#### **NHS GREATER GLASGOW AND CLYDE**

**Principal Physiotherapist (Gait Laboratory)**

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| JOB IDENTIFICATION |
|  Job Title: Principal Physiotherapist (Gait Laboratory)Responsible to: Clinical Scientist Specialist – Gait AnalysisDepartment(s): West of Scotland Mobility and Rehabilitation Centre (WestMARC)Directorate: Regional |

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| JOB PURPOSE To undertake the role of Principal Physiotherapist, utilising high levels of decision making and clinical judgement, ensuring that patient health needs are met through diagnosis and the management of highly complex patients referred for gait analysis. This involves working as an autonomous practitioner during specialised clinical gait assessments, and contributing to highly complex technical reports and recommendations for use by Medical Consultants and Specialist AHPs. The role involves providing a key contribution to MDT meetings with Medical Consultants and Specialist AHPs to determine optimal treatment recommendations. Provide advice and support to Specialist AHPs requiring regarding treatment and referral of patients with gait-related impairments. To identify and be actively involved in the audit, research and improvement activity which will contribute to the development of the service. |

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| 1. **ROLE OF DEPARTMENT**

WestMARC provides an environmental control service for NHS GG&C, with wheelchair & seating, prosthetic and gait analysis services across all West of Scotland Health Boards. The gait analysis service provides specialist support to the lower limb prosthetic service enabling the establishment of a paediatric prosthetic clinic and problem-solving clinics for adult amputees. Collaboration with the Children’s Orthopaedic Service at The Royal Hospital for Children, along with the Orthotic Department and Community Physiotherapy Service, provides a tertiary gait analysis and assessment service for children referred from across the West of Scotland.  |

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| 4. ORGANISATIONAL POSITION |
| Directly reports to the Clinical Scientist Specialist (gait analysis). See organisational chart below.**\\xggc.scot.nhs.uk\ggcdata\FolderRedirects\WWH4\carsebr046\My Documents\Gait lab physio job description\WestMARC Managment Structure May 22.jpg** |

