

Heart Disease Training Directory

A guide to career frameworks and
education offers

Contents

Introduction.....	2
Background	3
Role of Training and Careers.....	4
How to Use this Guide	4
Supporting Organisations	5
Heart Disease Training Competencies and Frameworks	6
All Healthcare Professionals	6
Nursing.....	10
Medical.....	13
Allied Health Professionals	15
Advanced Clinical Practitioners	17
Pharmacists.....	20
Support Workers.....	21
Higher Education Courses	22
All Healthcare Professionals	22
Medical.....	27
Allied Health Professionals	28
Healthcare Scientists.....	31
Physician Associate	34
Short Courses	35

Introduction

The [NHS Long Term Plan](#) has set out its ambitions for the NHS over the next 10 years, identifying heart disease as a key clinical priority. This at a time of significant [workforce challenges](#) with efforts underway to boost NHS activity and tackle the rising backlog of care.

There are 6.4 million people across England living with heart and circulatory diseases, and [workforce challenges](#) means that the right number of healthcare staff to deliver time-critical heart treatment is impacting patients. Many people with heart conditions are facing agonising waits for care, knowing that the longer they wait, the higher their risk of a preventable heart attack, disabling heart failure, or even premature death. It is for this reason that job retention and the development and upskilling of the multidisciplinary (MDT) heart team must be [improved](#). The [development](#) of extended roles and upskilling the whole heart team is important to delivering high quality and integrated services, enabling the workforce to operate more effectively.

To support this and ensure we have a workforce with the right number, skills and capabilities, Health Education England (HEE) developed a number of training support tools i.e. Cardiovascular Diseases: A training [resources guide](#) and [digital toolkit](#), conjoined to the HEE [STAR](#) methodology to support workforce transformation

To help optimise available roles and career pathways, we have developed this training directory, to further support national priorities, workforce capacity and capability. This training directory is a centralised repository of heart disease career pathways and higher educational resources, to help the NHS workforce develop a career in heart disease specialty and expand their clinical expertise.

Background

[Heart disease](#) affects around seven million people in the UK and is a significant cause of disability and death. It is responsible for one in four premature deaths in the UK and accounts for the largest gap in healthy life expectancy. Those in the most deprived 10% of the population are almost twice as likely to die as a result of heart disease than those in the least deprived 10% of the population.

The pandemic has [continued](#) to drive excess non-COVID mortality and widen health inequalities for patients with CVD. CVD is also a key driver of health inequalities. It accounts for around 25% of the life expectancy gap (27% in men and 24% in women) between rich and poor populations in England; premature death rates being three times higher in the most deprived, compared to the least deprived, and 40% of all amenable deaths in heart disease are in the three most deprived deciles. A year on year [increase](#) in mortality has continued, and there are currently 1.4 million heart attack survivors and 900,000 people living with heart failure in the [UK](#). Heart failure is a large [burden](#) on the NHS, accounting for 1 million bed days per year, 2% of the NHS total, and 5% of all emergency admissions to hospital, and this is likely to rise with an ageing population.

Prevention is key with a series of interventions [underway](#), in addition to service configurations and new models of care. These aim to help ensure multi-disciplinary teams provide support as part of primary care networks, virtual wards and cardiac rehabilitation that can save lives, improve quality of life and reduce hospital readmissions. However [challenges](#) remain but there are [opportunities](#) to do more to address these.

Working with partners, we aim to support areas in heart disease healthcare by supporting the workforce through training, continuous development and workforce planning to improve early and accurate diagnosis, medicine optimisation, rehabilitation, and supporting self-management.

Over the next ten years, the NHS is targeting investment in improved treatment and support for those with heart disease, with an ambition to transform our outcomes to equal, or better, than international counterparts. The NHS LTP outlines how it'll make improvements along the full pathway from symptom onset to ongoing care, including early detection and diagnosis, treatment, and rehabilitation.

Role of Training and Careers

The NHS is [determined](#) to continue to invest in training opportunities and the development of career paths for the whole workforce. A career in the NHS means staff can expect an annual personal development review and a plan to support their [career progression](#). This gives them the opportunity to identify any training and development needs with their manager, education team or educator. It is a commitment to support people to grow and develop professionally, to reach their full potential. [Line managers](#) should have regular conversations with individuals about learning and development opportunities and career progression.

It is also [desirable](#) for senior staff to have an MSc level qualification to meet the requirements of their role, either from a bespoke or standard MSc programme. Line managers should [ensure](#) courses are available for specialist professionals in their team, as well as for educators, advanced practitioners, lead practitioners and non-registered staff. A training needs should be completed to identify their own and staff development needs. This can be supplemented with professional development (CPD) [funding](#) from HEE.

The [NHSE Priorities and Operational Guidance 23/24](#) states workforce plans should help support a number of areas, including HEE [Multi-Professional Education and Training Investment Plan \(METIP\)](#). The METIP is not a workforce plan, but an investment plan for HEE's 'Future Workforce' and 'Workforce Development' budgets – around 90% of HEE's spending – which includes funding the future workforce supply needed to deliver NHS workforce strategies. It will enable HEE to respond positively to NHS workforce challenges through prioritising its spending to generate the biggest and best impact for patients. There may be opportunity through the METIP process for the individuals to develop through the discussed training competencies and frameworks and/or higher education courses.

How to Use this Guide

We recommend when reading through the 'Career Competency Frameworks' and 'Higher Education Resources', to start at 'All Healthcare Professionals' before moving onto other subsections for further specialities.

Supporting Organisations

UK Clinical Pharmacy Association

Blood Pressure UK

British Heart Rhythm Society

Heart UK

Centre for Pharmacy Postgraduate Education

Congenital Cardiac Nurses Association (CCNA)

British Association for Cardiovascular Prevention and Rehabilitation (BACPR)

British Thoracic Society

UK College of Paramedics

British Irish and Hypertension Society

Heart Disease Training Competencies and Frameworks

All Healthcare Professionals

Organisation	Framework	Description
<u>British Association for Cardiovascular Prevention and Rehabilitation</u>	Core Competencies for the Physical Activity and Exercise Component for Cardiovascular Disease Prevention and Rehabilitation Services	This document provides guidance on the key competences required to ensure the use of best practice standards and guidelines for physical activity and exercise prescription. Competencies are outlined, identifying specific knowledge and skills for each core competency and a framework to assess the health professional's ability to <u>demonstrate</u> their competency. This document also serves as a tool to monitor the need for continuing professional development for the exercise professional and supporting staff to achieve specific competences.
<u>British Association for Cardiovascular Prevention and Rehabilitation</u>	Core Competencies for the Health Behaviour Change and Education Component for Cardiovascular Disease Prevention and Rehabilitation Services	This document provides guidance on the key competences required to ensure the use of best practice standards and guidelines for health behaviour change and education. Competencies are outlined, identifying specific knowledge and skills for each core competency and a framework to assess the health professional's ability to <u>demonstrate</u> their competency. This document also serves as a tool to monitor the need for continuing professional development for the health professional and supporting staff to achieve specific competences.
<u>British Association for Cardiovascular</u>	Core Competencies for the Diet Component: Health	This document provides guidance on the key competences required to ensure the use of best practice standards and guidelines for healthy eating and weight management. Competencies are outlined, identifying

<u>Prevention and Rehabilitation</u>	Eating and Body Composition for Cardiovascular Disease Prevention and Rehabilitation Services	specific knowledge and skills for each core competency and a framework to assess the health professional's ability to <u>demonstrate</u> their competency. This document also serves as a tool to monitor the need for continuing professional development for the health professional and supporting staff to achieve specific competences.
<u>British Society for Heart Failure</u>	Heart Failure Competency Framework for Healthcare Professionals	The framework has been developed by a national multidisciplinary panel of senior experts in heart failure across a broad range of health care professions and structured with two levels of scope. This initial document does not focus on job-specific skills unique to any individual profession. Individuals will need to interpret and use this framework according to their own needs, role and circumstance. It gives guidance to members of staff who want to get more involved in the care of heart failure patients or who are new to a heart failure specialist role.
<u>Health Education England</u>	Clinical Academic Careers Framework	This framework sets out the plans for the development of a formal academic career pathway for all those in the healthcare professions in England who have the talent and passion to pursue a formal clinical and research career. This framework describes an over-arching process and aligned programme for the clinical academic workforce across medicine and dentistry and other healthcare professions.

