SPECIALISED COMMISSIONING – RESPONSE TO AMENDMENTS REQUESTED TO EVIDENCE REVIEW DURING ENGAGEMENT OR CONSULTATION

URN	1903
POLICY TITLE	Catheter ablation for atrial fibrillation
CRG:	Cardiac Services
NPOC:	Internal Medicine
Date	19 Mar 20

Description of comments during consultation (If studies have been suggested please provide a list of references)	• 24 stakeholders submitted comments on the draft policy proposition. • 14 stakeholders submitted details of papers they believed to be relevant to the review and policy proposition – mostly in response to the questions regarding exclusion criteria contained within the policy and regarding additional information that should have been considered in the evidence review. • Most stakeholders submitted details of more than one study and several papers were suggested by more than one stakeholder. Papers suggested were: 1. Winkle RA et al. Impact of obesity on atrial fibrillation ablation: Patient characteristics, long-term outcomes and complications. Heart Rhythm 2017; 14: 819-27. 2. Glover B et al. Impact of body mass index on the outcomes of catheter ablation of atrial fibrillation. Heart 2019; 105: 244-250. 3. Providencia R et al. Impact of body mass index on the outcomes of catheter ablation of atrial fibrillation: A European Observational Multicenter Study. JAHA 2019; 8: 012253 4. Fein et al. Treatment of obstructive sleep apnea reduces the risk of atrial fibrillation recurrence after catheter ablation. JACC 2013; 62: 300-305. 5. Naruse Y et al. Concomitant obstructive sleep apnea increases the recurrence of atrial fibrillation following radiofrequency catheter ablation of atrial fibrillation: clinical impact of continuous positive airway pressure therapy. Heart Rhythm. 2013;10:331–337. 6. Congrete S et al. Effect of obstructive sleep apnea and its treatment of atrial fibrillation recurrence after radiofrequency catheter ablation: A meta-analysis. J Evid Based Med 2018; 11: 145-151. 7. Deng et al. Treating obstructive sleep apnea with continuous positive airway pressure reduces risk of

	recurrent atrial fibrillation after catheter ablation: a meta-analysis. Sleep Med 2018; 46: 5-11. 8. Odutayo A et al. Atrial fibrillation and risks of cardiovascular disease, renal disease and death: systematic review and meta-analysis. BMJ 2016; 354: 14482 9. Mansour M et al. The impact of first procedure success rate on the economics of atrial fibrillation ablation. JACC: Clinical Electrophysiology 2017; 3: 129-138 10. Wynn GJ et al. Long-term outcomes after ablation of persistent atrial fibrillation: an observational study. Open Heart 2016; 3: e000394 11. Providencia R, Elliott P, Patel K, McCready J, Babu G, Srinivasan N, Bronis K, Papageorgiou N, Chow A, Rowland E, Lowe M, Segal OR, Lambiase PD. Catheter ablation for atrial fibrillation in hypertrophic cardiomyopathy: a systematic review and meta-analysis. Heart. 2016 Oct 1;102(19):1533-43. doi: 10.1136/heartjnl-2016-309406. Epub 2016 May 27 12. Winkle RA et al. Predicting atrial fibrillation ablation outcome: The CAAP-AF score.Heart Rhythm. 2016 Nov;13(11):2119-2125) 13. Proietti R et al. A Systematic Review on the Progression of Paroxysmal to Persistent Atrial Fibrillation: Shedding New Light on the Effects of Catheter Ablation. JACC Clin Electrophysiol. 2015 Jun;1(3):105-115. 14. Kuck K-H et al. Catheter Ablation can Delay Progression from Paroxysmal to Persistent AF: presented at the 2019 European Society of Cardiology conference. 15. Packer DL et al. Effect of catheter ablation vs antiarrhythmic drug therapy on mortality, stroke, bleeding, and cardiac arrest among patients with atrial fibrillation: the CABANA randomized clinical trial. Jama. 2019;321:1261. 16. Mark, DB et al. Effect of catheter ablation vs. medical therapy on quality of life among patients with atrial fibrillation. The CABANA randomized clinical trial. JAMA. 2019; 321(13) 1275-1285. 17. Jarman JW et al. Stroke rates before and after ablation of atrial fibrillation and in propensity-matched controls in the UK. Pragmat Obs Res. 2017 May 29;8:107-118 18. Wilber, DJ et al. Comparison of antiarrhythmic drug therapy and radiofrequency catheter ablation in patients with paroxysmal atrial fibrillation. A randomized trial. JAMA. 2010. 303(4) 333-340. 19. Gunawardena R, Furniss SS, Shepherd, Santarpia G, Lord SW, Bourke JP. Outcomes following catheter ablation of atrial fibrillation in the UK – a single-centre cohort analysis. Br J Cardiol 2010; 17:271-276.