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| 5. SCOPE AND RANGE |
| A wide range of advanced measurement techniques and equipment are used in WestMARC to provide the objective measurement of gait, which can provide data on kinematics, kinetics, spatiotemporal parameters, gait efficiency, muscle activity and community activity levels. Data is collected, managed and processed through a combination of commercially available and bespoke in-house software.Interpretation of the data requires subjectivity and expert clinical judgement. Data and information from a variety of sources (clinical examination, gait measurement and patient history) needs to be assimilated and is often conflicting and sometimes contentious in its nature.The application of gait analysis will often be an integral component of a routine multidisciplinary clinical service activity and is routinely used to assist in both orthopaedic and neurosurgical planning, in addition to other non-surgical interventions. It can also be applied in response to difficulties encountered in the care of individual patients with complex or unusual problems by a range of involved clinical staff.The majority of referrals are from Consultant Orthopaedic Surgeons, requesting advice on appropriate surgery (frequently multilevel) for cerebral palsy children and adults. A large number of children are referred by Consultant Paediatric Neurologists with the aim of providing a baseline assessment with regular monitoring, assisting in diagnosis and for advice on management (e.g. therapy, and orthotic interventions) and/or administration of specific medication (e.g. botulinum toxin, baclofen pumps and other muscle relaxants). Adults referred by Neurologists also require similar management advice.Other referrals come directly from expert AHPs (e.g. Physiotherapists, Orthotists, Podiatrists and Prosthetists) requesting advice on management or effect of any interventions undertaken on the gait pattern of complex patients.The role requires clinical expertise and the dissemination of gait data to a wide range of departments and clinical staff across NHS GG&C. This is an important feature both to respond to the needs of individual patients and to improve the quality of clinical care generally in the longer term.  |
| 6. MAIN TASKS, DUTIES AND RESPONSIBILITIES |
| * Working with a high level of autonomy, take lead role during clinical assessment of patients with regards; taking patient history, the in-depth clinical examination, supporting the patient to walk safely during gait data capture.
* Stay up-to-date with evidence-based practice and ensuring assessment procedures are adjusted accordingly.
* To be professional and legally responsible and accountable for all aspects of your own work including the treatment and management of patients in your care
* To assess capacity, gain valid, informed consent from the child and carer and have the ability to work within a legal framework with patients/carers who lack the capacity to consent treatments.
* Contribute towards gait reports suitable for interpretation by both biomechanically-expert and non-expert clinicians.
* Schedule and co-ordinate routine MDT reporting sessions where gait data is discussed used to formulate individual patient treatment plans (including surgical recommendations).
* Provide occasional assessment of function in clinical (non-laboratory) environments to a wide range of clinicians involved in the management of patients with gait disorders
* Participate in occasional education and training of other NHS clinical staff and University students in biomechanics, gait analysis and clinical decision-making
* Assist with ensuring the gait service meets relevant quality standards (i.e. CMAS and ISO 13485) and any other relevant local and national policies and procedures. Participate in internal and external audits.
* Contribute to service improvement and development projects within the gait service and WestMARC-wide.
* Ensuring role-specific competencies are achieved and maintained.
* Conduct referral screening against pre-defined referral criteria.
* Achieve and maintain required competencies, which are routinely assessed.
* Work within WestMARC’s Quality Management System framework, following standard operating procedures and participating in repeatability studies as required
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| 7a. EQUIPMENT AND MACHINERY |
| * Basic measuring equipment; goniometer, tape measure, anthropometer, weighing scales
* Examination plinth
* Reflective markers
* EMG electrodes
* Gait lab data collection PC
* Laptop PC
* Activity monitoring devices
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| **7b. SYSTEMS*** Use of local Quality Management System software
* Use of WestMARC’s patient records database to update patient clinical notes and other records
* Use of all standard word processing, spread sheet, and presentation software
* Occasional use of data processing software packages associated with the different gait analysis systems used in the laboratory
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| 8. DECISIONS AND JUDGEMENTS |
| * Contribute to decisions on appropriate tests to be performed to answer the referral question and to inform the content of the gait analysis session.
* Continual decisions and judgements throughout the gait assessment session evaluating the information being obtained and altering the plan in order to ensure that the relevant data is captured to answer the referral question.
* Decisions on safety-related aspects of data to be collected based on patient history taking and adapt to suit their needs.
* Data from the gait assessment (clinical examination, patient history, kinematic and kinetic gait data) is often contradictory. Individual patient’s gait data will have a unique combination of characteristics where the solution is not always obvious. Experienced clinical opinion often differs on how the data should be interpreted with regards to clinical decision-making. Clear rationale and expert clinical judgement, backed up by objective data should always be presented to support decisions.
* Determining when additional data is required beyond that which has been obtained with standard protocols and identifying appropriate tests to achieve this.
* Ability to differentiate between different types of abnormal muscle tone by using standardised testing techniques.
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| **9. COMMUNICATIONS AND RELATIONSHIPS** |
| * To Clinical Scientist Specialist on a daily basis
* Working closely during clinical gait assessments with Clinical Scientists
* Communicating complex information to children and families/carers where there may be barriers to understanding and with sensitivity where the information is contradictory to patient expectation or desires.
* Communicating highly complex gait data to members of the MDT involved in gait analysis clinics (Consultant Orthopaedic Surgeons, Consultant Neurosurgeons, Physiotherapists, Orthotists, Prosthetists, Paediatricians)
* Providing highly specialist biomechanical assessment expertise and/or advice to local NHS clinicians.
* Work closely with Physiotherapists who work in fields whose patients frequently use the gait analysis services (e.g. Orthopaedic, Neurology and Community Physiotherapists).
* Referring clinicians, who may be in remote locations across the West of Scotland
* Using gait data recorded to tactfully highlight problems to patients and relatives/carers and relating it to the problems they described.
* Working with WestMARC administrative staff to ensure effective communication with patients pre-assessment, and efficient report distribution post-assessment.
* Participation in internal and external audit activities (both auditing others and being audited)
* Occasional provision of in-service CPD to NHS staff
* Speaking at both national and international conferences and scientific meetings
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| **10. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB** |
| Physical Skills :* Patient clinical examination using physical methods (e.g. manual muscle testing)
* Use of physical assessment tools (e.g. goniometers, tape measures), which will be routinely assessed with repeatability studies.
* Identification of critical anatomical landmarks through palpation and the accurate placement of a range of marker systems on patients’ bodies, which will be routinely assessed with repeatability studies.
* In addition to palpatory skills, demonstrate highly developed physical competence through; dexterity, co-ordination as well as observational and auditory senses.
* Physical assistance with gait and sit-to-stand transfers.

Physical Demands:* Physical assessment of large and/or heavy patients who may also have high muscle tone
* Physical assessment of patients who may be uncooperative

Divisional Movement and Handling Guidelines. * Working within the constraints of these guidelines
* Interpretation of these to the gait analysis laboratory environment
* Identification of difficulties complying with these due to specific requirements of the gait analysis process and the patient categories involved

Mental Demands :* During the gait assessment itself, interpretation of the on-going results of clinical examination of the patient and the adaptation of the following assessments is important to ensure the collection of all relevant clinical information
* During data interpretation and report writing, there will be the occasional requirement for prolonged concentration when assimilating data and information from multiple sources. This is essential to the accurate interpretation of highly complex gait data to contribute towards the formulation of individual treatment plans for each patient.
* Guiding members of the MDT, particularly those not familiar with gait analysis data, so they may fully understand the significance of the data and engage with the clinical decision-making process.
* Developing new methods of data acquisition and data processing to facilitate clinical decision-making

Risk assessment* Assessing and managing risk to patients and carers involved in clinical gait analysis processes
* Assessing and managing risk to self and other clinical staff involved in clinical gait analysis processes
* Assessing the risk to patients of clinical decisions arrived at from the data interpretation and clinical decision-making process

Emotional Demands:* Dealing with highly upsetting situations involving patients, and their families, with complex or insoluble conditions.
* Working with other clinicians who hold conflicting views regarding approaches suggested for the management of patients and trying to engage them constructively to arrive at a treatment plan acceptable to all concerned.

