(14\)00822-1/pdf](https://www.heartlungcirc.org/article/S1443-9506(14)00822-1/pdf).

Service	Requirements
	<ul style="list-style-type: none"> dietetics occupational therapy physiotherapy social work
GP liaison services	Staffing and services available in accordance with the <i>Framework for the Victorian general practice liaison program</i> .

Equipment and infrastructure

As for level 2, in addition:

Area	Requirements
Emergency/ Urgent care	Level 4 capability framework for <i>Urgent, Emergency and Trauma care</i> . <i>Note: this capability framework is part of the suite of frameworks currently under consultation.</i>
Admitted care	Acute cardiac patients managed in a general inpatient ward informed by the Australasian Health Facilities Guidelines on inpatient units ³⁸ .
Critical care	Access to on-site or co-located High Dependency Unit informed by the Australasian Health Facilities Guidelines on intensive care units ³⁹ .
Telehealth	Telehealth services are available and used to facilitate cardiac rehabilitation programs to patients. Telehealth services are available 24/7 for specialist advice and external consultations (for example, interpreting ECGs remotely and ambulatory monitoring).
Non-admitted care	Dedicated facilities, fit-for-purpose for the range of services required including: <ul style="list-style-type: none"> medical consultations nursing consultations. The design of facilities should be informed by the Australasian Health Facilities Guidelines on ambulatory care units ⁴⁰ .

Clinical governance

As for level 2, in addition:

Area	Requirements
Service guidelines	Established referral pathways to a wide range of cardiac services at higher level services.
	Emergency Department has processes to identify patients likely to be experiencing acute coronary syndrome and to: <ul style="list-style-type: none"> initiate immediate management and early assessment

³⁸ Australasian Health Infrastructure Alliance 2018, *Australasian health facility guidelines, part b - health facility briefing and planning 0340 - inpatient accommodation unit*, AHIA, Sydney, accessed at <https://healthfacilityguidelines.com.au/part/part-b-health-facility-briefing-and-planning-0>.

³⁹ Australasian Health Infrastructure Alliance 2016, *Australasian health facility guidelines, part b - health facility briefing and planning 0360 – intensive care – general*, AHIA, Sydney, accessed at <https://healthfacilityguidelines.com.au/part/part-b-health-facility-briefing-and-planning-0>.

⁴⁰ Australasian Health Infrastructure Alliance 2016, *Australasian health facility guidelines, part b - health facility briefing and planning 0155 - ambulatory care unit*, AHIA, Sydney, accessed at https://aushfg-prod-com-au.s3.amazonaws.com/HPU_B.0155_6_0.pdf.

	<ul style="list-style-type: none"> • activate a reperfusion pathway for patients with ST-Elevation Myocardial Infarction (STEMI) • activate safe and timely transfer for patients with STEMI or suspected Non-ST-segment-elevation acute coronary syndrome (NSTEMACS)⁴¹.
	<p>Has a formal protocol with the Victorian Extracorporeal Membrane Oxygenation (ECMO) Service to assess patients that may require the intervention⁴².</p>

Draft for consultation

⁴¹ National Heart Foundation of Australia 2015, *Australian acute coronary syndromes capability framework*, National Heart Foundation of Australia, Melbourne, accessed at https://www.heartfoundation.org.au/images/uploads/publications/ACS_framework.pdf.

⁴² Safer Care Victoria 2019, *Adult extracorporeal membrane oxygenation (ECMO) in Victoria: Centralisation and retrieval model evidence review*, State Government of Victoria, Melbourne. To be released later in 2019.

Level 4 CARDIAC CARE

Service description

Service	Description
Complexity of care/ service role description	<p>A level 4 service:</p> <ul style="list-style-type: none"> provides admitted and non-admitted cardiology services for adult patients with medium complexity cardiac conditions manages acutely unwell patients requiring short term critical care in a designated critical care unit provides ambulatory cardiac rehabilitation programs^{43,44,45} provides an elective Percutaneous Coronary Intervention (PCI), simple pacing, implantable cardioverter-defibrillator (ICD) implant and simple electrophysiology (EP) service during business hours. <p><i>Note: paediatric patients with low, moderate or high cardiac conditions are managed in a designated specialist paediatric health service.</i></p>
Emergency services	Level 3, plus identifies patients suitable for ECMO prior to transfer in consultation and collaboration with the Victorian ECMO Service.
Assessment	Level 3, plus provides a range of medium risk cardiac investigations which are initiated, supervised and interpreted by a cardiologist.
Prevention/ screening	As for Level 1.
Acute care	<p>Level 3, plus:</p> <ul style="list-style-type: none"> provides inpatient care to patients with acute and chronic cardiac conditions (with the exception of an acute cardiac emergency). This includes intensive care support for patients suffering an acute cardiac condition or an exacerbation of an existing condition provides access to cardiology specialist clinics for a range of conditions and has referral pathways to a wider range of cardiac services at higher level services.
Rehabilitation	Level 2 plus provides stage 1 and stage 2 cardiac rehabilitation ⁴⁶ .
Palliative care	Provides comprehensive care and manages the full range of palliative care patients in accordance with level 3 of the <i>Victorian palliative care capability framework</i> .

Service requirements

Clinical workforce

Service	Requirements
Emergency	Rapid response system ⁴⁷ (for example, 'respond blue') and designated roles on-site 24/7 to respond immediately to acute cardiac emergencies across the

⁴³ National Heart Foundation of Australia and Australian Cardiac Rehabilitation Association 2004, *Recommended framework for cardiac rehabilitation*, National Heart Foundation of Australia, Melbourne, accessed at <https://www.heartfoundation.org.au/images/uploads/publications/Recommended-framework.pdf>.

⁴⁴ Woodruffe, S, Neubeck, L, Clark, R, Gray, K, Ferry, C, Finan, J, Sanderson, S & Briffa, T 2015, 'Australian Cardiovascular Health and Rehabilitation Association (ACRA) core components of cardiovascular disease secondary prevention and cardiac rehabilitation 2014', *Heart, Lung and Circulation*, vol. 24 no. 5, pp.430-441, accessed at [https://www.heartlungcirc.org/article/S1443-9506\(14\)00822-1/pdf](https://www.heartlungcirc.org/article/S1443-9506(14)00822-1/pdf).

⁴⁵ National Heart Foundation of Australia 2010, *Multidisciplinary care for people with chronic heart failure: Principles and recommendations for best practice*, National Heart Foundation of Australia Melbourne, accessed at <https://www.heartfoundation.org.au/images/uploads/publications/Multidisciplinary-care-for-people-with-CHF.pdf>.

⁴⁶ Ibid. National Heart Foundation of Australia and Australian Cardiac Rehabilitation Association 2004.

