

**NEW PRESCRIBED SPECIALISED SERVICES SERVICE SPECIFICATION
TEMPLATE**

SCHEDULE 2 – THE SERVICES

A. Service Specifications

1. Service name	Cardiac Surgery
2. Service specification number	A10/S/a - 240701
3. Date published	July 2024
4. Accountable Commissioner	NHS England Internal Medicine Programme of Care <u>NHS commissioning » Cardiac services</u> <u>(england.nhs.uk)</u>

5. Population and/or geography to be served
5.1 Population covered
<p>This specification (the 'Specification') covers the provision of Cardiac Surgery for adults with acquired heart disease ("the Service").</p> <p>The service outlined in the specification is for patients ordinarily resident in England. For the purposes of commissioning health services, this EXCLUDES patients who, whilst resident in England, are registered with a GP practice in Wales or Scotland, but INCLUDES patients resident in Wales or Scotland who are registered with a GP practice in England.</p> <p>It is expected that the entire population of England would access cardiac surgical services in similar ways irrespective of geography, gender and race.</p> <p>This specification covers ALL adult cardiac surgery BUT does not include surgery for the following groups of patients:</p> <ul style="list-style-type: none"> i) Transplantation with or without Ventricular Assist Device implantation ii) Surgery for congenital cardiac problems iii) Non-vascular thoracic surgery.
5.2 Minimum population size
<p>The Service must be configured so that there is sufficient volume to ensure workforce sustainability and maintain professional expertise and should serve a population sufficient to support a critical mass of infrastructure required to deliver the service. Typically, a provider would serve a population of 1-3 million, but networks should ensure complete and equitable coverage of their catchment, working in conjunction with providers.</p>

6. Service aims and outcomes

6.1 Service aims

Cardiac surgery is a surgical sub-specialty within the specialty of cardiothoracic surgery and includes provision of:

- Surgical interventions for coronary artery disease and its complications requiring surgical revascularisation;
- Valve disease requiring surgical valve repair or replacement;
- Surgery of the aorta in the thorax, both emergency and elective;
- Surgery to deal with trauma involving the heart and a group of miscellaneous conditions such as surgery for cardiac arrhythmias, resections of muscular obstruction within the heart and cardiac tumours.

The aim of the service is to:

- Deliver high quality clinical care and holistic support to service users in a culturally appropriate way;
- Improve the clinical outcomes, quality of life and experiences of people affected by the need for cardiac surgery;
- Ensure that there is equity of access for all elements of the service and comparable clinical outcomes for all service users across all centres;
- Support and advise all professional groups within the system to offer care closer to home whenever it is clinically appropriate to do so;
- Deliver cardiac surgical services built around a model in each provider centre and across each region that supports an approach based around multidisciplinary teams;
- Ensure that the patients and families of service users are involved in care pathways;
- Engage in processes of continuous improvement and incorporate a patient safety culture;
- Provide treatment in a timeframe that is appropriate for the patient's condition;
- Ensure the appropriate alignment of patient, procedure and team (subspecialisation).

This service is provided by commissioned cardiac surgery centres in England.

6.2 Outcomes

NHS Outcomes Framework Domains & Indicators

Domain 1	Preventing people from dying prematurely
Domain 2	Enhancing quality of life for people with long-term conditions
Domain 3	Helping people to recover from episodes of ill-health or following injury
Domain 4	Ensuring people have a positive experience of care
Domain 5	Treating and caring for people in safe environment and protecting them from avoidable harm

