

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

<p>Project and Title of report, including HQIP REF <i>e.g. REF XX, Project and Report title</i></p>	<p>National Audit Of Cardiac Topics National Cardiac Audit Programme 2019 Annual Report Reference NCA 2005</p>
<p>1. What is the report looking at/what is the project measuring?</p>	<p>The National Cardiac Audit Programme 2019 Annual Report covers over 300,000 records across five clinical areas: Congenital Heart Disease, Heart Attack, PCI, Adult Surgery and Heart Failure. This report highlights quality improvement opportunities under the themes of timeliness, the need for specialised care and the need for evidence-based care delivered equitably. Examples of leading practice are provided to help reduce variation across the NHS and address areas where care falls below expected standards. The findings and quality improvement recommendations from a sixth clinical area, Cardiac Rhythm Management, will be reported later in the year.</p>
<p>2. What countries are covered?</p>	<p>Where possible, the report covers the whole of the UK (some of the six domains do not include all the countries).</p>
<p>3. The number of previous projects (e.g. whether it is the 4th project or if it is a continuous project)</p>	<p>This is the second year of the combined NCAP cardiovascular project.</p>
<p>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)</p>	<p>All domains cover 2017/18 data with some domains including 3-year rolling data from 2015/16 (or longer).</p>
<p>5. Any links to NHS England/NHS Improvement objectives or professional work-plans (only if you are aware of any)</p>	<p>The report links to the NHS Long-Term Plan cardiovascular objectives. Two of the domains (NACSA and NAPCI) also provide data to NHS Improvement COP programme.</p>

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 decreased and over what period of time
Rec 1	All STPs/local health systems should have in place the protocols and infrastructure to fast track to the PPCI team those heart attack patients presenting themselves to A&E or other settings without PPCI facilities.	NCAP 2019 Annual Report, page 7-11	<p>ESC target states balloon time should occur within 120 minutes of STEMI diagnosis (which in the UK is translated as a call-to-balloon target of 150 minutes).</p> <p>There are currently no agreed standards for call-to-door times.</p> <p>BCIS target: At least 75% of all patients should have a door-to-balloon time of less than 60 minutes.</p>	Not applicable	<ol style="list-style-type: none"> 1. MacCarthy PA, Blackman DJ, Hildick-Smith D, Banning AP. British Cardiovascular Intervention Society PPCI for STEMI Position Statement 2016. https://www.bcis.org.uk/wp-content/uploads/2016/12/MaCarthy_PA_072016_BCI_S.pdf 2. ESC Clinical Practice Guidelines 2017. Acute myocardial infarction in patients presenting with ST-segment elevation (Management of). https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Acute-Myocardial-Infarction-in-patients-presenting-with-ST-segment-elevation-Ma 3. NICE Clinical Guideline 	<p>9-minute deterioration in median call-to-balloon times observed over the last 3 years (14-minute deterioration since 2011).</p> <p>Overall median call-to-door time has increased from 67 minutes in 2016/17 to 75 minutes (direct admissions) and 77 minutes (all-comers, including inter-hospital transfers).</p>

					[CG167] July 2013. Myocardial infarction with ST-segment elevation: acute management. https://www.nice.org.uk/guidance/cg167/chapter/1-Recommendations	
Rec 2	All ambulance services need to review service delivery for patients with STEMI to see if the lengthening call-to-door times can be reversed.	NCAP 2019 Annual Report, page 7-11	ESC target states balloon time should occur within 120 minutes of STEMI diagnosis (which in the UK is translated as a call-to-balloon target of 150 minutes). There are currently no agreed standards for call-to-door times.	Not applicable	As above. There are currently no agreed standards for call-to-door times.	Overall median call-to-door has increased from 67 minutes in 2016/17 to 75 minutes (direct admissions) and 77 minutes (all-comers, including inter-hospital transfers).
Rec 3	All ambulance services and hospitals should put in place a single point of contact at the PPCI centre to activate the PCI team, which should be ready to receive the patient on arrival.	NCAP 2019 Annual Report, page 7-11	ESC target states balloon time should occur within 120 minutes of STEMI diagnosis (which in the UK is translated as a call-to-balloon target of 150 minutes). There are currently no agreed standards for call-to-door times. BCIS target: At least 75% of all patients should have a door-to-	Not applicable.	As above.	No significant change in door-to-balloon times over the last 3 years (though significant variation between hospitals).

