## NHS GGC JOB DESCRIPTION

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| **JOB INDENTIFICATION**  Job Title: Highly Specialised Cardiac Physiologist  Band: Agenda For Change Band 7  Reports to; Cardiac Physiology Team Lead  Responsible to: Cardiac Physiology Sector Manager  Departments: Cardiac Physiology QEUH & WGACH (occasionally NVACH) | |
| Division: South Sector | |
| **JOB PURPOSE** | |
| |  | | --- | | To contribute to scientific leadership of the transthoracic echocardiography service at QEUH & WGACH, which will encompass:  (i) Participating in service delivery as an expert practitioner, working with a high level of autonomy  (ii) Provision of scientific and technical advice  (iii) Advising clinical colleagues on the contribution of findings to clinical-decision making, eg in the context of the potential utility of the investigation to address a clinical question  (iv) Advancing and developing practice, in partnership with clinical colleagues where appropriate  (v) Leading in the provision of training and workplace based assessment of physiology staff in the area of specialty  (vi) Providing quality assurance of the service, in partnership with clinical colleagues where appropriate  (vii) As a member of the sector wide echocardiography team, to work collaboratively with colleagues on shared goals such as quality improvement, waiting list management, training, or clinical governance. As required, to participate in service delivery at other sites.  (Clinical and scientific competencies will be as defined by the AHCS Clinical Scientist framework).  To support the Cardiac Physiology Lead and Sector Manager as a member of the senior team, in both the day to day operational management of cardiac physiology service as a whole and in the leadership and development of the healthcare science team. | |  | | |
| **ROLE OF DEPARTMENT** | |
| NHS Greater Glasgow and Clyde (GGC) serves a catchment population of 1.3 million across South, North and Clyde sectors, with South Sector serving more than half of this with a catchment of 480 thousand. South Sector has a cardiac physiology workforce of 58 WTE.  The echocardiography service provides outpatient transthoracic echo services which include supporting one-stop Cardiology clinics for a large cohort of NHSGGC. Direct access echocardiography services are provided to GPs to support the diagnosis of suspected heart failure and the investigation of new murmurs and atrial fibrillation. According to the postholders’ expertise and service requirements, they would also be responsible for providing echocardiography services to other more specialist clinics. This includes inherited cardiac conditions clinics, cardio-obstetric clinics, cardio-oncology, Adult Congenital Heart Disease service and stress echo.  There is a well-established device follow up service which including CRT and ICD patients, remote follow-up and access to a HF specialist nursing service. Pacemaker implantation and ILR insertion is performed at QEUH and at present, ICD and CRT implantation is undertaken by the Golden Jubilee National Hospital with plans to develop an ICD implant service at QEUH. All catheterisation-based procedures and cardiac surgery are performed by the Golden Jubilee. The department performs the usual repertoire of resting and ambulatory ECG and BP and exercise testing, which includes provision of a Rapid Access Chest Pain service. In addition, Physiologist-led consultations to support GPs in the investigation and management of palpitations are also provided. NHS GGC has a Managed Clinical Network for Heart Disease which provides a forum for South Sector Physiologists to take an active role in wider service developments. South Sector Consultants are research-active and there would be the opportunity to utilise this resource to develop Physiology-led projects. | |
| ORGANISATIONAL POSITION | |
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| SCOPE AND RANGE | |
| * Supports the professional leadership and development of healthcare science staff at WGACH * Teaching and training of healthcare science staff and students to be provided up to postgraduate level, to include MSc Clinical Science postgraduate trainees and those undertaking postgraduate level professional accreditation in the area of specialism * Supervision of research projects and clinical and service audit at undergraduate level | |
| MAIN TASKS, DUTIES AND RESPONSIBILITIES | |
