##### CURRICULUM VITAE: Professor Mark Jeremy Dayer

##### April 2023

#### Personal Details

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Current Positions Consultant Cardiologist

Somerset NHS Foundation Trust

Appointed 1st November 2007

Honorary Associate Professor

University of Plymouth

Faculty of Health

Appointed 31st January 2023

Consultant Cardiologist

Nuffield Health, Taunton Hospital

Appointed 1st November 2008

Address Musgrove Park Hospital

Taunton

Somerset TA1 5DA

Tel. (Work) 01823 343824 (Secretary, Natalie Shedden)

#### Qualifications

June 1992 BSc (Hons) in Psychology with Basic Medical Sciences, First Class Honours

June 1995 MB BS (Hons), Distinction in Surgery

June 1998 MRCP (UK)

September 2007 Certified Cardiac Device Specialist – Physician

February 2008 CCST in Cardiology and General Internal Medicine

May 2008 PhD, Imperial College London

August 2011 FRCP (UK)

April 2013 Level II Cardiac CT Accreditation (renewed February 2022)

#### Education

1981-1988 Bristol Grammar School

1989-1995 United Medical and Dental Schools of Guy’s and St Thomas’s

2001-2004 PhD, Imperial College London

#### Current Position and Roles

* I am a consultant cardiologist at Taunton and Somerset NHS Trust, where I have worked since 2007. I was the clinical lead for cardiology until April 2017. My principal sub-speciality interests are heart failure, cardiac devices, adult congenital heart disease and cardiac CT. I have in-patient responsibilities for both cardiology and general medical patients and participate in the non-invasive on-call cardiology rota.
* Research is a principal focus. In particular, I have an interest in the analysis of large datasets. For over fourteen years, my focus has been on the epidemiology of infective endocarditis. I lecture nationally and internationally on the subject and have published in many high-impact journals. I am currently co-writing an American Heart Association position statement, leading on the European data. I have also built a small research team in the cardiology department, undertaking commercial trials.
* I am the Clinical Director for Medicine. I am also the chair of the Drugs and Therapeutics Committee.
* I am both an educational and clinical supervisor. I am an Advanced Life Support Instructor and teach on the Trust-run Human Factors course annually. I have edited the cardiovascular disease section and written chapters for the upcoming MLA textbook being prepared by Plymouth University.
* I am the clinical lead for the National Cardiac Rhythm Management Audit (https://www.nicor.org.uk/cardiac-rhythm-management-arrhythmia-audit/).
* I am a member of the British Heart Rhythm Society Council and also a member of their education committee.
* I am the co-founder of a small website that analyses Strava data (a site that collects exercise data) to look for cardiac anomalies (https://crickles.casa).

#### Membership of Learned Societies

Royal College of Physicians of London (Fellow)

British Cardiac Society

British Heart Valve Society

British Heart Rhythm Society (Council member)

#### Research

I have undertaken research throughout my career, starting in my gap year at ICI, looking at molecular structures of potential high-temperature superconductors.

I chose psychology for my intercalated BSc in 2001, and during that time worked at the Kobler Centre at Chelsea and Westminster, studying the quality of life of patients with HIV and AIDS. Several abstracts were presented due to the work, and a paper was published in AIDS.

During my cardiology training, I undertook a PhD at Imperial College. I have detailed my PhD research below.

I have a particular interest in infective endocarditis. Over the past fourteen years, I have been part of an international group with a successful track record of publishing in the field at the highest level. I am recognised as an expert in the field internationally. At the end of 2014, I presented data at the AHA in a late-breaking clinical trials session, and The Lancet published the conference paper simultaneously. I was appointed as a topic expert for NICE in their review of the endocarditis guidelines and have authored Cochrane reviews of endocarditis treatment. We have several papers in preparation at present. Through my work, I have linked with several other departments nationally and internationally, including a team from Venezuela who focus on Cochrane Reviews and Dr Andrew Appleboam in Exeter looking at the emergency treatment of supraventricular tachycardias.

According to Research Gate, my h-Index is 31. I have 3,486 citations.

I am a PI for several commercial studies and have built a small clinical research team from scratch in the cardiology department at Somerset NHS Foundation Trust. I am about to become a co-PI for DAPA-MI.