Other supportive resources:

NHS England: (i) [Cardiovascular disease](#) (ii) [Cardiac services](#) (iii) [Cardiovascular disease high impact interventions](#) (iv) Transforming elective care services [cardiology](#) (v) Getting it right first time (GIRFT): [Cardiology](#) (vi) [National Heart Failure Audit](#) (vii) [National Audit of Cardiac Rehabilitation](#) (viii) [Cardiovascular disease prevention pathway](#) (ix) [Cardiovascular disease \(CVD\) prevention recovery](#) (x) International Cardiovascular Disease Prevention [case studies](#) (xi) [Congenital Heart Disease Standards](#)

[& Specifications](#) (xii) [End of life care in heart failure](#)

NHS England (Workforce): (i) [Evidence Brief: Cardiology](#) (ii) [Evidence Brief: Cardiac Rehabilitation](#) (iii) [Evidence Brief: Echocardiographers](#) (iv) [Evidence Brief: Workforce Planning](#) (v) [Evidence Brief: Workforce challenges and solutions](#) (vi) [Evidence Brief: Advanced Clinical Practice](#) (vii) [Evidence Brief: Advanced practitioners in community services](#) (viii) [Clinical Academic Careers](#) Framework (ix) [Clinical Leadership Competency](#) Framework (x) [Echocardiography Training Programme](#)

[NHS Health Check](#): Competency Framework + Learner and Assessor Workbook

The National Centre for Smoking Cessation and Training (NCSCT): [Competency Frameworks](#) and [Learning](#)

[NHS Professionals](#): Introduction to ECG

[National Institute for Health and Care Research](#): Cardiovascular disease ([NIHR-BHF Cardiovascular Partnership](#))

[British Heart Foundation](#): Research grants + Education

[British Cardiovascular Society](#): Resources

British and Irish Hypertension Society: [Resources](#) & [Events](#)

[Primary Care Cardiovascular Society](#): Academy

British Congenital Cardiac Association: [Education & Careers](#)

[British Society of Echocardiography](#): Accreditation and training

[British Heart Rhythm Society](#): Training centres

British Association for Cardiovascular Prevention and Intervention: The BACPR [Standards and Core Components](#) for Cardiovascular Disease Prevention and Rehabilitation (4th edition) + [education and training](#) courses

[Association of Chartered Physiotherapists in Cardiac Rehabilitation](#): Standards for Physical Activity and Exercise in the Cardiovascular Population

[Heart Rhythm O2](#): HRS Educational Framework for Clinical Cardiac Electrophysiology

Skills for Health: [Cardiac workforce case studies](#)

[Resuscitation Council UK](#): The ABCDE Approach

European Society of Cardiology: [Education](#) + [Echo core syllabus](#)

[American College of Cardiology](#): Competencies

[The King's Fund](#): Cardiovascular disease in England Supporting leaders to take actions

[Nuffield Trust](#): Care for heart attack patients

[Heart](#): United Kingdom standards for non-invasive cardiac imaging: recommendations from the Imaging Council of the British Cardiovascular Society

British Journal of Cardiac Nursing: What is [advanced clinical practice](#) in cardiovascular care?

Nursing

Organisation	Framework	Description
<u>British Association of Nursing in Cardiovascular Care (BANCC)</u>	Competency Framework Position statement	This competency framework statement from the British Association of Nursing in Cardiovascular Care (BANCC) is aimed at cardiovascular nurses of all levels; from novice starting their cardiovascular care on a ward, coronary care or catheter suite setting, through to expert, advanced nurse practitioners and consultant nurses.
<u>British and Irish Hypertension Society</u>	Hypertension Nurse Specialist Competency Framework	The aim of this framework is to support the Hypertension Nurse in achieving the level of competence required to carry out the day-to-day tasks linked to the role. Being competent defines a person who has acquired through training, qualification, experience or a combination of these, the knowledge and skills necessary to perform the task required. The competencies in this framework provide an indication of personal and professional development as a Hypertension Nurse Specialist as well as documented evidence of achievement.
<u>British Society for Heart Failure</u>	Heart Failure Specialist Nurse Competency Framework	The competency framework serves to guide Heart Failure Specialist Nurses' (HFSNs) to develop the knowledge and clinical consultation skills required to work safely, competently and effectively manage adults with heart failure. The HFSN is the named professional co-ordinating the patient's care plan in partnership with the patient and is involved in collaborative care planning across all relevant health and social care sectors where appropriate.
<u>NHS Cheshire and Merseyside</u>	Heart Failure Competency record	The competency framework is designed to be a rolling record of competency for development of nursing and clinical skill and education in support of the role of Community Cardiac and Cardiac Specialist Nurse Role within the community cardiac team. The framework is based

		on a stage 1 to 4 development from beginner to expert/teacher within the team.
Royal College of Nursing	Adult Congenital Heart Disease Nursing: RCN guidance, career pathways and competence development	This publication aims to set out minimum standards for adult congenital heart disease (ACHD) nursing and includes recommendations for education and training underpinned by competency frameworks and career pathway. It is envisaged that development as practitioners will be enhanced by ensuring consistency across professional levels, because different roles require varying levels of competence, depending on the nature of the work and level of responsibility, this framework considers roles spanning levels 5-9 of the career pathway.
Royal College of Nursing	Children and Young People's Cardiac Nursing: RCN guidance, career pathways and competence development	This document includes recommendations for education and training, underpinned by competency frameworks and career pathways. Provides a competency framework reflecting the key roles outline within CHD standards and from which a CYP nurse can work within the principles of nursing practice and their professional standards. Different roles require varying levels of competence depending on the nature of the work and level of responsibility. Consequently, this framework considers roles spanning levels 5–9 of the career pathway.
NHS England	District Nursing and General Practice Nursing Service: Education and Career Framework	Both frameworks (district and general practice) begin with a description of the key characteristics of district and general practice nursing to enable a clearer understanding of their core and specific roles. This then leads to a specialised stepped education and career illustration based on the NHS Career Framework and Skills for Health Career Framework and indicative academic levels.

