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Bwrdd Iechyd Prifysgol
Cwm Taf Morgannwg
University Health Board

CAJE REF: RYL/2021/0176

JOB DETAILS:

Job Title	Highly Specialist Cardiac Physiologist (Echocardiography)
Pay Band	Band 7
Hours of Work and Nature of Contract	37.5 hours/week Permanent
Division/Directorate	POW Managed Unit – Cardiology
Department	Cardio-Respiratory Department
Base	Princess of Wales Hospital

ORGANISATIONAL ARRANGEMENTS:

Managerially Accountable to:	Service & Patient Pathway Improvement Manager
Reports to: Name Line Manager	Head of Cardio-Respiratory Department
Professionally Responsible to:	Head of Cardio-Respiratory Department

OUR VALUES AND BEHAVIOURS:

Our values and behaviours are fundamental to the way we do things at Cwm Taf Morgannwg University Health Board. They are everything we stand for and aspire to. That includes the way we behave, how we perform our roles and the way we recruit new talent. We look forward to exploring how your values align with ours. This is how we work:

We listen, learn and improve

We treat everyone with respect

We all work together as one team

To find out more about our values, visit: <https://cwmtafmorgannwg.wales/we-are-cwm-taf-morgannwg/>

Job Summary/Job Purpose:

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The post holder will work as part of a team of cardiac physiologists based in the Cardio-respiratory department, providing a quality Echocardiography service to both inpatients and outpatients.

They will be required to undertake a range of complex activities of a highly specialist nature (Echocardiography), ensuring that they provide a high standard of care to all patients accessing the service within the resources available. Working across the sites within Cwm Taf Morgannwg University Health Board (CTMUHB) as service requires.

DUTIES/RESPONSIBILITIES:

The post holder :

- Will work as an autonomous practitioner, with responsibility for their own specialist caseload of patients.
- Will be a clinical practitioner responsible for a caseload of patients; working independently and using own discretion within local and BCS and Heart Rhythm UK guidelines.
- To work as an independent practitioner within a team, to deliver an effective and efficient service with high standards of care.
- Perform transthoracic Echocardiograms for patients, ensuring the procedure is performed to a high standard in accordance with BSE guidelines.
- Be able to interpret and analyse the procedure results and produce an accurate and comprehensive report for the requesting physician.
- Ensure the prompt notification of relevant staff following the diagnosis of serious cardiac conditions, acting in the best interest of the patient.
- Participate in the Specialist Echocardiography clinics, working closely with the Consultant Cardiologists.
- Provide echocardiogram service for Heart Failure clinic and surgical pre- assessment clinics.
- To support the Head of Echocardiography by taking additional responsibility for the day-to-day activities in the Echocardiography service.
- Maintain BSE standards and ensure that all staff continue with accreditation processes in line with a BSE accredited department.
- Liaise with consultant Clinical Leads and Head of Clinical Physiology Services to facilitate existing training and to develop further training within appropriately resourced and agreed levels.
- To support for the Senior Chief Cardiac Physiologist by taking additional responsibility

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for the smooth day to day running of Clinical Investigations.

- To play an active role in the development of the Cardiac Physiology Department, participate in implementing new service developments, contribute to educational and technical/departmental meetings.
- Assisting in ordering of stock/consumables for the department.
- To participate in Regional (Swansea University) and National Training and development meetings and communicate back to appraise staff. Formal teaching at relevant certified courses at post-graduate level throughout CTMUHB.
- Undertakes clinical supervision and training for junior and trainee staff and Cardiology Specialist Registrars during their accreditations process, completing DOPS and e-portfolios in training, giving adequate support where required.
- Act as a communication channel to all different staff groups, patients and relatives, as well as staff in other disciplines and agencies, providing detailed specialist advice as required.
- Receive and impart complex patient related information with members of the multidisciplinary team as required e.g. Consultants, junior doctors, cardiac physiologists, nursing staff.
- Fully explain the test procedure to the patient ensuring that they understand the complex information being given to them, using listening and communication skills to overcome any barriers to understanding e.g. deafness, learning difficulties.
- Contributes to the effective systems of communication within the Department and with other healthcare professionals. Communication on a daily basis with patients/carers, Consultants, Medical Staff, Junior staff and other multidisciplinary members of staff.
- To provide non-routine, specialist and advanced diagnostic investigations such as contrast echocardiograms and bubble studies.
- Preparing the patient for the investigation and ensuring the patients are monitored appropriately. Preparing the necessary medical equipment and agents for the procedure, using the aseptic technique. Adhering to pre-procedural checklist. Undertake the investigation autonomously and report results making recommendations with regard to appropriate onwards investigation and management.
- Uses specialist knowledge and interpretation skills to provide full in-depth reports and analysis in a variety of clinical settings (standard & advanced non-routine echocardiography).