##### Commercial Trials

The following is a list of commercial trials for which I have been Principal Investigator:

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Target | Recruited | Status |
| HORIZON | 3 | Recruiting | Open |
| SELECT (Co PI) | 35 | 35 | Open |
| Dal-GenE (Dalcor) | 8 | 6 | Closed |
| HERITAGE (Prevalence) | 50 | 50 | Closed |
| TIGRIS | 20 | 30 | Closed |
| NOAH/AFNET | 8 | 5 | Closed |
| ETTAA | 6 | 27 | Closed |
| POST 4 | 2 | 2 | Closed |
| ARIADNE | 20 | 28 | Closed |
| GALACTIC | 3 | 0 | Closed |
| ASSESS | 30 | 33 | Closed |
| PARADIGM Open Label | 5 | 5 | Closed |
| PARADIGM | 6 | 11 | Closed |
| PARAGON | 6 | 5 | Closed |
| CANTOS Ext | 8 | 6 | Closed |
| CANTOS | 8 | 16 | Closed |
| GLORIA-AF | 30 | 34 | Closed |
| MATRIX | 12 | 17 | Closed |
| AEGEAN | 3 | 1 | Closed |
| EMMACE 3 | 10 | 20 | Closed |
| EMMACE 4 | 20 | 20 | Closed |
| UKAGS | 800 | 1275 | Closed |

#### Clinical Research Fellow Post (PhD)

Supervisors Dr Michael Polkey

Professor John Moxham

Professor Andrew Coats, Professor Philip Poole-Wilson

Title Limitations to Exercise in Congestive Heart Failure: Insights from Peripheral and Transcranial Magnetic Stimulation

Background In patients with congestive heart failure (CHF), there is a mismatch between objective exercise tolerance and measures of ventricular function. The final limits to exercise tolerance and symptoms are centrally driven. Several studies have documented structural and functional changes in the central nervous system (CNS) in patients with CHF.

Objectives To compare the behaviour of the CNS in patients with CHF and age-matched healthy controls.

Techniques Several techniques were employed, including volitional and non-volitional invasive and non-invasive respiratory and peripheral muscle studies, lung function testing, cardiopulmonary exercise testing, transcranial magnetic stimulation and cortical evoked potentials in response to respiratory occlusion.

Results There was evidence of mild peripheral respiratory and quadriceps muscle weakness at rest in patients with CHF. Cycle exercise-induced quadriceps, but not diaphragm fatigue, in both healthy subjects and patients, but at lower workloads in patients. There was a fall in cortical reactivity after exercise in healthy subjects but not in patients with CHF. Evoked potentials can be elicited in patients.

Conclusions There is some evidence of change in central nervous system performance in patients with heart failure. Changes in peripheral muscle function are also noted at lower workloads.

Progress PhD awarded 31st May 2008.

#### Publications

##### Scientific Papers

Temporal association between invasive procedures and infective endocarditis. Thornhill MH, Crum A, Campbell R, Stone T, Lee EC, Bradburn M, Fibisan V, **Dayer M**, Prendergast BD, Lockhart P, Baddour L, Nicoll J. Heart. 2023 Jan 11;109(3):223-231. doi: 10.1136/heartjnl-2022-321519.

Antibiotic Prophylaxis Against Infective Endocarditis Before Invasive Dental Procedures. Thornhill MH, Gibson TB, Yoon F, **Dayer MJ**, Prendergast BD, Lockhart PB, O'Gara PT, Baddour LM.J Am Coll Cardiol. 2022 Sep 13;80(11):1029-1041. doi: 10.1016/j.jacc.2022.06.030. Epub 2022 Aug 17.

Thornhill, M., Crum, A., Rex, S. et al. Campbell, R., Stone, T., Bradburn, M., Fibisan, V., **Dayer, M**., Prendergast, B., Lockhart, P., Nicholl, J. (Accepted: 2022) The Invasive Dentistry - Endocarditis Association (IDEA) study: a case-crossover study using English national data. Health Technology Assessment. Volume: 26, Issue: 28, Published in June 2022. <https://DOI.org/10.3310/NEZW6709>

The effect of a standardised protocol for CIED insertion on complications and infection rates in a DGH.

Foster E, Furniss G, **Dayer M**. Br J Cardiol. 2021 Jun 2;28(2):27. doi: 10.5837/bjc.2021.027. eCollection 2021.

Prescribing of antibiotic prophylaxis to prevent infective endocarditis. Thornhill MH, Gibson TB, Durkin MJ, **Dayer MJ**, Lockhart PB, O'Gara PT, Baddour LM. J Am Dent Assoc. 2020 Nov;151(11):835-845.e31. DOI: 10.1016/j.adaj.2020.07.021.

A cross-sectional audit of the risk of burnout among senior medical staff in a UK district general hospital. Baverstock A, Coulston J, **Dayer M**. Clin Med (Lond). 2020 Mar;20(2):203-207. DOI: 10.7861/clinmed.2019-0161.

Factors influencing digital review of pathology test results in an inpatient setting: a cross-sectional study. Challen R, Tsaneva-Atanasova K, Edwards T, Gompels L, **Dayer M**, Pitt M, Danon L. JAMIA Open. 2020 Mar 17;3(2):290-298. DOI: 10.1093/jamiaopen/ooaa003. eCollection 2020 Jul.

Oral antibiotic prescribing by NHS dentists in England 2010-2017. Thornhill MH, **Dayer MJ**, Durkin MJ, Lockhart PB, Baddour LM. Br Dent J. 2019 Dec;227(12):1044-1050. DOI: 10.1038/s41415-019-1002-3.