Service	Requirements
response	facility, including internal alerts for patients likely to be experiencing acute coronary syndromes.
Medical – cardiology	Registered medical specialist (RACP - Cardiology) or equivalent, credentialed at the health service for cardiology care, available 24/7.
	Registered medical specialist (RACP - Cardiology) or equivalent with advanced training in cardiology and expertise in interventional cardiology, credentialed at the health service for interventional cardiology care, available during business hours.
	Registered medical specialist (RACP) or equivalent with advanced training in cardiology and expertise in cardiac electrophysiology, credentialed at the health service for cardiac electrophysiology care, available during business hours.
	Designated registered medical practitioner enrolled in the Advanced Training in Cardiology program or equivalent, credentialed at the health service for cardiology care, available during business hours (for public services). AND Registered medical practitioner, Basic Physician Trainee or equivalent, on-site 24/7. May be an accredited registrar on the RACP training program. <i>For private services:</i> If no designated registered medical practitioner on-site 24/7, must meet requirements for Level 4 urgent, emergency and trauma care capability framework AND Level 4 Intensive care capability framework. <i>(pending advice on draft core capability levels)</i>
Cardiac catheterisation laboratory staff	Radiographer available during business hours.
	Cardiac technician available during business hours and accessible 24/7.
Medical – anaesthetics	Registered medical specialist (ANZCA) or equivalent, credentialed at the health service for anaesthetic care, available during business hours.
Nursing	<i>Ward based services:</i> Staffing in accordance with the <i>Safe patient care (nurse to patient and midwife to patient ratios) Act 2015⁴⁸</i> or, in the case of the private sector, the relevant enterprise agreement and statutory requirement.
Rehabilitation team	A cardiac rehabilitation team comprised of cardiac rehabilitation professionals in accordance with best practice guidelines ⁴⁹ .

Clinical support services

As for level 3, in addition:

Service	Requirements
Medical imaging	Full range of on-site imaging services and cardiac imaging services available 24/7. <i>(pending advice on draft core capability levels)</i>

⁴⁷ Standards Australia 2010, *Australian Standard 4083-2010, AS3745 Planning for emergencies: Health care facilities*, Standards Australia, Sydney.

⁴⁸ Parliament of Victoria *Safe patient care (Nurse to patient and midwife to patient ratios) ACT 2015* Government of Victoria, Melbourne accessed at <https://www2.health.vic.gov.au/health-workforce/nursing-and-midwifery/safe-patient-care-act>

⁴⁹ For example, Woodruffe, S, Neubeck, L, Clark, R, Gray, K, Ferry, C, Finan, J, Sanderson, S & Briffa, T 2015, 'Australian Cardiovascular Health and Rehabilitation Association (ACRA) core components of cardiovascular disease secondary prevention and cardiac rehabilitation 2014', *Heart, Lung and Circulation*, vol. 24 no. 5, pp.430-441, accessed at [https://www.heartlungcirc.org/article/S1443-9506\(14\)00822-1/pdf](https://www.heartlungcirc.org/article/S1443-9506(14)00822-1/pdf).

Service	Requirements
Pathology	Point of care and on-site blood and specimen collection with processing available 24/7 for biochemistry, haematology, anatomical pathology and microbiology. <i>(pending advice on draft core capability levels)</i>
Medical – specialist services	Registered medical specialists or equivalent credentialed at the health service available 24/7 including: <ul style="list-style-type: none"> • general medicine • anaesthesia • infectious diseases • intensive care medicine • general surgery
Non-admitted services	Provides range of cardiac specialist clinics (e.g. general cardiology, heart failure). Provides allied health clinics including dietetics, physiotherapy, occupational therapy, social work and psychology.
Allied health	On-site access during business hours to: <ul style="list-style-type: none"> • psychology • spiritual care (encompassing pastoral care).

Equipment and infrastructure

As for level 3, in addition:

Area	Requirements
Cardiac investigation unit	<ul style="list-style-type: none"> • Dedicated facilities to support a limited range of cardiac investigations available during extended hours. The design of facilities should be informed by the <i>Australasian Health Facilities Guidelines on cardiac investigation units</i>⁵⁰. • On-site access to percutaneous coronary intervention services available during business hours/ PCI operating hours and facilities informed by the <i>Australasian Health Facilities Guidelines on cardiac investigation units – ‘cardiac catheter laboratory’</i>⁵¹.
Resuscitation equipment	Resuscitation equipment located near/in cardiac investigation areas ⁵² .
Critical care	On-site/co-located access to intensive care unit.
ECG services	Information technology system to enable ECG recordings to be available anywhere, at any time, within the healthcare facility.
Admitted care	<ul style="list-style-type: none"> • Acute cardiac patients managed as a cohort in inpatient ward informed by the <i>Australasian Health Facilities Guidelines on inpatient units</i>⁵³ and Cardiac and Cardiac Surgery Inpatient Unit section of HPU 260 Cardiac

⁵⁰ Australasian Health Infrastructure Alliance 2016, *Australasian health facility guidelines, part b - health facility briefing and planning 0170 - cardiac investigation unit*, AHIA, Sydney, accessed at https://aushfg-prod-com-au.s3.amazonaws.com/HPU_B.0170_2_0.pdf.

⁵¹ Ibid.

⁵² Cardiac services and associated tests present a higher than usual likelihood of cardiac arrest, and resuscitation equipment should always be immediately accessible.

⁵³ Australasian Health Infrastructure Alliance 2018, *Australasian health facility guidelines, part b - health facility briefing and planning 0340 - inpatient accommodation unit*, AHIA, Sydney, accessed at <https://healthfacilityguidelines.com.au/part/part-b-health-facility-briefing-and-planning-0>.

Area	Requirements
	Care Unit <ul style="list-style-type: none"> Facilities for telemetry with monitoring at a staff station in CCU or main inpatient unit staff station access to patient education facilities for cardiac rehabilitation.

Clinical governance

As for level 3, in addition:

Area	Requirements
Service guidelines	Has a formal protocol with the Victorian ECMO Service to assess patients that may require the intervention ⁵⁴ .
	Care provided in accordance with best practice guidelines, including: <ul style="list-style-type: none"> <i>Guidelines on Support Facilities for Coronary Angiography and Percutaneous Coronary Intervention (PCI) including Guidelines on the Performance of Procedures in Rural Sites</i>. 2016. CSANZ⁵⁵. <i>Guidelines on the Performance of and Support Facilities for a Primary Percutaneous Coronary Intervention (PCI) Service</i>. 2014. CSANZ⁵⁶.
Consultation, referral and transfer	Processes and guidelines to expedite referrals into the service from lower capability services in accordance with default referral pathways.
	The credentialing processes for medical staff providing cardiac diagnostic and interventional services ⁵⁷ and ongoing review includes assessment of volume and recency of practice for key procedures.