Service defined outcomes/outputs

Outcome reference number	Domain	Rationale	Name of outcomes / description
<u>CS07</u>	3, 4 & 5	This is an indicator of the quality of the initial surgery. Good quality surgery would indicate no return to theatre is required, and there are no complications arising from initial surgery.	Return to theatre for any cause, including: <ul style="list-style-type: none"> a. no re-operation necessary b. re-operation for bleeding or tamponade c. re-operation for valvular problems d. re-operation for graft problems e. re-operation for other cardiac problems f. sternum re-suturing (sterile) g. surgery for deep sternal wound infection
CS08	1, 2 & 4	This is an indicator of the success of the surgery, and of the effectiveness of the surgical team	1 year survival rate
CS09	1, 2 & 4	This provides a measure of the appropriateness of the initial decision for surgery	5 year cardiac surgery / cardiology repeat procedure for the same condition within 5 years

7. Service description

7.1 Service Model

The Provider will deliver the service for a network of referring secondary care organisations, within and across clinical network boundaries. The Provider must ensure that the service provides:

- 24/7, 7 day per week service provision for elective and emergency cardiac surgery;
- Work as a multi-disciplinary team to support patient selection and identification of appropriate patient treatment pathways;
- Signpost relevant patients to appropriate services for highly specialised services;
- High volume surgery - revascularisation, aortic valve and proximal aortic surgery, mitral valve surgery, arrhythmia surgery, atrial tumour surgery and surgery for endocarditis should all be delivered at each centre (primary and some redo procedures);
- Decisions for surgery should be based on evidence and clinical guidelines, with individual patients being discussed in appropriate multi-disciplinary team meetings;
- Providers must use published NHSE patient prioritisation criteria and best practice guidance to assist cardiac surgeons in prioritising patients added to surgical waiting lists;
- Work in close collaboration with regional cardiac clinical networks to ensure optimal treatment and access for service users;
- The service must encourage regional solutions and mutual aid across providers where there may be local service constraints;
- Providers must collect waiting list and activity data at a local level to aid cardiac clinical networks and commissioners in understanding and managing patient flows.

And, if not already in place, providers should work towards:

- a daytime consultant presence free of fixed responsibilities to supervise ward care, optimise patient flow and provide support for urgent revascularisation pathways;
- adopting examples of best practice to optimise patient outcomes and improve patient flow, such as enhanced recovery after cardiac surgery (ERAS) programmes, day of surgery admission (DOSA), smarter scheduling, use of remote monitoring and virtual wards. (GIRFT, 2017);
- developing opportunities to reducing waiting times for cardiac surgery patients, such as with extended operating lists and waiting list initiatives.

As part of a regional cardiac network, the system should:

- Ensure providers work with the responsible network and other providers to minimise the need for unwarranted out-of-region flows, keeping care as close to home for patients and integrated into local pathways of care;
- Provide a locally networked model of primary and secondary care complementing the tertiary centre;

- Work within a regional network of tertiary centres to deliver low-volume high complexity work;
- Low-volume high complexity surgery – such as distal arch and descending thoracic aortic surgery, hypertrophic cardiomyopathy (HCM) surgery, complex mitral valve procedures, complex redo surgery, complex endocarditis, non-atrial tumour surgery should be delivered within a centre by surgeons with a sub-specialist interest, to concentrate team experience for the best patient outcomes;
- There should be regional collaboration to deliver treatment for acute type A aortic dissection (ATAAD) by aorto-vascular specialists, and treatment of patients with mitral valve disease by mitral valve specialists;
- There should be regional collaboration to develop networks to deliver minimally invasive cardiac surgery.

7.2 Pathways

Overall patient pathway

Cardiac surgery is a tertiary level of care, and normally patients are referred from cardiology services, other than those that present as an emergency in the Emergency Department. Occasionally patients are referred directly from primary care, but this is not common. Cardiac surgery is commissioned from a range of different centres:

- Trusts where the cardiac surgery service is co-located with other secondary care and emergency care provision
- Trusts where the cardiac surgery element sits on a separate site from the cardiology department
- Cardiac providers that do not have an emergency department, and that focus solely on elective activity

Cardiac surgery and interventional cardiology services remain closely interlinked, and where these two specialties are provided from different sites, excellent working arrangements are needed to ensure the best multi-disciplinary and supportive approach for patients. In these circumstances trusts must ensure there are robust arrangements to transfer patients (and imaging) between sites, where needed.