- Uses judgment to assess clinical information and act upon this if necessary liaising with Senior Chief Cardiac Physiologist, Consultants, Medical staff, and other healthcare professionals.
- Be able to interpret the complex findings of the Echocardiogram and produce an accurate and comprehensive report for each study, with responsibility for your own caseload of patients.
- To use a variety of diagnostic equipment within cardiac ultrasound and haemodynamic monitoring, which requires complex hand eye coordination and intense concentration over a prolonged period, generating computerised information for technical reporting.
- Recognise and deal with acute clinical incidents, using knowledge, skills and experience to direct and support both staff and the situation, e.g. cardiac arrest.
- To independently provide specialist and advanced assessment for referred patients.
- Monitoring the appropriateness of referrals, obtaining information relevant to patient care, interpreting and reporting of clinical findings and ensuring appropriate ongoing care.
- Arranging immediate admission if indicated, or urgent clinical review if needed. There are significant Clinical Governance issues associated with this position as diagnoses are often made without any medical input.
- Works in planned and emergency care situations due to the nature of a major cardiac and trauma centre.
- Prioritises inpatient referrals and other urgent appointments when necessary.
- Allocates work to junior staff if required. Readjusts plans as circumstance change.
- Plan and prioritise own workload throughout the day, making adjustments to schedules as required.
- Ensure that all reports are completed and returned to the requestor in a timely manner.
- Perform transthoracic Echocardiograms to a high standard in accordance with BSE guidelines.
- This requires highly developed physical skills, with good hand and eye co-ordination, for use of equipment to produce an accurate and detailed scan.
- Participate in the highly specialist provision of Echocardiography service for both inpatients and outpatients; undertaking the procedure, analysing the findings and reporting on test results in an accurate and comprehensive manner.
- Liaise with and advise appropriate clinical specialists when diagnosing conditions that require urgent medical attention, arranging the admission of the patient if necessary

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e.g. doctors, nursing staff, bed managers.

- Participate in the Transoesophageal Echocardiography clinics, working closely with the Cardiologists, setting up the equipment and recording the images obtained.
- Assist in the provision of echocardiography services to Heart Failure patients in line with the NSF guidelines.
- Participate in the provision of an echocardiography service in the pre assessment surgical clinics.
- Promote equality for all individuals to include promoting anti-discriminatory practice as well as supporting individual rights and choices within service delivery.
- Promote a safe environment for both staff and patients should there be any exposure to violent or aggressive behaviour from others, by ensuring that all procedures are adhered to.
- Manage and support both patients and staff when dealing with vulnerable adults or young people.
- Contribute to the development, implementation and evaluation of policies to enable the safe and effective development of the service.
- Contribute to the correct implementation of the complaints procedure and provide advice where appropriate.
- Ensure the appropriate referral of vulnerable adults in line with local policy.
- At all times be responsible for the safe use of expensive, highly complex equipment, reporting any faults in order that maintenance can be carried out.
- Maintaining data storage, archiving and retrieval of reports across the entire department.
- Ensuring the investigation results are recorded on the relevant database.
- Advanced IT skills required to negotiate multiple IT systems, referral systems, reporting systems, data management systems, clinical systems.
- Be responsible for the effective and efficient use of all resources within their sphere of responsibility.
- Where appropriate monitor and record expenditure.
- Support the Head of Echocardiography on the evaluation and purchasing of

equipment.

