Job

**NHS TAYSIDE - AGENDA FOR CHANGE**

**JOB DESCRIPTION**

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| 1. **JOB IDENTIFICATION** | Job Title | Specialist Renal Clinical Engineering Technologist |
|  | Department(s)/Location |  Renal Equipment Services Section  Medical Physics, Renal Clinic Ninewells  |
|  | Number of job holders |  2  |
| **2. JOB PURPOSE** This post acts as a Specialist Renal Technologist within the Renal Equipment Services Section, of the Department Of Medical Physics Clinical Engineering Section, out-posted to the clinical area of NHS Tayside Renal Service.  This section acts as part of a multi-disciplinary team within the Renal Service and this post is primarily concerned with providing clinical, scientific and technical support by way of repair, calibration, evaluation, scheduled preventative maintenance, safety checking, training and quality control for a range of complex patient critical life support systems. The section is also involved in the associated highly specialised utilities that are required through local and international standards for both hospital and home patient installations. Implementing Medical Physics accredited quality system to Renal clinical protocols and assisting in both of their production and development. |
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| **3. ORGANISATIONAL POSITION** The staffing complement of the Renal Equipment Services Section consists of two posts of Specialist Clinical Engineering Renal Technologists and a Team Lead (Specialist Renal Clinical/Engineering Technologist), responsible through the Operations Manager to the Clinical Engineering Section of the Department of Medical Physics. Operations Manger - Clinical Engineering - Medical Physics Renal Team Lead - **Band 7**Specialist Clinical Engineering Technologist Band 6 **This Post**Specialist Clinical Engineering Technologist **Band 6**  |
| **4. SCOPE AND RANGE** The post holder works as part of a team providing a 24-hour comprehensive technical clinical service within dedicated sites across Tayside, which includes, Ninewells Hospital Renal Clinic and Ward 22, Intensive Care, Coronary care, Ward 42 Infectious Diseases, High dependency units, Perth Royal Infirmary Renal Clinic, Arbroath Infirmary Renal Unit and patient homes throughout the Tayside region. The post holder acts as a point of technical/clinical information on a wide range of topics relating to the technology driven service of renal dialysis including patient care and specialist technical problems to Clinical consultants, specialist nursing staff, patients and other departments both within and out-with the NHS.The post holder participates in clinical support, repair, maintenance, research and development, and provides informal training for staff, patients and their carers.  The post holder is responsible for their own work, planning and organising their allocated workload often having to urgently reprioritise after reallocation of tasks or on information from several sources weighing up all the options open to them and responding accordingly. The post holder works on and provides clinical/technical support for a range of highly specialised life support equipment, ensuring continuity of service which, if comprised, could have a severe consequence on clinical procedures and patient well being, appointment schedules, portering and transport. The post holder, on a daily basis, deals with expensive equipment e.g. haemodialysis monitor, makes decisions on the viability of repairs, purchases of spare parts and manages stock levels following departmental guidelines  |
| **5. MAIN DUTIES/RESPONSIBILITIES**   **Clinical/Technical (**85% of time)  **Induction Standards and Code of Conduct**Your performance must comply with the national “Mandatory Induction Standards for Healthcare Support Workers in Scotland” 2009; and with the Code of Conduct for Healthcare Support Workers.As specialist renal technologist:1. Provides a point of technical/clinical information and support for critical care clinical staff. Undertakes advanced fault finding on complex patient critical life support equipment for both technical and clinical problems. Equipment is frequently connected to critically ill patients where speed and accuracy is essential.
2. Communicates with Technologists, Consultants, doctors, nurses, patients and their carer’s to gain a clear understanding of the problem, assess the seriousness and implications and respond with the appropriate action to the urgency of the request.
3. Responsible for carrying out of planned maintenance schedules, equipment service programmes and repair of patient critical life support equipment for Tayside Renal Services and home based patients.
4. Organises and plans servicing, planned maintenance for specialised renal utilities including patient homes and other hospital areas
5. Prioritises own allocated workload and deals with emergency requests in order of urgency.
6. Participates in Renal on call system, for hospital and home patients
7. When on call acts as co-ordinator for Medical Physics volunteer on call system for whole of the Trust. Assessing urgency of requests and co-ordinating an appropriate response from a group of specialised volunteer staff.
8. Provides training and instruction to nursing, medical staff, patients and their carers on the operation and use of specialised critical care equipment.
9. Provides specialist assistance to the medical and nursing staff with the application and correct operation of patient life support equipment and physiological monitoring equipment.
10. Provides advice to clinical, nursing and managerial staff on the purchase of high cost new renal critical care equipment.
11. Deals with company representatives and participates in equipment trials and evaluations, investigating technical /clinical aspects
12. Attends equipment manufacturer specialist certificated training courses as required.
13. Keep up to date through Renal Association registration the advances in clinical and technical research.
14. Carry out equipment calibration, chemical, biological and technical quality control, safety and acceptance testing.
15. Carry out equipment electrical and functional safety checks.
16. Carry out equipment software upgrades and modifications
17. Carry out equipment hardware developments and monitoring.
18. Orders spare parts and equipment, taking account of lead times, storage space, and cost.
19. Participates in research and development of both technical and clinical aspects.
20. Commissioning and safety checking of new equipment