[Adverse drug reactions due to oral antibiotics prescribed in the community setting - England.](https://www.ncbi.nlm.nih.gov/pubmed/31512540) Baddour LM, **Dayer MJ**, Thornhill MH. Infect Dis (Lond). 2019 Nov - Dec;51(11-12):866-869. DOI: 10.1080/23744235.2019.1663918. Epub 2019 Sep 12.

[Risk of Adverse Reactions to Oral Antibiotics Prescribed by Dentists.](https://www.ncbi.nlm.nih.gov/pubmed/31314998) Thornhill MH, **Dayer MJ**, Durkin MJ, Lockhart PB, Baddour LM. J Dent Res. 2019 Sep;98(10):1081-1087. DOI: 10.1177/0022034519863645. Epub 2019 Jul 17.

Fluoroquinolone use and associated adverse drug events in England. Baddour LM, **Dayer MJ**, Thornhill MH. J Infect. 2018 Nov 13. pii: S0163-4453(18)30325-6. DOI: 10.1016/j.jinf.2018.11.001.

Antibiotic Prophylaxis and Incidence of Endocarditis Before and After the 2007 AHA Recommendations. Thornhill MH, Gibson TB, Cutler E, **Dayer MJ**, Chu VH, Lockhart PB, O'Gara PT, Baddour LM. J Am Coll Cardiol. 2018 Nov 13;72(20):2443-2454. DOI: 10.1016/j.jacc.2018.08.2178. Epub 2018 Nov 5.

B-type natriuretic peptide-guided therapy for heart failure (HF): a systematic review and meta-analysis of individual participant data (IPD) and aggregate data. Pufulete M, Maishman R, Dabner L, Higgins JPT, Rogers CA, **Dayer M**, MacLeod J, Purdy S, Hollingworth W, Schou M, Anguita-Sanchez M, Karlström P, Shochat MK, McDonagh T, Nightingale AK, Reeves BC. Syst Rev. 2018 Jul 31;7(1):112. DOI: 10.1186/s13643-018-0776-8.

Infective Endocarditis After Invasive Medical and Surgical Procedures. Thornhill MH, **Dayer MJ**, Cahill TJ. J Am Coll Cardiol. 2018 Jun 19;71(24):2753-2755. DOI: 10.1016/j.jacc.2018.03.533.

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Quantifying infective endocarditis risk in patients with predisposing cardiac conditions. Thornhill MH, Jones S, Prendergast B, Baddour LM, Chambers JB, Lockhart PB, **Dayer MJ**. Eur Heart J. 2018 Feb 14;39(7):586-595. DOI: 10.1093/eurheartj/ehx655.

Effectiveness and cost-effectiveness of serum B-type natriuretic peptide testing and monitoring in patients with heart failure in primary and secondary care: an evidence synthesis, cohort study and cost-effectiveness model. Pufulete M, Maishman R, Dabner L, Mohiuddin S, Hollingworth W, Rogers CA, Higgins J, **Dayer M**, Macleod J, Purdy S, McDonagh T, Nightingale A, Williams R, Reeves BC. Health Technol Assess. 2017 Aug;21(40):1-150. DOI: 10.3310/hta21400.

Model-based cost-effectiveness analysis of B-type natriuretic peptide-guided care in patients with heart failure. Mohiuddin S, Reeves B, Pufulete M, Maishman R, **Dayer M**, Macleod J, McDonagh T, Purdy S, Rogers C, Hollingworth W. BMJ Open. 2016 Dec 28;6(12):e014010. DOI: 10.1136/bmjopen-2016-014010.

The Cost-Effectiveness of Antibiotic Prophylaxis for Patients at Risk of Infective Endocarditis. Franklin M, Wailoo A, **Dayer MJ**, Jones S, Prendergast B, Baddour LM, Lockhart PB, Thornhill MH. Circulation. 2016 Nov 15;134(20):1568-1578.

The healthcare costs of heart failure during the last five years of life: A retrospective cohort study. Hollingworth W, Biswas M, Maishman RL, **Dayer MJ**, McDonagh T, Purdy S, Reeves BC, Rogers CA, Williams R, Pufulete M. Int J Cardiol. 2016 Dec 1;224:132-138. DOI: 10.1016/j.ijcard.2016.09.021.

Postural modification to the standard Valsalva manoeuvre for emergency treatment of supraventricular tachycardias (REVERT): a randomised controlled trial. Appelboam A, Reuben A, Mann C, Gagg J, Ewings P, Barton A, Lobban T, **Dayer M**, Vickery J, Benger J; REVERT trial collaborators. Lancet. 2015 Oct 31;386(10005):1747-53. DOI: 10.1016/S0140-6736(15)61485-4. Epub 2015 Aug 24.