- Deliver training and teaching sessions to others in the specialist field of Echocardiography e.g. Physiologists and junior doctors.
- Instruct and supervise student and junior physiologist staff as required, providing clinical supervision, assessment and signing off at the end of training.
- Support the development of the knowledge base of junior medical staff eg. Cardiology Specialist Registrars.
- Ensure when supervising students that both they and the students are aware of the limitations of the role and have considered their individuals level of competence, skill and knowledge, the objectives to be achieved during their placement and the method of assessment to be used.
- Follow Health Board procedures in the in the safe storage of information and patient related files/data.
- Maintain patient confidentiality.
- Following the procedure, input the data into the system and produce computerised reports for each individual patient.
- Undertake regular clinical audits relating to service delivery and outcomes.
- Be expected to participate in any research projects.
- Disseminate research and audit findings into clinical practice and develop and implement change.
- Participate in trials and testing of new equipment.
- The post holder will be a clinical practitioner responsible for a specialist caseload of patients.
- The post holder will work independently and use own discretion within local and BSE guidelines, and Codes of Practice.
- The post holder will adhere to Cwm Taf Morgannwg University Health Board policies and procedures.
- Provide specialist echocardiogram training and the setting up of training programs, for junior physiologists, junior doctors, GP's with a special interest in cardiology, cardiology registrar's and provide support to other members of the department training in echocardiograms.

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PERSON SPECIFICATION

The knowledge to be measured is the minimum needed to carry out the full duties of the job to the required standards. Qualifications should be used to provide an indicator of the level of knowledge required. Training and experience is also a means of acquiring the knowledge required for a job such as on-the-job training, short courses and experience to an equivalent level of knowledge which should be specified.

NOTE: Please do not use the number of years experience as this is potentially discriminatory and these will be returned. It is essential that managers concentrate on the sorts of skills and qualities needed to fulfil the duties of the post.

ATTRIBUTES	ESSENTIAL	DESIRABLE	METHOD OF ASSESSMENT
Qualifications and/or Knowledge	<p>Degree in Clinical Physiology (Cardiology) or equivalent level of knowledge and experience.</p> <p>knowledge and skills in Echocardiography to Masters level equivalency.</p> <p>British Society of Echocardiography Adult Accreditation.</p> <p>Experienced Cardiac Physiologist with knowledge of wide range of Cardiac Diagnostic testing.</p> <p>Knowledge of research methodologies.</p> <p>RCCP Active Registration</p>	<p>Immediate Life Support Certificate.</p> <p>ECDL.</p> <p>Paediatric Echocardiography.</p> <p>Masters in Clinical Physiology.</p> <p>International Board of Heart Rhythm Examiners (IBHRE) / Heart Rhythm Society (HRS)</p>	<p>Application Form</p> <p>Interview</p> <p>Production of evidence (certificates etc)</p>
Experience	<p>Significant experience as a Band 6 and highly developed</p> <p>Experience in producing written and verbal reports pertinent to the post i.e. individual patient and departmental documentation.</p>	<p>Dobutamine stress echocardiogram (DSE).</p> <p>Transoesophageal echocardiogram (TOE).</p> <p>Contrast Echo.</p>	<p>Application Form</p> <p>Interview</p> <p>References</p>
Aptitude and Abilities	<p>Able to demonstrate a positive and caring attitude to all patients, relatives and members of staff in a calm and professional manner.</p> <p>Ability to organise and prioritise</p>	<p>Ability to speak Welsh</p>	<p>Application form</p> <p>Interview</p> <p>References</p>