**Administrative** (10**%** of time) 1. Maintain accurate records of all work carried out, stock and test equipment within the renal section as laid down in Clinical Engineering QMS & Policies including hard copy and electronic records.
2. Participate in the evaluation and assessment of equipment and suppliers.
3. Attend related meetings for Medical Physics, Renal services, Estates department and Scottish Renal Association
4. Proposes changes to policies in Renal and Critical Care areas, comments on departmental policies.
5. Participates and contributes to the development of the Clinical Engineering accredited Quality Management System.
6. Participates in the use and upkeep of the renal technical services vehicle.
7. Participates in various auditing, including but not limited to H&S, QMS and stock control.

 **Health and Safety** (5% of time) 1. Participate in the safe use of equipment, being aware of Health & Safety; DSEAR, CoSHH and General Risk Assessment.
2. Carry out Renal workplace and task risk assessments.
3. Participate in fire risk assessment.
4. Advise and assist with technical risk management and health and safety implementation throughout the renal service and patients homes.
5. Keep up to date on hazard notifications or modification notices in relation to renal life support systems and implementing any changes.
6. Keep up to date on new developments in other fields impacting on renal services e.g. water chlorination and blue green toxic alga formations.
7. Provide quality assurance on dialysis equipment, fluid composition and water supply integrity.
8. Decontaminate equipment that has been used to treat patients with blood borne viruses.