⁵⁴ Safer Care Victoria 2019, *Adult extracorporeal membrane oxygenation (ECMO) in Victoria: Centralisation and retrieval model evidence review*, State Government of Victoria, Melbourne. To be released later in 2019.

⁵⁵ Cardiac Society of Australia and New Zealand 2016, *Guidelines on support facilities for coronary angiography and percutaneous coronary intervention (PCI) including guidelines on the performance of procedures in rural sites*, CSANZ, accessed at <https://www.csanz.edu.au/wp-content/uploads/2017/07/Support-Facilities-Coronary-Angio-PCI-inc-rural-sites-2016-amendment_25-Nov-2016.pdf>.

⁵⁶ Cardiac Society of Australia and New Zealand 2014, *Position statement performance of and support facilities for a primary percutaneous coronary intervention (PCI) service*, CSANZ, accessed at https://www.csanz.edu.au/wp-content/uploads/2014/12/Performance-and-Support-Facilities-Primary-PCI-Service_2014-Aug.pdf.

⁵⁷ Safer Care Victoria 2018, *Credentialing and scope of clinical practice for senior medical practitioners policy*, State Government of Victoria, Melbourne, accessed at <https://bettersafercare.vic.gov.au/our-work/governance/credentialing>.

Level 5 CARDIAC CARE

Service description

Service	Description
Complexity of care/ service role description	<p>A level 5 service:</p> <ul style="list-style-type: none"> provides a full range of admitted and non-admitted cardiac services to adult patients with acute, subacute or chronic cardiac conditions provides emergency PCI 24/7 and elective PCI manages acutely unwell patients in a specialised coronary care unit provides cardiac rehabilitation programs^{58,59,60}. <p>Excludes:</p> <ul style="list-style-type: none"> services that are limited to designated state-wide providers services providing cardiothoracic surgery involving cardiopulmonary bypass. <p>The designated regional health services have systems to support bed finding for acute or deteriorating patients in the region.</p> <p>A level 5 service may be a designated Intermediate ECMO Centre⁶¹.</p>
Emergency services	<p>Level 4, plus:</p> <ul style="list-style-type: none"> direct access to cardiac catheter laboratory for patients with acute cardiac episode 24/7 provides the full range of expertise to support critically ill patients and all cardiac and cardiothoracic emergencies 24/7.
Assessment	<p>Level 4, plus:</p> <ul style="list-style-type: none"> provides a range of high-risk cardiac investigations initiated, supervised and interpreted by a cardiologist 24/7. <p>Excludes:</p> <ul style="list-style-type: none"> procedures needing cardiothoracic surgical backup, for example: <ul style="list-style-type: none"> complex electrophysiological studies⁶² transcatheter valve therapies cardiac resynchronisation therapy non-urgent complex PCI.
Prevention/ screening	As for Level 1.
Acute care	<p>Level 4, plus:</p> <ul style="list-style-type: none"> Provides the full range of inpatient services to patients with acute or chronic cardiac conditions, including acute cardiac emergencies, except for patients requiring cardiothoracic surgical interventions and those needing to access a state-wide service (e.g. cardiac transplant).

⁵⁸ National Heart Foundation of Australia and Australian Cardiac Rehabilitation Association 2004, *Recommended framework for cardiac rehabilitation*, National Heart Foundation of Australia, Melbourne, accessed at <https://www.heartfoundation.org.au/images/uploads/publications/Recommended-framework.pdf>.

⁵⁹ Woodruffe, S, Neubeck, L, Clark, R, Gray, K, Ferry, C, Finan, J, Sanderson, S & Briffa, T 2015, 'Australian Cardiovascular Health and Rehabilitation Association (ACRA) core components of cardiovascular disease secondary prevention and cardiac rehabilitation 2014', *Heart, Lung and Circulation*, vol. 24 no. 5, pp.430-441, accessed at [https://www.heartlungcirc.org/article/S1443-9506\(14\)00822-1/pdf](https://www.heartlungcirc.org/article/S1443-9506(14)00822-1/pdf).

⁶⁰ National Heart Foundation of Australia 2010, *Multidisciplinary care for people with chronic heart failure: Principles and recommendations for best practice*, National Heart Foundation of Australia Melbourne, accessed at <https://www.heartfoundation.org.au/images/uploads/publications/Multidisciplinary-care-for-people-with-CHF.pdf>.

⁶¹ Safer Care Victoria 2019, *Adult extracorporeal membrane oxygenation (ECMO) in Victoria: Centralisation and retrieval model evidence review*, State Government of Victoria, Melbourne. To be released later in 2019.

⁶² As defined by the 2017 CSANZ Guidelines for sub-speciality training in adult cardiac clinical electrophysiology.

Service	Description
	<ul style="list-style-type: none"> Has coronary care unit for acutely unwell patients who are hemodynamically unstable
Rehabilitation	As for Level 4.
Palliative care	As for Level 4.

Service requirements

Clinical workforce

Service	Requirements
Emergency response	Rapid response system ⁶³ (for example, 'respond blue') and designated roles on-site 24/7 to respond immediately to acute cardiac emergencies across the facility, including internal alerts for patients likely to be experiencing acute coronary syndromes.
Cardiology team	<p>Registered medical specialist (RACP) or equivalent, credentialed at the health service for cardiac care, employed as Director of Cardiology services and responsible for clinical governance of service.</p> <p>Cardiology clinical unit(s) are structured to provide consultant led care in clinical streams that collectively provide ambulatory care, pre- and post- procedure care and 24/7 care to admitted patients and management of complications of procedures.</p> <p>The clinical unit(s) is comprised of:</p> <ul style="list-style-type: none"> Head of unit(s) is a registered medical specialist (RACP) or equivalent, credentialed at the health service for cardiac care. Registered medical specialists (RACP) or equivalent with expertise in clinical and diagnostic cardiology⁶⁴, credentialed at the health service for cardiology care, available 24/7. Designated registered medical practitioner, Advanced Trainee on Cardiology program or equivalent, credentialed at the health service for cardiology care, on-site 24/7. Registered medical practitioners. Advanced and extended practice nurses credentialed at the health service to provide specialist services⁶⁵. Specialty (nurse) coordinators for key cohorts of patients. Cardiac technician, biomedical technician registered perfusionist (ANZCP) and radiographer available 24/7. <p>The number and type of units at each service reflects demand for services and local agreements about workload management.</p>
Medical – anaesthetics	Registered medical specialist (ANZCA) or equivalent, credentialed at the health service for anaesthetic care, available 24/7.
Cardiothoracic Surgery	Registered medical specialist (RACS) or equivalent, credentialed at the health service for cardiac care, employed as Director of Cardiothoracic Surgery and responsible for clinical governance of service.

⁶³ Standards Australia 2010, *Australian Standard 4083-2010, AS3745 Planning for emergencies: Health care facilities*, Standards Australia, Sydney.

