## **Role Delineation of the Sport Rehabilitator**



#### Introduction

A Graduate Sport Rehabilitator (GSR) is a graduate level autonomous healthcare practitioner specialising in musculoskeletal management, exercise based rehabilitation and fitness.

Sport Rehabilitators have graduated with a degree in Sport Rehabilitation, a course of study suitable for them to be recognised as a graduate member of the British Association of Sport Rehabilitators and Trainers (BASRaT), the United Kingdom professional body for Graduate Sports Rehabilitators. The Sport Rehabilitator offers the individual unique skills to allow continued optimal participation in their chosen activity. This document outlines the domains, tasks, knowledge and skill statements, which delineate the role of the GSR.

## **Professional Responsibility and Development**

**Prevention** 

Recognition and Evaluation of the Individual

Management of the Individual – Therapeutic Intervention, Rehabilitation and Performance Enhancement

**Immediate Care** 



## **Professional Responsibility and Development**

The GSR should adhere to BASRaT Code of Ethics and hold at all times appropriate current insurance and first aid certification. The GSR should work within their scope of practice and professional competency at all times, extending and maintaining this via Continuing Professional Development. As a part of the multidisciplinary healthcare team, the GSR should communicate and refer appropriately to the other professionals. In addition the GSR has a professional responsibility to maintain and manage accurate medical records.

#### A Record Keeping

Maintain and manage medical records effectively, using a recognised and appropriate system to document patient management and provide for continuity of care

#### **Knowledge of:**

- 1. All relevant Data Protection legislation
- 2. Institutional protocols for documentation and record keeping
- 3. Medical terminology and commonly-used abbreviations

#### Skill in:

- 4. Effective and appropriate recording and management of medical records
- 5. Application of institutional protocols as appropriate

#### **B** Professional Practice – Conduct and Ethical Issues

Demonstrate the highest standards of professional conduct and ethics by complying with applicable guidelines

#### Knowledge of:

- 6. BASRaT Code of Ethics and Disciplinary procedures
- 7. Relevant professional conduct issues including informed consent, duty of care, patient confidentiality
- 8. Relevant Institutional policies and procedures

#### Skill in:

- 9. Obtaining informed consent as appropriate
- 10. Maintaining patient confidentiality
- 11. Exercising a professional duty of care
- 12. Maintaining high levels of personal and professional conduct at all times
- 13. Representing the profession honestly and maintaining the reputation of BASRaT at all times
- 14. Maintaining appropriate levels of Personal Indemnity and Malpractice Insurance and understanding how this relates to the limits of practice

#### C Professional Practice - Performance Issues

Demonstrate and maintain the highest standards of professional practice and performance within Sport Rehabilitation

#### Knowledge of:

- Scope of Practice of a Sport Rehabilitator as outlined in this Role Delineation
- Relevant professional performance issues including personal and professional practice limits
- BASRaT Continuing Professional Development (CPD) guidelines and requirements
- 4. Relevant and current Health and Safety legislation and practice
- 5. Resources for updating and developing knowledge and skills
- Current and pertinent research to maintain and expand the knowledge base of the GSR



- Resourcing, evaluating and applying relevant professional information and research data to update knowledge and skills base
   Completing the BASRaT biannual CPD requirements
- 3. Working within personal and professional practice limits, and referring on to other, relevant health professionals as appropriate

  4. Maintaining and updating first aid certification, and appropriate Health and
- Safety practice and procedures





## **Prevention**

The GSR has the knowledge and skills necessary to recognise the risks associated with injury and implement an appropriate plan to minimize these risks. This involves the planning, implementation and interpretation of pre-participation screening, to identify potential predisposing factors to musculoskeletal injury and health related disorders. From these findings the GSR has the ability to synthesize information and formulate an appropriate evidence based intervention.

#### A Risk Assessment and Management

Identify and evaluate common risks found in the sporting environment and the workplace and to implement appropriate strategies in order to minimise these risks

#### Knowledge of:

- 1. The common risks associated with participation in physical activity/sport
- 2. The potentially life threatening disorders associated with participation in physical activity/sport
- The common workplace risks, for example ergonomics, bio-ergonomics and lifestyle stressors
- 4. Current clinical guidelines and protocols, to include safety rules, laws and governing body regulations to help reduce the risk of injury and disease in physical activity/sport and in the workplace

#### Skill in:

- Identification and assessment of all risks common to both the sporting environment and workplace
- Applying appropriate management and intervention strategies utilizing available resources to minimize the potential risk of injury in the sporting environment and workplace