	20. Bourke JP, Dunuwille A, O'Donnell D, Jamieson S, Furniss SS. Pulmonary vein ablation for idiopathic atrial fibrillation: six month outcome of first procedure in 100 consecutive patients. Heart 2005; 91:51–7. 21. Raine D, Langley P, Shepherd E, Lord S, Murray S, Murray A, Bourke JP. Effect of catheter ablation on quality of life in patients with atrial fibrillation and its correlation with arrhythmia outcome. Open Heart. 2015, 2(1): e000302. doi:10.1136/openhrt-2015-000302. E Collection 2015 22. Santangeli P. Transseptal access and atrial fibrillation ablation guided by intracardiac echocardiography in patients with atrial septal closure devices. Heart Rhythm. 2011;11:1669-1675 23. Xuping L et al. Safety and feasibility of transseptal puncture for atrial fibrillation ablation in patients with atrial septal defect closure devices. Heart Rhythm. 2014;11:330-335 24. Nei J-G, Catheter ablation of atrial fibrillation in patients with atrial septal defect: long-term follow-up results. Journal of Interventional Cardiac Electrophysiology. 2015;42:43-49 25. Scaglione M. Very long-term results of electroanatomic-guided radiofrequency ablation of atrial arrhythmias in patients with surgically corrected atrial septal defect. EP Europace. 2014;16:1800-1807 26. Odutayo A et al. Atrial fibrillation and risks of cardiovascular disease, renal disease, and death: systematic review and meta-analysis. BMJ 2016;354: i4482. 27. Bhargava M, Di Biase L, Mohanty P, Prasad S, Martin DO, Williams-Andrews M, Wazni OM, Burkhardt JD, Cummings JE, Khaykin Y, Verma A, Hao S, Beheiry S, Hongo R, Rossillo A, Raviele A, Bonso A, Themistoclakis S, Stewart K, Saliba WI, Schweikert RA, Natale A. Impact of type of atrial fibrillation and repeat catheter ablation on long-term freedom from atrial fibrillation: results from a multi-centre study. Heart Rhythm. 2009; 6(10):1403-12. 28. Rostock T, Salukhe TV, Steven D, Drewitz I, Hoffmann BA, Bock K, Servatius H, Müllerleile K, Sultan A, Gosau N, Meinertz T, Wegscheider K, Willems S. Long-term single- and multiple-procedure outcome and predictors of success after catheter ablation for persistent atrial fibrillation. Heart Rhythm. 2011; 8(9):1391-7. 29. D'Ascenzo F, Corleto A, Biondi-Zoccai G, Anselmino M, Ferraris F, di Biase L, Natale A, Hunter RJ, Schilling RJ, Miyazaki S, Tada H, Aonuma K, Yenn-Jiang L, Tao H, Ma C, Packer D, Hammill S, Gaita F. Which are the most reliable predictors of recurrence of atrial fibrillation after

