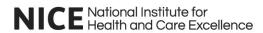


Diagnostics Advisory Committee Interests Register

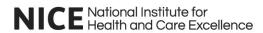
Topic: Algorithm-based remote monitoring of heart failure risk data in people with cardiac implantable electronic devices

NICE's declaration of interest policy can be accessed here

Name	Role with NICE	Type of interest	Description of interest	Interest arose	Interest declared	Interest ceased	Comments
Jennifer Cooke	Specialist committee member	None	-	-	-	-	
Daniel Garner	Specialist committee member	Financial	Consultant Cardiology – NHS	October 2022	April 2023	Ongoing	Declare and participate
Daniel Garner	Specialist committee member	Financial	Honoraria – Astrazeneca speaker fees for a talk on the use of SGLT2 inhibitors in heart failure to the community Cardiology team.	October 2022	April 2023	October 2022	Declare and participate
Daniel Garner	Specialist committee member	Financial	Honoraria – Boehringer speaker fees for talk on the use of SGLT2 inhibitors in heart failure to the community Cardiology team.	March 2023	April 2023	March 2023	Declare and participate
Daniel Garner	Specialist committee member	Financial	Honoraria – Novartis speaker fees for talks on the use of Angiotensin-Neprilisin inhibitors in heart failure to the General Practitioners in community	March 2023	April 2023	March 2023	Declare and participate
Daniel Garner	Specialist committee member	Non-financial professional and personal interest	Authored work on the use of the Medtronic Triage HF system and how the high-risk alerts affected hospitalisations. We published a flowchart for a centrally based device trained heart failure specialist nurse to manage and triage alerts to community teams as a possible model of future use.	September 2022	April 2023	September 2022	Declare and participate



			Reference: Use of CIED Generated Heart Failure Risk Score (HFRS) Alerts in an Integrated, Multi-Disciplinary Approach to HF Management—A Prospective Cohort Study. Garner, D. ; Lunt, L.; Leung, W.; Llewellyn, J.; Kahn, M.; Wright, D.J.; Rao, Sensors 2022, 22, 1825. https://doi.org/10.3390/s22051825				
Daniel Garner	Specialist committee member	Indirect	I have been employed to undertake heart failure clinics for Inspira Health in the Northwest in a primary care heart failure project. GP practices were audited for patients with severe left ventricular dysfunction who were no longer and cardiology and who could benefit from medical optimization and/or device therapy. Patients who were eligible and willing were then re-referred to my NHS work for consideration of further management. The research work was funded by Medtronic who manufacture the implantable cardioverter defibrillators we implant at Liverpool Heart and Chest hospital although there was no mandate to use one company over another. Medtronic use the Triage HF (heart failure) risk score that is being studied. Funding from industry was paid directly to the employer.	October 2022	April 2023	Ongoing	Declare and participate Confirmed by AD 4 April 2024
Alastair Gray	Specialist committee member	Financial	FIRE1 – I work with FIRE1 as a clinical advisor for their clinical trial that has been running initially as a first in human clinical trial in Europe and now an early feasibility study in USA regulated by FDA. I provide clinical advice on trial protocol	2019	April 2023	On-going	Declare and participate



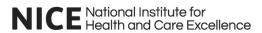
			development, sit on their safety events committee and act as medical monitor/adjudicator for the current trial – assessing trial outcomes, follow–up visits and adverse events. The work is unchanged from my initial engagement with NICE. Their product is in clinical trial phase and is not commercially available.				Confirmed by AD and Chair 2 April 2024
			This is not an implantable CIED and would not be a competitor product. The closest product to this is Cardiomems pulmonary artery sensor although this developmental product lies within the IVC and measures completely different parameters. If it were to be available in the future for commercial use I would envisage that it would need to go through technology appraisals etc with any health authority that would consider enabling its use under their health service. I am paid directly by FIRE1 for my clinical work with them. Clinical centres involved in the current trial are remunerated by FIRE1 and activity is monitored by FDA, EHRA/ MHRA. There is no competition through this activity to the technologies under appraisal.				
Alastair Gray	Specialist committee member	Financial	Boehringer Ingelheim – speaker fees	2021	April 2023	On-going - occasional	Declare and participate
Alastair Gray	Specialist committee member	Financial	Biotronik – heart failure expert panel member - discussion forum/ focus group in relation to remote monitoring for heart failure. Approximately 6 cardiologists from the UK who provided information on their experience of remote monitoring and what we felt the key aspects were/ obstacles. This was a single event with no follow up and no input into the structure/ design of the biotronik remote monitoring systems	2021	April 2023	Alastair Gray	Declare and participate