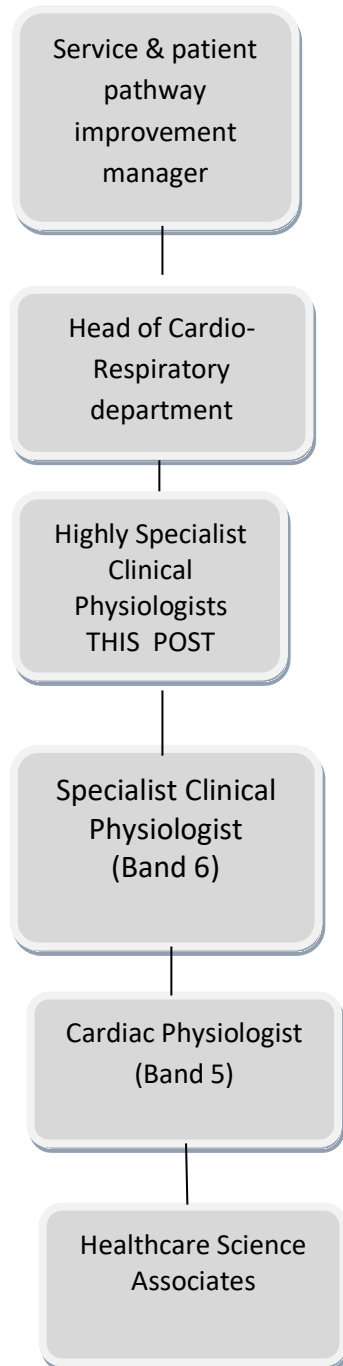
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	<p>workload.</p> <p>Good organisational and time management skills.</p> <p>Ability to demonstrate empathy and understanding to others</p> <p>Excellent verbal communication skills, and the ability to demonstrate empathy and understanding to others.</p> <p>Good standard of written communication skills.</p> <p>Effective teaching and motivational skills.</p> <p>Clinical Supervision experience.</p> <p>Enthusiastic and committed.</p> <p>Manual dexterity for using a wide range of specialist medical equipment.</p> <p>Able to undertake the duties of the role.</p>		
Personal Qualities	<p>Must be enthusiastic and highly motivated.</p> <p>Ability to work as an individual and also as part of a team.</p> <p>Able to deal with challenging situations.</p>		<p>Application Form</p> <p>Interview</p> <p>References</p>
Circumstances	<p>Ability to be able to travel across all Cwm Taf Morgannwg sites as service requires. Able to undertake the duties of the role.</p> <p>Flexible to meet service needs.</p> <p>Satisfactory DBS clearance.</p>		<p>Application Form</p> <p>Interview</p> <p>Occ Health Form</p>

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Organisational Chart



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Supplementary Job Description Information

Please complete information on Physical Effort, Mental Effort, Emotional Effort and Working Conditions in order to assist the Job Matching process.

Physical Effort

This factor measures the nature, frequency and duration of physical effort (sustained effort at a similar level or sudden explosive effort) required for the job.

Please ensure any circumstances that may affect the degree of effort required, such as working in an awkward position; lifting heavy weights etc. are detailed, such as:

‘Working in uncomfortable/unpleasant physical conditions; sitting in restricted positions; repetitive movements; lifting heavy weights; manipulating objects; kneeling, crouching, twisting; heavy duty cleaning; working at heights; using controlled restraint; driving as part of daily job - **N.B. Walking /driving to work is not included**’

Examples of Typical effort(s)	How often per day / week/month?	For how long?	Additional Comments
Being required to have an intense amount of physical effort throughout each shift including periods of standing, sitting, walking performing echocardiograms (TTE) on the wards, intensive care, ward cubicle, theatre, and the emergency department.	Per day	8-10, 40 minute scan per day	