			balloon time of less than 60 minutes.			
Rec 4	All ambulance services and hospitals should ensure that, wherever possible, the patient is taken directly to the catheter lab at the PPCI centre – the room in which PCI is performed.	NCAP 2019 Annual Report, page 7-11	<p>ESC target states balloon time should occur within 120 minutes of STEMI diagnosis (which in the UK is translated as a call-to-balloon target of 150 minutes).</p> <p>There are currently no agreed standards for call-to-door times.</p> <p>BCIS target: At least 75% of all patients should have a door-to-balloon time of less than 60 minutes.</p>	Not applicable.	As above.	<p>9-minute deterioration in median call-to-balloon times observed over the last 3 years (14-minute deterioration since 2011).</p> <p>No significant change in door-to-balloon times over the last 3 years (though significant variation between hospitals).</p>
Rec 5	Hospitals not reaching the current national or BCIS DTB standards should undertake a clinical pathway process review and identify areas where delays can be avoided. Advice should be sought from centres where such work has resulted in the meeting of the current standards.	NCAP 2019 Annual Report, page 7-11	<p>ESC target states balloon time should occur within 120 minutes of STEMI diagnosis (which in the UK is translated as a call-to-balloon target of 150 minutes).</p> <p>There are currently no agreed standards for call-to-door times.</p> <p>BCIS target: At least 75% of all patients should have a door-to-balloon time of less</p>	Not applicable.	As above.	<p>9-minute deterioration in median call-to-balloon times observed over the last 3 years (14-minute deterioration since 2011).</p> <p>No significant change in door-to-balloon times over the last 3 years (though significant variation between hospitals).</p>

			than 60 minutes.			
Rec 6	Every patient suspecting a heart attack should call for an ambulance and not attempt to take themselves to hospital.	NCAP 2019 Annual Report, page 7-11	ESC target states balloon time should occur within 120 minutes of STEMI diagnosis (which in the UK is translated as a call-to-balloon target of 150 minutes). There are currently no agreed standards for call-to-door times.	Not applicable	As above. There are currently no agreed standards for call-to-door times.	Overall median call-to-door has increased from 67 minutes in 2016/17 to 75 minutes (direct admissions) and 77 minutes (all-comers, including inter-hospital transfers).
Rec 7	All hospitals and ambulance services should ensure that local service delivery times for angiography and PCI for patients with non-STEMI (particularly for patients requiring inter-hospital transfer) are reviewed and that where delays are identified: <ul style="list-style-type: none"> • Multidisciplinary groups are set up to undertake a regional clinical pathway process review, and agree actions to bring times within the recommended standards; • Quality improvement action plans and business cases are drawn up to ensure a 	NCAP 2019 Annual report, page 11-14	High-risk patients with NSTEMI should undergo angiography (unless a contra-indication) within 72 hours of arrival at hospital.	The Best Practice Tariff uplift is achieved if >60% of patients undergo angiography within 72 hours.	<ol style="list-style-type: none"> 1. 2018 ESC/EACTS Guidelines on myocardial revascularization. https://academic.oup.com/eurheartj/article/40/2/87/5079120#133836057 2. NICE QS68, September 2014. Acute coronary syndrome in adults. https://www.nice.org.uk/guidance/qs68/chapter/Quality-statement-3-Coronary-angiography-and-PCI-within-72-hours-for-NSTEMI-or-unstable-angina 	3.5 percentage point improvement in times to angiography over the last 3 years, but still <60% of all patients are investigated within the target.