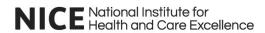
Alastair Gray	Specialist committee member	Financial	Frontiers in Cardiology – expert HF panel member, Novartis sponsored educational event	June 19/2023	April 2023	June 19/2023	Declare and participate
Alastair Gray	Specialist committee member	Financial	Irish cardiac Society – case report reviewer/ expert HF panel member	October 2021	April 2023	On-going	Declare and participate
Alastair Gray	Specialist committee member	Financial	Journal of Cardiac Failure – reviewer	2020	April 2023	On-going	Declare and participate
Alastair Gray	Specialist committee member	Financial	Heart rhythm congress— case presentation, Early yellow alerts, not late blue lights for worsening heart failure patients? use of remote monitoring for detection of heart failure, case report. Travel expenses supported by Boston Scientific	2019 (single case presentatio n at HRC meeting)	April 2023	2019	Declare and participate
Alastair Gray	Specialist committee member	Financial	Future of heart failure – 2 day meeting, sponsored by Abbott	June 2019	April 2023	2019	Declare and participate
Alastair Gray	Specialist committee member	Financial	Future of heart failure – 2 day meeting sponsored by Abbott	June 2022	April 2023	2022	Declare and participate
Alastair Gray	Specialist committee member	Financial	Conduction system pacing training – supported by Medtronic and Biotronik, training on implantation techniques for conduction system pacing. Single training events	2022	April 2023	2022	Declare and participate
Alastair Gray	Specialist committee member	Financial	Presentations Atrial fibrillation in General Practice: Project ECHO, September 2020 – March 2021 Autumn Heart Failure Meeting; What's the risk: Defibrillators in Cardiomyopathy, Irish Cardiac Society, September 2020 Heart Rhythm Congress, Early yellow alerts, not late blue lights for worsening heart failure patients? HRC 2019, Birmingham UK Ulster medical society, case presentation. Pulmonary Embolism: A case requiring		April 2023		Declare and Participate



name and a second
rescue percutaneous intervention June
2016
ACS management, Dunsilly Hotel
Ballymena July 2015
June 2015 – Ulster medical society, case
presentation. Acute cardiomyopathy due
to Systemic Lupus Erythematosus; A
case report and discussion June 2015
Antrim Area Hospital/ Ulster hospital
Dundonald DC cardioversion audit results
June 2013
<u>Publications</u>
Sheridan S, Wetterling F, Gray A. et al.
Safety and performance of a novel
implantable sensor in the inferior vena
cava under acute and chronic
intravascular volume modulation.
European Journal of Heart Failure, 27
Nov 2023
Ivey-Miranda, Wetterlin F, Gray A et al.
Changes in inferior vena cava area
represent a more sensitive metric than
changes in filling pressures during
experimental manipulation of
intravascular volume and tone. European
Journal of Heart Failure, 27 Nov 2021
Coburn J, Gray A, Connolly M. Primary
cardiac intimal sarcoma: presenting with
symptomatic mitral in flow obstruction.
ECHO, sept 2021, 115
Sankaranarayanan R; Gray A et al. the
impact of CoVID-19 on the management
of heart failure: a United Kingdom patient
questionnaire study. ESC Heart Failure,
2021, Jan 18.
1 '



Mumbula Constant Internal F. Ameladian
Murphy L; Gray A; Joyce E. Anabolism
to catabolism: Serologic clues to
nutritional status in heart failure. Current
Heart Failure Reports, Oct 2019
Gray A, Mahon N G. Left Ventricular
Outflow Tract obstruction secondary to
right atrial dilatation and accessory mitral
valve tissue in a patient with Ebstein's
Anomaly. Journal of Congenital
Cardiology, 2019; 3; 7.
Adams S, Gray A, Herity N. Fifty years of
ventricular tachycardia in a single patient:
Ulster Medical Journal, 2019, 889(10),1-2
Mcquillan C, Gray A, Kearney A, Menown
I. Advances in Clinical cardiology 2017:
A summary of key clinical trials.
Advances in Therapy, June 2018.
McQuillan C, Gray A. Highlights from
transcatheter therapeutics 2017. January
2018. Available www.bcs.com
A Gray, C McQuillan. Acquired QT
prolongation and Torsades De Pointes.
British Heart Rhythm Society, November
2017. Available www.bhrs.com
• A Gray, C McQuillan, I Menown;
Advances in Clinical Cardiology 2016. A
summary of the key clinical trials.
Advances In Therapy, July 2017, 34(7),
1503-1527
A Gray, D McEneaney; Seizure related
Bradyarrhythmia- to pace or not to pace?
British Heart Rhythm Society, March
2017. Available <u>www.bhrs.com</u>
A.Gray. Right Ventricular Outflow Tract
tachycardia - Recognition and
management. British Heart Rhythm