<p><u>Critical Care National Network Nurse Leads Forum (CC3N)</u></p>	<p>National Competency Framework for Registered Nurses in Adult Critical Care Cardiac Speciality Competencies</p>	<p>These competencies have been designed to provide you with the core skills required to care for critically ill patients with cardiac care needs. It is recognised that developing competency in practice depends on a number of factors including a range of experiences and opportunities, however we acknowledge the variance between units and practices so please identify, record and complete sections relevant to your unit and patient group. You may also wish to indicate sections which are not relevant to your clinical area, for a record of completeness.</p>
<p><u>British Heart Rhythm Society</u></p>	<p>Arrhythmia Nurse Specialist Competency Document</p>	<p>The Arrhythmia Nurse Competency offers a comprehensive document for Arrhythmia Nurses and presents a wide range and scope of relevant competencies for nurses working in diverse areas and specialty services, within heart rhythm management.</p>

Other supportive resources:

Royal College of Nursing: (i) [Career progression tips](#) (ii) [Advanced level nursing practice competencies](#) (iii) Children and Young People's [Cardiac Nursing](#)

Nursing and Midwifery Council: [Becoming a prescriber](#) + [approved programmes](#)

Critical Care National Network Nurse Leads Forum ([CC3N](#)): [Education standards](#) and [competencies](#)

Congenital Cardiac Nurses Association: [Education](#)

[Skills for Health](#): Cardiac Nurse Practitioner role profiles and development plans to create competence-based jobs roles

[British Journal of Nursing](#): Developing the Heart Failure Specialist Nurse Competency Framework

[British Journal of Cardiac Nursing](#): Cardiac competency statements: time for a refresh

[European Journal of Heart Failure](#): Heart Failure Association of the European Society of Cardiology heart failure nurse curriculum

[Nursing Open](#): Effectiveness of the Advanced Practice Nursing interventions in the patient with heart failure: A systematic review.

[Future Healthcare Journal](#): Description and development of a nurse-led cardiac assessment team

[British Journal of Cardiac Nursing](#): Nurse-led chest pain hot clinics: improving patient flow in the emergency department

[British Journal of Cardiac Nursing](#): The role of the nurse in adult congenital heart disease: past, present and future

Medical

Organisation	Framework	Description
Joint Royal Colleges of Physicians Training Board	Curriculum for Cardiology Training	The purpose of the Cardiology curriculum is to produce doctors with the generic professional and specialty specific capabilities needed to manage adult patients presenting with the full range of acute and chronic cardiovascular symptoms and conditions. This curriculum will ensure that the trainee develops the full range of generic professional capabilities and the underlying knowledge and skills, and their application in the practice of internal medicine and cardiovascular medicine. It will also ensure that the trainee develops the full range of specialty specific core capabilities, together with advanced capabilities in one area.

<p><u>Joint Royal Colleges of Physicians Training Board</u></p>	<p>Curriculum for Paediatric Cardiology Training</p>	<p>The purpose of the Paediatric Cardiology curriculum is to produce doctors with the generic professional and specialty specific capabilities needed to manage children with acquired heart disease and patients with congenital heart disease presenting at any age; in-utero, in childhood and throughout their adult lives. This curriculum will ensure that the trainee develops the full range of generic professional capabilities and underlying knowledge and skills, specifically their application in the practice of congenital cardiology and paediatric acquired heart disease. It will also ensure that the trainee develops the full range of speciality-specific core capabilities, together with at least one area of advanced practice.</p>
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Other supportive resources:

Royal College of General Practitioners: GPs with [Extended Roles](#)

[The Society of Thoracic Surgeons](#): Careers and Education Hub

[European Society of Cardiology](#): Core Curriculum for the Cardiologist

British Junior Cardiologists' [Association](#): National Cardiology [Induction Handbook](#)

[BMJ Careers](#): The complete guide to becoming a cardiology doctor

The Royal College of Paediatrics and Child Health: [SPIN](#) Module curriculum in [Paediatric Cardiology](#)

[Royal College of Physicians](#): Specialty spotlight – paediatric cardiology

NHS Physician Higher [Specialty Training Recruitment](#): Cardiology

NHS Certificate of Eligibility for [Specialist Registration](#): Cardiology

[European Journal of Cardio-Thoracic Surgery](#): A competency framework in cardiothoracic surgery for training and revalidation — an international comparison

[British Journal of General Practice](#): The benefits of echocardiography in primary care

[The British Journal of Cardiology](#): Women not in cardiology: where are we going wrong? A survey of the perceptions and barriers to training

[Circulation](#): The Future of Cardiovascular Education and Training

Allied Health Professionals

Organisation	Framework	Description
NHS England	Allied Health Professions' Support Worker Competency, Education, and Career Development Framework	The Framework provides guidance on training, education and competencies for AHP support workers employed in NHS services and NHS funded services. It supports education providers to plan and deliver accredited education, and ICSs to take a coordinated approach. Supports three linked workforce strategies that are aimed at recruiting local people directly into AHP entry-level roles, where vacancies exist; developing existing support staff so they can perform at the top of their scope of practice; and creating clear end-to-end progression routes linked to formal education programmes, including access into AHP degrees.

<p><u>Chartered Society of Physiotherapy</u></p>	<p>Physiotherapy Framework</p>	<p>The framework defines & describes the behaviours (& underpinning values), knowledge & skills required for contemporary physiotherapy practice: at all levels - from a new support worker through to a senior level registered physiotherapist; across a variety of occupational roles – clinical, educational, leadership, managerial, research, & support; in a variety of settings – in health & social care, in industry & workplaces, in education & development, & in research environments.</p>
<p><u>The College of Radiographers</u></p>	<p>Education and Career Framework for the Radiography Workforce</p>	<p>The College of Radiographers (CoR) Education and Career Framework (ECF) (fourth edition) provides guidance for the education and career development of the radiography profession. The ECF defines the various levels of radiography practice and the educational standards related to each of them. The framework informs the CoR’s pre- and post-registration programme approval process. It also informs the accreditation of individual members of the radiography workforce through the CoR accreditation schemes.</p>

Other supportive resources:

NHS England: (i) [AHPs making an impact](#) in cardiovascular and respiratory disease

[UK Health Security Agency](#): Allied Health Professionals have a major role to play in prevention

British Association for Cardiovascular Prevention and Rehabilitation (BACPR): [Education](#)

British Cardiovascular Intervention Society: [AHPs working group](#)

[Chartered Society of Physiotherapy](#): Role of the Physiotherapist in Cardiac Rehabilitation

[The Society and College of Radiographers](#): The role of the radiography workforce in cardiac services

Association of Chartered Physiotherapists in Cardiovascular Rehabilitation ([ACPICR](#)): [Role and Benefits of the Physiotherapist in Cardiac Rehabilitation](#)

British Heart Foundation: (i) [How the cardiac physiotherapist can help you](#) (ii) [Emergency angioplasty: the paramedic's role](#) (iii) [What does a radiographer do?](#)

[HeartRhythm Case Reports](#): Introducing the Heart Rhythm Case Reports "Focus on Allied Health Professionals"

Health Research Institute UK: [A paramedic's perspective on heart attacks](#)

Health & Care Professions Council: [Prescribing](#) + [Approved programmes](#)

[ACPRC](#): Extended Scope Practice - Non-Medical Prescribing

Advanced Clinical Practitioners

Organisation	Framework	Description
NHS England	Multi-professional framework for advanced clinical practice in England	The core capabilities for health and care professionals at the level of advanced clinical practice are articulated in this framework and these will apply across all advanced clinical practice roles, regardless of the health and care professional's setting, subject area and job role. The core capabilities across the four pillars are applied to specialist competencies. These may be manifested/demonstrated in different ways depending on the profession, role, population group, setting and sector in which an individual is practising.

Other supportive resources:

British Journal of Cardiac Nursing: What is [advanced clinical practice](#) in cardiovascular care?