⁶⁴ Including non-invasive cardiology, interventional cardiology and cardiac electrophysiology.

⁶⁵ Including nurse practitioners, nurse consultant in stomal care, continence, wound management, nurse endoscopist/cystoscopist.

Service	Requirements
	<p>Cardiothoracic clinical unit is structured to provide consultant led care and collectively provide ambulatory care, pre- and post- procedure/surgery care and 24/7 care to admitted patients and management of complications of procedures/surgery.</p> <p>The clinical unit is comprised of:</p> <ul style="list-style-type: none"> • head of unit is a registered medical specialist (RACS) or equivalent, credentialed at the health service for cardiothoracic surgery • registered medical specialists (RACS) or equivalent with expertise in clinical and diagnostic cardiology⁶⁶, credentialed at the health service for cardiothoracic surgery, available 24/7 • designated registered medical practitioner, Advanced Trainee on cardiothoracic surgery program or equivalent, credentialed at the health service for cardiothoracic surgery, available 24/7 (for public services only) • registered medical practitioners • advanced and extended practice nurses credentialed at the health service to provide specialist services⁶⁷ • specialty (nurse) coordinators for key cohorts of patients • cardiac technician, registered perfusionist (ANZCP) and radiographer available 24/7.
Nursing	<p><i>Ward based services:</i></p> <p>Staffing in accordance with the Safe Patient Care (Nurse to Patient and Midwife to Patient Ratios) Act 2015 <https://www2.health.vic.gov.au/health-workforce/nursing-and-midwifery/safe-patient-care-act> or in the case of the private sector, the relevant enterprise agreement and statutory requirement.</p>

Support services

As for level 4, in addition:

Service	Requirements
Medical imaging	Full range of on-site imaging services and cardiac imaging services available 24/7.
Nuclear medicine	<p>Staff with demonstrated competence to provide consultation services and produce radiopharmaceuticals.</p> <p>On-site dedicated and accredited⁶⁸ radiopharmaceutical laboratory services and nuclear medicine specialist available on-call 24/7 for:</p> <ul style="list-style-type: none"> • gated blood pool scan • myocardial perfusion studies • nuclear stress testing.
Pharmacy	On-site pharmacy service that provides clinical pharmacy, medicines information, clinical trial support, hospital-wide medication management services, medicines procurement, sterile compounding, dispensing and distribution services available seven days a week with on-call access 24/7.

⁶⁶ Including non-invasive cardiology, interventional cardiology and cardiac electrophysiology.

⁶⁷ Including nurse practitioners, nurse consultant in stomal care, continence, wound management, nurse endoscopist/cystoscopist.

⁶⁸ Australasian Association of Nuclear Medicine Specialists (AANMS) Nuclear Medicine Practice Accreditation Program – see https://www.aanms.org.au/index.php?option=com_content&view=article&id=13&Itemid=19

Service	Requirements
	<i>(pending advice on draft core capability levels)</i>
Pain management	On-site, multi-disciplinary, comprehensive acute and persisting pain management services available during business hours.
Allied health	On-site access during business hours to: <ul style="list-style-type: none"> • exercise physiology • speech pathology • neuropsychology
ECG support service	Provides ECG interpretation and clinical decision support for capability level 1–5 services 24/7.

Equipment and infrastructure

As for level 4, in addition:

Area	Requirements
Cardiac investigation unit	On-site access 24/7 to percutaneous coronary intervention services and facilities informed by the Australasian Health Facilities Guidelines on cardiac investigation units – ‘cardiac catheter laboratory’ ⁶⁹ .
Operating rooms	Meets requirements for Level 5 surgery and procedural care capability framework ⁷⁰ .
Admitted care	Critically ill and complex cardiac patients managed as a cohort in inpatient unit informed by the Australasian Health Facilities Guidelines on cardiac care units ⁷¹ .
Coronary care	Provides acute care in standalone unit or as part of a general ICU for critically ill patients requiring advanced haemodynamic monitoring, cardiac monitoring invasive haemodynamic monitoring and non-invasive ventilation at bedside and with central monitoring. Telemetry to other parts of the organisation.

Clinical governance

As for level 4, in addition:

Area	Requirements
Service guidelines	Accredited to initiate ECMO prior to transfer to an Intermediate or Comprehensive ECMO Centre or accredited as an Intermediate ECMO Centre ⁷² .
Competence and credentialing	Provides level 1–4 cardiac services within the region support for credentialing processes for medical staff providing cardiac care. Provides level 1–4 cardiac services within the region support to complete annual competency assessment and review processes for staff providing

⁶⁹ Australasian Health Infrastructure Alliance 2016, *Australasian health facility guidelines, part b - health facility briefing and planning 0170 - cardiac investigation unit*, AHIA, Sydney, accessed at https://aushfg-prod-com-au.s3.amazonaws.com/HPU_B.0170_2_0.pdf.

⁷⁰ Department of Health and Human Services 2019, *Surgery and procedural care capability framework*, State Government of Victoria, Melbourne. To be released.

⁷¹ Australasian Health Infrastructure Alliance 2018, *Australasian health facility guidelines, part b - health facility briefing and planning HPU 260 Cardiac Care Unit*, AHIA, Sydney, accessed at https://aushfg-prod-com-au.s3.amazonaws.com/HPU_B.0260_7%20_0_0.pdf.

⁷² Safer Care Victoria 2019, *Adult extracorporeal membrane oxygenation (ECMO) in Victoria: Centralisation and retrieval model evidence review*, State Government of Victoria, Melbourne. To be released later in 2019.

	cardiac care. Provides level 1–4 cardiac services within the region support for the completion of annual peer review processes for staff providing cardiac care.
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Draft for consultation

Level 6 CARDIAC CARE

Service description

Service	Description
Complexity of care/ service role description	<p><i>Adult services</i></p> <p>A level 6 service:</p> <ul style="list-style-type: none"> provides the full range of admitted and non-admitted cardiac services to adult patients with acute, subacute, or chronic cardiac conditions or events is a designated cardiothoracic surgery provider including surgery or procedures on cardiopulmonary bypass – (<i>Public services only</i>) provides emergency PCI 24/7 and elective PCI provides cardiac rehabilitation programs^{73,74,75} takes a lead role in developing partnerships with service providers at other levels of capability⁷⁶. <p>Designated services – (<i>Public services only</i>), there will be:</p> <ul style="list-style-type: none"> one designated Comprehensive ECMO Centre one designated heart/lung transplant centre one designated lead extraction centre may include designated Intermediate ECMO Centre/s⁷⁷ <p><i>Paediatric services</i></p> <p>A level 6 paediatric service:</p> <ul style="list-style-type: none"> provides a full range of cardiac services to paediatric patients with acute, subacute, or chronic cardiac conditions or events. <p>Designated services – (<i>Public services only</i>):</p> <ul style="list-style-type: none"> there will be one designated paediatric level 6 cardiac service
Emergency services	<p>Level 5, plus:</p> <ul style="list-style-type: none"> provides timely access to telephone clinical decision support for capability level 1–5 services 24/7. emergency surgical intervention available 24/7.
Assessment	<p>Level 5, plus:</p> <ul style="list-style-type: none"> caters for patients requiring complex investigations including those with potential to require emergency surgical intervention.
Prevention/ screening	As for Level 1.