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During an echocardiogram we are required on a daily basis to rotate / twist our torso into an uncomfortable position whilst maintaining continuous probe pressure to achieve a diagnostic image, for the duration of the scan using significant muscular effort and body weight.	Per day	8-10, 40 minute scan per day	
Scanning unresponsive patients in a suboptimal position of the scan. This requires further physical effort / discomfort in order to achieve an optimal diagnostic image. The physiologist is required to manoeuvre patient with little or no mobility into the correct position to allow for an optimal ultrasound image.	Per day	8-10, 40 minute scan per day	
scanning bariatric patients exerting intense physical / force activity in the scanning of obese patients to achieve an optimal diagnostic image.	Per day	8-10, 40 minute scan per day	
Be required to undertake a moderate amount of physical effort throughout the day, including periods of standing, walking and sitting.	Per day throughout the shift	7.5hours	
Often involves scanning unresponsive patients in a suboptimal position of the scan. Requiring further physical effort / discomfort to achieve an optimal diagnostic image. The echocardiogram technique requires the patient with limited or no mobility to be moved into position to allow for an optimal ultrasound image to enable correct diagnosis.	Few times per week	8-10, 40 minute scan per day	
Having to navigate with ultrasound equipment into cramped, difficult to manoeuvre positions with other equipment, often lifesaving in a confined space e.g. ventilators, defibrillators, external/ temporary pacing and CPAP's.	Per day	8-10, 40 minute scan per day	

Required on a daily basis to rotate / twist our torso into an uncomfortable position whilst maintaining continuous pressure of the probe using arm, back, leg and hip muscles to achieve a diagnostic image for the duration of the scan.	Per day	8-10, 40 minute scan per day	
Climbing / reaching stock from higher shelving in the store room or reaching up to replenish stock in the store room.	Per day throughout the shift	7.5hours	
Moving, pushing and pulling cumbersome test equipment e.g. echocardiogram machine or supine ultrasound bicycle requiring intense physical Effort over 15 Kilos between rooms in the department. The scanners are frequently required in an emergency response.	Per day throughout the shift	7.5hours	
Frequently manoeuvring and positioning very heavy ultrasound equipment into confined spaces in intensive care areas where space is limited due to vital life support equipment in close proximity to the patient.	Per day throughout the shift	7.5hours	

Mental Effort

This factor measures the nature, level, frequency and duration of mental effort required for the job, for example, concentration, responding to unpredictable work patterns, interruptions and the need to meet deadlines.

Please identify the normal requirement to concentrate in the post and determine, how often and for how long it is required to concentrate during a shift / working day, e.g. :

‘Carrying out formal student assessments; carrying out clinical/social care interventions; checking documents; taking detailed minutes at meetings; operating machinery/equipment; carrying out screening tests/microscope work; carrying out complex calculations; carrying out non-clinical fault finding; responding to emergency bleep; driving a vehicle; examining or assessing patients/clients.

Examples of Typical effort(s)	How often per day / week / month?	For how long?	Additional Comments
Be required to concentrate frequently throughout the span of duty e.g. Carrying out the Echocardiogram or when making complex measurements and compiling reports.	Per day throughout the shift	8-10, 40 minute scan per day	
Be required to respond to ever changing situations, and prioritise your workload accordingly.	Per day throughout the shift	7.5hours	

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Provide assessments and formal training of B.S.C cardiology students in conjunction with Swansea University.	Per day throughout the shift	Ongoing	Depending on student numbers: maybe all day.
Perform echocardiograms that require long periods of intense concentration. Each session can last 4 hours with 2 sessions being performed daily.	Per day	8-10, 40 minute scan per day	This includes performing routine transthoracic echocardiograms which can last up to 45 minutes.
Occasional, very intense periods of concentration whilst performing scans during high stress, clinically urgent situations, such as during pericardiocentesis, in the emergency department and theatres, also involving critically ill patients and during stress/contrast echocardiography. This includes continuous proactive engagement with the patient and all attending staff, to respond and directly participate in the activity being performed.	Per month	60 minutes per scan	Carry out screening tests for patients with potential cardiomyopathy and the follow up of patients with possible chemotherapy.
To perform detailed transthoracic echo studies and reports in accordance with the British Society of Echocardiography (BSE) standards ensuring the complex procedures are continually produced to the best quality and accuracy.	Per day	8-10, 40 minute scan per day	

Emotional Effort

This factor measures the nature, frequency and duration demands of the emotional effort required to undertake clinical or non-clinical duties that are generally considered to be distressing and/or emotionally demanding.