Healthcare Science

Organisation	Framework	Description
Society for Cardiological Science and Technology	Certificate of Proficiency in Healthcare Science (Cardiac Physiology)	The preceptorship programme is designed to guide the HSP through their first few years as an autonomous healthcare professional, and allows the HSP to apply to the Society for Cardiological Science and Technology for the SCST Certificate of Proficiency in Healthcare Science (Cardiac Physiology). This certificate allows managers and employers to identify HSPs who have undertaken the preceptorship programme which acts as a benchmark of quality for the profession.
British Society of Echocardiography	Transthoracic (TTE) accreditation	TTE level 2 accreditation is available to all society members regardless of occupation and provides a structured framework to assist the echocardiographer in training. The accreditation process includes both written and practical sections and following successful completion, accreditation is valid for five years.
British Society of Echocardiography	Transoesophageal (TOE) accreditation	The transoesophageal echocardiography accreditation process represents a joint venture between the British Society of Echocardiography and the Association of Cardiothoracic Anaesthesia and Critical Care (ACTACC). Following successful completion, accreditation is valid for five years.

<u>British Heart Rhythm Society</u>	Certification	British Heart Rhythm Society (formerly known as Heart Rhythm UK) is dedicated to improving all aspects of arrhythmia care and electrical device based therapies along with acting as a unifying focus for those professionals involved.
<u>National School of Healthcare Science</u>	Scientist training programme (STP)	3 year funded programme of work-based training, supported by a University Accredited Master's degree. Leads to eligibility for HCPC registration as a Clinical Scientist.
<u>National School of Healthcare Science</u>	Practitioner Training Programme (PTP)	The Practitioner Training Programme (PTP) is a three year BSc Honours undergraduate training scheme that includes work based and academic learning. Leads to eligibility for AHCS accredited registration.
<u>National School of Healthcare Science</u>	Echocardiography Training Programme (ETP)	An 18 month funded programme of work-based training, supported by a university accredited PGCert in Clinical Echocardiography. Leads to Accreditation with the British Society of Echocardiography.
<u>National School of Healthcare Science</u>	Higher Specialist Scientist Training Programme (HSST)	A bespoke 5 year workplace based training programme supported by a Doctoral level academic award. Leads to eligibility to join the AHCS HSS register and apply for consultant clinical scientist posts.

Other supportive resources:

NHS England: (i) [Cardiac Science](#) (ii) Practitioner training programme (PTP) BSc [Healthcare Science Curriculum](#) - Cardiovascular, Respiratory and Sleep Sciences (iii) [Scientist Training Programme](#) - Cardiac Science (iv) Certificate of Completion of the Scientist Training Programme (CCSTP) [training programme](#) - Cardiac, Critical Care, Vascular, Respiratory & Sleep Sciences (CCVRS) (v) [Curriculum library](#)

[Society for Cardiological Science and Technology](#): Standards

[NHS Careers](#): Training, development and registration (cardiac sciences)

British Society of Echocardiography: (i) [Resources](#) (ii) [My HSST journey](#)

British Heart Rhythm Society: [Education](#) & [Workforce](#)

Royal College of Physicians: Recognising the [vital role of healthcare scientists](#), clinical physiologists and technologists

[Echo Research and Practice](#): The evolution from cardiac physiologists to clinical scientists in the UK: a guide to attaining equivalence

Pharmacists

Organisation	Framework	Description
Royal Pharmaceutical Society	Core Advanced Pharmacist Curriculum	The RPS core advanced curriculum describes the entry-level standard for advanced pharmacists working in any patient focussed role. It bridges the gap between the RPS post-registration foundation curriculum and the RPS consultant pharmacist curriculum . It provides a credentialing assessment to assure pharmacists have the capabilities to practise at an advanced level.
Royal Pharmaceutical Society	A Competency Framework for all Prescribers	This competency framework has been developed and updated to support prescribers in expanding their knowledge, skills, motives and personal traits, to continually improve their performance, and work safely and effectively. The competencies within the framework are presented as two domains and describe the knowledge, skill, behaviour, activity, or outcome that prescribers should demonstrate: domain one 'the consultation' and domain two 'prescribing governance'.

Other supportive resources:

Royal Pharmaceutical Society: [Helping to prevent and support people with cardiovascular disease](#)

Centre for Pharmacy Postgraduate Education: (i) [Coronary heart disease](#) (ii) [Heart Failure](#) (iii) [Atrial fibrillation and arrhythmias](#)

UK Clinical Pharmacy Association: [Cardiovascular](#)

GPHC: [Becoming an independent prescriber](#) + [accredited independent prescribing programmes](#)

[International Journal of Pharmacy Practice](#): A competency framework for clinical pharmacists and heart failure

[International Journal of Pharmacy Practice](#): The cardiology training needs of general practice-based pharmacists

[BMJ Open Quality](#): Developing a post-myocardial infarction medicines optimisation clinic: core competencies for upskilling pharmacists and initial patient feedback

[Open Heart BMJ](#): Effectiveness of pharmacist's intervention in the management of cardiovascular diseases

Support Workers

Organisation	Framework	Description
NHS England	Care Navigation: A Competency Framework	The purpose of this document is to describe a core, common set of competencies for care navigation. These core competencies are brought together in a tiered competency framework, recognising three successive levels; essential, enhanced and expert. This will help provide a coherent benchmark or set of standards for care navigation, to help ensure relevant staff receive the necessary education, training and support to work effectively

Higher Education Courses

All Healthcare Professionals

University/Qualification	Qualification	Description/ Modules
<u>Brighton and Sussex Medical School</u>	Cardiology – MSc, PGDip & PgCert	<p>The cardiology content of the programme provides comprehensive learning to meet the professional development needs of a wide range of practitioners working in cardiology including: doctors, nurses, paramedics, pharmacists, physiologists and radiographers. Aims to increase students' practical and theoretical knowledge of advanced clinical and interventional cardiology, by promoting their exploration of the current evidence for diagnosis and treatment.</p>
<u>Middlesex University</u>	Cardiology - MSc & PGDip	<p>The course will provide you with both in-depth practical experience and comprehensive, up- to-date theoretical knowledge. Our specialist clinical physiology laboratory houses a wide range of diagnostic equipment and is run by experienced practitioners. As well as attending practical classes in the lab, you'll be able to use it for independent study and research, and will have access to specialist journals.</p>
<u>University of Bradford</u>	Practitioners with Special Interest – Cardiology - PGDip	<p>This programme enables practitioners to gain a formally recognised standard of competence in cardiology. It is taught and run by advanced clinicians, allied health professionals and service improvement specialists. It is designed for General Practitioners, Nurse Specialists and other medical professionals working in the specialty clinical environment. The structure of the programme is specifically designed to encourage the development of the specialist</p>