	Specialist committee	Einonoial	Society, June 2016. Available www.bhrs.com • A . Gray. Acute cardiomyopathy due to Systemic Lupus Erythematosus; A case report and discussion. Ulster Medical Journal 2015:84(3);196-199	April 2022	Declare and
Alastair Gray	Specialist committee member	Financial	 PI (principal investigator) for Evolution HF study, SHSCT FIRE 1 Dublin; Feasibility study, Safety Events Committee member FIRE 1 Dublin; Feasibility study, Events adjudicator FIRE 1 Dublin; First in Human trial, Safety Events Committee member SI (sub-investigator) for Observational study to determine the prevalence of ATTR amyloidosis as determined by TC99M-DPD scintigraphy in an undifferentiated population with heart failure with preserved ejection fraction in Ireland. Co-investigator responsible for design and development of research protocol, sought industry funding and ethical approval. Analyzing the relationship between continuous flow left ventricular assist device (LVAD) flow rates and inferior vena cava (IVC) geometry Co-investigator responsible for design and development of research protocol, data templates and sought ethical approval. Performed data collection and analysis 	April 2023	Participate



			 Medical/ Heart Failure clinical liaison, FIRE1Foundry, Finglas, Dublin. Clinical input into study design for first in human, feasibility and pivotal clinical trials. Aided submission for FDA trail approval. Performed initial implants in animal models for new clinical device. SI for VICTORIA phase 3 clinical trail Sub-investigator responsible for patient selection, recruitment/ enrolment, data collection, adverse event recording. SI for SMART CRT phase 3 trial Sub-investigator responsible for patient selection, recruitment/ enrolment, data collection, adverse event recording. SI for Heart-Logic trail Sub-investigator responsible for patient selection, enrolment, data collection, adverse event recording. 				
Alastair Gray	Specialist committee member	Financial	Medtronic and Biotronik – proctor for left bundle branch pacing. I provide proctorship for other cardiologists implanting their pacemakers in a left bundle position. This is a relatively new and emerging method of implanting pacemakers and requires operators to have training and ideally supervised implants prior to undertaking independently. My role is to train and supervise initial implants as part of a team of UK proctors. Cardiologists are free to use whichever manufacturer they wish, I simply provide implant technique training and am remunerated directly by Medtronic or Biotronik for expenses and an hourly rate for time in the cardiac cath lab. There is no	Jan 2024	March 24	On-going	Declare and participate Confirmed by AD and Chair 2 April 2024



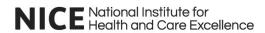
			competition through this activity to the technologies under appraisal.				
Alastair Gray	Specialist committee member	Non-Financial Professional and Personal Interest	Sub-investigator for Hermes Clinical Trial. The Hermes clinical trial is a global clinical trial of an injectable drug for the treatment of heart failure. My hospital is a clinical trial centre and this is a trial we are registered with and recruiting for. My role is as sub-investigator, consenting patients to recruitment to trial and monitoring progress throughout. Funding for the trial is provided to Craigavon Area Hospital research department under the NHS. As part of my NHS contract we are expected to be involved in clinical research and trials. I receive no remuneration for this activity. There is no competition through this activity to the technologies under appraisal.	2022	April 2023	On-going	Declare and participate Confirmed by AD and Chair 2 April 2024
Rani Khatib	Specialist committee member	Financial Interest	Speaker fees from Boehringer Ingelheim, Sanofi, and AstraZeneca	2022	10 May 2023		Declare and participate
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	Specialist Advisory Committee NICE Heart Failure Quality Standards	September 2022	10 May 2023	January 2022	Declare and participate
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	Associate Professor at the Leeds Institute of Cardiometabolic Medicine. University of Leeds.	January 2022	10 May 2023		Declare and participate
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	Member of the European Society of Cardiology Task Force on Allied Professionals	May 2019	10 May 2023		Declare and participate
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	Member of the Pumping Marvelous Clinical Advisory Group	January 2015	10 May 2023		Declare and participate
Rani Khatib	Specialist committee member	Non-Financial	NICE Heart Failure Guidelines Committee.	2016	10 May 2023	2018	Declare and participate



