

JOB DESCRIPTION

1. JOB DETAILS

Job Title:	Highly Specialised Clinical Physiologist
Responsible to:	Lead Clinical Physiologist
Department & Base:	Clinical Physiology Department - BGH
Job Reference Number:	043535

2. JOB PURPOSE

As the lead specialist, to provide an efficient, high quality clinical diagnostic service within the department of Clinical Physiology at the Borders General Hospital, primarily supporting adult Transthoracic Echocardiology

The post holder will operate as an independently reporting sonographer using cardiac ultrasound to assess and diagnose heart disease, but also supporting a number of other clinical investigations as service demands dictate. The department supports a variety of specialities including: Cardiology, Respiratory Function, Diabetes & Endocrinology, Gastroenterology, Child Health, Mental Health etc.

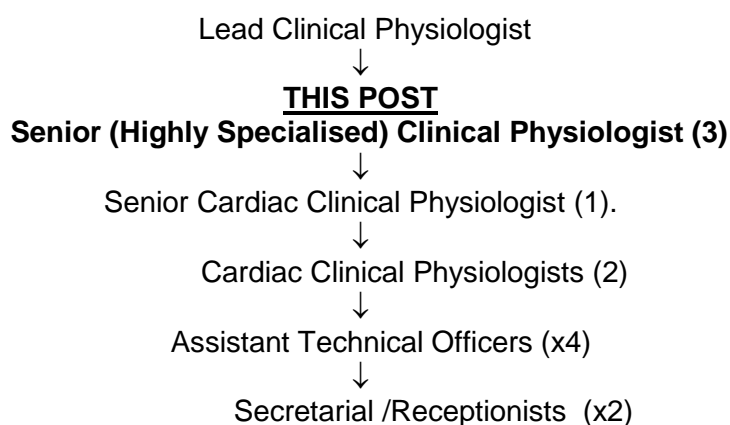
The post holder will support a number of open/direct access service for Primary Care reporting directly to requesting GP's and other health professionals.

The post holder is expected to participate in the training of students and in the supervision of junior staff.

The post hold is required to demonstrate a commitment to ongoing CPD, and is expected to support the ongoing development of clinical standard, policies and procedures, and the overall governance framework for the service.

The post holder is expected to adhere to all Departmental and Organisational protocols and procedures for infection control and patient and staff safety.

3. ORGANISATIONAL POSITION



4. SCOPE AND RANGE

The Clinical Physiology Team comprises of :-

- (X1) Lead Clinical Physiologist
- (XI) Depute Lead Clinical Physiologist
- (X3) Senior Clinical Physiologists (varying specialities)
- (X2) Clinical Physiologists
- (X4) Assistant Clinical Physiologists
- (X2) Secretarial / Receptionists

Approximately 22,145 patients attend the Clinical Physiology Department annually for a variety of clinical investigations (both In-Patient and Out-Patient).

Investigations carried out by the Clinical Physiology Department include :-

1. Electrocardiograms
2. Echocardiography / Contrast Echocardiography / Transoesophageal Echocardiography
3. Pacemaker / ICD / CRT Follow-Up
4. Exercise Tolerance Tests / Exercise Induced Asthma.
5. Ambulatory Monitoring (24/48 Hr Tapes / BP / Event recorders) - including the interpretation & analysis.
6. Spirometry / Forced Expiratory Volume / Vital Capacity & Reversibility Studies.
7. Full Lung Testing – the measurement of Lung volume / Gas Transfer & Flow Volume Loops.
8. Bronchial Challenge testing.
9. Skin Prick Tests.
10. Pedal Pulse Doppler.
11. Autonomic Function Tests.

OUR VALUES IN ACTION

●Care and Compassion ●Quality and Teamwork ●Dignity and Respect ●Openness, honesty and responsibility

5. MAIN DUTIES / RESPONSIBILITIES

HIGHLY SPECIALIST AREA'S

Transthoracic Echocardiogram (TTE):

Provide an autonomous clinical service within the specialist area of transthoracic echocardiography (TTE).