Latest NICE guidelines on the use of cardiac resynchronisation therapy and implantable cardioverter defibrillator devices in heart failure may significantly increase implant rates. Mahendiran T, Gosling OE, Newton J, Giblett D, McKenzie D, **Dayer M**. Br J Cardiol 2015;22:155. DOI:10.5837/bjc.2015.041

Incidence and nature of adverse reactions to antibiotics used as endocarditis prophylaxis. Thornhill MT, **Dayer MJ**, Prendergast B, Baddour LM, Jones S, Lockhart PB. J Antimicrob Chemother. 2015. In Press. DOI: 10.1093/jac/dkv115.

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Bond R, Augustine D, **Dayer M**. Pacemaker complications in a district general hospital. Br J Cardiol. Br J Cardiol 2012;19:90-4. DOI: 10.5837/bjc.2012.018.

Oxygen uptake efficiency slope, aerobic fitness, and V(E)-VCO2 slope in heart failure. Antoine-Jonville S, Pichon A, Vazir A, Polkey MI, **Dayer MJ**. Med Sci Sports Exerc. 2012 Mar;44(3):428-34. DOI: 10.1249/MSS.0b013e31822f8427.

Martin H Thornhill, **Mark J Dayer**, Jamie M Forde, G Ralph Corey, Vivian H Chu, David J Couper, Peter B Lockhart. Impact of the NICE guideline recommending cessation of antibiotic prophylaxis for prevention of infective endocarditis: before and after study BMJ 2011;342:DOI:10.1136/BMJ.d2392 (Published 3 May 2011).

Hastings PC, Vazir A, Meadows GE, **Dayer M**, Poole-Wilson PA, McIntyre HF, Morrell MJ, Cowie MR, Simonds AK. Adaptive servo-ventilation in heart failure patients with sleep apnea: A real world study. Int J Cardiol. 2010; 139: 17-24.

Hopkinson NS, **Dayer MJ**, Moxham J, Polkey MI. Abdominal muscle fatigue following exercise in chronic obstructive pulmonary disease. Respir Res 2010; 11: 15-22.

Jaye J, Chatwin M, **Dayer M**, Morrell MJ, Simonds AK. Autotitrating versus standard noninvasive ventilation: a randomised crossover trial. Eur Respir J 2009; 33: 566-71.

Swallow EB, Gosker HR, Ward KA, Moore AJ, **Dayer MJ**, Hopkinson NS, Schols AMWJ, Moxham J, Polkey MI. A novel technique for non-volitional assessment of quadriceps muscle endurance in man. J Appl Physiol 2007; 103: 739-46.

Hopkinson NS, Tennant RC, **Dayer MJ**, Swallow EB, Hansel TT, Moxham J, Polkey MI. A prospective study of decline in fat free mass and skeletal muscle strength in chronic obstructive pulmonary disease. Respiratory Research 2007; 8: 25.

**Dayer M**, Jonville S, Chatwin M, Swallow E, Porcher R, Sharshar T, Ross E, Moxham J, Similowski T, Hopkinson N, Polkey M. Exercise-induced depression of the diaphragm motor evoked potential is not affected by non-invasive ventilation. Respir Physiol Neurobiol 2007; 155: 243-254.

Vazir A, Hastings PC, **Dayer M**, McIntyre HF, Henein MY, Poole-Wilson PA, Cowie MR, Morrell MJ, Simonds AK. A high prevalence of sleep disordered breathing in men with mild symptomatic chronic heart failure due to left ventricular systolic dysfunction. Eur J Heart Fail 2007; 9: 243-50.

Szollosi I, O’Driscoll DM, **Dayer MJ**, Coats AJ, Morrell MJ, Simonds AK. Adaptive servo-ventilation and deadspace: effects on central sleep apnoea. J Sleep Res 2006; 15: 199-205

Vazir A, **Dayer M**, Hastings P, McIntyre H, Henein M, Poole-Wilson P, Cowie M, Morrell M, Simonds A. Can heart rate variation rule out sleep disordered breathing in heart failure? Eur Resp J 2006; 27: 571-7.

**Dayer MJ**, Hopkinson NS, Ross ET, Jonville S, Sharshar T, Kearney M, Moxham J, Polkey MI. Does symptom limited cycle exercise cause low frequency diaphragm fatigue in patients with heart failure. Eur J Heart Fail. 2006; 8: 68-73.

Sharshar T, Hopkinson NS, Ross ET, Jonville S, **Dayer MJ**, Nickol AH, Lofaso F, Moxham J, Polkey MI. Motor control of the costal and crural diaphragm – insights from transcranial magnetic stimulation in man. Resp Phys Neurobiol 2005; 146: 5-19.

Hopkinson NS, Man WD, **Dayer MJ**, Ross ET, Nickol AH, Hart N, Moxham J, Polkey MI. Acute effect of oral steroids on muscle function in chronic obstructive pulmonary disease. Eur Resp J 2004; 24: 137-42.