	<p>resolution of identified blocks to optimal care;</p> <ul style="list-style-type: none"> • Advice is sought from hospitals contributing to the NCAP where such work has resulted in the meeting of current standards. 					
Rec 8	All hospitals should ensure patients requiring urgent CABG receive this treatment within 7 days of the angiogram. In most circumstances, this implies the patients should undergo CABG as an in-patient.	NCAP 2019 Annual report, page 15-17	<p>2015 ESC Guidelines for the management of acute coronary syndromes.</p> <p>Taking into account comorbidities and case mix, a reasonable goal for hospitals is 75% of all urgent patients undergo CABG within 7 days of the diagnostic angiogram.</p>	The CQUIN (Commissioning for Quality and Innovation) target suggests that 100% of patients should undergo CABG within 7 days of the diagnostic angiogram.	<ol style="list-style-type: none"> 1. 2015 ESC Guidelines for the management of acute coronary syndromes – web addenda. https://www.escardio.org/static_file/Escardio/Guidelines/Publications/ACS/2015_NSTE-ACS%20Gles-Web-Addenda-ehv320.pdf 	Mean time to surgery is 10 days, down from 11 days over the last 3 years.
Rec 10	Hospitals not reaching the current standards for timing of urgent surgery should undertake a regional or hospital-centred clinical pathway process review and identify areas where delays can be avoided. Advice should be sought from centres where such work has resulted in the meeting of the current standards. A quality improvement action plan	NCAP 2019 Annual report, page 15-17	<p>2015 ESC Guidelines for the management of acute coronary syndromes.</p> <p>Taking into account comorbidities and case mix, a reasonable goal for hospitals is 75% of all urgent patients undergo CABG within 7 days of the diagnostic angiogram.</p>	The CQUIN (Commissioning for Quality and Innovation) target suggests that 100% of patients should undergo CABG within 7 days of the diagnostic angiogram.	<ol style="list-style-type: none"> 1. 2015 ESC Guidelines for the management of acute coronary syndromes – web addenda. https://www.escardio.org/static_file/Escardio/Guidelines/Publications/ACS/2015_NSTE-ACS%20Gles-Web-Addenda-ehv320.pdf 2. CQUIN IM1 Reducing cardiac surgery non-elective inpatient waiting. 	Mean time to surgery is 10 days, down from 11 days over the last 3 years.

	should be instigated to reduce delays.				https://www.england.nhs.uk/wp-content/uploads/2016/03/im1-reduc-cardiac-surgery-non.pdf	
Rec 10	All hospitals should aim to increase the rate of antenatal diagnosis of conditions requiring intervention in the first year by reviewing the staffing levels, the availability of the necessary ultrasonography equipment and ensuring that obstetric sonography staff are receiving appropriate education and training.	NCAP 2019 Annual report, page 18-20	There are currently no agreed international standards, but the aim is for an antenatal diagnosis in at least 75% of all abnormalities where intervention is undertaken in the first year, and 90% for two specific abnormalities: hypoplastic left heart syndrome (HLHS) and transposition of the great arteries with intact ventricular septum (TGA-IVS).	Not applicable.	1. Holland BJ, Myers JA, Woods CR Jr. Prenatal diagnosis of critical congenital heart disease reduces risk of death from cardiovascular compromise prior to planned neonatal cardiac surgery: a meta analysis. <i>Ultrasound Obstet Gynecol</i> 2015;45:631–8	Gradual improvement seen overall and for the two specific diagnoses in the last 10 years.
Rec 11	All hospitals should ensure that all heart attack and heart failure patients have equal access to specialist care, regardless of which type of ward they are admitted to, either by: <ul style="list-style-type: none"> • admitting a higher proportion to a cardiology ward, or by • putting in place specialised nursing cardiac ‘outreach’ teams that are able to play a role in the care of patients on other 	NCAP 2019 Annual report, page 21-25	2018 ESC/EACTS Guidelines on myocardial revascularization. 2015 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation. NICE QS68, September 2014. Acute coronary syndrome in adults.	The Best Practice Tariff target is for 60% of heart failure patients to be seen by a specialist heart failure team.	1. 2018 ESC/EACTS Guidelines on myocardial revascularization. https://academic.oup.com/eurheartj/article/40/2/87/5079120#133836057 2. 2015 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation. https://academic.oup.com/eurheartj/article/37/3/267/2466099	No change in specialist care for heart attacks patients over the last 2 years but high at 96%. For NSTEMI, the proportion of patients admitted to a specialist ward increased from 57.8% in 2015/16 to 61% now. Specialist care for heart failure patients has improved by 2 percentage points over