Responsible for managing their own clinical caseload, this will include the assessment, interpretation and reporting of patients referred for TTE.

Presentation and discussion of patients where diagnosis is unexpected, or if a critical condition that may require rapid medical or surgical treatment is detected, as part of a multidisciplinary team approach to the management of complex cardiac care.

Fully accountable for their own professional actions, including responsibility for reporting findings to clinicians and/or patients, understanding the implications and referring for appropriate examinations, directly affecting future management and care.

Performs investigations in accordance with all national and local published guidelines both individually and through supervision of specialist and junior cardiac clinical physiologists.

Manages and plans patient care and investigation process, through re-assessment of patient clinical profile prior to starting tests, and through ongoing assessment of clinical parameters during testing.

Involved in Research and Development activities. e.g. promote excellence in clinical practice through continuing education and input into Clinical Governance and Audit initiatives.

Responsible for ensuring ethical and moral dimensions of practice are adhered to.

Promote the highest standards of cleanliness in the clinical environment and equipment and ensure these are maintained at all times.

EDUCATION AND TRAINING

Supports our education programme in cardiac ultrasound to British Society of Echocardiography Masters equivalent standard for all post-graduate Cardiac Clinical Physiologists, Specialist Cardiac Clinical Physiologists, Specialist Registrars and visiting clinicians, including Consultants.

Provides training for ATO/SATO/Trainee and post registration Cardiac Clinical Physiologist staff in all areas of departmental investigations undertaken.

Maintains continuing professional development in accordance with divisional and registration body requirements. The post holder receives mandatory training updates annually, including those to maintain certification to use all defibrillators used within the department.

The post holder will demonstrate and explain the use of equipment to other health care professions, doctors, nurses, medical students, visiting clinical physiologists.

RESEARCH AND AUDIT.

The post holder is expected to undertake regular workload assessment and support the clinical audit and quality control programme as commissioned by Cardiac Clinical Physiology Service Manager, and the wider clinical service.

6. SYSTEMS AND EQUIPMENT

Careful use of highly complex medical equipment including necessary calibration and quality control:-

Echocardiography – The use of the Philips IE-33 and CX-50 high performance digital ultrasound imaging systems. These systems provide image generation in 2D, Colour Doppler, M-Mode, colour M-Mode, PW and CW Doppler Spectra, Tissue velocity imaging and contrast applications. The use of the Xcelera workstation with its post-processing programme which is designed for ultrasound image review, analysis and reporting. Xcelera is a comprehensive integrated database which allows post-processing of DICOM ultrasound images and raw data images.

Ambulatory ECG Analysis System – Pathfinder 600 Series – The Pathfinders ability to replay ECG at 1000 times the recording speed using the Neilson analysis principle allows the operator to examine the most severe events as they are captured, look for conduction abnormalities in the ECG and select appropriate ECG events for inclusion in the report. The flexibility of this analysis system revolutionises the analysis of 24 hour ECG in both clinical and research environments. The Pathfinder 600 incorporates an integrated database as part of its measurement package.

Cambridge Heart CH 2000 Cardiac Diagnostic System – a computer – based ECG Exercise Tolerance System – Controls resting and exercise stages of treadmill based on standard and user-customised protocols (computation of ST-level and slope plus calculations for ST-integral and ST-index). The Cambridge heart 2000 incorporates an integrated database along with clinical testing software.

The post holder is required to have a good working knowledge of all specialised diagnostic equipment within the Clinical Physiology Department in order to be able to “fault find” and initiate engineering call outs if required.

7. DECISIONS AND JUDGEMENTS

The post holder has significant autonomy in respect to all clinical responsibilities but works within established local and national policies and codes of practice i.e NICE, SIGN, BS, SCST, ARTP, etc.

The post holder requires complex analytical skills to diagnose both technical and clinical problems and to understand complex situations this includes the troubleshooting of equipment and may involve rapid decision making.