⁷³ National Heart Foundation of Australia and Australian Cardiac Rehabilitation Association 2004, *Recommended framework for cardiac rehabilitation*, National Heart Foundation of Australia, Melbourne, accessed at <https://www.heartfoundation.org.au/images/uploads/publications/Recommended-framework.pdf>.

⁷⁴ Woodruffe, S, Neubeck, L, Clark, R, Gray, K, Ferry, C, Finan, J, Sanderson, S & Briffa, T 2015, 'Australian Cardiovascular Health and Rehabilitation Association (ACRA) core components of cardiovascular disease secondary prevention and cardiac rehabilitation 2014', *Heart, Lung and Circulation*, vol. 24 no. 5, pp.430-441, accessed at [https://www.heartlungcirc.org/article/S1443-9506\(14\)00822-1/pdf](https://www.heartlungcirc.org/article/S1443-9506(14)00822-1/pdf).

⁷⁵ National Heart Foundation of Australia 2010, *Multidisciplinary care for people with chronic heart failure: Principles and recommendations for best practice*, National Heart Foundation of Australia Melbourne, accessed at <https://www.heartfoundation.org.au/images/uploads/publications/Multidisciplinary-care-for-people-with-CHF.pdf>.

⁷⁶ Department of Health and Human Services 2016, *Design, service and infrastructure plan for Victoria's cardiac system*, State Government of Victoria, Melbourne, accessed at <https://www2.health.vic.gov.au/hospitals-and-health-services/health-system-design-planning/cardiac-design-service-and-infrastructure-plan>.

⁷⁷ Safer Care Victoria 2019, *Adult extracorporeal membrane oxygenation (ECMO) in Victoria: Centralisation and retrieval model evidence review*, State Government of Victoria, Melbourne. To be released later in 2019

Service	Description
Acute care	Level 5, plus: <ul style="list-style-type: none"> provides the full range of inpatient services to patients suffering from acute or chronic cardiac conditions, including acute cardiac emergencies, patients requiring cardiothoracic surgical interventions and those needing to access a state-wide service (e.g. cardiac transplant).
Rehabilitation	As for Level 4.
Palliative care	As for Level 4.

Service requirements

Clinical workforce

As for level 5 plus:

Service	Requirements
Cardiothoracic surgery team	Registered medical specialist (RACS) or equivalent, credentialed at the health service for cardiac care, employed as Director of Cardiothoracic Surgery and responsible for clinical governance of service.
	<p>Cardiothoracic clinical unit is structured to provide consultant led care and collectively provide ambulatory care, pre- and post- procedure/surgery care and 24/7 care to admitted patients and management of complications of procedures/surgery.</p> <p>The clinical unit is comprised of:</p> <ul style="list-style-type: none"> head of unit is a registered medical specialist (RACS) or equivalent, credentialed at the health service for cardiothoracic surgery registered medical specialists (RACS) or equivalent with expertise in clinical and diagnostic cardiology⁷⁸, credentialed at the health service for cardiothoracic surgery, available 24/7 designated registered medical practitioner, Advanced Trainee on cardiothoracic surgery program or equivalent, credentialed at the health service for cardiothoracic surgery, available 24/7 (for public services only) registered medical practitioners advanced and extended practice nurses credentialed at the health service to provide specialist services⁷⁹ specialty (nurse) coordinators for key cohorts of patients cardiac technician, registered perfusionist (ANZCP) and radiographer available 24/7.
Medical – anaesthetics	Registered medical specialist (ANZCA) or equivalent, credentialed at the health service for anaesthetic care, available 24/7.
	Registered medical practitioner with appropriate experience in anaesthetics, credentialed to initiate anaesthetic management for surgical emergencies (beyond ANZCA Supervision Level 1) available 24/7 (for public services only). May be an accredited registrar on the ANZCA training program.
Medical – paediatric	<p><i>For designated paediatric service:</i></p> Registered medical specialist (RACP) or equivalent, credentialed at the health

⁷⁸ Including non-invasive cardiology, interventional cardiology and cardiac electrophysiology.

⁷⁹ Including nurse practitioners, nurse consultant in stomal care, continence, wound management, nurse endoscopist/cystoscopist.

Service	Requirements
cardiology/cardi othoracic surgery	service for paediatric cardiology care, available 24/7.
	For designated paediatric services, designated registered medical practitioner, Advanced Trainee on paediatric cardiology program or equivalent, credentialed at the health service for paediatric cardiology care, available 24/7.
Medical – paediatric anaesthetics	<i>For designated paediatric service:</i> Registered medical specialist (ANZCA) or equivalent, credentialed at the health service for anaesthetic care with subspecialty in paediatrics, available 24/7.

Support services

As for level 5, in addition:

Service	Requirements
Medical – specialist services	Provides a comprehensive range of specialist and subspecialist services on-site and available 24/7.
Transplant services	Transplant coordinator available 24/7.
	Transplant procurement team available 24/7.
Non-admitted services	Provides a range of cardiac specialist clinics (e.g. general cardiology, cardiothoracic surgery, heart failure, cardiac transplant clinics).

Equipment and infrastructure

As for level 5, in addition:

Area	Requirements
Critical care	On-site access to Intensive Care Unit.
Cardiac investigation unit	On-site access to two percutaneous coronary intervention services 24/7.
Operating rooms	Meets requirements for level 6 surgery and procedural care capability framework ⁸⁰ .

Clinical governance

As for level 5, in addition:

Area	Requirements
Service guidelines	Accredited to initiate ECMO prior to transfer to an Intermediate or Comprehensive ECMO Centre, or Accredited as an Intermediate ECMO Centre, or Accredited as a Comprehensive ECMO Centre ⁸¹ .
	Takes a clinical leadership role, including statewide/regional centre telehealth, referral and support 24/7.
Competence and	<ul style="list-style-type: none"> Provides level 1–5 cardiac services support for credentialing processes for

⁸⁰ Department of Health and Human Services 2019, *Surgery and procedural care capability framework*, State Government of Victoria, Melbourne. To be released.