Patients referred from secondary care cardiology will be discussed in a multi-disciplinary team (described later), to determine the appropriate diagnostics undertaken, and plan appropriate pathway of care. Pathway co-ordinators, where appointed, will be able to help with co-ordinating appointments for diagnostics and pre-assessment activities, and often patients find these a helpful contact point for queries. Surgical treatment is usually delivered as inpatient care, and recovery will usually require a short period of enhanced care in a critical care unit with specific cardiac expertise. Patients are discharged to primary care or their referring acute hospital cardiology team for ongoing care, rehabilitation and long term follow up. Patients with heart valve replacements or repairs should have long term follow up in a structured heart valve clinic setting. Similarly, patients undergoing surgery on the thoracic aorta should have the opportunity for long term follow up in an aortic surveillance clinic.

Cardiac centres should use pooled unit waiting lists for patients awaiting coronary artery bypass grafting, aortic valve replacement and combined aortic valve replacement + coronary artery bypass grafting.

Tertiary centres will receive patients from a number of referring Acute providers, and referring services may be linked into the MDT and able to support with diagnostics before the patient is transferred to the tertiary unit.

Cardiac centres should also be able to work together across the region for mutual support and aid, and to ensure concentration of expertise for the low volume high complexity procedures to ensure a high level of expertise and to promote and support ongoing workforce development and training.

Most of these working relationships will be within cardiac networks, although there needs to be a facility for services to work across network boundaries where this is in the best patient interest.

Shared Decision Making

All patients should have input into the decision-making process about options for their care, with use of appropriate tools.

Transition:

All healthcare services are required to deliver developmentally appropriate healthcare to patients and families. Children and young people with ongoing healthcare needs may present direct to adult services or may be required to transition into adult services from children's services. Transition is defined as a 'purposeful and planned process of supporting young people to move from children's to adult services'. Poor planning of transition and transfer can result in a loss in continuity of treatment, patients being lost to follow up, patient disengagement, poor self-management and inequitable health outcomes for young people. It is therefore crucial that adult and children's NHS services, in line with what they are responsible for, plan, organise and implement transition support and care (for example, holding joint annual review meetings with the child/young person, their family/carers, the children's and adult service). This should ensure that young people are equal partners in planning and decision making and that their preferences and wishes are central throughout transition and transfer. NICE guidelines recommend that planning for transition into adult services should start by age 13-14 years at the latest, or as developmentally appropriate and continue until the young person is embedded in adult services.

7.3 Clinical Networks

All Providers are required to participate in and contribute to a networked model of care to enable services to be delivered as part of a co-ordinated, combined whole system approach. Cardiac networks, their aims and responsibilities are described in the network specification [[Cardiac Clinical Network Specification \(england.nhs.uk\)](https://www.england.nhs.uk)], and trusts should participate and contribute as set out in Schedule 2F of the NHS Standard Contract Particulars.

7.4 Essential Staff Groups

There should be a single named lead clinician for the service who should also be a core multidisciplinary team member.

Patient care is dependent on a mixed economy of staff groups with experience in the management of cardiac patients, and will be drawn from medical, nursing and other professional backgrounds to provide a holistic environment for treatment and recovery of cardiac surgical patients.

The Provider should ensure that the service is able to operate a compliant shared MDT, appropriately supported administratively, with collective decision making and collective ownership, utilising the following essential staff groups:

- Consultant cardiac surgeons;
- Referring cardiologist (including equal arrangements for inclusion if from a different trust);
- Consultant cardiac anaesthetist;
- Intensive care consultants;
- Interventional Cardiologists;
- Advanced nurse practitioners and specialist nurses;
- Patient pathway co-ordinators (where these are in place);
- Consideration should also be made for including consultant cardiac radiologists and consultant imaging cardiologists.