Sharshar T, Hopkinson NS, Jonville S, Prigent H, Carlier R, **Dayer MJ**, Swallow EB, Lofaso F, Moxham J, Polkey MI. Demonstration of a second rapidly conducting cortico-diaphragmatic pathway in humans. J Physiol 2004; 560: 897-908.

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Sharshar T, Ross ET, Hopkinson NS, Porcher R, Nickol AH, Jonville S, **Dayer MJ**, Hart N, Moxham J, Lofaso F, Polkey MI. Depression of diaphragm motor cortex excitability during mechanical ventilation. J Appl Physiol 2004; 97: 3-10.

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Montagano V, Morosi S, **Dayer M**, Gomma A, Atherton M, Collins M, Redaelli A. The link between restenosis and cardiovascular stent design: a study combining computational fluid dynamics and computer aided design. Internal Medicine: Clinical & Laboratory, Multidisciplinary International Journal 2003; 11: 14-23.

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Allan N, **Dayer M**, Kulp D, Mackrodt W. Atomistic lattice simulations of the ternary fluorides AMF3 (A=Li, Na, K, Rb, Cs; M=Mg, Ca, Sr, Ba). J Mater Chem 1991; 1: 1035-9.

##### Review Articles

Bacteremia following different oral procedures: Systematic review and meta-analysis. Martins CC, Lockhart PB, Firmino RT, Kilmartin C, Cahill TJ, **Dayer M**, Occhi-Alexandre IGP, Lai H, Ge L, Thornhill MH. Oral Dis. 2023 Feb 7. doi: 10.1111/odi.14531.

Coenzyme Q10 to manage chronic heart failure with a reduced ejection fraction: a systematic review and economic evaluation. Claxton L, Simmonds M, Beresford L, Cubbon R, **Dayer M**, Gottlieb SS, Hartshorne-Evans N, Kilroy B, Llewellyn A, Rothery C, Sharif S, Tierney JF, Witte KK, Wright K, Stewart LA. Health Technol Assess. 2022 Jan;26(4):1-128. DOI: 10.3310/KVOU6959.

Temporal Trends of Infective Endocarditis in North America From 2000 to 2017—A Systematic Review. Khawaja M. Talha, **Mark J. Dayer**, Martin H. Thornhill, Wajeeha Tariq, Verda Arshad, Imad M. Tleyjeh, Kent R. Bailey, Raj Palraj, Nandan S. Anavekar, M. Rizwan Sohail, Daniel C. DeSimone and Larry M. Baddour. Open Forum Infectious Diseases, Volume 8, Issue 11, November 2021, ofab479, <https://DOI.org/10.1093/ofid/ofab479>

Infective endocarditis in the adult patient. JAT Sandoe, RW Watkin, **MJ Dayer**. Medicine. Volume 49, Issue 11, November 2021, Pages 681-686. https://DOI.org/10.1016/j.mpmed.2021.08.009.

Escalating incidence of infective endocarditis in Europe in the 21st century. Talha KM, Baddour LM, Thornhill MH, Arshad V, Tariq W, Tleyjeh IM, Scott CG, Hyun MC, Bailey KR, Anavekar NS, Palraj R, Sohail MR, DeSimone DC, **Dayer MJ**. Open Heart. 2021 Oct;8(2):e001846. DOI: 10.1136/openhrt-2021-001846.

The central nervous system and heart failure. **Dayer M**, MacIver DH, Rosen SD. Future Cardiol. 2020 Sep 16. DOI: 10.2217/fca-2020-0059.

A comparison of different antibiotic regimens for the treatment of infective endocarditis. Martí-Carvajal AJ, **Dayer M**, Conterno LO, Gonzalez Garay AG, Martí-Amarista CE. Cochrane Database Syst Rev. 2020 May 14;5:CD009880. DOI: 10.1002/14651858.CD009880.pub3.

Mortality during marathons: a narrative review of the literature. **Dayer MJ**, Green I. BMJ Open Sport Exerc Med. 2019 Jun 27;5(1):e000555. DOI: 10.1136/bmjsem-2019-000555. eCollection 2019. Review.

**Dayer M**, Thornhill M. Is Antibiotic Prophylaxis to Prevent Infective Endocarditis Worthwhile? J Infect Chemother. 2018 Jan;24(1):18-24. DOI: 10.1016/j.jiac.2017.10.006. Epub 2017 Oct 26. Review.

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MacIver DH, **Dayer MJ**, Harrison AJ. A general theory of acute and chronic heart failure. Int J Cardiol. 2013 Apr 30;165(1):25-34. DOI: 10.1016/j.ijcard.2012.03.093. Epub 2012 Apr 6.

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**Dayer MJ**, Cowie MR. Heart Failure – diagnosis and health care burden. Clin Med 2004; 4: 13-8.