#### **B Pre-Participation Screening**

Obtain and apply pre-participation screening information to help reduce the risk of injury and illness

#### **Knowledge of:**

- Predisposing conditions that increase the risk of injury or illness during sport participation
- Potential life threatening or disabling conditions, e.g. sudden death syndrome
- Secondary factors that may increase the risk of injury or illness during sport participation, e.g. general health problems, fitness levels and health related issues.
- 4. Clinical and performance related screening techniques and protocols
- Appropriate pre-participation interventions to minimise risk and prevent injury

#### Skill in:

- 1. Identifying conditions that may limit or compromise participation
- Analysis of normal and abnormal movement patterns for individuals in the workplace and sporting environment
- The appropriate management of an individual using evidence based intervention strategies

#### C Prophylactic Interventions

Apply appropriate prophylactic/protective measures using commercial products or custom made devices to minimize the risk of injury



#### **Knowledge of:**

- The commercial products currently available for minimizing the risk of injury
- 2. The effective use of prophylactic/protective methods to minimize injury risk in the sporting environment and/or workplace
- 3. Materials and methods for fabricating custom made orthoses
- 4. The biomechanics of the musculoskeletal system and the effect of force on biological and non-biological tissue
- Referral methods to allied health professionals for the design, fabrication and implementation of prophylactic/protective devices

#### Skill in:

- Assessment and identification of potential injuries and conditions which may warrant the use of custom made or commercial devices
- 2. Selection and application of appropriate prophylactic/protective devices to help minimize the risk of injury/re-injury

#### **D** Health and Safety

Identification of potential health and safety risks to an individual or group in the sporting environment or workplace

#### Knowledge of:

- Facilities and equipment protocols, including safety rules, laws and governing body regulations to help reduce the risk of injury and disease in physical activity/sport and in the workplace
- 2. Hazards common to the sporting environment or workplace, for example surface irregularities, inadequate lighting and broken equipment
- Policies and procedures for addressing and reporting common facility and equipment hazards

#### Skill in:

- Inspecting facilities and equipment in the sporting environment and workplace to assess the potential for risk
- Recognizing risks in the sporting environment and workplace and recommending interventions to address potential hazards

## **E** Risks Associated with Environmental Factors

Monitor participants and environmental conditions and make recommendations to ensure safe participation

#### Knowledge of:

- 1. Medical conditions of individuals which can be exacerbated by environmental conditions, e.g. diabetes, asthma and viral infections
- Environmental conditions that are a potential threat to individuals in the sporting environment or workplace, e.g. temperature extremes, pollution, altitude and infectious pathogens
- Monitoring techniques and protocols commonly used for individual and team sports e.g. weight charts, weight measurement techniques, fluid monitoring, body composition monitoring techniques and urine and blood analysis
- 4. Preventative methods to help minimize the risk to individuals e.g. activity scheduling, appropriate clothing and recovery methods

- Recognizing conditions that would predispose individuals to environmental risk
- 2. The use of appropriate methods to gather and interpret information regarding environmental conditions
- 3. Implementing monitoring and screening techniques to test an individual's response to environmental conditions
- Implementation and facilitation of appropriate protocols and procedures to help address environmental risk



## Recognition and Evaluation of the Individual

The GSR has the knowledge and skills necessary to recognise and evaluate the status of the individual and from this information determine the appropriate course of management. This evaluation involves a biopsychosocial approach that incorporates neuromusculoskeletal, physiological and psychosocial approaches, with full consideration of health and lifestyle factors. A clinical impression is formulated from which an appropriate evidence based management plan is developed.

#### A Subjective Evaluation

Obtain a history through interview and/or review of relevant records, to ascertain the status and requirements of the individual

#### Knowledge of:

- 1. Communication techniques to elicit information
- 2. Standard nomenclature and terminology
- 3. Relationships between predisposing factors and injury
- Presenting features of common neuromusculoskeletal and medical pathologies
- 5. Principles and demands of sport and activities of daily living
- 6. Contraindications and precautions to further assessment and treatment

#### Skill in:

- 1. Obtaining and recording of information
- 2. Relating clinical findings to specific conditions
- 3. Identification of the nature and severity of the presenting complaint
- 4. Evaluation of subjective findings to inform and justify ongoing assessment

#### **B** Neuromusculoskeletal Evaluation

Objective evaluation of anatomical structures involving observational and manual methods