	types of wards.		<p>All higher risk patients with a primary diagnosis of a heart attack should be seen during admission by a member of a specialist clinical team. Taking into account comorbidities and case mix, a reasonable goal is 90% of patients seen by a member of a specialist clinical team.</p> <p>NICE Clinical Guideline [CG187] October 2014. Acute heart failure: diagnosis and management.</p> <p>NICE QS 103, December 2015. Acute heart failure.</p> <p>2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure.</p> <p>NCEPOD report. Acute heart failure: failure to function. November 2018.</p> <p>All patients admitted with heart failure</p>		<ol style="list-style-type: none"> 3. NICE QS68, September 2014. Acute coronary syndrome in adults. https://www.nice.org.uk/guidance/qs68/chapter/Quality-statement-3-Coronary-angiography-and-PCI-within-72-hours-for-NSTEMI-or-unstable-angina 4. NICE Clinical Guideline [CG187] October 2014. Acute heart failure: diagnosis and management. https://www.nice.org.uk/guidance/cg187 5. NICE QS 103, December 2015. Acute heart failure. https://www.nice.org.uk/guidance/qs103/chapter/Quality-statement-3-Organisation-of-care-early-specialist-input 6. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Acute-and-Chronic-Heart-Failure 	<p>the last 2 years.</p> <p>There has been no change in the proportion of heart failure patients admitted to a specialist ward.</p>
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			should be seen by a member of a specialist HF team. Taking into account comorbidities and case mix, a reasonable goal is 80% of patients seen by a member of a specialist clinical team.		7. NCEPOD report. Acute heart failure: failure to function. November 2018. https://www.ncepod.org.uk/2018ahf.html	
Rec 12	Hospitals not achieving the targets for access to specialist care for heart attack and heart failure patients should undertake a review of staffing structures and clinical protocols and are also advised to learn from centres that provide the best care.	NCAP 2019 Annual report, page 21-25	As above.	As above.	As above.	As above.
Rec 13	All hospitals should ensure that all appropriate heart attack and HF patients are referred for cardiac rehabilitation and that such rehabilitation services are appropriately staffed.	NCAP 2019 Annual report, page 25-27	NICE Clinical Guideline [CG172]. Myocardial infarction: cardiac rehabilitation and prevention of further cardiovascular disease. NICE Pathway. Cardiac rehabilitation after myocardial infarction. All heart attack patients should be offered cardiovascular rehabilitation. Taking into account comorbidities and case mix, a reasonable goal is	Not applicable.	1. NICE Clinical Guideline [CG172]. Myocardial infarction: cardiac rehabilitation and prevention of further cardiovascular disease. https://www.nice.org.uk/guidance/cg172 2. NICE Pathway. Cardiac rehabilitation after myocardial infarction. https://pathways.nice.org.uk/pathways/myocardial-infarction-rehabilitation-and-preventing-further-cardiovascular-disease#path=view%3A/pathways/myocardial-	No previous comparator for heart attack patients. The proportion of heart failure patients increased by 1.8 percentage points over the last year from 13.4%.

			<p>90% of patients referred for rehabilitation.</p> <p>2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure.</p> <p>NICE Guideline [NG106], September 2018. Chronic heart failure in adults: diagnosis and management.</p> <p>All heart failure patients should be offered cardiovascular rehabilitation. Taking into account comorbidities and case mix, a reasonable goal is 60% of patients referred for rehabilitation.</p>		<p>infarction-rehabilitation-and-preventing-further-cardiovascular-disease/cardiaccardiac-rehabilitation-after-myocardial-infarction.xml&content=view-quality-statement%3Aquality-statements-referral-for-cardiac-rehabilitation</p> <p>3. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Acute-and-Chronic-Heart-Failure</p> <p>4. NICE Guideline [NG106], September 2018. Chronic heart failure in adults: diagnosis and management. https://www.nice.org.uk/guidance/ng106</p>	
Rec 14	All hospitals should aim to offer day-case PCI to at least 75% of their elective cases.	NCAP 2019 Annual report, page 28-30	There is no national standard currently. Taking into account social and safety issues, a reasonable goal is ≥75% of elective PCI procedures treated as a day case.	Not applicable.	<p>1. Abdelaal E, Rao SV, Gilchrist IC, et al. Same-day discharge compared with overnight hospitalization after uncomplicated percutaneous coronary intervention: a systematic review and meta-analysis. JACC Cardiovascular</p>	There has been a 5-percentage point increase in the use of day-case PCI procedures over the last 2 years.