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**Dayer M**, Hardman SM. The Safety, Tolerability and Efficacy of Anti-Arrhythmic Drugs in the Elderly. Am J Geriatr Cardiol 2002; 11: 370-5.

##### Editorials

[Antibiotic prophylaxis for patients at risk of infective endocarditis: an increasing evidence base?](https://bjcardio.co.uk/2023/02/antibiotic-prophylaxis-for-patients-at-risk-of-infective-endocarditis-an-increasing-evidence-base/) **Dayer MJ**, Thornhill MT, Baddour LM. Br J Cardiol 2023;30:26–30 doi:10.5837/bjc.2023.006.

[Antibiotic Prophylaxis in Dentistry.](https://pubmed.ncbi.nlm.nih.gov/36413595/) Thornhill MH, **Dayer M**, Prendergast BD, Lockhart P, Baddour L. Clin Infect Dis. 2023 Mar 4;76(5):960-961. doi: 10.1093/cid/ciac857.

Injection Drug Use: A Minor Criterion With Major Implications for Patients With Infective Endocarditis. Baddour LM, Thornhill MH, **Dayer MJ**. J Am Coll Cardiol. 2021 Feb 9;77(5):556-558. DOI: 10.1016/j.jacc.2020.11.058.

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**Dayer MJ**. Hospital mortality ratios. What about community standardised mortality ratios? BMJ 2010; May 25;340:c2749.

#### Oral Presentations at National / International Meetings

**Dayer M**. An overview of NICOR data.British Heart Rhythm Society, London, March 2023

**Dayer M.** Endocarditis – An Overview. Society of Cardiothoracic Surgeons, Belfast, March 2022

**Dayer M.** Use of National Registry Data for CIED Surveillance. Heart Rhythm Congress UK, Online, October 2021

**Dayer M.** A patient with possible device infection: A practical approach to management. Royal Society of Medicine / British Society of Echocardiography, Online, January 2021

**Dayer M.** Infective Endocarditis. British Heart Valve Society, London, October 2019

**Dayer M.** Might Antibiotic Prophylaxis Prevent Endocarditis? British Association of Oral Surgeons, Bristol, September 2019

**Dayer M.** Sudden Cardiac Death management over the last 20 (40+) years. What do we have to change? Cardiosummit, Berlin, September 2019

**Dayer M.** Infective Endocarditis. British Society of Echocardiography, Liverpool, October 2018

**Dayer M.** Infective Endocarditis. British Heart Valve Society, Birmingham, September 2018

**Dayer M.** Antibiotic Prophylaxis. Any Point? ESCMID Postgraduate Education Course. Update on Endocarditis and Endovascular Infections, Munster, March 2018.

**Dayer M.** Why a Randomized Clinical Trial of Antibiotic Prophylaxis (AP) to Prevent Infective Endocarditis(IE) Must be Conducted**.** 14th International Symposium on Modern Concepts in Endocarditis and Cardiovascular Infections, Dublin, June 2017.

**Dayer M.** What May Change in the UK After the Change in NICE Guidelines (In July 2016)? 14th International Symposium on Modern Concepts in Endocarditis and Cardiovascular Infections, Dublin, June 2017.

**Dayer M.** The Methodological Limitations of the Lancet Paper. 14th International Symposium on Modern Concepts in Endocarditis and Cardiovascular Infections, Dublin, June 2017.

**Dayer M.** Is Antibiotic Prophylaxis Worthwhile?91st Annual Meeting of the Japanese Association of Infectious Diseases and 65th Annual Meeting of the Japanese Society of Chemotherapy, April 2017, Tokyo.

**Dayer M.** How to prevent device-related infection, Royal Society of Medicine, May 2016, London.

**Dayer M**. Case Presentation, European Society of Cardiology, September 2015, London.

**Dayer M**. Case Presentation, British Cardiac Society, June 2015, Manchester.

**Dayer M**, Jones S, Prendergast B, Baddour LM, Lockhart PB, Thornhill MH. The Incidence of Infective Endocarditis in England is Increasing - An Assessment of the Impact of Cessation of Antibiotic Prophylaxis Using Population Statistics. Session LBCT.03, American Heart Association, November 2014, Chicago.

**Dayer M**. Medical Error, Acute and General Medicine for the Physician, Manchester, UK, 2014.

**Dayer M**. Medical Error, Acute and General Medicine for the Physician, London, UK, 2013.

**Dayer M**. Indications for ICDs in inherited cardiac conditions, Irano-British Cardiology Symposium, Izmir, Turkey, 2012.