**Induction Standards & Code of Conduct**Your performance must comply with the national “Mandatory Induction Standards for Healthcare Support Workers 2009” and with the Code of Conduct for Healthcare Support Workers. |
| **6. COMMUNICATIONS AND RELATIONSHIP**  The post acts as a Specialist Renal Technologist for the Clinical/Technical Renal Service provided by the Department of Medical Physics, situated in, and acting as part of the NHS Tayside Renal Service multi disciplinary team.  The post holder is a technical/scientific point of information for the NHS Tayside Renal Services and as a specialist renal technologist communicates various levels of technical information with clinical managers right through to end users including patients and their carers on the protocols, procedures and limits for the safe and correct use of critical renal life support and other clinical equipment. The post holder is required to gather clinical, environmental and technical details of fault situations from several sources and advises on the likely outcomes on patient well-being and equipment and treatment delays which would impact on other services, e.g. clinic appointments and patient transport. This may involve contact and discussions with highly agitated patientsThe post holder gives informal training to nurses, clinical support staff, patients and their carers. The post holder is required to have effective verbal communication skills and the ability to produce written reports e.g. where equipment is being evaluated, incidents are investigated, manufacturers being informed on equipment or supply issues.The post holder regularly participates in clinical research and development work advising clinical specialist staff, nurses and doctors on technical issues. The post holder is responsible for keeping equipment users informed of status of work within the workshop, clinics or patient homes highlighting any impact on other areas (delays etc). The post holder must have an awareness and understanding of the pressures that working in a busy renal clinic generates for both staff and patients and an ability to deal with these in a sympathetic and supportive manner. The post holder is required to keep up to date with technological advances e.g. through national registration to renal associations and attending meetings and certificated training courses. The post holder is required to regularly meet company representatives and may assist with the vetting of new suppliers e.g. for suitability of products, staffing, credibility and reliability of supply and price.The post holder regularly communicates with home patients and carers about technical or clinical problems over the phone giving advice reassurance and negotiates convenient appointment times for repair and maintenance |
| **7. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB** BEng or BSc in relevant technical subject preferably with a suitable postgraduate diploma with an extensive qualification experience in a renal environment. Experience should consist of proven in-depth knowledge of the clinical use, repair, performance testing and assessment of a wide range of renal, medical and laboratory equipment gained through practical experience in-house training and compulsory manufacturers certificated training courses. The post holder will use their in depth specialist technical knowledge to make decisions for medical, nursing & support staff in matters relating to patient treatments, which often impacts across the organization.  The post holder is a registered member of the Scottish Renal Association and is eligible to join the specialist renal section of the voluntary register for clinical technologists. The post holder must have a comprehensive knowledge of the related health and safety issues including working with electricity, lone working, risk assessment, DSEAR, COSHH and the NHS Tayside health and safety policies.  The post holder should understand and will work within the Clinical Engineering QMS and relevant work instructions.  The post holder must keep up to date on technology developments through registration and meeting with national renal associations.  The post also requires a full driving licence to operate the renal unit technical support vehicle. The post holder must be aware of the pressures of working in a busy intensive clinic on patients, carers and staff and try to deal with matters in a sympathetic and supportive way. |
| **8. SYSTEMS AND EQUIPMENT**  A wide range of technical, clinical and utility equipment is supported including high quality water treatment plant (requiring the use of using caustic, acidic and poisonous chemicals requiring chemical test kits, water analysis meters, general tools, protective clothing and heavy lifting equipment), medical ward equipment, and a range of highly specialised renal life support systems.  The post holder will, on a daily basis, be required to utilise specialised computer fault finding, programming and quality control software, a range of renal specific fragile and very expensive calibration instruments and a wide range of fine intricate tools including magnifiers and surgical type instruments.The post holder will also be required to handle an array of chemicals, chemical cleaners, glues, solvents and service aids.  The post holder will also be required to utilise the Renal Service leased vehicle provided for home patient equipment repairs, maintenance and installations across Tayside.The post holder will on a daily basis also utilise the medical physics computer database for job recording and ordering of spare parts, consumables and equipment.Responsibility for Records ManagementAll records created in the course of the business of NHS Tayside are corporate records and are public records under the terms of the Public Records (Scotland) Act 2011. This includes email messages and other electronic records. It is your responsibility to ensure that you keep appropriate records of your work in NHS Tayside and manage those records in keeping with the NHS Tayside Records Management Policy and with any guidance produced by NHS Tayside specific to your employment. |