⁸¹ Safer Care Victoria 2019, *Adult extracorporeal membrane oxygenation (ECMO) in Victoria: Centralisation and retrieval model evidence review*, State Government of Victoria, Melbourne. To be released later in 2019.

credentialing	medical staff providing cardiac care. <ul style="list-style-type: none">• Provides level 1–5 cardiac services support to complete annual competency assessment and review processes for staff providing cardiac care.• Provides level 1–5 cardiac services support for the completion of annual peer review processes for staff providing cardiac care.
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Draft for consultation

Appendix 1 – About capability frameworks

Capability frameworks define the different levels of complexity across the spectrum of care for particular clinical service streams. Each service stream comprises different levels of complexity and, for each level of complexity, the capability framework sets clear requirements for the workforce, infrastructure, equipment, support services and formal relationships needed to ensure patients have access to the full range of care they may need and to ensure that the care that patients receive at each level is safe and high quality.

Capability frameworks are primarily system planning tools but also contribute to a system of good governance to support the quality and safety of health care. They:

- outline which patients and treatments each hospital has the capability to safely care for
- support a transparent approach to planning and service development at local, regional and system levels
- provide a common language and understanding of clinical services capability for the community and for health service providers, and
- facilitate improved service alignment and linkages between healthcare providers.

For each clinical service stream, there are six levels of complexity from Level 1 (the lowest complexity of care) to Level 6 (the highest complexity of care). As a rule, each service level builds on the preceding service level.

The use of capability frameworks will be new for some readers. Capability frameworks are widely used in other states and territories and, in Victoria, they have been used in some clinical service streams for many years.⁸²

The capability frameworks are designed to describe ‘best practice’ care in each clinical service stream, across the full continuum of patient care, from the lowest complexity of care to the highest complexity of care. They aim to create consistency between health services operating at the same level, and also aim to drive improvement across the system as a whole.

Scope of the frameworks

Like the Maternity and Newborn Capability Frameworks, the four new capability frameworks focus on the direct clinical services delivered to patients. They apply equally to public and private hospitals and acute care facilities, but they do not include the research, teaching and other non-clinical functions that hospitals undertake.

The capability frameworks provide the details of the requirements needed to meet the clinical care standards for a cohort of patients (not for individual patients) and health services remain accountable for assessing individual patients, circumstances and the competencies of staff.

Each capability framework provides structure in relation to risk management approaches using a risk scale (high, medium and low), however, in general the frameworks do not specify individual conditions that can be treated or procedures that can be performed at each level of service. Exceptions to this are where the department has designated a statewide provider or providers of a particular service, or where there is clear evidence of volume-outcome relationships.

It is worth noting that the frameworks do not replace, but sit alongside, current legislation, mandatory standards and accreditation processes. It is assumed that health services provide care in accordance

⁸² For example, the Maternity and Newborn Capability Frameworks. See Department of Health and Human Services 2019, *Capability frameworks for Victorian maternity and newborn services*, State Government of Victoria, Melbourne, accessed at <https://www2.health.vic.gov.au/Api/downloadmedia/%7B422BB28D-7A8C-478C-AF6D-62499CBA9368%7D>

with the National Safety and Quality Health Service (NSQHS) Standards⁸³ and the Victorian clinical governance framework⁸⁴. Exceptions are where a particular issue may need to be highlighted in the capability framework to define the intensity of the service at each level or where a specific risk has been identified.

Draft for consultation

⁸³ Australian Commission on Quality and Safety in Health Care 2017, *National Safety and Quality Health Service Standards*, 2nd edition, ACQSHC, Sydney accessed at <https://www.safetyandquality.gov.au/wp-content/uploads/2017/12/National-Safety-and-Quality-Health-Service-Standards-second-edition.pdf>.

⁸⁴ Safer Care Victoria 2017, *Delivering high-quality healthcare: Victorian clinical governance framework*, State Government of Victoria, Melbourne, accessed at <https://bettersafercare.vic.gov.au/sites/default/files/2018-03/SCV%20Clinical%20Governance%20Framework.pdf>.

Glossary

Term	Description
24/7	24 hours a day, seven days a week.
Access/Accessible	Refers to the ability to utilise resources, a service or the skills of a suitably qualified person without difficulty or delay (may be located on-site or off-site in accordance with requirements).
Acute care	Victorian acute care includes admitted and non-admitted services such as critical care, surgical services, admitted care (including Hospital in the Home), specialist clinics, trauma and emergency services.
Admitted care	<p>Sufficient dedicated facilities, fit-for-purpose to:</p> <ul style="list-style-type: none"> • support the treatment of inpatients by multidisciplinary teams • reduce the risk of errors, accidents and hospital-acquired conditions • ensure the safety of patients, staff, visitors, volunteers and students • ensure the privacy and dignity of patients, their carers and family • minimise the distance staff must travel to obtain supplies and equipment • enable the use of current and emerging technologies (e.g. telemetry), telehealth and support clinical training • enable isolation of patients with infectious conditions or who are immunocompromised • support the care of terminally ill and dying patients • provide satellite facilities for pharmacy and radiology • provide functional zones (e.g. staff areas, administrative areas, patient lounges) • support home-delivered admitted care. <p>Accommodation should support the care of diverse and speciality groups including:</p> <ul style="list-style-type: none"> • Aboriginal and Torres Strait Islanders • people with physical and cognitive disabilities • obese and morbidly obese patients • people from cultural and linguistically diverse backgrounds • children and adolescents • older persons • people affected by dementia • The design of facilities should be informed by the Australasian Health Facilities Guidelines on inpatient accommodation
Admitted patient	A patient who undergoes a hospital's formal admission process to receive treatment and/or care. This treatment and/or care is provided over a period of time and can occur in hospital and/or in the person's home (Hospital in the Home).
Adult Retrieval Victoria (ARV)	Adult Retrieval Victoria (ARV) is part of Ambulance Victoria and provides clinical coordination, retrieval and critical care services.
Advanced life support (ALS)	The provision of effective airway management, ventilation of the lungs and production of a circulation by means of techniques additional to those of basic life support. These techniques may include, but not be limited to, advanced airway management, vascular access/drug therapy and defibrillation.
Allied health	<p>An allied health profession is one which has a direct patient care role and belongs to a national professional organisation with a code of ethics/conduct and clearly defined membership requirements.</p> <p>Minimum education standards include university health sciences courses (not medical, dental or nursing) at Australian Qualifications Framework Level 7 or higher, accredited by the relevant national accreditation body. Allied health has clearly</p>