		practitioner role, by encouraging collaborative clinical work-based training between the practitioner and the clinical mentor.
<u>University of Chester</u>	Cardiovascular Disease - MSc	This is an academic programme designed to develop and further your understanding and knowledge of cardiovascular disease, focusing on up-to-date research and developments in the diagnosis and treatment of various cardiovascular diseases. The course is suitable for healthcare professionals, researchers and intercalating medical students. Our modules investigate in detail the likely causes and effects of cardiovascular disease as well as the various complications and treatments. You will review current cardiovascular research and guidelines and their evidence base in the therapeutic management of cardiovascular disease, and explore potential new therapies.
<u>University of Hertfordshire</u>	Cardiology and Stroke - MSc	This programme is designed for junior doctors with career intentions in stroke or cardiology, general practitioners with special interest as well as acute medicine or emergency medicine physicians who want to enhance their understanding of stroke or cardiology. We also welcome interest from clinical nurse specialists and other healthcare professionals working in cardiology and stroke or emergency or acute medicine. This programme will provide students with the requisite clinical assessment, investigation, decision-making skills, treatment plan and management for a range of cardiology conditions and stroke including pharmacological and non-pharmacological therapeutic interventions.
<u>Imperial College London</u>	Cardiovascular and Respiratory Healthcare – MSc/ PGDip/ PGCert	Designed to suit people from a wide range of healthcare backgrounds, this course will enable you to enhance your career in your chosen field. You'll receive academic and research training in a wide range of aspects associated with the clinical management of cardiovascular and respiratory healthcare. You'll also discuss new technologies for the prevention, diagnosis and

		management of ill health, and examine their impact on the delivery of person-centred healthcare.
<u>University of Edinburgh</u>	Cardiovascular Science MScR	The Centre for Cardiovascular Science aims to foster and deliver research into the causes, consequences and therapy of the cardiovascular diseases. We offer postgraduates the opportunity to work within internationally leading research programmes addressing fundamental development and control of the cardiovascular system and the origins and consequences of cardiovascular disease. The work extends from basic laboratory research through to clinical studies.
<u>Middlesex University</u>	Cardiac Ultrasound – MSc, PGDip & PGCert	This course provides a solid grounding in research methodologies, experimental design and statistics — delivering all the transferable skills required for a career executing specialist cardiac ultrasound procedures. Following the British Society of Echocardiography (BSE) syllabus, you will be equipped with the advanced theory and practice of cardiac ultrasound and signal processing.
<u>University of Leeds</u>	Cardiac Device and Rhythm Management - PgCert	Develop specialist clinical expertise underpinned by in-depth theoretical knowledge in cardiac Implantable devices including pacemakers, ICD, CRT and remote monitoring. Teaching delivered by a research active multi-disciplinary team of clinical academics including IBHRE and BHRS accredited cardiac physiologists, specialist nurses and cardiologists. Undertake hands on training in implantable loop recorder implantation. Aimed at a range of healthcare professionals including Cardiac Physiologists, Hospital Doctors, GPs, Cardiac Nurse Specialists, Physician Associates, Radiographers and Allied Health Professionals.
<u>Middlesex University</u>		A central objective of the course is to enable students to critically evaluate the legal requirements for human experiments and ethical issues relating to research with human subjects and human tissue. You will acquire in-depth

	Cardiac Rhythm Management and Electrophysiology - MSc, PgDip & PgCert	knowledge of the technologies used in diagnostics and research, solving complex problems related to disease investigation. With a significant leadership and management component, the course will also help you understand and apply the principles of health and safety, quality control, research and statistical methods in their professional lives.
<u>University of Huddersfield</u>	Electrocardiography (ECG) Monitoring and Interpretation - PgCert	This course is aimed at health professionals who wish to develop their skills in the monitoring and interpretation of electrocardiograph (ECG). It offers you the opportunity to analyse and understand complex rhythm strips and 12 lead ECGs in order to challenge and develop your existing knowledge base. The course is taught within a contemporary learning environment where you will have access to the latest ECG equipment, providing you with both theoretical knowledge and practical skills.
<u>University of Leeds</u>	Echocardiography - PgCert	Develop specialist clinical expertise underpinned by in-depth theoretical knowledge, including the opportunity to apply learning to work based issues in echocardiography and echocardiography pathology. You will have the opportunity to acquire an in-depth theoretical knowledge and understanding of the underlying scientific and technological principles of diagnostic ultrasound and a critical understanding of current and emergent diagnostic imaging equipment and technology. This specialist course will appeal to a range of healthcare professionals including Cardiac Physiologists, GPs, Cardiac Nurse Specialists, Physician Associates, Radiographers and Allied Health Professionals.
<u>University of Sheffield</u>	Cardiovascular Medicine: From Molecules to Man - MRes	The course is delivered by experts within the cardiovascular field. It provides a unique research environment within which you can learn valuable transferable skills encompassing the full range of activities from discovery science at the laboratory bench to the hospital clinic or bedside. A research

		project forms the major part of your studies, during which time you will be integrated into the department as a member of an established research team.
<u>Brunel University</u>	Advanced Clinical Practice (Cardiovascular Health) – MSc, PgCert & PgDip	You'll complete a series of clinical observations across key areas of cardiovascular prevention and rehabilitation. This will give you a thorough understanding of the theory behind the practice. You'll also learn first-hand the practicalities of current service delivery. The research element of the course will provide you with a strong foundation in the practical use of research methods within cardiovascular health and you'll learn how to use research evidence in order to implement best practice within your healthcare setting.
<u>University of Chester</u>	Cardiovascular Health and Rehabilitation MSc	This course is designed to provide a thorough understanding of cardiovascular health and the process of rehabilitation. Cardiovascular anatomy and physiology is covered in detail, with application to exercise and the practicalities of working with a patient with CVD. You will also learn about the complexities of exercise prescription, the role of nutrition in CVD and the psychological influences that can drive behaviour change. There is also specialist input from the British Association for Cardiovascular Prevention and Rehabilitation.
<u>Oxford Brookes University</u>	Cardiorespiratory Practice - PgCert	This course will enable you to achieve professional development and experience in the specialist area of cardiac and/or respiratory care. You will develop your critical understanding of cardiorespiratory practice. By applying evidence based practice, you will deliver the best outcome of care for the patient and their family. Students are able to learn by participating in clinical practice activities within their own cardiac or respiratory unit and are able to develop new clinical skills.
		This Postgraduate Certificate prepares practitioners for the innovative, specialist and advanced roles in cardiothoracic practice which are emerging

Edge Hill University	Advanced Cardiothoracic Care - PGCert	in line with the NHS vision of delivering high quality, effective and compassionate care in the 21st century. It has been designed for qualified staff from a variety of professional backgrounds, including nurses and operating department practitioners, as well as allied health professionals such as cardiac catheterisation laboratory technicians, respiratory physiologists, physiotherapists and bioscience physiologists.
Kings College London	Cardiovascular Research - MSc	This course offers an advanced theoretical and practical foundation in cardiovascular research. You will be taught by academic and clinical specialists who actively research the mechanisms that underlie human cardiovascular disease. This course is designed for biomedical science and medically qualified graduates who wish to pursue further academic studies or employment in a research environment.
University of Glasgow	Cardiovascular Practice - MSc	This novel multi-professional programme is offered collaboratively from a consortium of three UK higher Education Institutions (HEIs) (University of Glasgow, Coventry University, and Glasgow Caledonian University) and supported by the British Heart Foundation to enable students to undertake a variety of highly specialist cardiovascular courses.

Medical

University/Qualification	Qualification	Description/ Modules
University of Plymouth	Surgical Care Practitioner (Cardiothoracic Surgery) - PgDip	Deliver care for surgical patients and develop the necessary skills to become a surgical care practitioner. Through this programme you'll learn core competences for surgical care practitioners, with a focus on cardiothoracic surgery. You'll gain the necessary skills to assist with complex surgical procedures and provide high quality patient care. Secure the experience you need to excel in unpredictable and highly pressurised clinical environments.