Further detailed information is available from:

[\[mdm_guidance_final_confirmed_for_publication_may_2021.pdf \(scts.org\)\]](#)

- The service will be delivered in a dedicated area with core staff dedicated to the delivery of postoperative care of patients recovering from open-heart surgery;
- Dedicated intensivists who have experience and training in the management of the postoperative patient following open-heart surgery;
- Cardiopulmonary bypass and post-cardiotomy mechanical circulatory support should be delivered by perfusionists or other staff fully trained in their use;
- Staff must be fully trained in the post operative care of surgical patients, including their resuscitation.

7.5 Essential equipment and/or facilities

- All heart surgery must be undertaken in fully equipped and staffed dedicated operating theatres by specialist cardiac anaesthetists with immediate availability of transoesophageal echocardiography.
- All cardiac surgical units must have detailed and robust working relationships, including immediate access, with all other major branches of acute medicine and surgery, in particular:
 - complex interventional cardiology
 - cardiac imaging
 - heart failure service
 - vascular services
 - renal medicine

- gastroenterology teams
- general and plastic surgery
- neurology (ideally with acute stroke teams) and intensive care programmes

In addition, there must be close links with physiotherapy, pre- and post-operative rehabilitation services.

Patients who have undergone such surgery must be returned to an area capable of managing such patients including those who do not follow a straightforward path and might necessitate prolonged ventilation and inotropic support, an intra-aortic balloon pump, haemofiltration or access to many additional specialists who will be available to attend at short notice.

Provision for emergency re-sternotomy and cardio-pulmonary bypass on the intensive care unit should be made with adequate resourcing.

All commissioned providers of the service must be able to provide access to support services without the need to transfer patients to an alternative hospital.

7.6 Inter-dependant Service Components – Links with other NHS services

The service must have access to:

- Fully equipped, staffed and appropriately sized Cardiac intensive care unit (CICU) that meet the core standards for intensive care units;
- Effective multidisciplinary working with all the subspecialties of cardiology including inherited cardiac conditions, and access 24/7 to a staffed catheterisation lab for structural, coronary and pacing interventions;
- Immediate availability of vascular surgery and interventional vascular radiology and all associated imaging modalities (vascular lab / hybrid theatre, CT, ultrasound, MRI);
- Immediate availability of renal services (Haemofiltration / dialysis / management of co-morbidities);
- Co-located GI surgery and gastroenterology with 24/7 access to general theatre team and for upper and lower GI endoscopy;
- Co-located with haematology and transfusion services;
- Co-location with microbiology for daily input into CICU ward rounds and ward advice (endocarditis MDT).

7.7 Additional requirements

Collection, and timely submission of data is an essential component of the service. Providers must collect waiting list and activity data at a local level to aid cardiac clinical networks and commissioners in understanding and managing patient flows. Adequate personnel and IT infra-structure should be in place to ensure the quality of the data collected as required within the contract.

Data should be submitted to the National Adult Cardiac Surgery Audit, which is part of the National Cardiac Audit Programme.

Data regarding implanted devices, and outcomes, must be captured at the time of operation, and submitted to the relevant registries.

Trusts should benchmark their own outcomes with those of peers using data from the national adult cardiac surgery audit, and using tools such as the National Cardiac Benchmarking Collaborative, and other relevant tools.

Trusts will need to respond to reasonable data requests from Commissioners as needed.

Cardiac surgery should be coded using specialty code 172. Code 170 should no longer be used. Cardiac surgery in-patient and outpatient activity should be identified by application of the IR software tool, and coded with NCBPS 13E (inpatients), and NCBPS13Z (outpatients).

It is a requirement that the service looks for opportunities for participation in clinical trials and research relating to cardiac surgery.