	articulated national entry level competency standards and assessment procedures including a defined core scope of practice and robust and enforceable regulatory mechanisms.
Ambulatory care	Care provided to patients who are not admitted to the hospital, such as patients of emergency departments, specialist clinics and the Health Independence Program.
Available	Refers to the ability to immediately access and utilise resources, a service, or the skills of a suitably qualified person. In relation to workforce, an available staff member is formally on-call and can be immediately contacted to provide advice and/or deliver face-to-face care within the timeframes agreed by the health service.
Basic life support (BLS)	The preservation of life by the initial establishment of, and/or maintenance of, airway, breathing, circulation and related emergency care, including use of an AED.
Biomedical technician	A biomedical technician is a certified electro-mechanical technician or technologist who ensures that medical equipment is well-maintained, properly configured, and safely functional.
Business hours	9 am to 5 pm Monday to Friday.
Cardiac care unit	A unit within the hospital or health facility that has additional equipment and infrastructure to support: <ul style="list-style-type: none"> • cardiac monitoring which may be invasive and non-invasive or hard wired, with or without telemetry • invasive haemodynamic monitoring • co-ordination and administration of appropriate drug therapies, including thrombolysis • non-invasive and invasive ventilation • haemodialysis • monitoring of devices used to manage heart failure (e.g. left ventricular assist device) • cardioversion – elective and emergency procedures • intra-aortic balloon counter-pulsation • transthoracic echocardiography (TTE) • transoesophageal echocardiography (TOE) • exercise stress testing • management of patients with temporary or external pacing wires • patient education and rehabilitation. <p>The design of facilities should be informed by the Australasian Health Facilities Guidelines on cardiac care units.</p>
Cardiac investigation units	Dedicated facilities, fit-for-purpose to support: <ul style="list-style-type: none"> • cardiac catheter laboratories (CCL) (diagnostic and interventional) • electrophysiology laboratory • electrocardiogram (ECG) • echocardiography • transthoracic echocardiography (TTE) • trans-oesophageal (TOE) • stress echocardiography • exercise stress testing • Holter monitoring • ambulatory blood pressure monitoring

	<ul style="list-style-type: none"> pacemaker and defibrillator implantation, and follow-up <p>The design of facilities should be informed by the Australasian Health Facilities Guidelines on cardiac investigation units</p>
Cardiac technician	A cardiac technician is a certified cardiac technologist who provides technical services for the investigation, diagnosis and treatment of heart disease.
Clinical governance	The framework through which health organisations are accountable for continuously improving the quality of their services and safe guarding high standards of care by creating an environment in which excellence in clinical care will flourish.
Clinical leadership	Clinical leadership is recognised as essential for improving the performance of health services and enhancing the wellbeing of patients and the quality of outcomes to improve safety, quality control, patient outcomes, and health service performances.
Clinical pathways	Standardised, evidence based multidisciplinary management plan, which identifies an appropriate sequence of clinical interventions, time frames, milestones and expected outcomes for a homogenous patient group.
Community service organisations	Registered community health centres, local government authorities and non-government organisations that are not health services.
Credentialing	<p>Formal process of verifying the qualifications, experience, professional standing and other relevant professional attributes for the purpose of forming a view about a clinician's competence, performance and professional suitability to provide safe, high-quality healthcare services within specific organisational environments.</p> <p>Credentialing is a requirement for hospital accreditation under the <i>National Safety and Quality Health Service Standards</i>. It is a formal process to verify the qualifications, experience, professional standing, competencies and other relevant professional attributes of staff to provide safe and high-quality care.</p> <p>For registered medical specialists, credentialing is as per <i>Credentialing and defining the scope of clinical practice for medical practitioners in Victorian health services – a policy handbook</i>.</p> <p>For registered medical practitioners (non-specialists) and non-medical health professionals, credentialing is a health service process whereby a registered medical specialist, or other suitably qualified person, assesses and documents that a health professional is appropriately qualified and competent to deliver safe, high-quality care within a specified scope of practice.</p>
Cultural competence	A system where a person's cultural background, beliefs and values are respected, considered and incorporated into the way healthcare is delivered to that individual.
Cultural respect and safety	The recognition, protection and continued advancement of the inherent rights, cultures and traditions of Aboriginal and Torres Strait Islander peoples and other cultural groups.
Dedicated space	Agreed area with the necessary equipment and resources for clinical assessment and care.
Demonstrated competency	<p>Refers to the demonstration of a current set of skills, knowledge and practice expertise required to provide care that is safe and high quality. Competency may be demonstrated across a scope of practice or depth of practice both during training or after formal assessment or credentialing.</p> <p>Competency is usually demonstrated through:</p> <ul style="list-style-type: none"> regular training and education ongoing workplace assessment and review recency of practice (within 12 months) <p>and may be used to offer privilege to provide specific services within a health service, be recognised through formal endorsement by a registering authority or a formal credentialing process.</p>
Dietitian	A member of, or an individual eligible for membership of, Dietitians Association of

	Australia.
Documented process/guidelines	A process agreed by services involved. It may include a networking agreement, letter of agreement between parties, a policy arrangement, memorandum of understanding or a contractual arrangement for the delivery and receipt of services, however, defined between two organisations.
Emergency department	<p>Facilities that support or include:</p> <ul style="list-style-type: none"> • triage and registration • basic primary and secondary assessment • streaming zone • early treatment zone • adult life support • advanced paediatric life support (if required) • trauma • resuscitation • acute care and stabilisation of critically ill patients • retrieval services • the health service's Disaster Response Plan including mass casualty management (e.g. transport for staff, decontamination showers, additional morgue facilities) • short stay unit • procedure room • ambulance delivery and retrieval • dental chair. <p>In addition, there may be sufficient facilities, fit-for-purpose for patients with specific needs including:</p> <ul style="list-style-type: none"> • the elderly and people with dementia • children (e.g. reducing sensory overload, protection from adult clinical areas or trauma treatment areas, size appropriate bathroom facilities, parenting room) if required • people with disabilities • patients in custody • people with behaviours of concern • culturally safe places • the management of patients following sexual assault • patients with minor or major injury, industrial illness and injury, sport-related injury, drug and alcohol-related presentations, mental health conditions, complications of pregnancy, chemical, biological and radiological (CBR) exposure and those with infections or who are immunosuppressed. <p>The design of facilities should be informed by the Australasian Health Facilities Guidelines on emergency departments</p> <p>Accessible parking spaces must be provided where set-down locations are provided, associated with pedestrian entries to hospital facilities near emergency departments.</p>
Exercise physiologist	A member of, or an individual eligible for membership of, Exercise and Sports Science Australia.
Extended hours	The service is available beyond 9 am to 5 pm Monday to Friday; this may be extended hours during the day/evening or over the weekend.
Facility	Physical or organisational structure that may operate a number of services of a similar or differing capability level.