<u>University of Plymouth</u>	Surgical Care Practitioner (Cardiothoracic Surgery) - MSc	<p>Advance your professional expertise and specialist knowledge with MSc Surgical Care Practitioner (Cardiothoracic Surgery). Consider approaches to care delivery, investigate the surgical patient experience and conduct a research investigation into a topic tailored to your own needs, enabling you to practice at an advanced level in this emerging specialist role. PLEASE NOTE: You must have completed the corresponding PgDip Surgical Care Practitioner programme to enrol for this award.</p>
<u>St. Georges, University of London</u>	Heart Failure - MSc	<p>The programme will be delivered by a multi-disciplinary group of cardiologists and allied health professionals and will include invited international key opinion leaders in heart failure who are leaders in their field. You will gain a unique blend of clinical expertise and experience in cutting-edge heart failure research. The content of the course is current and inclusive of the most recent European Society of Cardiology heart failure guidelines. Online modules to allow self-paced, flexible learning, interactive workshops, webinars.</p>

Allied Health Professionals

University/Qualification	Qualification	Description/ Modules
<u>University of Hull</u>	Cardiovascular Rehabilitation - MSc	<p>This MSc has been developed in conjunction with the British Association of Cardiovascular Prevention and Rehabilitation for healthcare professionals and people aspiring to work in the evolving field of cardiovascular rehabilitation. The programme is designed for people already working in the field, such as physiotherapists and physical therapists, as well as students without a professional background. Gain a grounding in the theory and practice of cardiovascular rehabilitation and apply this knowledge to real-life settings.</p>

<p><u>University College London</u></p>	<p>Physiotherapy Studies: Cardiorespiratory – MSc/ PgDip/ PGCert</p>	<p>This postgraduate programme integrates the clinical, academic and research components of cardiorespiratory physiotherapy practice. The emphasis is on the management of patients with cardiorespiratory disorders. Offers you the opportunity to extend your understanding of key areas in cardiorespiratory physiotherapy, including challenging the foundations of established but poorly justified treatments, developing and undertaking clinical research. You will learn about new and emerging treatment options and benefit from the mentorship of recognised experts in cardiorespiratory physiotherapy.</p>
<p><u>Keele University</u></p>	<p>Advanced Physiotherapy (Cardio-Respiratory) - MSc</p>	<p>Enhance your knowledge and expertise as a Physiotherapist with the opportunity to specialise in cardio-respiratory physiotherapy at postgraduate level. You will advance your skills through a specialist route that enables you to broaden your skills in a constantly evolving profession. You will engage with the underpinning science of physiotherapy, advancing your clinical skills and building key research skills through critical analysis and evaluation.</p>
<p><u>Leeds Beckett University</u></p>	<p>Masters by Research (MRes) in Cardiac Rehabilitation</p>	<p>The Carnegie School of Sport is looking to recruit a highly motivated individual to a fee paid Masters by Research (MRes) programme. This Masters by Research will adopt qualitative methods to explore and understand the factors that influence an individual's progression or decision not to progress from Phase III to Phase IV CR in the UK, particularly among the groups reported as being underrepresented in the recent NACR report (2021). This Masters by Research project has the opportunity to feed into a larger scale project and intervention.</p>
<p><u>University of Plymouth</u></p>	<p>Advanced Professional Practice in Physiotherapy - MSc</p>	<p>Are you a qualified physiotherapist looking to enhance your current skills and knowledge whilst developing a strong critical thinking ethos? This programme offers you the opportunity to review your current practice and evaluate new approaches, ensuring that you are equipped to meet the challenges of working in an ever changing physiotherapy profession with confidence.</p>

		Module options include 'Asthma and COPD – management in primary care', 'Advancing practice in long term conditions'
<u>Queen Margaret University</u>	Physiotherapy (pre-registration) – PgDip/ Msc	This MSc Physiotherapy (Pre-Registration) course offers an accelerated route to gain a recognised qualification in physiotherapy practice. It will develop the theoretical, practical, analytical and evaluative skills necessary to apply for registration with the Health and Care Professions Council (HCPC) as a physiotherapist. Modules include 'Cardiorespiratory Physiotherapy'.
<u>St. Mary's University</u>	Physiotherapy (pre-registration) - Msc	This course provides you with the knowledge, understanding and skills required to manage patients suffering from a range of conditions or musculoskeletal injuries, from the acute stage through to return to sport or activity. This includes working as part of a multidisciplinary team in the care of different patients. Modules include 'Management and Rehabilitation of Cardio-Respiratory and Pulmonary Conditions'.
<u>Oxford Brookes</u>	Physiotherapy (pre-registration) - Msc	MSc in Physiotherapy (Pre-Registration) is a qualifying course for graduates with a relevant first degree. It provides the opportunity to undertake a physiotherapy course leading to registration at master's level. Working at masters level, you will focus on developing your knowledge of physiotherapy, which is evidence-based and underpinned by research. Modules include 'Cardio-Respiratory Research' and 'Physiotherapy Management of Long Term Conditions'.
<u>University of Chichester</u>	Physiotherapy (pre-registration) - Msc	This degree is ideal for graduates with related first degrees who want to gain a professional academic qualification and start a career in the challenging and rewarding field of physiotherapy. This accelerated two-year course follows evidenced-based practice principles and focuses on active learning and practical application. With a suitable balance of theory and practical experience, you will graduate a capable and confident physiotherapist. Modules include 'Cardio-Respiratory Physiotherapy'.

Healthcare Scientists

University/Qualification	Qualification	Description/ Modules
Queen Mary, University of London	Cardiac and Vascular Medicine - MRes	<p>This programme will: provide state-of-the-art practical training in modern molecular and cellular pharmacological techniques alongside their application to in vivo methods of pharmacological investigation of cardiac and vascular inflammatory disease mechanisms. Offer the latest practical training in modern molecular and cellular pharmacological techniques deliver scientists adept in the crucial skill set needed for successful careers in UK Life Sciences, especially deeper phenotyping in cardiac and vascular inflammation research (e.g. rheumatoid arthritis, atherosclerosis, pulmonary hypertension, hypertension, arrhythmia, nephrology or cancer).</p>
The University of Manchester	Cardiovascular Health and Disease (Research) - MSc	<p>Develop the biomedical research skills you need for a potential career in cardiovascular science, and allied healthcare and bioscience fields, even if you have no previous research experience. Spend most of your time developing your research skills on placement. This course is open to bioscience graduates and intercalating medical students at Manchester and other universities.</p>
University College London	Cardiovascular Science - MSc	<p>You will develop a detailed knowledge of molecular and cellular cardiovascular science, animal models of cardiovascular disease, microvascular biology and mechanisms by which the heart and vasculature function in health and disease, as well as laboratory principles and statistical methods. You will gain an awareness of research integrity and practice valuable research skills relating to developments in cardiovascular science.</p>
		<p>This four-year PhD programme provides an exciting opportunity for outstanding graduates with an interest in any aspect of cardiovascular disease. The first year of the programme provides postgraduate-level tuition in</p>