| **PROFESSIONAL**  To support NHS Greater Glasgow and Clyde’s core values of quality, teamwork, care and compassion, dignity and respect, and openness, honesty and responsibility through the application of appropriate behaviours and attitudes.  To adhere to relevant professional codes of conduct (the Registration Council of Clinical Physiologists, The Health and Care Professions Council or the Academy for Healthcare Science as appropriate).  To support the Cardiac Physiology Team Lead in ensuring that the healthcare science team conduct themselves in accordance with these codes and within the professional governance framework  To uphold the individuality, dignity, confidentiality, values and autonomy of every patient and to act as an exemplary role model to junior staff  To adhere to and be fully conversant with relevant NHS GGC policies and procedures  To assume responsibility for maintaining own continuing professional development, professional registration, and clinical accreditations; identifying own development needs in conjunction with the Cardiac Physiology Sector Manager  To promote equality, value diversity and to challenge bullying, harassment and discrimination within the workplace, whilst encouraging and enabling others to do so  To act as an ambassador for the Healthcare Science professions and actively engage in the scientific community  To maintain currency of professional accreditations and registrations.  **CLINICAL, SCIENTIFIC AND TECHNICAL**  (*It is anticipated that a significant proportion of this clinical contact time be spent in the provision of direct / indirect clinical supervision of staff preparing for postgraduate professional accreditation. This is out with the separate provision made for other educational responsibilities*)  Own Clinical Practice and Clinical Leadership (Echocardiography)  As an independent and expert practitioner, to participate in the delivery of the highly complex (Masters level) clinical workload of the echocardiography service, operating with a high level of technical and clinical autonomy:  • Acquisition of best quality images, including where there may be barriers to this such as poor acoustic windows, body habitus or patient difficulties with compliance  • Optimisation of images obtained, requiring application of expert knowledge of equipment instrumentation and software packages.  • Formulates differential diagnoses during the course of the examination on the basis of both clinical history and investigation findings (eg measurements and calculations). Develops and modifies strategy for refining differential diagnosis throughout the conduct of the investigation. This may involve modifying the measurements/data obtained, modifying recording technique, recommending an alternative investigation expected to provide greater clinical utility  • Identifies where it would be clinically appropriate to acquire a limited dataset and provide a targeted report, ie where it would be acceptable to address the clinical question more narrowly  • Performing detailed analysis of images, appropriate to the clinical question and investigation findings including measurements and calculations  • Independently produces an accurate and comprehensive report tailored to the clinical question and escalates findings which require urgent clinical action in a suitable timeframe  • regularly participate in echocardiography that utilises more advanced techniques or modalities (eg 3D echo) or in more specialised or complex pathologies (eg Adult Congenital Heart Disease, Inherited Cardiac Conditions)  In the context of the above, the judgements for which the postholder will provide reports may contribute to medical management decisions, eg.   1. cessation/modification of chemotherapy regimens, 2. selection of patients for intervention (eg implantable cardiac devices, endocardial valve procedures) and surgery (eg valve replacement, transplant, coronary artery bypass grafting) 3. fitness of patients to undergo general anaesthesia.   Further, image acquisition and analysis includes evaluation of subtle aspects of heart function in which there is considerable nuance and in the case of qualitative assessments  To have shared responsibility for the scientific leadership of the echocardiographic service to encompass:  • set and maintain local technical standards, and to co-produce clinical practice guidelines along with other scientific and medical colleagues and to continually develop and update these to ensure they incorporate current professional recommendations and evidence based practice. To this end, to search and critically appraise scientific literature and to maintain an up to date knowledge of clinical guidelines and technological advances to ensure ability to identify and initiate appropriate service developments.  • May act as a point of liaison for industry, medical physics and ehealth in relation to repair, maintenance and upgrade of equipment and digital archiving systems and to be responsible for coordinating routine servicing and repair.  • To actively participate in service improvement and clinical and service audit  Duties and Responsibilities out with own field of expertise  To maintain competence in a range of cardiac investigations (resting, ambulatory and exercise ECG and direct access palpitations clinics) in order to facilitate discharge of managerial obligations in relation to these services, including robust oversight of undergraduate student progress. Occasional participation in service delivery only.  **OPERATIONAL MANAGEMENT AND LEADERSHIP**  Staff supervision / day-to-day management and leadership  To support the Cardiac Physiology Team Lead and Sector Manager in the leadership of the healthcare science staff; actively contributing to team cohesiveness, the empowerment of junior colleagues and the release of talent  To share responsibility with the Cardiac Physiology Team Lead, for ensuring healthcare science staff work within the scope of their competence and where appropriate, with effective clinical supervision  To support the Cardiac Physiology Sector Manager in matters pertaining to the recruitment and selection; to include participating in shortlisting, interviewing and selection of healthcare science personnel at AfC bands 2-7.  To ensure staff receive regular and constructive feedback on their performance. From time to time, to assist the Cardiac Physiology Sector Manager, in the application of the Capability Policy  Service Management  To support the Cardiac Physiology Team Lead in the operational management of day-to-day demands on the clinical service, requiring the following:  • Responsible for ensuring clinically effective day-to-day sanctioning and triaging of referrals for echocardiograms, primarily through TRAKCare vetting process.  • Supporting and mentoring junior staff in communicating the decision not to sanction a referral for a diagnostic test to another healthcare professional, in instances where this is liable to lead to a challenge by the referrer  • To balance competing requirements: (i) to control demand and manage waiting lists at WGACH, (ii) to ensure a patient-centred, equitable and accessible service for patients and (iii) to maintain strong working relationships with colleagues across GGC,  To collaborate with colleagues across GG & C to enhance existing communications and working arrangements between staff across the sector as a whole  Where clinical incidents or patient complaints occur, to support the Cardiac Physiology Sector Manager in their investigation and management.  To support the Cardiac Physiology Team Lead in ensuring that the service provided is patient-friendly, accessible and equitable and upholds patient comfort, privacy and dignity at all times.  To deputise for the Cardiac Physiology Team Lead where designated, for example by chairing meetings  **EDUCATIONAL**  To lead in the delivery of training for physiology and where relevant other specialties including medical staff.  To actively support the Cardiac Physiology Team Lead and Sector Manager in the performance development of echocardiography staff, in line with the educational strategy and workforce plan as defined by the Sector Manager.  To support junior colleagues to participate in the delivery of training as part of their own development  May act as a Workplace Supervisor for post-graduate trainee Clinical Scientists specialising in echocardiography, sharing this responsibility with other senior colleagues across the sector  May participate in presenting at and / or chairing educational meeting for healthcare science and medical staff  May participate in the development of educational resources pertaining to echocardiography and to identify appropriate external training courses and conferences for trainees  To deliver educational presentations including audit findings, both internally and externally to NHS GGC; thus raising the profile of both the service and the profession  **RESEARCH, CLINICAL AND SERVICE AUDIT AND SERVICE IMPROVEMENT**  Contribute to clinical and service audit for the department and to present findings both internal to the organisation and within the healthcare science community.  Contribute to ensuring practice or service delivery is modified in response to clinical or service audit findings, within own field of clinical expertise  To oversee local service improvement initiatives, for instance targeting demand optimisation and waiting list management  May be required to supervise research undertaken by both Student Physiologists undertaking their undergraduate degrees and Trainee Clinical Scientists undertaking their Masters degrees; where the subject matter is within own field of expertise. These students may be based at NVH, QEUH or WGACH.  May assist with the purchasing process of any capital equipment to be used within the department; assisting with the preparation of equipment specifications and collating information to support the preparation of associated capital bids by the Cardiac Physiology Sector Manager.  To keep abreast of technological advances across the cardiac ultrasound market in order to ensure the department continue to optimally address the evolving clinical needs of the service.    To take an active role in quality assurance processes, for instance through peer-review and the identification of suitable areas for service improvement in order to discharge the department’s clinical governance obligations. | |
| **EQUIPMENT AND MACHINERY** | |