					<p>interventions 2013; 6(2):99–112 http://dx.doi.org/10.1016/j.jcin.2012.10.008</p> <p>2. Amin AP, Pinto D, House JA, et al. Association of same-day discharge after elective percutaneous coronary intervention in the United States with costs and outcomes. JAMA Cardiol. 2018; 3(11):1041–9 Sep 26. doi: 10.1001/jamacardio.2018.3029.</p>	
Rec 15	Hospitals that are not achieving the target for PCI day-cases should undertake a process review and learn from centres that provide the best care.	NCAP 2019 Annual report, page 28-30	As above.	Not applicable.	As above.	As above.
Rec 16	Hospitals already achieving the BCIS target of 75% of PCI procedures performed using radial artery access should aim for 85% of procedures.	NCAP 2019 Annual report, page 30-32	<p>2018 ESC/EACTS Guidelines on myocardial revascularization.</p> <p>At least 75% of all PCI procedures should be performed using radial artery access.</p> <p>For those already achieving the BCIS target, a reasonable goal, taking into account comorbidities</p>	Not applicable.	<p>1. 2018 ESC/EACTS Guidelines on myocardial revascularization. https://academic.oup.com/eurheartj/article/40/2/87/5079120#133836057</p>	Almost linear growth in the use of radial artery access for PCI procedures over the last 14 years, rising from 10.2% in 2004 to 87.2% in 2017/18.

			and case mix, is 85% of procedures performed using radial artery access.			
Rec 17	Hospitals not achieving the BCIS target for the use the radial artery access should set this as a quality target, supported by the necessary leadership and training.	NCAP 2019 Annual report, page 30-32	As above.	Not applicable.	As above.	As above.
Rec 18	Operators with low rates of radial artery access, unless justified by their case mix, should attend educational and training courses or be proctored in the technique.	NCAP 2019 Annual report, page 30-32	As above.	Not applicable.	As above.	As above.
Rec 19	Hospitals not achieving the 60% target of offering patients with HFREF (and without established contra-indications) all three disease-modifying medicines should undertake a review of the clinical pathway to identify opportunities to improve performance, including learning from the hospitals that provide the best care. In particular, the focus of this should be on increasing the use of MRAs.	NCAP 2019 annual report, page 32-34	At least 60% of all patients without established contra-indications should be offered all three disease-modifying medicines. For hospitals already meeting the target, a reasonable goal is 80% of all patients without established contra-indications being offered all three disease-modifying medicines.	Not applicable.	NHFA consensus and review of NHFA data with analysis of variance.	There has been a 4.3 percentage point increase over the last 3 years in the proportion of patients being offered all 3 disease-modifying medicines, from 42.8% to 47.1%.
Rec 20	For hospitals already meeting the above target, a reasonable QI goal is for 80% of all patients without	NCAP 2019 Annual report, page 32-34	As above.	Not applicable.	As above.	As above.

	established contra-indications to be offered all three disease-modifying medicines.					
Rec 21	Hospitals with cardiac surgical units should collect data on all deep wound infections using the consistent definition provided by NACSA.	NCAP 2019 Annual report, page 34-36	A reasonable goal is to aim for deep wound infections occurring in less than 0.3% of adult cardiac surgery cases.	Not applicable.	NACSA data with analysis of variance.	Data completeness across hospitals not yet sufficient to provide reliable trend results (all hospitals had a rate of 1% or less, but there is a tenfold variation between centres).
Rec 22	Hospitals with deep wound infection rates requiring additional surgery of more than 0.3% should use infection prevention best-practice in striving to reduce risks at every point in the pathway of patient care.	NCAP 2019 Annual report, page 34-36	As above.	Not applicable.	As above.	As above.