**Dayer M**. Optimisation of Cardiac Resynchronisation Therapy, Irano-British Cardiology Symposium, Izmir, Turkey, 2012.

**Dayer M**. Prevention of Device Related Infections, Irano-British Cardiology Symposium, Izmir, Turkey, 2012.

**Dayer M**. What to do when the battery runs down. ICDs. Heart Rhythm UK. Birmingham, UK, 2011.

**Dayer M**. Challenging device cases. Heart Rhythm UK. Birmingham, UK, 2011.

**Dayer M**. The management of acute heart failure. Cardiology 2007 – Theory into Clinical Practice and Guidelines. Royal Marsden Hospital, London, UK, 2007.

**Dayer M**, Swallow E, Jonville S, Moore A, Vazir A, Porcher R, Sharshar T, Moxham J, Hopkinson N, Poole-Wilson P, Polkey M. Is the cortical response to exercise different in patients with congestive heart failure. European Society of Cardiology. Stockholm, Sweden, 2005.

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#### Teaching Sessions and Education Delivered over Past Year

22/11/2022 Cardiology update, Somerset Prescribing Leads.

14/11/2022 Cardiology update, “Fresh Looks”.

04/11/2022 Cardiology update, Somerset Pentagon GP Symposium.

16/09/2022 Managing the Politics of Medicine. Year 3 Peninsula Medical Students.

27/04/2022 A Talk on Errors. Human Factors Day. FY2 Trainees, Severn Deanery. Taunton and Somerset NHS Trust.

24/01/2022 Dealing with Emotional Overload. How to Self-Manage in Distressing Situations. Year 3 Peninsula Medical Students.

23/11/2021 Cardiology Update. Fresh Looks. Somerset General Practitioners Annual Update.

22/06/2021 Advanced Life Support. Bridgwater. Variety of HCPs.

#### Other Information

#### Previous Positions

##### Cardiology Specialist Registrar Rotation

1st October 2007 – 31st October 2007

Harefield Hospital, Royal Brompton and Harefield NHS Trust

Dr N Banner, Dr E Birks

Transplant Cardiology

1st October 2006 –30th September 2007

Harefield Hospital, Royal Brompton and Harefield NHS Trust

Dr M Mason, Dr V Markides, Dr T Wong, Dr A Mitchell

General Cardiology, Devices & Electrophysiology

2nd October 2005 – 31st September 2005

Royal Brompton Hospital, Royal Brompton and Harefield NHS Trust

Dr J Clague, Professor R Sutton, Dr V Markides, Dr T Wong

General Cardiology, Devices & Electrophysiology

April 2005 – 1st October 2005

Harefield Hospital, Royal Brompton and Harefield NHS Trust

Dr A Mitchell

General Cardiology

3rd October 2004 – April 2005

Harefield Hospital, Royal Brompton and Harefield NHS Trust

Dr N Banner, Dr E Birks

Transplant Cardiology

3rd October 2001 – 2nd October 2004

Imperial College, London & Royal Brompton Hospital

Dr M Polkey, Professor J Moxham, Professor P Poole-Wilson

Clinical Research Fellow

June 2001 – 2nd October 2001

Royal Brompton Hospital, Royal Brompton and Harefield NHS Trust

Dr M Gatzoulis, Dr M Mullen

Grown-up Congenital Heart Disease

31st January 2001 – June 2001

Royal Brompton Hospital, Royal Brompton and Harefield NHS Trust

Professor A Coats, Professor P Poole-Wilson, Professor P Collins, Dr D Gibson

Academic Heart Failure

4th October 2000 – 30th January 2001

The Whittington Hospital

Dr D Patterson, Dr S Hardman

LAT in Cardiology/General Internal Medicine

6th October 1999 – 3rd October 2000

Kent and Canterbury Hospital

Dr D A Lythall, Dr A J Johnson

LAT in Cardiology/Respiratory Medicine/General Internal Medicine

##### General Medical Training

9th August 1999 – 5th October 1999

Frimley Park Hospital

Dr R K Knight

LAS, General Internal Medicine/Chest Medicine

February 1999 – August 1999

St Thomas’s Hospital

Dr C Bucknall, Dr M Webb-Peploe, Dr J Gill, Dr J Chambers, Dr J Coltart

Senior House Officer, Cardiology

August 1998 – February 1999

Guy’s Hospital

Dr I Abbs, Dr J Pattison, Dr D Goldsmith, Dr S Scoble

Senior House Officer, Renal Medicine

February 1997 - August 1998

Worthing Hospital

Senior House Officer Rotation in General Medicine:

Dr G Caldwell – Endocrinology/General Medicine

Dr A Roques, Dr C Rist – Haematology

Dr P Carr – Renal/General Medicine

Dr J Bull – Gastroenterology/General Medicine

Dr M Signy – Cardiology/General Medicine

Dr J Evans – Chest/General Medicine

August 1996 – February 1997

Kent and Canterbury Hospital

Dr S Brooks

Senior House Officer, Accident and Emergency Medicine

February 1996 – August 1996

Kent and Canterbury Hospital

Mr RM Heddle

Pre-registration House Officer, General Surgery

August 1995 – February 1996

St Thomas’s Hospital

Dr F C Martin – Elderly Care/General Medicine

Dr D Russell-Jones, Professor P Sonksen, Dr C Lowy – Endocrinology/General Medicine

Pre-registration House Officer, General Medicine

#### Positions of Responsibility at Somerset NHS Foundation Trust

Since I arrived at Somerset NHS Foundation Trust, I have taken on several leadership roles. I have held positions whose primary responsibility is to my department and trust-wide and regional roles.