7.8 Commissioned providers

The list of commissioned providers for the services covered by this specification can be found here. [\[ADD LINK TO THE COMMISSIONED PROVIDER LIST ONCE AVAILABLE\]](#)

7.9 Links to other key documents

- [Cardiology GIRFT report](#)
- [Cardiac Surgery GIRFT report](#)
- [SCTS / BCS / ATACC report: Getting the best from the heart team](#)
- [MDM_guidance_final_May_2021.pdf \(scts.org\)](#)
- [NHS England Acute type A aortic dissection toolkit](#)
- [European and US published guidelines for: revascularisation, management of patients with heart valve disease](#)
- [NICE guidance: Management of patients with heart valve disease](#)
- [NICOR cardiac surgery annual reports](#)
- [Cardiac Surgery Prioritisation of Patients guidance](#)

Please refer to the [manual for prescribed specialised services](#) for information on how the services covered by this specification are commissioned and contracted.

Please refer to the Identification Rules tool for information on how the activity associated with the service is identified and paid for.

Please refer to the relevant Clinical Reference Group webpages [NHS commissioning » Cardiac services \(england.nhs.uk\)](#) for NHS England Commissioning Policies which define access to a service for a particular group of service users.

Change form for published Specifications and Products developed by Clinical Reference Group (CRGs)

Product name: Cardiac Surgery

Publication number:

CRG Lead: Cardiac Surgery CRG and Internal Medicine Programme of Care

Description of changes required

Describe what was stated in original document	Describe new text in the document	Section/Paragraph to which changes apply	Describe why document change required	Changes made by	Date change made
Previous document was in the 2013 specification format	Wording has been transferred to the new specification format, which has included re-ordering sentences, and rephrasing in order to ensure the specification continues to follow a logical dialogue.	Whole document	Update to format of the specification template	Internal medicine Programme of Care	July 2023, October 2023, December 2023
Clinical metrics and outcome indicators listed in section 4.2, and appendix 1	Clinical outcomes statements listed within the document with the clinical metrics removed for separate publication	Old document section 4.2; new document section 6.2	Update to format and content of specification, in keeping with QNT Quality metrics reporting process	Specification Working Group, Internal Medicine Programme of Care, Quality and Nursing Team (QNT)	July 2023

<p>Large sections of descriptive text</p>	<p>Removed</p>	<p>(old template) National context</p>	<p>Principle that moving to outcome focused rather than prescriptive service specifications. Removal of unnecessary descriptive and clinical text.</p>	<p>Specification Working Group</p>	
<p>Despite a steady increase in the risk profile of the patients treated (as reflected by an increase in the mean logistic Euroscore) there has been a steady reduction in hospital mortality. The numbers per million population should be expected to be in the region of: i) All cardiac surgery; circa 580/million ii) Isolated CABG;</p>	<p>The Service must be configured so that there is sufficient volume to ensure workforce sustainability and maintain professional expertise and should serve a population sufficient to support a critical mass of infrastructure required to deliver the service.</p> <p>A provider would serve a population of 1-3 million, but networks should ensure complete and equitable coverage of their catchment, working in conjunction with providers.</p>	<p>5.2 Minimum population size</p>	<p>Principle that moving to outcome focused rather than prescriptive service specifications. Removal of unnecessary descriptive and clinical text.</p>	<p>Specification Working Group Internal Medicine Programme of Care</p>	<p>December 2023</p>

<p>circa 300/million iii) Isolated valve surgery; 240/million</p>					
	<p>Cardiac surgery is a surgical sub-specialty within the specialism of cardiothoracic surgery and includes provision of:</p> <ul style="list-style-type: none"> • Surgical interventions for coronary artery disease requiring surgical revascularisation • Valve disease requiring surgical valve repair or replacement • Surgery of the aorta in the thorax, both emergency and elective • Surgery to deal with trauma involving the heart and a group of miscellaneous conditions such as surgery for cardiac arrhythmias and resections of muscular obstruction within the heart, and cardiac tumours. 	<p>6.1 Service aims</p>	<p>Text updated to reflect aims of the service, and to match the PSS Manual</p>	<p>Specification Working Group</p>	<p>Jan 2024</p>
<p>[Section 3.1 -] There is a CQUIN related specifying the time from acceptance onto a surgical list, to surgery.</p>	<p>Removed</p>	<p>(old template) National context</p>	<p>CQUINs no longer applicable for this service so all references removed.</p>	<p>Specification Working Group</p>	