Skills for interpreting data to ensure it are of technical / clinical accuracy and related to patient / equipment condition. The post holder is required to use their judgemental skills to determine what the results of an investigation show and to make a recommendation for future management. In some cases patients are assessed over a period of time by quantifying the progress of the disease process which calls for accurate comparisons of analysis and clinical measurements.

The investigations performed and the consequent decisions made enable the diagnosis and optimum treatment or management of a patient's condition and the post holder requires judgmental skills to formulate solutions and recommend / decide the best course of action / treatment.

The post holder is expected to demonstrate a high degree of discretion and confidentiality with regard to the handling of sensitive patient information and confidential consultant information.

The post holder will instigate advanced life procedures when necessary.

8. COMMUNICATIONS AND RELATIONSHIPS

The post holder will communicate with:- doctors, nurses, physiotherapists, managers, members of the general public, patients, carers, colleagues (within and out with the department), pharmaceutical representatives & equipment manufacturers.

The post holder will regularly communicate with Senior medical staff, by both written & verbal communication items of a highly complicated or sensitive nature regarding the clinical findings of a specialist investigation and / or patient's condition.

The post holder provides an explanation of the purpose and nature of the diagnostic procedures / investigations to patients, their carers and / or other Health Care Professionals keeping the level of communication appropriate to the intended audience. The post holder will instruct, persuade, encourage, reassure and motivate patients to participate fully to their maximal potential during an investigation in order to produce accurate and relevant results.

The post holder may have to overcome barriers of understanding and provide appropriate and timely support for a variety of language and sensory difficulties eg: the pointing and showing of diagrams or equipment where appropriate. This includes patients without English as their first language, patients with dementia, deaf and blind patients and dyslexics – all of whom you cannot necessarily have a straight forward conversation with. This may include occasional work with interpreters (it may be necessary to change the communication techniques if the patients clinical condition deteriorates).

The post holder will use tact and diplomacy when informing colleagues and / or other Health Care Professionals of a patients' condition or attention to findings during an investigation.

The post holder will advise, instruct and assist with training / supervision internally within the department both on a one to one basis and also to larger groups when necessary eg: In-service training within the Clinical Physiology Department and also presentations to groups other Health Care Professionals.

The post holder is required to assist with the motivation, encouragement and support of staff through example.

The post holder will communicate, liase and build relationships with external contacts out with the BGH eg liase with company representatives both for technical support & sales advice (both equipment and pharmacological companies), Primary Care, Mental Health Unit and other Health Boards and Trusts etc (the post holder is required to communicate with other Trusts and Primary Care to provide local follow up for patients).

The post holder will empathise with patients and their carers who may receive distressing / unexpected news or the need for further investigation / treatment regarding clinical condition.

The post holder may be required to communicate in an antagonistic / hostile environment eg:- dealing with verbal abuse, demanding patients / carers / relatives etc, dealing with complaints of service, patients unwilling to co-operate during clinical procedures eg:- Mental Health Unit, children, distressed and confused patients etc, continual demands for information and test results - which we are not in a position to provide and therefore requires to be diplomatic, empathic and tactful.

The post holder is required to communicate with colleagues and other Health Care professionals during emergency procedures in an emotive atmosphere such as Cardiac / Respiratory Arrest or PeriArrest situations.

9. PHYSICAL DEMANDS OF THE POST

Exhausting physical skills required to carry out investigations eg; long frequent periods of standing for prolonged periods of time and frequent, twisting & stretching across patients - actions which frequently cause lower back strain.

The continual use of Visual Display Units (VDU) – PC and ECG display equipment, necessitates periods of restricted posture due to sitting in a continuous position and occasional eyestrain. Continual concentration with “real time” ECG & Respiratory data on screen for prolonged periods of time require speed, accuracy and judgement from the post holder as the patient’s condition can deteriorate quickly

During advanced life support – The physical skills required to adequately provide thoracic compression and maintenance of the airway by mouth-mouth, mouth-airway or bag-airway during CPR (may also include advanced airway management, tracheal intubation and / or defibrillation).