#### **Knowledge of:**

- 1. Anatomy of the neuromusculoskeletal system
- 2. Pathophysiology of common neuromusculoskeletal conditions
- 3. Objective features of neuromusculoskeletal conditions
- 4. Principles of visual inspection
- 5. Principles of palpation
- Specific tests for physiological and accessory motion, neurological structures, muscular strength, structural integrity and function
- Effect of additional factors on the neuromusculoskeletal presentation e.g. pre- and co-existing conditions, medications, lifestyle, psychosocial factors
- 8. Biomechanical analysis of human motion and its relation to pathology

- Locating and palpating bony landmarks, articulations, ligamentous structures, musculotendinous units and other soft tissues
- 2. Visual analysis of posture, normal and abnormal movement patterns and soft tissues
- 3. Assessing muscular strength, range of motion and limiting factors
- 4. Performance of musculoskeletal assessment techniques i.e. special tests, neural mobility, neurological function, joint mobility and functional tests
- Use of evidenced based outcome measures to formulate objective reassessment markers



#### C Physiological and Biomechanical Evaluation

#### Evaluation of health and fitness through field and laboratory based testing procedures

#### Knowledge of:

- Environmental, physiological and biomechanical factors that relate to performance
- 2. Effect of age on physiological and mechanical capacity of the individual
- 3. Current recommended protocols for physiological and biomechanical evaluation for specific sports and medical conditions

#### Skill in:

- 1. Evaluation of environmental factors and implementation of appropriate strategies which will minimise any adverse physiological response
- Identification of factors that are limiting the athlete in achieving optimal performance in terms of both mechanics and physiology
- Evaluation of biomechanical and physiological performance and lifestyle using laboratory and field based tests

#### **D** Additional Factors

Identification and evaluation of the role of nutritional, pharmacological and psychosocial factors on the presenting condition

#### Knowledge of:

- Principles of nutrition and the role of nutrition in health, activity and sporting participation, including the use of supplements and ergogenic aids
- Basic pharmacological principles, indications, contraindications and adverse reactions to commonly prescribed medications
- 3. The role of psychological and sociological factors in health and sport

#### Skill in:

- Application of tools for the evaluation and analysis of nutritional status and habits in an individual
- 2. Identification of the use of medications, and consideration of their effects on clinical presentation and ongoing health of the individual.
- Application of appropriate evaluation tools for pertinent psychosocial factors

#### E Health and Lifestyle Evaluation

Recognition and evaluation of the effects of systemic disease, health status and lifestyle factors within the assessment process

#### Knowledge of:

- Epidemiology and pathophysiology of common medical conditions and their effects on health and activity e.g. diabetes, coronary heart disease, osteoarthritis
- 2. Physiology of chronic pain and its clinical presentation
- 3. The effects of lifestyle and occupation on an individual's health and well-
- 4. Basic principles of ergonomics in promotion of a healthy lifestyle
- 5. Physiology and exercise considerations during pregnancy

- Evaluation of the effects of the currently medical conditions on the health of an individual
- Evaluation and analysis of pain behaviour, levels of pain, and related functional and health measures
- Recognition and evaluation of lifestyle and occupational factors, including basic ergonomic assessment
- 4. Recognition and consideration of the effects of pregnancy within the health and lifestyle management of the individual



#### F Clinical Decision Making

Formulate a clinical impression through synthesis and analysis of the findings of the assessment and in light of current research evidence

#### **Knowledge of:**

- 1. Theoretical basis of practice for clinical decision making
- 2. Theories of clinical reasoning
- 3. Current research and evidenced based clinical guidelines for management as the theoretical basis for clinical decision-making

#### Skill in:

- Synthesis of information and analysis of findings in order to formulate a clinical impression
- 2. Clinical decision-making within professional scope and competence
- Application of current best practice methods based on reflection and evaluation of recent research evidence
- 4. Adherence to current clinical guidelines where appropriate

#### **G** Dissemination of Assessment Findings

Dissemination of the findings of the assessment to the individual, and other relevant individuals as appropriate, and formulation of a fully integrated management plan

#### **Knowledge of:**

- 1. Communications skills and techniques
- Evidence-based management protocols and practice for a variety of common health and sport-related conditions
- 3. Patient confidentiality
- 4. Relevant medical terminology
- 5. Role and scope of practice of a variety of medical and health practitioners