###### Clinical Lead for Heart Failure – November 2007 – June 2013

* Oversight of the community heart failure service.
* I participated in developing a service specification enabling the commissioning of the hospital-based heart failure service.

###### Clinical Lead for Cardiac Devices – November 2008 – September 2017

* Reduced length of stay from 3 days to less than one day.
* Maintained clinical waiting times and outcomes in the context of changes in personnel and changes in demand.
* Won MAFTA for work to reduce the rate of device infections.
* Introduced new procedures and practices (e.g. operating on warfarin).

###### Cardiology Network Lead (AGWSCS) for Arrhythmias, January 2009 – May 2012

* Introduced new regional guidelines and pathways for the management of arrhythmias and ICCs.
* Introduction of remote monitoring of devices.
* Promoted the introduction of new oral anticoagulants and the GRASP-AF tool, which is starting to reduce stroke rates in the region.

###### Clinical Lead for Research – Cardiology, 2011, On-going role

* Creation of a cardiology research team, currently two full-time nurses, two part-time nurses and an administrator.
* 2014, lead trust for cardiology clinical trials recruitment within South-West Peninsula NIHR Clinical Research Network.
* Income is used to support the education of nursing staff and partially fund the rotablation service.
* Invited speaker at national and international conferences.

###### Clinical Director for Cardiology – January 2014 – April 2017

* Maintained a dialogue with management at times of significant tension.
* Maintained performance at a time of increasing demand and expectations and changes in cardiology personnel.
* Fully implemented CG95 despite considerable resistance to enable the CCG to continue commissioning chest pain services.
* Transitioned cardiology job plans from paper onto Zircadian.
* Ensured that Trust cardiology guidelines were reviewed and up to date.
* Ensured compliance with all cardiology NICE guidelines.
* Ensured that the department continued to provide data to all relevant national audits.

###### Clinical Safety Officer – September 2014 – April 2016

* Supported implementation of Cerner Upgrade (Fujitsu to BT) and IMS Maxims patient administration systems.
* No significant patient safety episodes with either implementation.

###### Caldicott Guardian – July 2017 – February 2023

* The senior person responsible for protecting patient and service-user information confidentiality and enabling appropriate information-sharing at Musgrove Park Hospital.
* I have been involved in negotiations with Google and Sensyne Health; no patient-level data was transferred to either organisation.

###### Lead for Electronic Prescribing and Medicines Administration (EPMA) implementation – July 2017 –October 2020

* Musgrove park is a “Global Digital Exemplar”, and it is currently being supported to transform its IT systems.
* We implemented an EPMA system in April 2020 that is now Trust-Wide; it has recently expanded into Obstetrics and Gynaecology.

###### Associate Chief Clinical Information Officer – October 2020 – February 2023

* I had a broader remit of work than when just the lead for EPMA.
* I oversaw the development of several projects, including:
  + Further development of the EPMA system – including links with GP systems and further roll-out across the community;
  + Single sign-on;
  + A new Order Comms system (Clinisys ICE).

###### Member, Drugs and Therapeutics Committee – September 2018 – March 2023

* Review and decisions regarding the use of new medications in the Trust and regulation of existing medication.
* Ensuring the availability of new medications recommended by NICE.
* Review of medication safety issues.

###### Chair, Drugs and Therapeutics Committee – March 2023

* As above!
* As of 01/04/2023 the committees that were running in Yeovil, Musgrove and the Community formally came together, and I became chair of the new combined committee.

###### Clinical Director for Medicine – March 2023

* On 01/03/2023 I became the Clinical Director for Medicine at Musgrove Park Hospital.
* Thus far, my work has principally revolved around sorting clinical cover for the Strike Days.
* In the months to come, my remit includes reforming the medical on call rota and expanding the bed base and workforce.

#### National Roles

##### National Institute for Cardiovascular Outcomes Research (NICOR)

* Clinical lead, since January 2023, for the Cardiac Rhythm Management audit.

##### BHRS Council Member

* Appointed 2022
* Responsible for approving and discussing standards and recommendations for device therapy in the UK.
* Appointed also to the education committee to help organise the BHRS national meeting in 2023.

#### Hobbies and Interests

When I am not spending time with my family (or injured), I am a keen endurance athlete. I have completed several marathons and ultramarathons, marathon swims and triathlons at all distances, including Ironman. But one of my favourite ways to spend time is to do Parkrun on a Saturday morning, and I recently completed my 100th.