	transcatheter ablation? : a meta-analysis. Int J Cardiol. 2013;167(5):1984-9. 30. Themistoclakis S, Schweikert RA, Saliba WI, Bonso A, Rossillo A, Bader G, Wazni O, Burkhardt DJ, Raviele A, Natale A. Clinical predictors and relationship between early and late atrial tachyarrhythmias after pulmonary vein antrum isolation. Heart Rhythm. 2008; 5(5):679-85. 31. Nademanee K, Schwab MC, Kosar EM, Karwecki M, Moran MD, Visessook N, Michael AD, Ngarmukos T. Clinical outcomes of catheter substrate ablation for high-risk patients with atrial fibrillation. J Am Coll Cardiol. 2008; 51(8):843-9. 32. Winkle RA, Mead RH, Engel G, Patrawala RA. Relation of early termination of persistent atrial fibrillation by cardioversion or drugs to ablation outcomes. Am J Cardiol. 2011; 108(3):374-9. 33. Shim J, Joung B, Park JH, Uhm JS, Lee MH, Pak HN. Long duration of radiofrequency energy delivery is an independent predictor of clinical recurrence after catheter ablation of atrial fibrillation: Over 500 cases experience. Int J Cardiol. 2012; doi:10.1016/j.ijcard.2012.06.120. 34. McCready JW, Smedley T, Lambiase PD, Ahsan SY, Segal OR, Rowland E, Lowe MD, Chow AW. Predictors of recurrence following radiofrequency ablation for persistent atrial fibrillation. Europace. 2011; 13(3):355-61. 35. Saad EB, d'Avila A, Costa IP, Aryana A, Slater C, Costa RE, Inácio LA Jr, Maldonado P, Neto DM, Camiletti A, Camanho LE, Polanczyk CA. Very low risk of thromboembolic events in patients undergoing successful catheter ablation of atrial fibrillation with a CHADS2 score ≤3: a long-term outcome study. Circ Arrhythm Electrophysiol. 2011; 4(5):615-21. 36. Mohanty S, Mohanty P, Di Biase L, Bai R, Pump A, Santangeli P, Burkhardt D, Gallinghouse JG, Horton R, Sanchez JE, Bailey S, Zagrodzky J, Natale A. Impact of metabolic syndrome on procedural outcomes in patients with atrial fibrillation undergoing catheter ablation. J Am Coll Cardiol. 2012; 59(14):1295-301. 37. Komatsu Y, Uno K, Otomo K, Nagata Y, Taniguchi H, Ogura K, Egami Y, Takayama K, Kakita K, Iesaka Y. Atrial defibrillation threshold as a novel predictor of clinical outcome of catheter ablation for persistent atrial fibrillation. Europace. 2011; 13(2):213-20. 38. Li X, Wissner E, Kamioka M, Makimoto H, Rausch P, Metzner A, Mathew S, Rillig A, Richard Tilz R, Fürnkranz A, Chen Q, Zhang Q, Liu Q, Zhou S, Kuck KH, Ouyang F. Safety and feasibility of transseptal puncture for atrial fibrillation ablation in patients with atrial septal defect closure devices. Heart Rhythm. 2014;11(2):330-335.

Action taken by Public Health lead	The abstracts of all papers suggested by stakeholders were checked for relevance to the PICO document (except Ref 14, a conference paper which could not be sourced). Where necessary full text of the papers was obtained.
Outcome for studies suggested during consultation	
1. Evidence already identified during the evidence review	None
2.New evidence identified by stakeholders that does not fall within PICO and search methodology	References 1-13 and 15-38 The methods of the rapid evidence review stipulate that subgroup results can be included in the review where presented in the evidence selected to examine clinical effectiveness, safety and cost effectiveness. Stakeholders identified factors that may influence the efficacy of catheter ablation, which whilst in scope of the PICO (subgroups that may benefit more), are not considered in the experimental studies included in the rapid evidence review.
3.New evidence identified by stakeholders that falls within PICO and search methodology but does not materially affect the conclusions of the existing evidence review	None
4.New evidence identified by stakeholders that falls within PICO and search methodology, that does materially affect the conclusions of the existing evidence review. Updated evidence reviews to be undertaken (agreed with CET)	None