Provider line of sight table on report recommendations for submission to the funders	
Please can the provider complete the following details to allow for ease of access and rapid review	
Project and Title of report	**National Adult Cardiac Surgery Audit (NACSA) 2023 Summary Report (on 2019/22 data)**
1. What is the report looking at/what is the project measuring?	**National Adult Cardiac Surgery Audit (NACSA)**
2. What countries are covered?	**UK (England, Wales and Northern Ireland only)**
3. The number of previous projects (e.g. whether it is the 4th project or if it is a continuous project)	**Continuous**
4. The date the data is related to (please include the start and end points – e.g. from 1 January 2016 to 1 October 2016)	**1st April 2019 to 31st March 2022**
5. Any links to NHS England/NHS Improvement objectives or professional work-plans (only if you are aware of any)	

Please can the provider complete the below for each recommendation in the report						
No.	**Recommendation**	**Evidence in the report which underpins the recommendation**	**Current national audit benchmarking standard if there is one**	**Associated NHS payment levers or incentives'**	**Guidance available (for example, NICE guideline)**	**% project result if the question previously asked by the project (date asked and result). If not asked before please denote N/A. This is so that there is an indication of whether the result has increased or**

NICOR

						decreased and over what period of time
Rec 1	Hospitals with prolonged waiting times for elective CABG surgery should review their processes and referral pathways to identify the causes of any delays. If necessary, advice should be sought from centres with evidence of the best performance. A QI action plan should be instigated to achieve this target. Units not achieving the target should consider ring-fencing level 3 intensive care unit (ICU) facilities and seek to make greater use of day-of-surgery admissions (DOSA) and enhanced recovery after surgery (ERAS) to improve patient flows and outcomes. Patients should be offered surgery in neighbouring hospitals with shorter waiting times if reductions in waiting times cannot be demonstrated.	NACSA report, section 3.1. • Only 9 NHS (and 2 private) hospitals achieved the 12 week (84 day) target in 2020/21. There were considerable differences in elective waiting times between the best and worst performing NHS hospitals, ranging from 60 to 245 days [Figures 3.1 and 3.2].	NHS England target of 18 weeks (126 days) from GP referral to treatment (but this includes several other steps in the pathway prior to final referral for surgery), meaning that the portion from the performance of diagnostic investigations to the treatment should be considerably less than 18 weeks. The finding of an abnormality on the coronary angiogram is usually the point that triggers the consideration of a referral for cardiac surgery. This time (from angiogram to operation) is the portion of the patient pathway that surgical teams can influence. A target of 84 days means that the surgical team has taken 67% (12 weeks) of the referral-to-treatment time.	Referral to Treatment Target	• N/A	After increasing during 2020/21 elective waiting times last year (2021/22) across England have now fallen but not back to pre-pandemic levels (114 days compared to 102 days pre-COVID). In Wales the wait is now 109 days (compared to 130 days). However, in Northern Ireland the waits have continued to worsen last year and are now 199 days (compared to 122 days pre-COVID).

Rec 2	Hospitals not reaching the 7-day target of urgent CABG performed after coronary angiography should undertake a review of their processes to identify where delays occur and how these can be avoided. If necessary, advice should be sought from centres with evidence of the best performance. A QI action plan should be instigated to reduce delays. Hospitals should have agreed and uniform referral processes from all referring centres. Ideally this should be through a unified online referral portal. Regional protocols should be agreed between surgical and cardiology teams to stop anti-platelet agents pre-operatively to minimise delays once referred. A common surgical waiting list should be shared by all surgeons. Units not achieving the target should consider ring-fencing level 3 ICU facilities and seek to make greater use of	NACSA report, section 3.2. There is considerable variation between NHS hospitals (from 8 days to 27 days). No hospital achieved the target last year (compared to 3 hospitals in 2020/21) [Figures 3.3 and 3.4].	The Commissioning for Quality and Innovation framework (CQUIN) target in 2016 recommended that 100% of patients should meet the target of undergoing urgent CABG within 7 days of angiography	CQUIN	ESC/EACTS Revascularisation Guidelines	Urgent waiting times have increased by 2 days in the last year in England (to 12 days). In Northern Ireland waiting times have also increased by 7 days (to 27 days), whereas in Wales waits have improved by 3 days (to 14 days).