| * A range of cardiac ultrasound machines (GE and Philips) * A range of equipment for undertaking routine resting: GE exercise testing system, Spacelabs ambulatory ECG and BP recorders and analyser, GE ECG machines and MUSE software, used on an infrequent basis | |
| **SYSTEMS** | |
| * Processing,analysis, reporting, archiving of echo data (Echopac ) * Sentinel Analysis System, MUSE System * Trakcare, Clinical Portal, PECOS, SSTS, Turas, Datix * Elibrary/Knowledge Network Services. | |
| **ASSIGNMENT AND REVIEW OF WORK** | |
| On a day to day basis, the postholder will report to the Cardiac Physiology Team Lead in relation to all operational matters.  The postholder will be expected to make operational decisions relating to the echocardiography service independently. The postholder will execute their technical / clinical / scientific duties autonomously, but be subject to peer-review and similar quality assurance mechanisms.  Allocation of workload and site will be on a rotational basis. | |
| **DECISIONS AND JUDGEMENT** | |
| **Clinical / technical / Scientific**  The postholder will be responsible for providing critical information that will often contribute to important clinical management decisions eg (i) cessation/modification of chemotherapy regimes, (ii) selection of patients for intervention (eg implantable cardiac devices, endocardial valve procedures) and surgery (eg valve replacement, transplant, coronary artery bypass grafting) and timing thereof and (ii fitness of patients to undergo general anaesthesia.  Also evaluates the judgements of others when undertaking the training and clinical supervision of other senior healthcare science staff, bands 6 and 7    Formulates differential diagnoses during the course of cardiac investigations on the basis of both clinical history and investigation findings (eg. measurements and calculations). Develops and modifies strategy for refining differential diagnosis throughout the conduct of the investigation. This may involve modifying the measurements/data obtained or modifying recording technique.  Sanctioning and triaging referrals for examinations and providing support and guidance to junior colleagues reviewing referrals for more routine cardiac investigations.    Takes a shared responsibility in the clinical-decision making process as part of the multi-disciplinary team, by identifying diagnostic findings that require immediate or further medical or nursing attention.    Offers highly specialist technical and clinical advice, support and training to other health care professionals    **Educational**    Assist with ongoing development of healthcare science staff to perform as independent practitioners, including support when preparing for post-graduate professional accreditation examinations    Support the development of trainees and assist in determining the level of clinical supervision required    Evaluates learning styles and needs and modifies training methods accordingly    Evaluates quality of training and assessments undertaken by junior colleagues    **Operational Management and Leadership**   * Manage the day to day operation of the echo service * Assist with management of waiting lists as and when required * Identification of demand optimisation opportunities and development of associated initiatives * Determination and delivery of immediate response to clinical incidents * Identification and assessment of risks (clinical and otherwise), balancing competing risks and determination of governance obligations | |
| **MOST CHALLENGING/DIFFICULT PARTS OF THE JOB** | |
| * Working with high risk unwell Cardiac patients where clinical findings may be distressing * Working with challenging patients when trying to perform complex diagnostic testing (eg. Behavioural, physical, emotional) * Maintaining knowledge and skills at an advanced level to ensure practice is evidence based * Communicating the decision not to sanction a referral for a diagnostic test to another healthcare professional * Responding to and reconciling conflicting priorities and demands on own and departments time | |
| **COMMUNICATIONS AND RELATIONSHIPS** | |
| **Key working relationships:**   * Cardiac Physiology Team Leads, * Healthcare science colleagues including clerical staff * Cardiac Physiology Sector Manager, Team Leads and echocardiography colleagues * Consultant Cardiologists   Communication with patients will require:   * History taking * The ability to quickly establish rapport and demonstrate empathy when performing essential tests, reassurance and clinical credibility. * Explaining investigations and procedures to adult patients and obtaining consent, where there may be barriers to communication or understanding and where obtaining full patient cooperation is a determinant of the diagnostic yield of the investigation (eg exercise tolerance testing).   Communication with direct reports will require:   * Leadership skills * Delivering feedback eg. conducting Performance Development Reviews * Interviewing for recruitment * Conducting formal Workplace-based Assessments as part of degree programmes and informs trainee of performance.   