- Using both written and verbal forms of communication within a health care setting
- 2. Advising and educating the individual regarding assessment findings
- 3. Incorporating the views and wishes of the individual into the management plan
- 4. Informing other members of the health care team of assessment findings where appropriate, and with the individual's consent
- 5. Ongoing referral to appropriate medical and allied health care practitioners
- 6. Implementation of appropriate management plan with the full consent of the individual





# Management of the Individual – Therapeutic Intervention, Rehabilitation and Performance Enhancement

Following appropriate assessment the GSR has the knowledge and skills necessary to facilitate the recovery of function, return to physical activity, and high levels of performance through a clinically reasoned approach, which incorporates evidenced based therapeutic intervention, and exercise. Throughout the management of the individual, the GSR has the skills to objectively monitor the intervention strategy and determine the need for appropriate modification. A holistic approach allows optimal recovery, through consideration of the multifactorial needs of the individual.

#### A Therapeutic Intervention

Administer therapeutic interventions using safe and effective procedures to facilitate recovery/function and/or performance

#### Knowledge of:

- The effect of therapeutic interventions on the pathophysiology of the human body
- Availability and application of therapeutic interventions relating to treatment, rehabilitation and performance
- 3. Indications and contraindications for therapeutic interventions
- 4. Current clinical guidelines in the application of therapeutic interventions

#### Skill in:

- 1. Application of thermal modalities e.g. Ice and Heat
- 2. Application of electro-therapeutic modalities e.g. Ultrasound/Interferential
- Administration of manual intervention/techniques that may include; joint
  mobilisation, manipulation, massage, soft tissue application/technique and
  proprioceptive neuromuscular facilitation (PNF)
- Selection and application of braces, strapping and taping techniques in order to facilitate recovery from injury and a safe return to functional activity

#### **B** Exercise Based Rehabilitation

Design planning and delivery of clinically reasoned exercise based rehabilitation programmes according to the individual's needs

#### **Knowledge of:**

- Underpinning theory of proprioception, neuromuscular control and balance including: contribution to joint stability, peripheral somatosensory system and mediation of motor control and assessment techniques
- Range of motion and flexibility theory including neurophysiological principles and mechanical properties of contractile, non-contractile and neural tissue
- Theoretical basis of strength, power and muscular endurance training, in particular variation in strength training qualities and factors determining strength
- Theoretical basis of the use of hydrotherapy for recovery and restoration of function
- Concepts of functional progressions and integration with traditional exercises
- 6. Cardio-respiratory energy systems and their importance in rehabilitation

- Restoration of proprioception and neuromuscular control for joint stability, through the development of retraining techniques
- Application of specific techniques to improve flexibility in contractile, noncontractile and neural tissue



- Design and implementation of speed, power and strength training exercises as part of the rehabilitation process, specific to the requirements of the individual
- 4. Application of hydrotherapy to aid recovery and restoration of function
- Design of training methods for restoration and maintenance of cardiorespiratory fitness
- Analysis of functional tasks and the design and integration of functional programmes

#### C Performance Enhancement

Design and implement evidenced based periodised programmes to increase performance in a specific sport or activity

#### Knowledge of:

- Principles of training e.g. progressive overload, specific adaptation to imposed demand, recovery, reversibility
- Micro / Macro variables of strength training load parameters i.e. repetitions, sets, tempo and rest
- 3. Metabolic demands of training and different sports
- 4. Responses of skeletal, muscular, neural, and cardio-respiratory systems to training stimuli
- 5. Training methodologies for speed, strength and endurance training
- Common musculoskeletal screening protocols for individual and team sports
- 7. Periodisation and integration of training methodologies

#### Skill in:

- 1. Evaluation of strength qualities needed for effective training prescription
- Coaching of speed power and strength training exercises for performance enhancement
- 3. Design and delivery of programmes to increase cardio-respiratory fitness
- Design and implementation of evidenced based periodised training programmes, for performance enhancement in different sports and populations

#### **D** Factors Affecting Recovery and Performance

Consideration and management of the nutritional, environmental, pharmacological, psychosocial, physiological and biomechanical factors affecting recovery following injury and contributing to performance

#### Knowledge of:

- Principles of nutrition as related to the dietary and nutritional requirements of the physically active, including the use of supplements and ergogenic aids
- General indications, contraindications and adverse reactions of commonly prescribed and non-prescribed medications.
- 3. Biopsychosocial models and cultural issues which may affect recovery, resumption of physical activity or enhancement of performance
- Responses of the physiological systems of the body to injury and disease, and the effects of age
- Influence of biomechanical factors in the optimisation of injury management and programme planning
- Physiological responses to environmental factors e.g. climate, altitude and travel