Please identify how often the post holder has exposure to direct and/or indirect distressing and/or emotional circumstances and the type of situations they are required to deal with.

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For example,' processing (e.g. typing/transmitting) news of highly distressing events; giving unwelcome news to patients/clients/carers/staff; caring for the terminally ill; dealing with difficult situations/circumstances; designated to provide emotional support to front line staff; communicating life changing events; dealing with people with challenging behaviour; arriving at the scene of an accident.' **N.B. Fear of Violence is measured under Working Conditions**

Examples of Typical effort(s)	How often per week / month?	For how long?	Additional Comments
Have occasional exposure to distressing or emotional situations due to the nature of the patient's condition.	Per month	Few times per month	
Identifying significant life threatening abnormalities while undertaking examinations in emergency situations on patients which have poor or untreatable prognosis.	Per month	Few times per month	
Providing emotional support for staff that are stressed or upset due to personal circumstances or service changes which may be related and may affect their working practice.	Per month	Few times per month	
Occasionally, coping with traumatic circumstances such as performing echocardiography on severely injured victim of a road traffic accident, or on a clinically dead patient kept on ventilator to preserve organs for transplant.	Per month	Infrequently per month	
Providing emotional support for staff after traumatic events such as a cardiac arrest or a patient's death.	Per month	Infrequently per month	

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Working Conditions

This factor measures the nature, frequency and duration of demands on staff arising from inevitably adverse environmental conditions (such as inclement weather, extreme heat/cold, smells, noise and fumes) and hazards, which are unavoidable **(even with the strictest health and safety controls)**, such as road traffic accidents, spills of harmful chemicals, aggressive behaviour of patients, clients, relatives, carers.

Please identify unpleasant working conditions or hazards which are encountered in the post holder's working environment and establish how often and for how long they are exposed to them during a working day / week / month.

Examples are – use of VDU more or less continuously; unpleasant substances/non-household waste; infectious material/foul linen; body fluids, faeces, vomit; dust/dirt; fleas/lice; humidity; contaminated equipment or work areas; driving/being driven in normal or emergency situations -
***Driving to and from work is not included**

Examples of Typical Conditions	How often per week / month?	For how long?	Additional Comments
Have frequent exposure to unpleasant working conditions e.g. odours, infections, body fluids and secretions.	Per day	8-10, 40 minute scan per day	
Emergency echocardiograms in confined ward cubicles. The ultra sound machine produces significant heat which can quickly increase the temperature in the room without adequate ventilation.	Per day	8-10, 40 minute scan per day	
In contact with enzymatic detergent and peracetic acid, which is used for the disinfection of transoesophageal probes.	Per week	3 procedure week	

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Prolonged use of VDU screen scanning and reporting echocardiograms.	Per day	8-10, 40 minute scan per day	
Scanning infected patients is common e.g. patients with endocarditis, Clostridium difficile, shingles, Tuberculosis (TB), Severe acute respiratory syndrome (SARS), MRSA and Flu plus other exposure to other infectious conditions. Subsequent decontamination of equipment is required.	Per week	Few times per month	
Frequent exposure to body fluids, such as blood, sputum and vomit during transoesophageal (TOE).	Per week	3 procedures per week	
Working in stressful emergency situations e.g. intensive care, ward cubicle, theatre, emergency department with various equipment.	Per day	8-10, 40 minute scan per day	
Frequently working in very close contact (touching and leaning over) patients with unpleasant personal hygiene and in contact with bodily fluids.	Per day	8-10, 40 minute scan per day	
Working all day in the darkness on a daily basis performing ultrasound examinations (each shift is performed with reduced lighting).	Per day	8-10, 40 minute scan per day	
Working in confined/ cramped position often in emergency situations e.g. ITU, ward cubicle, cardiac catheter lab, theatre and the emergency department.	Per day	8-10, 40 minute scan per day	

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