<u>University College London</u>	British Heart Foundation Cardiovascular Biomedicine – Mphil/ PhD	<p>selected relevant topics, training in transferable research skills, and the opportunity to undertake three 12-week research projects, working with different cardiovascular scientists across UCL. These projects provide a basis for students to select a doctoral project and supervisors. During your PhD thesis research, students will be encouraged to present their work at international meetings, and funds will be made available for this. A generous consumables allowance is provided across the studentship.</p>
<u>University of Glasgow</u>	Cardiovascular Science - MSc	<p>The aim of this programme is to deliver teaching related to cardiovascular science and biology with an emphasis on the epidemiology, genetics, pathological and molecular mechanisms underlying cardiovascular diseases and their pharmacological management.</p>
<u>University of Leeds</u>	Cardiac Physiology	<p>Our course focuses primarily on diagnosis, assessment and treatment of heart disease. Careers in Cardiac Physiology are stimulating, varied and suited to a diverse range of subject interests. As well as diagnosing and treating heart disease, many professionals enjoy meaningful and rewarding careers as researchers, industry representatives or academics.</p>
<u>University of Plymouth</u>	PgCert Clinical Echocardiography	<p>This is a 60-credit programme comprising 2 core modules, BHCS700 Introduction to Clinical Echocardiography and BHCS701 Ultrasound Imaging in Cardiac Disease. Applicants should have an honours degree (1st or 2.1) in Cardiac Physiology (PTP) or relevant scientific subject in the UK or equivalent experience and appropriate underpinning knowledge and skills in cardiology.</p>

<p><u>Imperial College London</u></p>	<p>Medical Ultrasound (Echocardiography) - MSc</p>	<p>Receive training in the theory and practice of medical ultrasound on this Master's course. You'll gain a solid grounding in the physics and scientific theories of medical ultrasound before specialising in the area of echocardiography. You'll develop the practical skills necessary to perform a diagnostic ultrasound as part of a placement in a hospital department. Through taught modules, you'll also build expertise in interpreting data and clinical decision-making in preparation for a career as a sonographer or within healthcare.</p>
<p><u>Manchester Metropolitan University</u></p>	<p>Human Physiology - MSc</p>	<p>On this masters course, you'll build advanced knowledge of different systems or specialisms. You will not only learn how our bodies work, but you'll also develop the key techniques and technologies for investigating normal and abnormal physiology. From the lab-based work that helps to develop new treatments and therapies to the clinical care that touches (and saves) lives. You will have the opportunity to deep dive into a topic of your choice with an independent research project. Modules include 'Cardiorespiratory Physiology'.</p>
<p><u>Kings College London</u></p>	<p>Human & Applied Physiology - MSc</p>	<p>This course will give you an advanced theoretical and practical understanding of the functioning of the muscular, respiratory and cardiovascular systems, including the effects of extreme environmental conditions on whole-body physiology. You will study topics from both systemic and cellular/molecular perspectives in order to gain an understanding of the breadth of investigative approaches employed in human physiology research. You will also focus on practical work, learning how to plan and run experiments using human subjects. Ultimately, we aim to equip you with the knowledge and skills to enhance your understanding and expertise in human physiology in its broadest sense and build a career in a related field.</p>

<u>Imperial College London</u>	Biomedical Research (Respiratory and Cardiovascular Science)	Specialise in respiratory and cardiovascular science and build your biomedical research skills on this Master's course. You'll analyse the basic physiology of cardiac function, as well as the pathophysiology of major cardiovascular diseases and major respiratory diseases. Extensive theoretical and practical skills training will prepare you for employment roles within a biomedical environment, on a programme that incorporates grant writing, technical workshops and journal clubs.
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Further echocardiography training details: [NSHCS Echocardiography Training Programme](#)

Physician Associate

University/Qualification	Qualification	Description/ Modules
<u>University of Bradford</u>	Master of Physician Associate Studies	This programme is suitable for graduates from life sciences or health courses and is designed to prepare students to enter the professional role of Physician Associate (PA). The Master's component of this course is focused on achieving the competencies required of a graduate PA and provides the challenges of enhanced knowledge synthesis, audit, and service improvement to produce Physician Associates with the ability to lead and develop the profession. Year One teaching consists of integrated units of study focussed on systems of the body (e.g. cardiovascular, respiratory).

<u>Anglia Ruskin University ARU</u>	Physician Associate - MSc	<p>In your first year of this Master's degree course you'll study on ARU's Chelmsford campus in the School of Medicine. Alongside lectures, tutorials, practical workshops and simulated skills work, you'll also go on primary care <u>placements</u> in GP surgeries. You'll spend all of the second year following a programme of clinical placements in general practice, hospital wards and outpatient settings across the East of England. Module 'Medical Practice & Patient Care 1' covers respiratory system.</p>
<u>Bangor University</u>	Physician Associate	<p>Graduates from this course will have a broad and relevant set of transferable skills with a focus on medical history-taking, clinical examination, analysis of test results, clinical reasoning and diagnosis, and the development of evidence-based patient management plans. Our Physician Associate course was one of the first of it's kind in the UK. It will utilise the best teachers in medical science and clinical practice in north Wales - all of whom have a track record of teaching, research and clinical excellence in their specialist fields.</p>

Short Courses

University/Qualification	Subject	Description/ Modules
<u>University of London City</u>	Heart Disease, Heart Failure and Prevention of Heart Disease	<p>This heart disease course is designed for health care practitioners requiring an update on or introduction to heart disease in primary care. Practitioners would benefit from this one day course because it provides the knowledge and understanding that develops the quality of care provision for patients with heart disease or heart failure.</p>

<u>University College London</u>	Cardiac Morphology	<p>This 3-day course is suitable for all those wishing to improve their knowledge of structural heart disease (congenital heart malformations) from fetal life to adulthood. Information will be built up from analysis of normal anatomy & simple defects to more complex morphology and is suitable for a wide range of disciplines.</p>
<u>University of Sunderland</u>	Coronary Heart Disease and Heart Failure	<p>This course is taught over five full days over a four-month period at the University of Sunderland. Each day uses a variety of teaching and learning methods including interactive workshops and will focus on a specific topic that you can then consolidate in clinical practice. Assessment will be by an Objective Structured Clinical Examination (OSCE) utilising simulated patients in a variety of CHD & Heart failure-based consultations. Additionally, there will be a critical review of one cardiovascular condition.</p>
<u>University of Central Lancashire</u>	Acute Cardiac Care	<p>This module aims to enhance the practitioner's knowledge and understanding of the care and management of patients at risk from or presenting with manifestations of Coronary Heart Disease (CHD) and abnormalities of cardiac conduction. It will review the normal functioning of the cardiovascular system which will inform the exploration of abnormal pathophysiology and electrophysiology. This will support the practitioner in critically analysing the assessment and management of patients presenting with symptoms of CHD in order to enhance and develop their own practice.</p>
<u>Kings College London</u>	Cardiac Care: Symptoms and Management of Heart Failure	<p>This module will enable students to become an expert in managing symptoms and providing care for patients with heart failure. This will inform their understanding of the advanced management of heart failure and their ability to make rational, evidence-based and patient focused decisions. This module will prepare practitioners to identify symptoms and develop expert knowledge of the management of patients with heart failure in the hospital and community setting.</p>

<u>Glasgow Caledonian University</u>	Chronic Heart Failure: Optimising Health and Wellbeing	This blended learning module is specifically designed to support health and social care practitioners to develop their knowledge, skills and application of evidence-based heart failure management.
<u>Birmingham City University</u>	Acute Cardiac Conditions	The module will provide opportunities for you to develop an in depth knowledge of the underlying physiology of a number of conditions, and critically investigate evidence based, best practice management of these conditions.
<u>University West England</u>	Cardiac Care	In this 20 credit Cardiac Care module, you will examine the care of an adult with a cardiac condition from assessment to management. You will consider the pathophysiology related to the cardiac condition, review policy and the implications for practice will be explored.
<u>Anglia Ruskin University</u>	Cardiac Care	Develop your skills in caring effectively for patients with chronic and acute cardiac disorders. Learn to analyse and interpret arrhythmias and understand the rationale for the management and holistic care needs of patients and critically discuss and debate the different issues which affect the delivery of care to cardiac patients.
<u>Royal Brompton & Harefield Hospital</u>	Hands on Cardiac Morphology course	This three-day course takes registrants from the basics of normal hearts and simple congenital malformations, through to the more complex defects and the conduction system, with live video demonstrations. This unique course is recommended for all professionals who manage and treat patients with congenital heart disease. It allows participants to appreciate the arrangement of the malformations in 3D.
<u>Buckinghamshire New University</u>	Cardiac Care	If you're working in the fields of cardiac and coronary healthcare, this module will enable you to develop your knowledge, expertise and understanding in these specialist areas. Led by our supportive and experienced staff, this course covers a range of topics.

