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, including HQIP REF ***e.g. REF XX, Project and Report title***			**National Audit of Cardiac Rhythm Management Devices and Ablation 2022 Summary Report (2020/21 data).**			
1. What is the report looking at/what is the project measuring?			**All devices (pacemakers, implantable cardioverter defibrillators and cardiac resynchronisation devices) and ablation procedures for the management of cardiac arrhythmias. The report describes procedures for cardiac rhythm management (CRM – devices and ablation) between 1st April 2020 and 31st March 2021 and looks at the data against a number of standards, describing safety, effectiveness and outcomes. There has been a focus on the impact of the COVID-19 pandemic in this report. Note we have reduced the number of recommendations this year because of the impact of COVID-19.**			
2. What countries are covered?			**England and Wales. Scotland have withdrawn from the project and Northern Ireland have not submitted data.**			
3. The number of previous projects (e.g. whether it is the 4th project or if it is a continuous project)			**This is a continuous project: there have been 14 previous device reports and 12 previous ablation reports.**			
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 2020 and 31st March 2021.**			
5. Any links to NHS England/NHS Improvement objectives or professional work-plans (only if you are aware of any)			**Results are also used by CQC and GIRFT.**			
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	Data submission *We have chosen not to make any recommendations about data submission and device volumes. The reduction in the number of device implants and the diversion of staff towards the pandemic and away from audit means that the results this year are not within the control of hospitals and operators.*	NACRM report, pages 17-20. In 2020/2021, there was a slight fall in the number of hospitals reporting pacemaker implants (146 vs 154) but not in those reporting complex ICD and CRT implants (103 vs 102). 83% of hospitals met the minimum standard of 80 pacemaker implants. This was somewhat lower than in recent years. Of note, the proportion of 'high volume' centres (implanting at least twice the minimum) fell from 60% to 47%. Similarly, for complex devices (ICD and CRT), the proportion of hospitals reaching the minimum number was significantly lower than in recent years, as was the proportion of high-volume centres. In 2020/21 fewer centres reported catheter ablations (57 vs 61 in 2019/20).	*Quality Standard 1 (Pacemaker Implants):* BHRS Standards (2015) recommend that pacing centres undertake a minimum of 80 pacemaker implants per year (this was 60 in the 2013 Standard). Training centres should conduct > 105 implants per year. *Quality Standard 2 (Complex device Implants):* BHRS Standards (2015) recommend that complex device centres undertake a minimum of 60 such procedures (ICD and CRT implant/upgrades) per year. *Quality Standard 3 (Catheter ablation):* BHRS Standards (2016) recommend that ablation centres undertake a minimum of 100 ablation procedures per year in total. *Quality Standard 4 (complex/AF ablation):* BHRS Standards (2016) recommend that centres undertaking AF ablation should perform a minimum of 50 such cases per year.	N/A	BHRS Standards	There has been an increase in the numbers of centres not meeting the targets for implantation of devices or performing ablations. It remains to be seen what will happen post-pandemic.

		65% of hospitals met the BHRS minimum volume standard for total ablation procedures (100 cases). There is a similar picture for AF ablations, with fewer centres reporting activity but only a small fall in the proportion meeting the standard.				
Rec 2	*We have chosen not to make any recommendations about data submission and device volumes. The reduction in the number of device implants and the diversion of staff towards the pandemic and away from audit means that the results this year are not within the control of hospitals and operators.* *We have included the following text:* The fall in procedure numbers has been largely a result of the pandemic, and not within the control of specialists. However, doctors who have become de-skilled should consider undertaking procedures jointly with colleagues, especially for complex or high-risk cases. Those persistently undertaking very small volumes of procedures should examine	NACRM report, pages 21-23. In contrast to the trends in declining volumes, the proportion of implanting specialists who met the minimum standard of 35 pacemaker implants remained steady at around 60%. However, the proportion of high-volume operators fell somewhat (29% versus ~35% in recent years). The proportion of consultants implanting complex devices that met the standard has been low (46-50%) in recent years and fell further to 38% in 2020/2021. Only 9% of complex implanters were high volume (more than twice the minimum), half that seen in recent years.	*Quality Standard 5 (Pacemaker Implantation):* The minimum volume for an implanting specialist is 35 total new devices per year. *Quality Standard 6: (Defibrillator/Cardiac Resynchronization Therapy):* For those undertaking complex implants/upgrades the recommendation is at least 30 such procedures within a total of 60 device implants per year. *Quality Standard 7 (Catheter ablation):* Interventional electrophysiologists undertaking catheter ablation should perform at least 50 procedures per year. *Quality Standard 8 (Complex ablation):* For those undertaking complex	N/A	BHRS standards	There has been an increase in the number of consultants not meeting the standards for implanting devices and undertaking ablations. It remains to be seen what will happen post-pandemic.

	whether this is sustainable, as should their hospitals.		procedures (generally AF ablations) the recommendation is at least 25 such procedures within a total of at least 50 ablations per year; while ≥50 complex procedures is desirable.			
Rec 3	*We have not made any recommendations about reintervention rates post device implant this year.*	NACRM report Pages 24-26. In the last five years, one-year reintervention rates have been stable at around 4% following pacemaker implants and 6% following complex device implants, although there has possibly been a slight rise in re-intervention rates for pacemakers.	*Quality Standard 15 (Pacemaker reinterventions):* The rate of re-interventions within a year of a first pacemaker implant should be below the 95% upper control limit (national mean + 2 standard errors). *Quality Standard 16 (Complex device reinterventions):* The rate of re-interventions within a year of a first ICD or CRT implant should be below the 95% upper control limit (national mean + 2 standard errors).	N/A	N/A	These values are fairly stable and in line with published data on complications from other countries. Centres with very high re-intervention rates should audit their practice to see if there are particular reasons why this should be the case.
Rec 4	*We have not made any recommendations about reintervention rates post ablation this year.*	NACRM report: Page 26. There was a substantial fall in re-interventions following ablations that were performed in the year prior to the pandemic. This was particularly marked for AF ablations which fell from 8% to 1.9%.	*Quality Standard 17:* the frequency of repeat interventions within a year of catheter ablation procedures (simple, complex atrial, and ventricular) should be below the 95% upper control limit (national mean + 2 standard errors). *Quality Standard 18:* the frequency of repeat interventions within a year of	N/A	N/A	The fall in ablations undoubtedly reflects the low availability of ablations, particularly AF ablation during the first pandemic year, particularly as repeat procedures are often more complex. Patients will undoubtedly have suffered as a result.

			catheter ablation procedures (simple, complex atrial, and ventricular) should be below the 95% upper control limit (national mean + 2 standard errors).			