Working Conditions :* In gait analysis laboratory environments with a wide range of complex and highly sensitive instrumentation
* Required to work safely using an examination plinth, and adjusting position posture to safely achieve the required measurements
* Required to move around the gait laboratory, including occasionally working on the floor with patients
* Required to work with patients in other clinical environments e.g. rehabilitation
* Occasional desk-based office work
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| 11. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB |
| * Conducting appropriate gait analysis on complex patients who may be very young and/or uncooperative.
* Deciding under pressure in fraught clinical situations with individual patients on data acquisition compromises necessary to obtain adequate gait data for clinical decision-making.
* Guiding MDT clinical decision-making where the gait impairments are highly complex and/or obscure, the data can be conflicting and its interpretation can sometimes contentious in its nature due to differing expert opinions.
* Explaining complex physical impairment issues and how they affect gait to patients and carers with limited understanding, where their active cooperation is essential.
* Showing adaptability in where service demand fluctuates, and new patient groups are referred for gait analysis.
* Changing processes and practices within the gait service to reflect emerging research and published evidence.
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| 12. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB |
| **Essential*** Degree in Physiotherapy or equivalent qualification recognised by the Chartered Society of Physiotherapy.
* HCPC registered Physiotherapist.
* Qualifications and/or experience which demonstrate advanced clinical practice, physical examination skills and knowledge in the field of gait analysis.
* Evidence of specialist training to Master’s level (or equivalent).
* The Principal Physiotherapist is required to develop and maintain advanced professional and clinical knowledge by in-depth practical experience across a range of procedures and practices. Undertakes Continuing Professional Development (CPD) by attending courses, seminars and meetings, by assisting with training of colleagues through presentations and workshops and by private study. Up-to-date knowledge is acquired through e-study, journals, textbooks and conference attendance. CPD is a requirement for maintaining State Registration status as a Physiotherapist.
* Ability to write clearly to convey complex physical impairments and movement deviations, using anatomical and technical terminology.
* Experience of reading and evaluating published research, and incorporating it into clinical practice
* A high level of IT literacy is essential to this role due the number of electronic systems used, with new software introduced regularly.

**Desirable*** Experience of patients with gait issues due to a wide range of clinical conditions
* Experience in teaching gait analysis and its clinical relevance to clinicians
* Experience of conducting, presenting and publishing research
* Experience in practical operation of 3D motion system hardware and associated software
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**PERSON SPECIFICATION FORM**

**Job Title:- Principal Physiotherapist**

**Department:- WestMARC**

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| **Qualifications** | **Essential (√)** | **Desirable (√)** |
| Degree in Physiotherapy or equivalent qualification recognised by the Chartered Society of Physiotherapy | y |  |
| MSc | y |  |
| HCPC registered Physiotherapist | y |  |
| Enhanced Disclosure Scotland/PVG clearance | y |  |

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| **Experience** | **Essential (√)** | **Desirable (√)** |
| Working with patients in an MDT environment | y |  |
| Experience in the application of biomechanics in a clinical environment | y |  |
| Research experience |  | y |
| Ability to deal with children and adults with visual, learning, behavioural and communication difficulties. | y |  |
| Competent computer skills and knowledge of use advanced software. | y |  |
| Completed training course in gait analysis (e.g.European Society of Motion Analysis for Adultsand Children (ESMAC) Advanced Course) |  | y |

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| **Behavioural Competencies** | **Essential (√)** | **Desirable (√)** |
| Able to communicate freely with patients, carers and other professional staff | y |  |
| Able to ensure their own professional development and stimulate the development of others | y |  |
| Mindful of health, safety and security issues regarding the scientific and clinical facility and the users, both patients and other clinicians  | y |  |
| Able to lead service improvement projects |  | y |
| Mindful of the need for high quality in scientific and clinical processes, following an organised and methodical approach | y |  |
| Able to interact equally with a wide range of patients, carers, clinical conditions and other clinical staff, of differing levels of competence and responsibility | y |  |
| Be adaptable, flexible, and able to cope with fluctuations in demand for the service. | y |  |