NICOR

	enhanced recovery after surgery (ERAS) to improve patient flows and outcomes.					
Rec 3	Hospitals not reaching the 75% target of urgent CABG performed within seven days of coronary angiography should undertake a review of their processes to identify where delays occur and how these can be avoided. If necessary, advice should be sought from centres with evidence of the best performance. A QI action plan should be instigated to reduce delays. Hospitals should have agreed and uniform referral processes from all referring centres. Ideally this should be through a unified online referral portal. Regional protocols should be agreed between surgical and cardiology teams to stop anti-platelet agents pre-operatively to minimise delays once referred. A common surgical waiting list should be shared by all surgeons.	NACSA report, section 3.3. The best performance was in England with 28% of patients meeting this target in 2021/22, although this is a drop from 35% in 2020/21. This is a long way below the expected 75% target set. Wales achieved 20% (versus 13% in 2020/21) with Northern Ireland only achieving 4% last year [Figures 3.5 and 3.6].	The Commissioning for Quality and Innovation framework (CQUIN) target (2016) recommended that 100% of patients should meet the target of undergoing urgent CABG within 7 days of angiography. In the 2021 NACSA report no NHS centre met this target.	CQUIN	ESC/EACTS Revascularisation Guidelines	No hospital achieved the 75% target and no centre achieved even 50% (whereas 3 hospitals did in 2020/21). There is a huge variance between the best and worst hospitals last year – from 43% to 4%.

NICOR

	Units not achieving the target should consider ring-fencing level 3 ICU facilities and seek to make greater use of enhanced recovery after surgery (ERAS) to improve patient flows and outcomes.					
Rec 4	Hospitals not reaching the Day-of-Surgery-Admission (DOSA) target should undertake a review of their processes to identify the barriers to achieving this target (such as introducing pre-assessment clinics). If necessary, advice should be sought from centres demonstrating the best performance. A QI action plan should be instigated to achieve this target.	NACSA report, section 3.4. After 3 years of improvements particularly in England following the GIRFT report in 2018, the rate fell to the lowest ever in 2020/21. Last year saw some improvement in England to 10.9%, but still not to the level seen before the pandemic [Figures 3.7 and 3.8].	At least 50% of elective patients should be admitted on the day of surgery	N/A	GIRFT 2018	There was very considerable variation amongst NHS hospitals in 2021/22 (from 0% to 55%). One hospital achieved the target of better than 50% last year, whereas 4 achieved it in 2019/20 (the year prior to COVID). In Wales and Northern Ireland hospitals do not yet appear to have developed effective DOSA programs, even before the pandemic.
Rec 5	Hospitals should have uniform and protocolised care for pre-operative antiplatelet drug cessation agreed between referring cardiology teams and the cardiac surgeons.	NACSA report, section 3.5. In the UK 2.24% patients were reopened for bleeding following their CABG surgery in	Based on the data from the last 3 years the best units (top quartile) have reopening rates for bleeding <1%. The bottom quartile has reopening rates >2.7%.	N/A	GIRFT 2018	There was a wide range of reopening rates between the best and worst hospitals (from 0% to 7%) last year.

NICOR

	Units should have agreed protocols for managing patients with pre-operative anaemia to optimise peri-operative care for patients having surgery. Units should have agreed blood transfusion triggers for the treatment of bleeding or anaemia during or after surgery with the aim of minimising or reducing transfusion requirements. Units not collecting blood transfusion data should collect and submit their data to NACSA for all patients.	2021/22. The rate in England was 2.34%, in Northern Ireland 1.26%, and in Wales 1.08%. Across the UK around 46% of patients undergoing CABG in 2021/22 required a blood transfusion of any type. The figures are remarkably similar across the 3 nations (England 46.1%, Northern Ireland 42.5% and Wales 46%) [Figures 3.9, 3.10 and 3.11].	This is the first year that blood transfusion rates have been collected. No target has been set, but the data presented aims to indicate current practice in the UK.			There is very considerable variation in blood transfusion rates (from 9% to 100%) between hospitals. Eleven hospitals have submitted no data.
Rec 6	Units should agree local and regional protocols for the conduct of multidisciplinary team (MDT) meetings in line with the Get It Right First Time (GIRFT) (2021) recommendations. Units should collect data for all patients on whether an MDT discussion has taken place	NACSA report, section 3.6. There are no previous data for comparison. Across the UK in 2021/22 MDT rates were 32% CABG, 32% AVR and 37% Mitral [Figures 3.12, 3.13 and 3.14].	All non-emergency patients in whom both PCI or CABG is an option should be referred through a quorate MDT. All non-emergency patients undergoing Valve surgery should be referred through a disease-specific quorate MDT	N/A	GIRFT 2018 Joint BCS/SCTS Consensus guidance for cardiac MDT meetings.	In England 31% CABG, 30% AVR and 36% Mitral operations were recorded as having been discussed at an MDT. Rates were similar in Wales (39% CABG, 33% AVR and 35% Mitral). However, in Northern Ireland MDT rates were much higher (80% CABG,

	and submit this to the NACSA audit.					80% AVR and 77% Mitral).