Communication with medical, nursing and healthcare science staff will require:   * Communicate triage decisions to Medics, this may include discussion around conflicting managerial strategies. * May be required to deliver educational presentations to all grades of health care professionals, most likely internally or regionally * May have the opportunity to present at regional and national conferences * Participating in local and regional forums of senior healthcare practitioners to discuss development or roles/profiles, educational and career pathways and professional governance eg accreditation, registration. * May be asked to represent the clinical discipline or the department at multidisciplinary meetings such as Morbidity and Mortality meetings, Case Conferences or the Managed Clinical Network | |
| **PHYSICAL,MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB** | |
| **Physical Effort:**  There will be a frequent requirement for the postholder to exert moderate physical effort for several long periods during a shift:   * Ultrasound scanning (echocardiography) requires the operator to sit for prolonged periods of time in a restricted position. There will often also be a requirement for repeated manoeuvring of the patient during the investigation to optimise image acquisition. The procedure is a well-established occupational cause of musculoskeletal conditions. A moderately high level of dexterity is required to acquire and optimise ultrasound images and to take measurements. Moderate physical exertion is required to acquire images from certain patients depending on their body habitus. * Movement of echo machines across wards. * Frequent use of a desktop PC   **Mental Effort:**   * Maintaining concentration during data acquisition, interpretation and reporting during the course of a clinic * Echocardiography requires image acquisition, optimisation and interpretation in patients in challenging patient groups such as those with limited compliance or those in whom features of interest are obscured by artefact eg due to body habitus * The operational management responsibilities of the post are inherently unpredictable, and impose competing demands on the postholder. There can be a requirement to interrupt tasks before completion   **Emotional Effort:**  The postholder will have direct exposure to distressing / emotional circumstances on a frequent basis:   * Communication with distressed and anxious patients and relatives * Dealing with patients whose prognosis is poor or who are terminally ill * Management of arrest (rare) and peri-arrest scenarios   **Environmental:**   * Echocardiography requires working in a darkened room for the majority of the working day. * Possible exposure to body fluids, eg during transoesophageal echo * Exposure to infectious patients * Dealing with aggressive and abusive patients * More or less continuous use of VDUs | |
| KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB | |
| |  |  | | --- | --- | | **ESSENTIAL** | **DESIRABLE** | | **REGISTRATION** |  | | (i) Registration as a Clinical Scientist with HCPC or  (ii) Satisfies eligibility criteria for registration as a Clinical Scientist via the STP equivalence route, as administered by AHCS AND holds current professional registration as a Clinical Physiologist at practitioner level with RCCP or AHCS. | Veni-puncture & Cannulation Training | | **QUALIFICATIONS** |  | | BSc Clinical Physiology from AHCS/RCCP approved educational provider; or equivalent qualification and experience as approved by either body | Experience/exposure to physiology led TOE procedure | | Masters level professional accreditation in adult transthoracic echocardiography,(or working towards) ie British Society of Echo (BSE), European Association of Cardiovascular Imaging (EACVI) or equivalent. This to be accompanied by evidence of CPD to maintain currency, or working towards it. |  | | **KNOWLEDGE,SKILLS & EXPERIENCE** |  | | Knowledge, skills and experience of direct clinical supervision and mentorship of staff who are in training |  | | Knowledge, skills and experience of workplace-based assessment |  | | Knowledge of clinical cardiology, to include the value and limitations of echocardiography, exercise testing and ambulatory monitoring in clinical decision making |  | | Knowledge of clinical governance principles and experience of assessing and managing clinical risk |  | | IT skills:  Intermediate level use of Word, Powerpoint and Excel |  | | **BEHAVIOURAL COMPETENCIES** |  | | * Leadership, emotional intelligence and interpersonal skills: * Progressive and open to change and innovation. Professional integrity, probity and accountability. Upholds professional governance * Ongoing commitment to own CPD |  | | |
| **JOB DESCRIPTION AGREEMENT** | |
| A separate job description will be signed off and agreed by each job holder to whom the job description applies:  Job Holder’s Signature:  Head of Department’s Signature: | Date:  Date: |