	<p>Updated description of service model separating what is the responsibility of the commissioned trust, and what should be a shared responsibility across a network of trusts.</p> <p>The Provider will deliver the service for a network of referring secondary care organisations, within and across clinical network boundaries. The Provider must ensure that the service provides:</p> <ul style="list-style-type: none"> • 24/7, 7 day per week service provision for elective and emergency cardiac surgery; • Work as a multi-disciplinary team to support patient selection and identification of appropriate patient treatment pathways; • Signpost relevant patients to appropriate services for highly specialised services; • High volume surgery - revascularisation, aortic valve and proximal aortic surgery, mitral valve surgery, arrhythmia surgery, atrial tumour surgery and surgery for endocarditis should all be delivered at each centre (primary and some redo procedures); 	7.1 Service Model	Requirement of new template includes detailing the service model	Specification Working Group	Mar 2024
--	--	-------------------	--	-----------------------------	----------

	<ul style="list-style-type: none"> • Providers must use published NHSE patient prioritisation criteria and best practice guidance, to assist cardiac surgeons in prioritising patients added to surgical waiting lists. • Work in close collaboration with regional cardiac clinical networks to ensure optimal treatment and access for service users; • The service must encourage regional solutions and mutual aid across providers where there may be local service constraints. <p>And, if not already in place, providers should work towards:</p> <ul style="list-style-type: none"> • a daytime consultant presence free of fixed responsibilities to supervise ward care, optimise patient flow and provide support for urgent revascularisation pathways. • adopting examples of best practice to optimise patient outcomes and improve patient flow, such as enhanced recovery after cardiac surgery (ERAS) programmes, day of surgery admission (DOSA), smarter scheduling, use of remote monitoring and virtual wards. (GIRFT, 2017) 				
--	---	--	--	--	--

	<ul style="list-style-type: none"> • developing opportunities to reducing waiting times for cardiac surgery patients, such as with extended operating lists and waiting list initiatives <p>As part of a regional cardiac network, the system should:</p> <ul style="list-style-type: none"> • Ensure providers work with the responsible network and other providers to minimise the need for unwarranted out-of-region flows, keeping care as close to home for patients and integrated into local pathways of care. • Provide a locally networked model of primary and secondary care complementing the tertiary centre; • Work within a regional network of tertiary centres to deliver low-volume high complexity work; • Low-volume high complexity surgery – such as distal arch and descending thoracic aortic surgery, hypertrophic cardiomyopathy (HCM) surgery, complex mitral valve procedures, complex redo surgery, complex endocarditis, non-atrial tumour surgery should be delivered within a centre by surgeons with a sub-specialist interest, 				
--	--	--	--	--	--

	<p>to concentrate team experience for the best patient outcomes;</p> <ul style="list-style-type: none"> • There should be regional collaboration to deliver treatment for acute type A aortic dissection (ATAAD) by aorto-vascular specialists, and treatment of patients with mitral valve disease by mitral valve specialists; • There should be regional collaboration to develop networks to deliver minimally invasive cardiac surgery. 				
	<p>Insertion of overall patient pathway description, demonstrating use of networks and links between acute and tertiary cardiac centres.</p>	7.2 Patient Pathway	Requirement of new template	Specification Working Group	Mar 2024
	<p>Inclusion of requirement for shared decision making.</p> <p>Inclusion of a section regarding transition of children and young people from paediatric to adult services, requiring adult and children's NHS services plan, organise and implement transition support and care.</p>	7.2 Pathways	Generic section included in many specifications.	Specification Working Group	
<p>There should be agreed network wide protocols for the safe management of their ongoing</p>	<p>All Providers are required to participate in and contribute to a networked model of care to enable services to be delivered as part of a co-ordinated, combined whole system approach. Cardiac networks, their aims and responsibilities are described in</p>	7.3 Clinical Networks	Specify importance of clinical networks in delivering cardiac surgery. Additionally	Specification Working Group	