<u>University of the West of England Bristol</u>	Cardiac Care	In this 20 credit Cardiac Care module, available at level 6 or level 7, you will examine the care of an adult with a cardiac condition from assessment to management. You will consider the pathophysiology related to the cardiac condition, review policy and the implications for practice will be explored.
<u>Birmingham City University</u>	Cardiac Care (Professional Practice)	This course aims to address your learning needs as a healthcare professional working with patients with cardiac conditions by providing opportunities for you to reflect and improve on your clinical practice. You'll focus on current issues within this speciality, and develop and enhance your theoretical knowledge and critical thinking skills in order to best meet the needs of your clients and the service.
<u>University of London City</u>	Cardiac Care Specialist Role Development	This course focuses on clinical decision-making in cardiac practice. Its aims are to provide practitioners working in the cardiac field with the specialist skills and knowledge to manage the care of patients with cardiac problems. The course will build on previous skills and knowledge and enable practitioners to explore specialist issues in-depth. The central focus will be on clinical decision-making in cardiac practice.
<u>Kings College London</u>	Cardiac Care: Symptoms and Management of Heart Failure	This module will enable students to become an expert in managing symptoms and providing care for patients with heart failure. This will inform their understanding of the advanced management of heart failure and their ability to make rational, evidence-based and patient focused decisions.
<u>Keele University</u>	Heart Failure Management in Clinical Practice	The module is designed to augment, enhance and focus the practitioner's skills on the holistic care of the complexity of a heart failure diagnosis. Linking the practitioner with an appropriate clinical mentor will assist in the acquisition of skills pertinent to the individual needs of the student.

<u>Imperial College London</u>	Heart Failure: Prevention and Management	<p>At the end of this module students will be able to: Critically consider the epidemiology and aetiology of heart failure in your clinical practice/country of practice. Discuss the assessment and monitoring for effective management of acute and chronic heart failure. Consider the impact of common co-morbidities on heart failure and on individualizing patient care. Evaluate the evidence for the life style advice in acute and chronic heart failure.</p>
<u>University of Bolton</u>	Heart Failure	<p>This stand-alone professional development module offers an advanced understanding of the clinical care of adults with heart failure. It's ideal for those specialising in caring for heart failure patients in hospital or primary care. Our expert team will support you in developing your knowledge and understanding of cardiac anatomy and physiology, pathophysiology, treatment and management, and palliation.</p>
<u>Birmingham City University</u>	ECG Interpretation and Arrhythmia Management	<p>The module will provide opportunities for you to develop an in depth knowledge of the ECG, enhance your knowledge and decision-making skills in relation to arrhythmia and conduction disturbance recognition and evidence based best practice management.</p>
<u>Teesside University</u>	Investigation and Management of Arrhythmias and Blackouts	<p>The award is delivered over eight days in two blocks – one five day block, followed by one three day block five months later, which allows time for consolidation of knowledge and application to practice. In these blocks you cover patient assessment, arrhythmia and blackout management, electrophysiology management, interventions and investigations. This award is supported by the British Heart Foundation.</p>
<u>Teesside University</u>	Advanced ECG in Practice	<p>This award facilitates healthcare professionals from primary care, pre-hospital care and the acute care setting to develop, enhance, appraise and evaluate evidence-based knowledge underpinning the issues relating to electrocardiography interpretation and treatment of the adult patient with cardiac disease.</p>

<u>Kings College London</u>	ECG: Measurement and Interpretation	<p>This course offers the student an opportunity to gain skills and understanding in the interpretation of electrocardiographs. It takes a basics upward approach, first refreshing understanding of the biological basis of ECG and arrhythmia formation then applying these principles to a selection of arrhythmias including atrial, AV conduction and ventricular abnormalities. The course continues with analysis of 12-lead ECGs to recognise abnormalities including acute coronary syndrome, ventricular conduction blocks and chamber hypertrophy.</p>
<u>University of York</u>	ECG Interpretation	<p>The course aims to address the anxieties of interpretation and is suitable for a variety of healthcare professionals in a range of settings. It will cover topics such as cardiac anatomy and physiology, as well as ECG recording and complex interpretation in clinical contexts in the care of adult patients.</p>
<u>University of Huddersfield</u>	Electrocardiograph (ECG) Monitoring and Interpretation	<p>This course is aimed at health professionals who wish to develop their skills in the monitoring and interpretation of electrocardiograph (ECG). It offers you the opportunity to analyse and understand complex rhythm strips and 12 lead ECGs in order to challenge and develop your existing knowledge base.</p>
<u>University of London City</u>	Introduction to 12-lead ECG interpretation	<p>This course offers the applicant the opportunity to build on their knowledge of 12-lead ECG interpretation. During the study day, the applicant will gain knowledge on how to interpret a 12-lead ECG, including rhythm recognition, ischemic changes, axis deviation and arrhythmias.</p>
<u>University of Hull</u>	Electrocardiograph Interpretation	<p>This module will provide you with the theoretical underpinning knowledge that is required to begin to interpret ECGs in clinical practice. The module is taught by academic staff and current practicing clinicians who are experts in their field. You will learn how systematically interpret and relate a variety of ECGs to acute disease pathologies and a variety of long term cardiac conditions.</p>

<u>St George's, University of London</u>	How to interpret the ECG of athletes and young adults	<p>The aim of the course is to equip participants with knowledge regarding the interpretation of the ECG of a young or athletic individual, so they can accurately differentiate findings suggestive of a potentially lethal cardiovascular disorder from normal variants or features of benign physiological adaptation.</p>
<u>Canterbury Christ Church University</u>	ECG Workshop	<p>The ECG Workshop addresses the needs of nurses, doctors and allied health professionals who might be involved in obtaining and interpreting ECGs as well as in cardiac monitoring. There will be the chance to update or develop your theoretical and practical skills in ECG Interpretation. This study day is designed to cover the basics required to monitor cardiac activity, perform and interpret a basic 12 lead ECG and is for anyone involved the care of cardiac patients.</p>
<u>Anglia Ruskin University</u>	Advanced 12 Lead ECG for the Pre Hospital Provider	<p>The 12 Lead ECG has evolved into one of the most important diagnostic tools available to paramedic and critical care staff. Develop a systematic and robust approach to the application, reading and analysis of the 12 Lead ECG findings on our continuing professional development course.</p>
<u>Leeds Beckett University</u>	Performing 12-lead Electrocardiography	<p>Suitable for anyone required to undertake the application and monitoring of 12 Lead ECG. To enable the practitioner to provide safe, competent and effective 12 Lead Electrocardiography.</p>