- Design of nutrition programmes and advice on dietary requirements, in order to promote recovery from injury and return to full activity / function
- Recognition of risks associated with pharmacological interventions, their effect on management, and to advise on-going referral to medical practitioners as appropriate



- Application of basic psychosocial interventions as appropriate in order to promote recovery, optimise well being and return to full activity / function, with consideration to the individual's cultural influences.
- Design and planning of intervention with consideration of relevant pathophysiology, concomitant disease and the effects of age through the life cycle
- Design and application of a progressive programme of rehabilitation, with full consideration of the biomechanical principles, in order to protect the injured tissue, optimise recovery and enhance performance
- 6. Implementation of appropriate strategies which will minimise any adverse physiological response with consideration to environmental factors

#### **E** Monitoring

Continual Monitoring of the individual using objective markers to optimise recovery and/or performance

#### Knowledge of:

- 1. Relevant quantifiable subjective and objective reassessment markers
- Techniques and procedures to progress or regress treatment or performance enhancement programmes
- 3. Functional and sport specific criteria for return to activity

#### Skill in:

- 1. Interpreting reassessment information to effectively progress or regress a treatment or performance enhancement programme or activity
- Education of the individual as to their progress and the best strategy to improve recovery and or performance
- 3. Application of functional and sport specific criteria for safe return to activity

#### F Health Promotion and Lifestyle Management

Ability to design and implement individualised exercise and rehabilitation regimes for both clinical and at risk populations

#### **Knowledge of:**

- Role of physical activity in the prevention and management of disease and in the promotion of health
- 2. Epidemiology, pathophysiology and management of common medical conditions e.g. diabetes, coronary heart disease, and osteoarthritis
- Guidelines for safe and evidence-based practice in the rehabilitative management of medical conditions on an individual or group basis
- Guidelines for the safe and evidence based practice in the prescription of activity and application of exercise programmes during pregnancy in light of medical advice as appropriate

- Administration and interpretation of clinical and laboratory-based testing procedures
- Design and implementation of appropriate activity-based programmes for the prevention and management of disease and in the promotion of health
- Application of activity-based programmes to an individual or within a group setting
- 4. Education and motivation of the individual / group in order to advise appropriately and promote adherence



## **Immediate Care**

The GSR has appropriate knowledge and skill in the application of recognised measures of care including basic life support and first aid for life threatening and other emergency situations. The GSR is also capable of evaluating acute injury and illness and subsequently make an informed decision based on the indications and contraindications initiating care or return to participation

#### **A** Emergency First Aid

Initiate and/or apply techniques to manage life threatening and other emergency conditions through the use of recognised emergency care procedures and referral to appropriate medical and allied healthcare professionals

#### Knowledge of:

- 1. Relevant anatomy, pathophysiology and neurophysiology
- 2. National guidelines and local procedures for emergency care
- 3. Common emergency medical situations and appropriate management
- 4. Immobilisation techniques and equipment for transportation

#### Skill in:

- 1. Recognition and evaluation of emergency situations, and formulation of an emergency management plan
- 2. Application of basic life support techniques
- 3. Implementation of appropriate immobilisation and transfer techniques
- 4. Demonstrating management of common medical emergency situations
- 5. Referring to appropriate medical and allied healthcare professionals

#### **B** Evaluation

Evaluation of acute injury and illness to stabilise and/or prevent exacerbation of the condition through the use of appropriate techniques

#### Knowledge of:

- 1. The pathophysiology of common acute injury and illness
- 2. Acute conditions requiring referral to other healthcare professionals

#### Skill in:

- 1. Recognition and evaluation of acute injury and illness
- 2. Referring to appropriate medical personnel

#### C Initiation of Care

Initiating care for acute injury and illness to determine the appropriate course of management

#### Knowledge of:

- 1. Current best practice in the management of acute injury and illness
- 2. Current best practice in relation to blood borne pathogens, blood hygiene and health and safety procedures
- 3. Immobilisation techniques and equipment
- 4. Protective and prophylactic equipment
- 5. Indications and contraindications for return to play
- 6. Appropriate use of therapeutic modalities

- Selecting and applying appropriate immobilisation, protective and prophylactic equipment
- 2. Administering appropriate therapeutic modalities
- 3. Appropriate wound care management and disposal of biohazardous waste