Guideline	Evidence-based statement(s) and/or recommendations that assist decision making to optimise patient care and outcomes. Guidelines include information and advice regarding referral pathways.
Health practitioner	A person whose name is entered on a register of practitioners maintained by a competent authority.
Health service	Public health services, denominational hospitals, public hospitals and multipurpose services, as defined by the <i>Health Services Act 1988</i> , in regard to services provided within a hospital or a hospital-equivalent setting.
Health service designation	The act of assigning responsibilities to a specific health service to undertake a defined role. Designation is usually based on the level of workforce and infrastructure capacity. For example, statewide major trauma services are designated to a small number of health services funded to deliver trauma care.
High dependency unit	A high dependency unit is a specially staffed and equipped section of an intensive care complex that provides a level of care intermediate between intensive care and general ward care.
Infrastructure	The physical equipment and facilities required to support service configuration and capacities necessary to achieve desired performance outcomes.
Intensive care unit	<p>A unit within the hospital that has additional equipment and infrastructure to support:</p> <ul style="list-style-type: none"> • immediate resuscitation and short-term cardio-respiratory support • mechanical ventilation • invasive cardiovascular monitoring • renal replacement therapy • complex multi-system life support. <p>The design of facilities should be informed by the Australasian Health Facilities Guidelines on intensive care units</p>
Medical practitioner	A health practitioner who has successfully completed a Bachelor of Medicine, Bachelor of Surgery (MBBS) or equivalent as accredited by the Australian Medical Council. A medical practitioner holds registration with the Medical Board of Australia.
Medical practitioner (General Practitioner)	A medical practitioner who has attained a specialist general practice qualification with either the Royal Australian College of General Practitioners or the Australian College of Rural and Remote Medicine.
Medical specialist	<p>A medical practitioner who holds specialist registration with the Medical Board of Australia.</p> <p>Specialist registration is available to medical practitioners who have been assessed by an Australian Medical Council-accredited medical specialist college as being eligible for fellowship. Fellowship is not a pre-requisite for specialist registration.</p>
Midwife	A person registered in the Register of Midwives kept by the Nursing and Midwifery Board of Australia under the Health Practitioner Regulation National Law, other than as a student
Non-admitted care	<p>Dedicated facilities, fit-for-purpose for the range of services required including:</p> <ul style="list-style-type: none"> • medical consultations • nursing consultations • allied health consultations • pharmacy services • telehealth • culturally safe spaces for patients and their families and carers

	<ul style="list-style-type: none"> • facilities to support home-delivered non-admitted care. <p>The design of facilities should be informed by the Australasian Health Facilities Guidelines including guidance on design for access, mobility, staff and patient safety, security, infection prevention, environmental design and specific requirements for speciality services (e.g. pharmacy unit, medical imaging).</p> <p>Accessible parking spaces must be provided where set-down locations are provided, associated with pedestrian entries to hospital facilities near non-admitted services.</p>
Nurse Practitioner	A registered nurse educated to masters level or equivalent and authorised to provide advanced nursing care. Nurse practitioners function autonomously and collaboratively in an advanced and extended clinical role. The nurse practitioner role includes assessment and management of clients using nursing knowledge and skills and may include but is not limited to the direct referral of patients to other health care professionals, prescribing medications and ordering diagnostic investigations.
Occupational therapist	A health practitioner registered with the Occupational Therapy Board of Australia
On-site	Staff, services and/or resources located within the health facility or an adjacent campus, including third party providers.
Operating hours	The hours a specific service is open and provides services to patients.
Operating rooms	<p>Sufficient dedicated facilities, fit-for-purpose for:</p> <ul style="list-style-type: none"> • pre-operative care • intra-operative care • post-operative care • patients with special needs • telehealth. <p>The operating rooms should be suitably flexible to accommodate the day-to-day fluctuations in surgical and procedural caseload enable the use of current and emerging technologies (e.g. robotics) and support clinical training.</p> <p>The design of facilities should be informed by the Australasian Health Facilities Guidelines on operating units</p>
Or equivalent	<p>A health professional determined via a credentialing process to have met the required workforce capability level. This applies to but is not limited to the following health professionals:</p> <ul style="list-style-type: none"> • registered medical practitioners with Limited Registration (or Provisional Registration) on either the Specialist Pathway – specialist recognition or the Specialist Pathway – area of need • registered medical practitioners on accredited training programs with previous training undertaken interstate.
Partnership care	A model of care between the patient, their General Practitioner and the health service(s) for patients with chronic or progressive conditions that require ongoing specialist advice.
Peer review process	The evaluation by a practitioner of creative work or performance by other practitioners in the same field in order to assure, maintain and/or enhance the quality of work or performance.
Pharmacist	A health practitioner registered with the Pharmacy Board of Australia.
Physiotherapist	A health practitioner registered with the Physiotherapy Board of Australia.
Planned/elective surgery and procedures	Surgery or procedures that, in the opinion of the treating clinician, is necessary but for which admission can be delayed for at least 24 hours.
Point of care	Also referred to as bedside testing. Diagnostic testing that takes place at or near the

testing	point of care – at the time and place of patient care.
Primary care	<p>Primary care is often the first point of contact people have with the health system. Primary care is provided in community settings by a number of different health professionals. Primary care often refers to medical care provided by general practitioners, but it can also refer to care provided by nurses, dentists, pharmacists, allied health and mental health providers, and Aboriginal and Torres Strait Islander health practitioners. Primary care services are usually:</p> <ul style="list-style-type: none"> • the pathway people generally take to other services • a point of coordination between other services • located in the community • directly connected to people's daily lives and to the management of their wellbeing.
Protocol/established protocol	An agreed framework outlining the care to be provided to patients in a given situation.
Psychologist	A health practitioner registered with the Psychology Board of Australia.
Radiographer or Medical Imaging Technologist	A health practitioner registered with the Medical Radiations Practitioners Board of Australia.
Referral pathway	A shared and agreed process by which a patient is referred from one service provider to another. This includes agreed referral criteria, consistent management of referrals and timely communication between service providers regarding the outcome of the referral.
Service (health)	Refers to a clinical service provided under the auspices of an organisation or facility. The word 'facility' usually refers to a physical or organisational structure that may operate a number of services of a similar or differing capability level.
Seven days a week	A specific service is open and provides services every day of the week.
Social worker	A member of, or individual eligible for membership of, the Australian Association of Social Workers.
Speech pathologist	A member of, or eligible for membership of, Speech Pathology Australia.
Statewide service	A specialist service that is provided by one or two health services for the entire state. Examples include transplant services, specialist services for children, and endovascular clot retrieval for acute stroke.
Telehealth	<p>Telehealth refers to the use of information and communications technologies (ICTs) to deliver health services and transmit health information for healthcare to be provided closer to home, including in-home care. It is about transmitting voice, data, images and information between users to support and/or provide healthcare, rather than needing to move patients, health professionals or educators to the same location. It encompasses diagnosis, treatment, preventive (educational) and curative aspects of healthcare services and typically involves patient(s), care providers or educators in the provision of these services directed to patients.</p> <p>Video consulting/conferencing is one of the main ways telehealth is improving access to healthcare services for patients, and is a requirement of telehealth capability.</p>
Urgent care centres	Urgent care centres are generally found in rural areas in Victoria. They are often supported by general practitioners and/or advanced practice nurses.

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