<p>ischaemia so that antiplatelet drugs and other evidenced based therapies are continued to reduce risk to as low as possible while preparing for surgery. Variance in such protocols should be avoided and audit performed to ensure that this is the case.</p>	<p>the network specification [link], and trusts should participate and contribute as set out in Schedule 2F of the NHS Standard Contract Particulars.</p>		<p>specifying that networks should cover the whole patient pathway in a single location in the specification. This is suggested in the previous specification however included in different sections.</p>		
<p>[Not specified]</p>	<p>There should be a single named lead clinician for the service who should also be a core multidisciplinary team member. Patient care is dependent on a mixed economy of staff groups with experience in the management of cardiac patients, and will be drawn from medical, nursing and other professional backgrounds to provide a holistic environment for treatment and recovery of cardiac surgical patients.</p> <p>The Provider should ensure that the service is able to operate a compliant shared MDT, appropriately supported</p>	<p>7.4 Essential Staff Groups</p>	<p>Principle that moving to outcome focused rather than prescriptive service specifications. Removal of unnecessary descriptive and clinical text.</p>	<p>Specification Working Group</p>	<p>Mar 2024</p>

	<p>administratively, with collective decision making and collective ownership, utilising the following essential staff groups:</p> <ul style="list-style-type: none"> - Consultant cardiac surgeons; - Referring cardiologists; - Consultant cardiac anaesthetics; - Intensive care consultants; - Interventional Cardiologists - Advanced nurse practitioners, and specialist nurses - Patient pathway co-ordinators - Consideration should also be made for including consultant cardiac radiologists and consultant imaging cardiologists. 				
<p>3.5 Interdependencies with other services / providers -</p>	<p>Reformatted into a bullet point list, including</p> <ul style="list-style-type: none"> - specific mention of cardiac intensive care units (CICU), - specific mention of microbiological support for input into ward advice 	<p>7.6 Interdependencies with other service components</p>	<p>Moving to outcome focused specifications. Removal of unnecessary descriptive and clinical text. Includes CICU, which was described but not named, and microbiology input, which along with CICU</p>	<p>Specification Working Group</p>	

			have become standard practice since original specification		
	<p>Data should be submitted to the National Adult Cardiac Surgery Audit, which is part of the National Cardiac Audit Programme. Data regarding implanted devices must be captured at the time of operation, and submitted to the relevant registry.</p> <p>Trusts should benchmark their own outcomes with those of peers using data from the national adult cardiac surgery audit, and using tools such as the National Cardiac Benchmarking Collaborative.</p> <p>Trusts will need to respond to reasonable data requests from Commissioners as needed.</p> <p>Included specific coding detail</p>	7.7 Additional Requirements	Explicit expectation of data reporting, which is established practice for services, and included in the standard NHS Contract.	Internal Medicine Programme of Care	December 2023
4.2 Applicable standards	<ul style="list-style-type: none"> • Cardiology GIRFT report • Cardiac Surgery GIRFT report • SCTS / BCS / ATACC report: Getting the best from the heart team • NHS England Acute type A aortic dissection toolkit 	7.9 Links to other key documents	Updating links and references to external professional guidance and standards relevant for the service	Internal Medicine Programme of Care	December 2023

	<ul style="list-style-type: none">• European and US published guidelines for: revascularisation, management of patients with heart valve disease• NICE guidance: Management of patients with heart valve disease• NICOR cardiac surgery annual reports• Cardiac Surgery Prioritisation of Patients guidance				
--	--	--	--	--	--