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| **9. PHYSICAL DEMANDS OF THE JOB**Physical EffortRegularly has to lift and manoeuvre heavy or awkward items (Daily 100+Kg). This is usually for short periods however collecting and delivering equipment, working off site or out with the workshops means carrying or pushing heavy equipment or trolleys for long periods. (Daily / weekly)Mental EffortThe post holder will have to deal with frequent interruptions and competing demands for attention. They will regularly have to drop the current task to deal with a more urgent demand (daily). Emergency calls occur frequently and must be assessed and prioritized. Routine calls are handled by the technical staff and they will also disrupt concentration. Fault finding on complex medical equipment requires intense concentration for lengthy periods. Working ConditionsFrequently works in situations where equipment access is difficult or unpleasant and where the equipment or location may be a risk (Daily)The post holder is regularly exposed to unpleasant/hazardous conditions including unpleasant smells contaminated bodily fluids, and chemical agents. The post holder also has to drive to other offsite locations in particular Perth Royal Infirmary and home patients in all conditions and generally works alone.Emotional EffortThe post holder will, on a daily basis, work in the dialysis areas where patients are being treated. The post holder will regularly come into contact with distressed, agitated, mentally impaired or seriously ill patients and must display a high degree of professionalism helping them overcome their fears and apprehensions of the equipment and treatment. These patients are generally well known to the staff, usually on a first name basis, and over many years sympathetic bonds often occur which leads to attendance at social events and funerals. Physical SkillsWorks on equipment that requires the use of magnifiers and fine tools (Daily).Requires basic keyboard skills. |
| **10. DECISIONS AND JUDGEMENTS**The post of Specialist Renal Technologist working as part of the Medical Physics Instrumentation Renal Department within a clinical multi disciplinary team implements the Medical Physics Quality System protocols and procedures and participates in technical decision making. This decision-making will be based on the post holder reviewing the range of options available and acting on their own initiative and judgement to deal with the problem at hand. Some of these include: CLINICAL/TECHNICAL 1. Regularly required to make fast and accurate decisions on patient life support equipment and treatments, based on several verbal information strands ( via patients, their carers, clinical staff and other external departments ), and utilising their advanced renal specific technical skills to assess clinical or equipment technical faults. As part of this process it is a requirement to weigh up all treatment implications for patient well-being and the service due to delays and knock on effects.
2. Regularly assesses tasks by risk assessing, recording and taking action to minimise risks to themselves, departmental staff, renal patients and their carers.
3. Regularly assesses and make decisions on many factors of the reliability and accuracy of patient critical life support equipment
4. Regularly assesses and make decisions on the chemical and biological acceptability of dialysis pure water supply and any action required.
5. Assess and decide on suitability and compatibility of new equipment and services.
6. Assess and decide on the feasibility of equipment repair based on economic viability, spare parts availability and clinical requirements.
7. Assess and decide on feasibility of clinical requests for treatments, giving advice on the limitations of the equipment or any problems that might be encountered.
8. Assist and provide information on home patients to aid decisions on their suitability for continued home treatments.
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| **11. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB** To keep up to date with the latest technology and to maintain high standards of work to the satisfaction of the customer. Working in conditions where the majority of equipment is life support and be able to have confidence in own abilities to ensure correct function after repair/servicing.   |
| **12. JOB DESCRIPTION AGREEMENT** The job description will need to be signed off using the attached sheet by each post holder to whom the job description applies. |

Job Reference Number.

**JOB DESCRIPTION AND ESSENTIAL ADDITIONAL INFORMATION FORM - SIGNATURE OF AGREEMENT**

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| **Post Title**  |  |
| **Reference Number** |  |

The attached job description and essential additional information will be used as part of the Agenda for Change assimilation exercise and therefore the job-matching panel may wish to seek further clarification on any issues contained within the documents. Should this be necessary please identify an appropriate Manager and Staff representative who can be contacted.

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|  **Responsible Manager** |  |
|  **Contact No.** |  |
|  |  |
|  **Staff Representative** |  |
|  **Contact No.** |  |

**I/we the undersigned agree the attached document is an accurate reflection of the requirements of the post. The essential additional information provides accurate information of additional job related factors.**

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| Signed: - (Manager)  |  |

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| Staff Members: |  |  |
| NAME (BLOCK CAPITALS PLEASE)  | SIGNED | POST NO. (Official use only) |
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