		Professional and Personal Interest					
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	UKCPA Cardiology Group - Chair	October 2018	10 May 2023		Declare and participate
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	Fellow of the Royal Pharmaceutical Society	2015	10 May 2023		Declare and participate
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	Member of the European Society of Cardiology Science Committee - ACNAP	2015	10 May 2023		Declare and participate
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	Joint working between Boehringer Ingelheim and employer (Leeds Teaching Hospitals NHS Trust) to support the establishment of Cardiometabolic Clinics.	September 2021	10 May 2023		Declare and participate
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	Joint working between AstraZeneca and employer (Leeds Teaching Hospitals NHS Trust) to support the establishment of Post MI Medicines Optimisation Clinics.	January 2016	10 May 2023	2019	Declare and participate
Rani Khatib	Specialist committee member	Non-Financial Professional and Personal Interest	Educational grant from Novartis paid to my employer (Leeds Teaching Hospitals NHS Trust) to support the Heart Failure Perceptorship for Pharmacist.	2019	10 May 2023	2019	Declare and participate
Ian Purcell	Specialist committee member	Non-Financial Professional and Personal Interest	Member of British Cardiovascular Intervention Society (BCIS) clinical standards group	2020	11 April 2023	Ongoing	Declare and participate
Ian Purcell	Specialist committee member	Non-Financial Professional and Personal Interest	Clinical Lead Northeast and North Cumbria Cardiac Network	2020	11 April 2023	Ongoing	Declare and participate
Alison Seed	Specialist committee member	Non-Financial Professional and Personal Interest	Co author / steering committee on REM HF study (Remote management of heart failure using implantable electronic devices). A clinician led, BHF and industry funded multicentre RCT. PI at one of 9 UK centres	2014	17 April 2023	2017	Declare and Participate



Alison Seed	Specialist committee member Specialist committee	Non-Financial Professional and Personal Interest	recruiting 200 patients. Eur Heart J. 2017 May 27. I had no financial benefit personally for steering committee contribution. The funding of the study was an unrestricted grant as I understand it, alongside a BHF grant. The steering committee had complete independence of industry. Our centre was one of the recruiting sites, reporting to a monitor and ultimately the steering committee. Only funding was payment per patient, via research and development, for the delivery of the study. Myself and lead nurse were paid for our time in delivering the study. Again no influence or engagement with industry. Publication peer reviewed and included declaration of no interest / association with industry. Co-author/ contributor on observational study Triage-HF Plus: a novel device-based remote monitoring pathway to identify worsening heart failure. Clinical lead of the HF service in Blackpool	2017	17 April 2023	2019 Ongoing	Confirmed by AD 04/04/24 Declare and participate
Alison Seed	member	Professional and Personal Interest	that has engaged in service development work around remote monitoring of HF risk in patients with implanted devices since 2014. Developing clinical networks across Lancashire and South Cumbria ICB that continue to be valued by clinicians and patients				participate
Alison Seed	Specialist committee member	Non-Financial Professional and Personal Interest	Initiating but not completing qualitative research into the impact of remote monitoring of HF diagnostics tools on clinical teams – structured interviews of clinicians intended. Only one interview recorded in early 2020 – COVID pandemic distracted and priorities have changed but I continue to believe such structured interviews with	2020	17 April 2023	2020	Declare and participate



			evaluation would provide valuable data and learning for others				
Rushabh Shah	Specialist committee member	Non-Financial Professional and Personal Interest	I sit on the British society for Heart failure education committee. I am involved with education for heart failure. I regard this as beneficial to the committee role and not a conflict.	February 2022	26 March 2023	Ongoing	Declare and participate
Andy Smith	Specialist committee member	Non-Financial Professional and Personal Interest	Patient advisory panel member of British Society for Heart Failure	February 2021	3 April 2023	current	Declare and participate
Andy Smith	Specialist committee member	Non-Financial Professional and Personal Interest	Patient ambassador for Cardiomyopathy UK	September 2020	3 April 2023	current	Declare and participate
Andy Smith	Specialist committee member	Non-Financial Professional and Personal Interest	Patient rep on program steering committee: PGfAR Programme NIHR202349: Personalising renal function monitoring and interventions in people living with heart failure: RENAL-HF	February 2022	3 April 2023	current	Declare and participate