Accurate placement of external electrodes for a variety of monitored and recording procedures requires a high degree of concentration & accuracy required for consistent measurements.

Advanced clinical procedures demand highly complex levels of hand – eye coordination and manual dexterity.

Acute listening skills are required for certain procedures eg: echo, pedal pulse Doppler, Respiratory Function Tests and manual blood pressure measurements etc.

Manipulation of echocardiography transducers involving minute adjustments to angulation and positioning (continual wrist movement) in order to achieve optimal image and accurate measurement.

The strain placed on the arms when scanning & stretching across patients for prolonged periods of time particularly on obese & difficult echo subjects.

The movement of echocardiograph (approx 200Kg) to and from Ward 5, ITU, HDU, A&E as required forces the post holder to work in a restricted position in a confined area.

Manoeuvring of patients into the optimal position for the procedure to be carried out to avoid a reduction of quality of the information obtained from the investigation and therefore avoid inaccurate data.

Frequent moving of patients (pushing / pulling patients weighing 50Kg and upwards) attending the department in wheelchairs, beds (sometimes with oxygen cylinders / drips attached etc), wheelchairs etc in accordance with moving and handling regulations.

The occasional movement of medical gas cylinders around the department (standard AV size 15Kg and AK size 51Kg).

Advanced keyboard skills – for the production of reports, presentation material, update of data to databases etc. including a variety of different diagnostic equipment and software which require advanced keyboard and touch-screen skills – demands acute concentration for total accuracy.

Manual handling skills – required for storage of supplies delivered to department (moving and unpacking boxes).

10. MOST CHALLENGING / DIFFICULT PARTS OF THE JOB

Reporting on investigations and assessments where the diagnostic conclusions are not clear, but will have significant long term implications for the patient medical care and management.

Managing high workload and producing clinical reports accurately in a busy environment. Occasionally patient investigations will be interrupted by the need to attend nearby clinical emergencies. Carrying out urgent/emergency patient assessments.

Keeping up to date knowledge of rapidly developing technology and clinical practice.

Achieving the correct balance between meeting the clinical demands of the service against the need to schedule necessary time for skill development, training and research.

The supervision of junior staff whilst undertaking own clinical commitments.

11. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB

The post holder must be registered with Health Professions Council (HPC) or a recognised equivalent body as a Cardiology Clinical Physiologist. Registration requires BSc Clinical Physiology or equivalent qualifications and validated specialist experience.

The post holder must have achieved postgraduate and experience through accredited courses in their specialist areas to Masters level or equivalent e.g. British Society of Echocardiography Accreditation/IHBRE/BPEG pacing accreditations.

The post holder must have a minimum of 5 years experience in a clinical cardiology department operating highly specialist cardiac ultrasound services.

The post holder must be able to demonstrate excellent interpersonal skills.

Post requires full knowledge of ECG variants and abnormalities and the ability to apply knowledge to interpret real time ECG signals on monitors and other equipment.

The post holder must be familiar with published SIGN/NICE and other external guidelines for all areas of practice.

Post requires formal defibrillation/Immediate Life Support and Basic Life Support training to published standards.

The post holder must have Divisional or equivalent iv cannulation accreditation.

The post holder must have knowledge of legislation impacting upon areas of practice.

This job description is not definitive and may be subject to future amendments following negotiation and consultation.

PERSON SPECIFICATION

For the post of Senior (Highly Specialised) Clinical Physiologist with a specific expertise in Echocardiography

Below are the essential and desirable knowledge, training (including qualifications) and experience required to do this job.

ESSENTIAL

1. British Society of Echocardiography Adult Accreditation.
2. BSc in Clinical Physiology.
3. Relevant experience of independently reporting Adult Echocardiography studies
4. Excellent communication skills
5. Excellent planning and organisational skills
6. Ability to work under pressure, meet deadlines and manage own workload

DESIRABLE

1. ASCST parts 1 & 2 / ARTP parts 1 & 2
2. Registration with the Registration Council for Clinical Physiologists
3. Experience of line management

